

Journal of New Century Innovations

VOLUME

19

ISSUE-2



Journal of new
century innovations

Exact and natural sciences

Pedagogical
sciences

Social sciences
and humanities

Engineering and
Medical Sciences

AREAS

ISSN (p): 2181-3671
ISSN (e): 2181-368X



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**JOURNAL OF NEW CENTURY
INNOVATIONS**

VOLUME - 19 | ISSUE - 2

DECEMBER - 2022



MAKTABGACHA TA'LIM TASHKILOTLARIDA MULTIMEDIA ORQALI TA'LIMNI TASHKIL QILISH

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*Termiz davlat pedagogika instituti maktabgacha ta'lim fakulteti maktabgacha
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Hozirgi kunda barkamol avlodni tarbiyalash, yosh avlodning intellektual salohiyatini ro'yobga chiqarish, ularni har tomonlama rivojlangan shaxs etib voyaga yetkazish hozirgi kunning dolzarb masalalaridandir. Asosan maktabgacha ta'lim yoshidagi bolalarning yuksak bilim egalashida multimedia ta'limi ham muhim o'rinda turadi. Multimedia ta'limi orqali biz bolalarda milliy qadiryatlarni video rolik shaklida jonlantirishimiz ham mumkun.

Ta'lim sohasida ham yangi axborot texnologiyalaridan keng foydalanish, an'anaviy o'qitish usullariga nisbatan samarali va yuqori natijalarga olib kelmoqda. Hozirda ta'lim tizimida zamonaviy axborot texnologiyalari, kompyuterlashtirish va kompyuter tarmoqlari ta'lim jarayonining muhim negizi bo'lib, yoshlarning yangi axborotlarga bo'lgan talablarini qondirishga xizmat qilmoqda. Maktabgacha ta'lim muassasalarida ta'lim-tarbiya olayotgan katta va maktabga tayyorlov guruhlarida aynan 5–7 yoshli bolalar tarbiyalanadi. Ulardagi intellektual salohiyatni shakllantirishning boshlang'ich davri ham xuddi shu yoshdan boshlanadi aynan shu sababli hozirgi kunda maktabgacha ta'limda multimedia ta'limiga alohida e'tibor qaratilmoqda.

Barkamol avlodni voyaga yetkazishda zamonaviy o'qitish metodlari, innovatsion texnologiyalar, multimedia vositalarining o'rni va roli benihoya kattadir. Pedagogik texnologiya va pedagog mahorati va pedagog tajriba bilan bir qatorda, interfaol metodlar, multimedia vositalari barkamol avlodni bilimli, yetuk malakaga ega bo'lishlarini ta'minlaydi.

Zamonaviy maktabgacha ta'lim muassasalarida ta'lim-tarbiya jarayonini multimedia vositalari asosida tashkil etishga alohida ahamiyat berilyapti. Multimedia vositalariga, birinchi navbatda, elektron darsliklar, kompakt disklar, video-audio tasmalar, turli taqdimotlar kiradi. MTTda multimedia texnologiyasidan foydalanishdagi masalalardan yana biri ta'lim-tarbiya jarayoni samaradorligini oshirish metodikasini ishlab chiqish, unga mos ishlanmalar yaratish hamda amaliyotga joriy qilish zarurligidir.

Multimedia ta'lim vositasining afzaliklari qanday va biz multimedia ta'limni qanday qilib maktabgacha ta'lim muassasalarida qo'lashimiz mumkin degan savol paydo bo'lishi tabiiydir. Maktabgacha ta'lim muassasalarida multimediani turli xil mashg'ulotlarda qo'lash mumkin. Masalan, tabiat bilan tanishtirishda, elementar

matematik ta'savurlarini shakillantirishda hamda xorijiy tilda mashg'ulotlarini tashkil etishda multimedia vositalari yuqori natijalar beradi. Mashg'ulot jarayoni bolalarni zeriktirib qo'ymaydi va ularni mashg'ulotga bo'lgan qiziqishlarini yanada ham ko'proq oshirishda keng imkoniyatlarni yaratib beradi. Maktabgacha ta'lim muassasalarida multimediani qo'llashdan ko'zlangan maqsad bolalarga qisqa vaqt ichida ko'proq va samarali ta'lim berishdan iboratdur. Hozirgi vaqtda bolalarning kompyuter va gadjetlarga qiziqishlari juda yuqori.

Shu tufayli pedagoglar ulardan tog'ri va unumli foydalanib, bolalarni yo'naltiri, qiziqishlaridan kelib chiqan holda ta'lim tashkil etilsa, bolalarning qiziqishlari yanada ham ortadi. Masalan, bolalarga multimedia ta'limidan foydalanib ularga til o'rgatish mashg'ulotlarni qiziqarli qilib tashkil etish mumkun. Ayniqsa, turli ranglardan foydalangan holda bolalarning ta'savuri kengaytirib, ularning diqqatini tortish, ularning tilga bo'lgan qiziqishlarini yanada ortirish mumkin. Jumladan, bolalarda fasilar to'grisida tasavvurlarini shakllantirishda qo'l keladi. Bolalarda bahor fasli haqidagi tushunchalarni shakllantirishda bahor faslini ko'rsatish bilan birgalikda undagi yashilik, daraxtlar va gularning rangi, bahor faslida nishonlanadigan bayramlarni havola qilish imkoniyati mavjud.

Maktabgacha ta'lim tashkilotkarida tayyorlov guruhida multimediali mashg'ulotlarni olib borish maktabga tayyorlash jarayonida tasavvurlarini boyitadi, ularning talim faoliyati to'g'risidagi tasavvurlarini shakillantiradi natijada ta'lim jarayonidagi qiyinchiliklarni yengib o'tishlari uchun zamin tayyorlaydi, shu bilan birga bolalarning inovatsion texnologiyalar bilan ishlash ko'nikmasi multimedia ta'limini tashkil qilish orqali shakillantirib boriladi.

Shuningdek, multimedia ta'limidan zamonaviy, inovatsion ta'limning bir shakli sifatida mashg'ulotlar jarayonida to'g'ri foydalanish maktabgacha ta'limda faoliyat olib borayotgan tarbiyachilarning ham inovatsion texnologiyalardan foydalanish bo'yicha ko'nikma va malakalarini shakillantirishga xizmat qiladi.

Multimedia va gipermedia texnologiyalari kuchli taqsimlangan ta'lim resurslarini birlashtiradi, ular bolani idroki shakllanishi va namoyon bo'lishi uchun muhitni ta'minlaydi. Multimedia va telekommunikatsiya texnologiyalari tizimda prinsipial jihatdan yangi uslubiy yondashuvlarni ochadi. Multimedia - zamonaviy texnik va dasturiy vositalardan foydalangan holda interaktiv dasturiy ta'minot nazorati ostida vizual va audio effektlarning o'zaro ta'siri, ular matn, ovoz, grafik, fotosuratlar, videolarni bitta raqamli tasvirda birlashtiradi.

Kompyuter o'yinlari tarbiyalanuvchilarning ushbu qiziquvchanlik xususiyatini oshiradi. Natijada, ularning aqliy rivojlanishi shakllana boradi. Multimediali kompyuter o'yinlari tarbiyalanuvchilarning qiziquvchanlik xususiyatini oshirishi quyidagilar asosida namoyon bo'ladi:

1) ekranda ko'rsatiladigan o'yin obyektiga animasiya samarasi berilgan bo'lishi va ular doimiy ravishda harakatlanib, jilolanib turishida;

2) tovushda;

3) musiqada;

4) animatsiyada;

5) multifikatsiyada;

O'yin davomidagi ushbu "kompyuterli" psixologik-pedagogik ta'sirlar yosh bolalarning faqat qiziquvchanlik xususiyatini oshiribgina qolmasdan, balki bilim olishga bo'lgan ishtiyoqini ham oshiradi. Yuqorida keltirilgan ma'lumotlardan ma'lum bo'ldiki, maktabgacha ta'lim yoshidagi bolalarni tarbiyasini shakllanishida axborot texnologiyalari ya'ni, multimedialardan foydalanish uni MTTlarda samarali qo'llash hozirgi kunning asosiy masalalaridan biri hisoblanadi.

Multimedia vositalarini tayyorlash va bolalarning kompyuter savodxonligini shakllantirish metodikasi shaxsiy kompyuterlar multimedia texnologiyasining asosiy texnik vositasi hisoblanadi. MTTlarning ta'lim-tarbiya jarayonida foydalanishda qo'shimcha vositalar - kompakt disklar, turli xil taqdimotlar, slaydlar va hokazolar talab etiladi. Multimedia vositalaridagi ta'lim-tarbiya materiallari dinamik xarakterga ega bo'lib, ular animatsiya bilan berilgan bo'ladi. Ta'lim tizimida foydalanib kelinayotgan an'anaviy ko'rgazmali materiallar statik xarakterga ega. Masalan, tarbiyachi A harfini an'anaviy usulda o'rgatish mobaynida, bolaga uning qog'ozdan yoki kartondan yasalgan shaklini ko'rsatadi (statik vosita). Multimedia vositasida ko'rsatilganda A harfi kompyuter (monitor) ekranida tebranib, bolalarning diqqatini o'ziga jalb etadi (dinamik vosita). Hozirgi kunda turli xil multimediali ta'lim vositalarini ishlab chiqish va ularni ta'lim-tarbiya jarayoniga tatbiq etish jadal rivojlanayapti. MTTlarda ta'lim-tarbiya jarayonida ulardan foydalanish metodikasi to'liq ishlab chiqilmagani uchun tarbiyachi-pedagoglar multimedia vositalarini multimedia texnologiyasi sifatida qabul qilmoqdalar. Kezi kelganda shuni ham ta'kidlab o'tish kerakki, multimedia vositalarini ishlab chiqaruvchi maxsus muassasadan tashqari, har bir MTT tarbiyachilarining o'zlari tayyorlashi mumkin bo'lgan dasturli va rolli multimedia vositalarini (DVD-disk) qo'llash mumkin. DVD video diski multimedaning texnik vositasi sifatida bir necha afzalliklarga ega. Diskdan foydalanib, o'rganiladigan materialni bosqichlar bo'yicha to'la, ba'zi hollarda alohida elementlarini ko'rish mumkin, zarur bo'lganda material qayta namoyish etiladi. DVD video diskda sxemalar, rasmlar, grafiklar ham joylashtirilgan bo'ladi. Multimedia texnologiyasining didaktik vositalari ta'limning didaktik talablariga to'la mos keladi.

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РАЗВИТИЕ ЭЛИТНОГО ТУРИЗМА В САМАРКАНДЕ

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Аннотация: В статье анализируются условия развития элитного туризма в Узбекистане, а в частности - в Самарканде. Подчеркивается важная роль строительства современных отелей и комплексов мирового уровня на территории страны.

Ключевые слова: Самарканд, элитный туризм, гостиничный бизнес, трудоустройство, курорт.

В наши дни в мировой экономике выделилось несколько важнейших секторов, и туризм занимает далеко не последнее место, а, возможно, одно из ведущих. В связи с этим в Узбекистане появился особенный интерес к модернизации туристической индустрии, разработке и совершенствованию нормативно-правовой базы для устойчивого развития отрасли, организации обслуживания зарубежных гостей в соответствии с международными стандартами.

В целях дальнейшего развития современного высокоэффективного и конкурентоспособного туристического комплекса в республике сформирована прочная нормативно-правовая база, основу которой составляет Закон «О туризме», принятый 20 августа 1999 года. Действуют программы адресных мероприятий по совершенствованию туристической инфраструктуры, в том числе привлечению инвестиций, диверсификации туристских продуктов, активизации мероприятий познавательно-ознакомительного характера, подготовке и повышению квалификации специалистов сферы [1].

За последние годы в Узбекистане наблюдается существенный прорыв в сфере туризма, учитывая не только историко-культурное наследие народа, возрождение национальных традиций и обычаев, восстановление и обустройство достопримечательностей республики, но и возведение современных туристических комплексов.

Одним из таких комплексов и является построенный в Самарканде в 2022 году курорт мирового уровня «Silk Road Samarkand».

«Silk Road Samarkand» - новейший туристический кластер Узбекистана, открытый накануне 22-ого саммита Шанхайской организации сотрудничества (ШОС). Этот элитный курорт со множеством современных роскошных отелей,

велнес-услуг, ресторанов, развлечений и достопримечательностей стал новым этапом развития местной туристической индустрии.

Комплекс «Silk Road Samarkand» - важнейшее для развития экономики страны сооружение. Одним из аргументов является то, что в этом комплексе было создано более 2000 рабочих мест, а это, в свою очередь, сильно расширило возможности трудоустройства местных жителей.

Из интервью компании «Euronews» с Роландом Обермайером, генеральным менеджером кластера отелей «Samarkand Regency Amir Timur» и «Savitsky Plaza», можно подчеркнуть следующее:

«Роскошного сервиса не существовало, а теперь есть набор отелей со стандартами 4, 5 звезд, 5 звезд делюкс, и это нечто совершенно новое. Это сооружение называют курортом назначения, где можно провести 3 дня, 4 дня, неделю. Там же предлагается конгрессный туризм, деловой туризм, кулинарный туризм на таком уровне, которого не было в прошлом» [2].

Тем самым, кроме рабочих мест планируется расширить поток туристов. Генеральный директор управляющей компании «Silk Road Samarkand» Артем Егикян в интервью газете «Коммерсантъ» отметил:

«По данным статистики, в 2019 году Узбекистан посетило около 3,5 млн иностранных туристов. Из них в Самарканде побывало около 600 тыс., большая часть которых приезжала сюда с однодневным визитом. Причиной этому было отсутствие прямых самолетных рейсов в город. Путешественники прилетали в Ташкент, на один день заезжали в Самарканд и уезжали обратно в Ташкент. Добираться было непросто, да и комфортных условий для ночлега не существовало. Новый отельный комплекс, а также открытие нового международного терминала в самаркандском аэропорту позволят довести турпоток в Самарканд до 1,2 млн туристов в год и увеличить среднюю продолжительность их пребывания в городе до трех-пяти дней» [3].

«Название курорта «Silk Road Samarkand» выбрано неслучайно: по территории современного Узбекистана со II века до н.э. и вплоть до XV века проходили маршруты Великого шелкового пути, на котором одной из важных остановок торговых караванов был древний Самарканд. Комплекс включает сразу восемь отелей. Два из них - пятизвездные: «Samarkand Regency Amir Timur» (единственный в Центральной Азии член ассоциации «The Leading Hotels of the World») и «Silk Road by Minyoun». Есть также два отеля «четыре звезды» - «Savitsky Plaza» и «Lia! by Minyoun Stars of Ulugbek». Плюс еще четыре гостиницы - бутик-отели санаторно-курортного направления «Wellness Park Hotels». Общий фонд отелей составит около 1,2 тыс. номеров различной категории».

Итак, можно прийти к заключению, что в Узбекистане элитный туризм развивается достаточно быстрыми темпами. Первым и самым главным шагом в развитии является строительство на территории гребного канала в Самаркандском районе курорта мирового уровня «Silk Road Samarkand», оцениваемого в 353 млн. долларов. Этот комплекс, включающий в себя 8 отелей международного уровня с общим фондом около 1200 номеров, позволит не только трудоустроить свыше 2000 человек, но и увеличить приток как иностранных, так и местных туристов в несколько раз. Также необходимо отметить, что сервис такого уровня появляется в Узбекистане впервые.

Для дальнейшего развития элитного туризма в Самарканде:

1. В 2023 году планируется провести одно из главных туристических ивентов на планете - собрать Генеральную Ассамблею Всемирной Туристской Организации ООН. Об этом заявил заместитель Премьер-министра Республики Узбекистан, министр туризма и спорта Азиз Абдухакимов после голосования в рамках 24-й сессии ЮНВТО, которая в настоящее время проходит в Мадриде, Испания [4].

2. Для притока иностранных туристов увеличивается количество безвизовых стран. За короткий период произошел скачок с 9 до 92 стран.

3. Между Генконсульством Узбекистана во Франкфурте-на-Майне и Германией прошли переговоры, в ходе которых стороны проработали вопрос создания онлайн-платформы в социальных сетях и мессенджерах, на которых немецкие юристы на постоянной основе будут проводить консультационно-лекционные занятия экспортерам Узбекистана по заключению контрактов с немецкими покупателями, сертификации товаров и заполнению таможенных деклараций в Германии [5].

4. Также организуются специальные автобусные маршруты. Возводится новая автомобильная дорога и мост, который свяжет туристический центр с улицей Усто Умара Джуракулова города Самарканда. Всего 5-6 минут понадобится туристам, чтобы доехать от гребного канала до комплекса Шахизинда. К услугам гостей и туристов будут предоставлены экомобили, велосипеды и лошади.

5. Следует отметить, что за последние годы Самаркандский гребной канал стал единственным базовым спортивным сооружением по водному спорту в Центральной Азии. В 2013 году здесь был проведен открытый чемпионат Азии по академической гребле на байдарках и каноэ, а в 2016 году - соревнования на кубок Азии и первый чемпионат континента пара-каноэ с участием ведущих спортсменов из 14 государств мира [6].

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ANALYSIS OF THE CONCEPTS OF
«EDUCATION» AND «GENDER EDUCATION»

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Abstract: *Education is one of the leading concepts in pedagogy. In the course of the historical development of society and pedagogy, various approaches to the explanation of this category have been determined.*

Keywords: *education, ethical, moral, legal norms, techniques, theory, social sense.*

A person's personality is formed and develops as a result of the influence of numerous factors, objective and subjective, natural and social, external and internal, dependent and independent of the consciousness and will of people acting spontaneously or according to certain goals. At the same time, the person himself is not defined as a passive being. He acts as a subject of his formation and development. First of all, there is a distinction between education in a broad and a narrow sense. In a broad social sense, education is the transfer of accumulated experience from older generations to younger ones. Experience is understood as knowledge, skills, ways of thinking known to people, and ethical, moral, and legal norms – in a word, everything created in the process of the historical development of the spiritual heritage of mankind. In a narrow social sense, education is understood as a directed influence on a person by public institutions to form certain views, knowledge and beliefs, moral values, political orientation, and preparation for life. In a broad pedagogical sense, education is a specially organized, purposeful, and controlling influence of the collective, educators on the educated to form the specified qualities in him, carried out in educational organizations and covering the entire educational process.

In a narrow pedagogical sense, education is the process and result of educational work aimed at solving specific educational tasks [1]. In pedagogy, as in other social sciences, the concept of «education» is often used to denote the components of an integral educational process. One of the eternal problems of pedagogy has always been to maximize the effectiveness of deliberate, purposeful educational influences on a person. Society has the opportunity to plan and anticipate certain changes in the social environment in advance and thereby create favorable opportunities for solving this problem.

Purposeful management of the process of personal development provides scientifically organized education or specially organized educational work. Where there is education, i.e. the driving forces of development, age, and individual

characteristics of children are taken into account, all possible positive influences of the natural and social environment are used, and, on the other hand, adverse environmental influences are weakened, coherence and unity of all social institutions are achieved, the child can self-education earlier.

Modern scientific ideas about education have developed as a result of a long confrontation of several pedagogical ideas. During the Middle Ages, the theory of authoritarian education was formed, which continues to exist in various forms at present. One of the brightest representatives of this theory was the German teacher I.F. Herbart, who reduced education to the management of children. The purpose of this management is to suppress the wild frolic of the child, «Which throws him from side to side,» the management of the child determines his behavior at the moment and maintains external order. Herbart considered supervision of children, orders, and prohibitions to be management techniques. As an expression of protest against authoritarian education, the theory of free education, put forward by J. J. Rousseau, arises. He and his followers urged him to respect the growing person in the child, not to constrain, but to stimulate his natural development in every possible way during upbringing. This theory has also found its followers in various countries of the world as a theory of spontaneity and spontaneity in education. She had a certain influence on domestic pedagogy [2]. Teachers of the first post-revolutionary years, proceeding from the requirements of the new, socialist, school, tried to reveal the concept of the process of education in a new way. So, P.P. Blonsky believed that education is a deliberate, organized, long-term impact on the development of a given organism and that any living being can be the object of such an impact - a person, an animal, or a plant.

A. P. Pinkevich interpreted education as a deliberately planned influence of one person (some people) on another (others) to develop biologically or socially useful natural properties of a person. The social essence of education has not been revealed on a truly scientific basis in this definition either. Characterizing education only as an impact, P.P. Blonsky and A. P. Pinkevich have not yet considered it as a two-way process in which educators and students actively interact, as the organization of the life and activities of pupils, their accumulation of social experience. The child in these concepts acted primarily as an object of education. Later, teachers came to define the essence of education as a social phenomenon. The problem of gender education of future men and women with an emphasis on the performance of specific social functions due to their gender identity was actively discussed by teachers from the beginning of the twentieth century until the 1930s. However, the ideas of «Gender» pedagogy soon became more widespread. During this period, very little attention was paid to the issues of sexual education of children and taking into account their psychophysiological characteristics in the educational process.

The reason was that, firstly, separate training was far from fully justified. Secondly, this system has not been fully brought to the high level of quality of secondary and incomplete secondary general education, which was originally conceived and envisaged. And, thirdly, the population as a whole was not interested in maintaining separate education, which reminded the older generation of the mid-twentieth century of pre-revolutionary Russian gymnasiums. In addition, the financial provision of a separate system turned out to be difficult for the state. According to the Federal State requirements for the structure of the basic general education program of preschool education, it provides for solving the problems of development, upbringing, and training of preschoolers with a gender approach [3]. The preschool institution and parents are faced with the task of moving from «Gender» pedagogy to the formation of a gender-appropriate behavior model in younger preschoolers, the principles of masculinity and femininity, to promote a favorable course of the process of gender education.

Based on numerous studies, scientists have come to the conclusion that it is currently impossible to focus only on biological gender, and have introduced the use of the interdisciplinary term «Gender» (Eng.–gender), which denotes social gender, gender as a product of culture. As a result, we have the opportunity to consider the issues of educating girls and boys not as a given from birth, but as a phenomenon developed as a result of the complex interaction of natural inclinations and appropriate socialization, as well as taking into account the individual characteristics of each particular child [4]. The introduction of the term «gender» is associated with the name of R. Stoller N.I. Abubakirova solves the problem of breeding the concepts of «gender» with the help of linguistic analysis: «gender» means a certain social relationship, not biological gender. Using the concept of «Gender», the researcher tries to get away from the biological characteristics of gender and point out that there are male and female social roles, the successful mastery of which will ensure a «Harmonious» entry into society. N.I. Abubakirova believes that the concept of «Gender» emphasizes the socio-cultural origin of differences between men and women. Thus, gender is the socio-psychological gender of a person, the totality of his psychological characteristics and features of social behavior, manifested in communication and interaction.

It is commonly believed that gender consists of three components:

- emotional or gender identity (I feel like a man/woman);
- behavioral or gender roles and behavior specifics (I behave like a man/woman)
- cognitive or gender identity (I know that I am a man/woman) [5].

In psychology, gender characteristics mean distinctive features of the male and female sex.

Gender education of younger preschoolers is a complex, multifaceted process. It is carried out in the process of moral education of children. According to the generally

accepted principles of preschool pedagogy, moral education is «a purposeful process of introducing children to the moral values of humanity and a particular society» [1].

Gender education is a continuous process of forming a positive gender identity, qualitative and quantitative transformations of the feminine and masculine characteristics of a child's personality, the development of ways of behavior by gender, emotional and values attitude to one's gender, and interaction with people of different sexes.

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DEVELOPMENT OF THE FUNCTIONAL LIFE EDUCATION OF THE PUPILS IN THE PROCESS OF PERCEPTING AND UNDERSTANDING PICTURE TEXTS

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Abstract: *In our article, great attention is usually paid to the formation of communicative literacy in literary studies and the teaching of the Uzbek language, since this type of literacy.*

Keywords: *communicative, social, informational, successfully adapt, functional literacy*

In modern education, the question of developing universal skills and qualities in students that will allow them to successfully adapt and function in conditions of constant social changes and information overload is increasingly being raised. In this regard, the problem of the formation of functional literacy among schoolchildren and students becomes particularly relevant, which is considered by specialists [2] as a person's ability to enter into relations with the external environment, quickly adapt and function productively in it. Functional literacy as a meta-subject result [1] is formed in the process of studying various academic disciplines through listening, speaking, reading, and writing. The authors [2] consider independence, activity, and social adaptation to be the main signs of functional literacy of a person.

Analysis of psychological and pedagogical literature [1] on this issue has shown that there are different classifications of types and types of functional literacy as a complex integrative concept. Most often, the components (types) of functional literacy are considered communicative, informational, social, and reading literacy.

The formation of communicative literacy is usually paid much attention to in the lessons of literary studies and the Uzbek language, since this type of literacy implies the possession of types of speech activity and is associated with the ability to understand oral and written speech, to express their thoughts independently. Listening, speaking, reading, and writing are considered the main activities affecting its development. At the same time, it should be noted that the active use of gadgets by modern schoolchildren largely hinders the development of their oral coherent speech skills, the ability to express their thoughts competently, and build verbal communication.

Information literacy is expressed in the skills of searching for information from different sources, processing it, and presenting it in the form of their skills, judgments, and conclusions.

Social literacy is considered the ability to conduct a dialogue, and interact with others, as socialization and interaction in the process of interpersonal communication.

Reader literacy is described not just as the ability to read and understand the meaning of what is read, but also as the ability to see the subtext of what is written, to decipher the author's position of the writer.

As a means containing a rich resource for the development of all components of functional literacy, from our point of view, it is advisable to use not only literary texts but also visual (works of painting), since they are ambiguous in their interpretation and contain many layers of information: from superficial, subject-matter, to deep, related to the feelings of characters and position the artist [6]. Understanding a pictorial text is similar to solving a creative problem and requires viewers to have the same skills and abilities to read and interpret visual images of paintings as when understanding a literary text. Reading pictorial texts is deciphering, translating the symbolic text of an image into the language of one's mental images when extracting meaning from them, as M.V. Osorina rightly notes. [6], requires a specially organized approach on the part of the teacher, aimed at forming students' ability to read a picture like a book, extract information from artistic images and interpret it.

As one such approach aimed at developing all four components of functional literacy (communicative, social, informational, and reading) in younger schoolchildren, let's consider the technology of facilitated discussion based on the material of paintings, which is a group discussion in the process of children viewing a picture, based on a certain strategy of open-ended questions and paraphrase technique.

Since functional literacy, as experts note [1], develops best in the process of search and research activities, we consider the understanding of the pictorial text as a creative task where there are no ready-made solutions. The teacher takes the position of a facilitator – a person who provides guiding participation and supports the student's initiative in the discussion process when perceiving and interpreting artistic images. The lack of art history information on the part of the teacher, the creation of a special creative environment during the discussion, and a group form of work that implements the principle of educational cooperation, allow students to develop the ability to find, extract information from artistic images, independently interpret it, evaluate it, give their arguments based on visually presented information. All these contribute to the formation of information functional literacy. The structure of the facilitated discussion includes the following components: 1. teacher-facilitator; 2. pictorial texts, 3. a group of students in the number of 10-15 people (this is the number that allows everyone to speak out during the discussion and be heard); 4. a discussion strategy that includes open questions and a paraphrase technique. It should be noted that when selecting pictorial texts, which include, first of all, paintings, the teacher is guided by the following principles: understanding accessibility, taking into account the age

characteristics of the participants in the discussion, saturation of details, the degree of recognition: students are not presented with paintings that they are familiar with and the name of which they have known for a long time. It is by considering an unfamiliar picture that they take the position of researchers, carry out search activities, master the ways of extracting information from a pictorial text, the skills to evaluate and comprehend it. The absence of art historical information on the part of the teacher before the start of the facilitated discussion is an important condition for the productive development of functional literacy. The discussion begins with the fact that children are presented with a slide of a painting or the painting itself in the museum exposition and are asked the question "What do you see here?", prompting students to look closely at what is depicted in the picture, extract information from it and formalize what is perceived in verbal forms.

At this first stage, which we call actualized perception, a special role is played by the technique of paraphrase, when the teacher paraphrases what the child says without adding his meaning and distorting it, if necessary, formalizing the student's statements taking into account cultural and linguistic norms and features. For example, considering a painting by Sidorov V. "Near the old sheds" (the description of which is included in the Uzbek language program in high school), a participant in our experiment, a first-grade student said: "I see a house here, two houses, they are big," and the teacher paraphrased: "Zhenya drew attention to two large houses depicted by the artist in this painting." Paraphrasing is of great importance in the process of forming the communicative component of functional literacy, as it helps to concretize the child's thoughts, clarify the meaning of what he saw, gives a sample of competent speech design, and allows the student to feel heard and understood. The paraphrase demonstrates acceptance of the opinion of each participant in the discussion, which, in turn, activates his cognitive activity, as it creates an atmosphere of psychological security, support, and trust. It should be noted that within the framework of this approach when forming functional literacy in the process of discussing paintings, the teacher does not evaluate the responses of students, and does not express either praise or blame. It shows that every opinion has the right to exist, and this, in turn, activates the desire of students to take part in the discussion and develops such aspects of communicative and social functional literacy as the ability to listen and hear each other, the ability to conduct a dialogue, relying not only on their own but also on someone else's point of view. vision. In a special form of paraphrase, called linking, the teacher generalizes different points of view in the process of reading a pictorial text by children, creating a socio-cognitive conflict, which, in turn, encourages children to be more reasoned in their judgments and conclusions.

All the issues that underlie the facilitated discussion can be divided into three groups following the stages of development of functional literacy of students identified

by us [3]. The first stage is aimed at developing the skills to search and collect information embedded in artistic images, to distinguish them from the general plan of the picture, and to find the most accurate words and concepts for their designation. At this stage, the facilitator asks questions that encourage a detailed collection and search for the information presented in artistic images: "What do you see here?", "What is happening in this picture?", "What else besides this have you noticed?", "Where can this happen?", "When is it happening?". To understand the meaning of what they saw and develop the skills of argumentation in oral speech, students are asked the question "What do you see here that allows you to say so?". It is significantly different from the question "Why do you say that?" or "Why do you think so?", since it is this formulation of the question that allows us to provide a connection between the perceived images and the thoughts that have appeared, without which it is impossible to understand the picture. Thus, the first stage is mainly aimed at the development of information functional literacy. In the second stage, more attention is paid to the development of the ability to argue, interpret artistic images, and use more complex speech constructs in oral speech. There are already questions that require reflection and the promotion of their hypotheses, and judgments. For example, "Who can this person be?", "What can you tell about him?", "What can these people talk about?", "What do they feel?", "In which country could this happen?", "When does this happen?", "What is this picture about?", "Who is its author?" At this stage, the participants of the Discussion actively develop the ability to compare different points of view, analyze their own and others' judgments, the ability to hear the interlocutor, and be convincing in their speech. So, for example, when considering Pablo Picasso's painting "The Girl on the Ball" to the teacher's question "Who are these people?", the participants in the discussion began to put forward versions of who is standing on this ball and Petya (7 years old) He said: "Vanya thinks it's a daughter. And I don't agree with him, after all, this is a wife. Will you look at how she stands? Her husband says to her: "Stand on the ball!", and she does not want to, but she stands. And my daughter won't stand like that!". This example clearly shows how the interpretation of what is perceived is based on the experience and knowledge of the child, when building the argumentation of his point of view.

Thus, the second stage is mainly aimed at the development of communicative and social-functional literacy.

In the third stage, students appear and actively develop such criteria of functional literacy as speech variability, free communication skills, speech on their initiative, and the ability to independently build and conduct a dialogue and polylogue. The function of the presenter is already assumed by the children themselves, asking each other questions in the course of viewing and discussing the picture, carrying out a paraphrase, both step-by-step, and generalizing different points of view (linking). There are already

questions that require an understanding of the author's position, that is, aimed at developing the so-called reader's functional literacy: "What do you think the artist wanted to say with this picture?", "What did he feel when he painted this picture?", "What do you feel when looking at this picture?", "How would you name it if you were the authors?", "What could you tell about this painting to a person who has never seen it?", "What is its main idea?", "What task did the artist set for himself?", "What interested the author of the painting in this plot?". At this stage, the dialogue is intensified not only with each other in the process of discussing the painting, but also the dialogue with the author of the painting is activated, students are trying to put themselves in his place, to assume what the artist felt when he painted this picture and what he wanted to tell us. In the course of such a discussion, penetration into deeper layers of the pictorial text takes place. Students begin to think and interpret the author's position and compare it with their vision. It should also be noted that if the first and second stages concerned such activities as reading pictorial text, listening, and speaking, then at this third stage it seems appropriate for us to also include written speech, during which information obtained from artistic images is generalized, comprehended, and processed. Such creative forms of work as writing cinquains and quatrains contribute to this in many ways, since they enable students to summarize the information received from artistic images in a concise form and to process it creatively, presenting it already in the form of their thoughts and images.

The methodical method of writing quatrains, proposed by S.K. Tivikova [7], allows you to formalize the impression of what you saw from the point of view of mental, visual, auditory, and sensory images. As examples, we will give several quatrains written by schoolchildren after a facilitated discussion. Based on the painting by Aivazovsky K. "Bay of Naples", Arseny (9 years old): "I see people on boats in the sea. I can hear their young cries. I feel calm here. Their foot will stand on the shore, I know." Based on the painting by Levitan I.I. "Golden Autumn", Eugene (10 years old): "I see golden autumn, birches in gentle tones; and I hear cranes cry a mile away, but I also feel fear of frost; and I also hear the murmur of the river, as if Bach is playing." Based on the painting by Krymov N.P. "Moscow landscape. Rainbow", Zhenya (11 years old): "I see a rainbow and a city. I can hear the noise from the factory far away. I feel the streams of moisture in the wind. It's rained here, I know that." The social component of functional literacy within the framework of this approach is actively developing due to the group form of work, during interpersonal communication during educational cooperation at the level of student – teacher, student–student, student – author of the picture according to such parameters as the ability to listen and understand someone else's point of view, convey your point of view, compare different approaches, find common and differences in the perception and understanding of the pictorial text, the ability to negotiate. All of the above is reflected in the personality-

oriented educational technology "Image and Thought" [4], specially designed for the intellectual and personal development of primary school children through art and actively used in practice in schools and creative houses of the Nizhny Novgorod region for more than ten years.

The use of this approach shows that a facilitated discussion in the process of group viewing of paintings helps children learn to read the pictorial text as a book, extract information from artistic images, comprehend it and understand it, and is an effective technology aimed at forming all components of functional literacy of students.

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ИНГЕБОРГ БАЛДАУФНИНГ ТУРКОЛОГИЯ-ЎЗБЕК АДАБИЁТИГА ОИД ТАДҚИҚОТЛАРИ

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Аннотация

Муаллиф ушбу мақолада Германияда вақтинча яшаётган ва таълим олаётган ватандошлар ва А.Гумболдт номидаги Берлин университетининг Марказий Осиё бўлими раҳбари, ўзбек тили ва адабиётининг билимдони, таниқли олима, «Дўстлик» ордени соҳибаси профессор шунингдек, Ўзбекистон Миллий университети фахрий профессори сифатида республикамиз олий таълим муассасалари тилшунослари ва адабиётшунослари билан яқин ҳамкорлик қилиб келаётганини Ингеборг Балдауфнинг ўзбек адабиёти хусусан жадидчилик тарихида ўрни ва ўзбек адабиёти, туркология борасидаги тадқиқотлари ҳақида сўз юритган.

Калит сўзлар: Ингеборг Балдауф, жадидлар, Беҳбудий, Чўлпон.

The author of this article is compatriots temporarily living and studying in Germany and the head of the Central Asia Department of the University of Berlin named after A. Humboldt, a scholar of the Uzbek language and literature, a famous scientist, a professor with the Order of Friendship, as well as an honorary professor of the National University of Uzbekistan, linguists of higher educational institutions of our republic. Ingeborg Baldauf talked about the place of Uzbek literature in the history of Jadidism, Uzbek literature and Turkology.

Key words: Ingeborg Baldauf, Jadidlar, Behbudi, Cholpon.

Ўзининг интервьюларидан бирида “ Мен ўзбек тилини ўрганиш ва тадқиқ қилиш, ўзбек адабиётининг етук вакиллари ва уларнинг асарларини ўрганишда давом этаяпман. Ўзбек тили ва адабиётини ўрганиш ва тадқиқ этиш фаолиятининг асосига айланган десам ҳам хато бўлмайди. Айни пайтда «20 аср бошларида ўзбек адабиёти», «Маҳмудхўжа Беҳбудий ва Ўрта Осиёда жадидчилик», «Ўзбек адабиёти», «Ўзбек халқ мақол, матал ва топишмоқлари» ва «Ўзбек халқида ҳаж сафарлари» мавзуларидаги илмий изланишлар устида ишляпман” деган эди. Ингеборг Балдауф Бамберг ҳамда Берлин университетларида ўзбек тили ва адабиёти фанини ўқитилишини ташкил қилган, ҳозир Берлиндаги Гумболдт университетида хорижлик ёшларга ўзбек тилидан дарс беради. Тилшунос олима Германияда ўзбек тили ва адабиёти фани ўқитилишига оид қатор ўқув дастурлари, дарслик ва қўлланмалар

яратган. И.Балдауф Ўзбекистонда жадиличлик ҳаракатининг ёрқин намояндалари Чўлпон, Бехбудий ва Фитратнинг ҳаёти ва ижодини ҳам чуқур ўрганган. Ушбу изланишлари натижасида «20 аср ўзбек адабиёти» монографиясини ёзиб, немис ва ўзбек тилларида нашр эттирган. У, шунингдек, Ўзбекистон халқ ёзувчиси Шукруллонинг «Кафансиз кўмилганлар» асари ва ёзувчи Учқун Назаровнинг «Чаён йили» романини немис тилига таржима қилган.

Олиманинг ҳақиқий илмпарвар эканини унинг илмий ишлари, мақолаларидан ҳам кўришиб туради. У доим факт ва ҳодисаларни қаердан олганини, кайси матнга асосланганини аниқ кўрсатади. Унинг асарларидаги саналар қайта-қайта текширувдан ўтказилган, жойлар, одамлар, асарларнинг номлари синчковлик билан аниқлаштирилган. Хуллас, олима бирон мақоласида чала муллагликка, билиб-билмай гапиришга, оддий ҳаёт ҳақиқатини баландпарвоз гаплар, ранговар бўёқлар билан алмаштиришга йўл қўймайди. Буларнинг бари чинакам илмийликнинг бирламчи шартидир.

Бу сифатларни Ингеборг услубининг фавқулудда хусусиятлари сифатида кўрсатмоқчи эмасмиз, лекин шунга қарамай, уларни таъкидлаётган эканмиз, бунинг сабаби бор, албатта. Биз, собиқ шуро адабиётшунослари, ўзимизни «адабиётшунос олим» деб атаб, гердайиб юраверган эканмиз, олимлик учун энг зарур сифатлар нима- дан иборат эканини ўйлаб ҳам кўрмаган эканмиз. Ўзимдан қиёс: мен, албатта Бехбудийнинг номини мактабда ўқиб юрган кезларимдаёқ эшитган, ҳатто унинг «Падаркуш»ини урушдан аввал нашр қилинган аллақайси адабиёт дарслигидан ўқиган ҳам эдим. (Бу ўринда дарслик- нинг муаллифию, қачон, кайси нашриётдан чиққанини аниқ айтмаётганим учун узр, 30-йилларда чиққан тўрт- бешта адабиёт дарслиги ва хрестоматияларини Аскар Зуннун докторлик диссертациясини ёзаётганда таваллолар билан, ялиниб-ёлвориб, иши битиши билан кайтариб беришга ваъдалар қилиб, олиб кетганча, ҳали кайтариб беради!) Кейинчалик унинг биографиясига оид баъзи материаллар билан танишдим, айрим узук- юлук хотиралар эшитдим ва шуларнинг узи билан қоникдим. Буни қарангки, салкам ярим аср мобайнида на Самарқандга бориб, на Тошкент кутубхоналарида Бехбудийнинг «Ойна» журнали ва Самарқандда нашр этган газетаси билан танишиб чиқишга қунт қилибман¹. Ҳолбуки, бу журнал ва газетанинг нусхаларидан суратга олиб Америкага жўнатишган ва у ердан бошқа мамлакатларга тарқалган экан.

Олиманинг ўзбек маърифатпарварлари ва жадида адабиёти намояндалари ижоди чуқур таҳлил қилинган “Ҳақиқат излаб...”, “Маҳмудхўжа Бехбудий Фаластинда” сингари йирик тадқиқотлари, адабий таъсир ва типология

¹ О. Шарофиддинов. Ингеборг Балдауф: 20 аср ўзбек адабиётига чизгилар. Сўзбоши. 6 бет.

масалалари кўтарилган “Тавфиқ Фикрат ва Чўлпон” номли маърузаси ва шундай характердаги қатор илмий-назарий мақолалари борки, улар ҳақида ҳам илик фикрлар айтиш мумкин. Дарвоқе, “Тавфиқ Фикрат ва Чўлпон” тадқиқоти таржима қилиниб, ўзбек вақтли матбуотида ҳам чоп этилган. И.Балдауф ўз фаолияти давомида Алишер Навоий, Чўлпон каби буюк сўз санъаткорлари ижодини Ғарбда кенг тарғиб қилиб келади, улар ижодига бағишланган қатор илмий-амалий конференциялар ташкил қилишда бош-қош бўлади.²

У Наим Каримов, Бегали Қосимов, Шухрат Ризаев, Баҳодир Каримов каби таниқли ўзбек адабиётшунослари билан мунтазам илмий-ижодий алоқалар ўрнатган. Чўлпон таваллудининг 100 йиллиги муносабати билан Германияда ташкил қилинган шундай конференцияларнинг бирида Наим Каримов, Хуршид Дўстмуҳаммад, Шухрат Ризаевлар ҳам иштирок этишган. Алишер Навоий таваллудининг 575 йиллиги муносабати билан Берлинда ўтказилган тантаналарда эса профессор Шухрат Сирожиiddинов, Ўзбекистон халқ ёзувчиси Муҳаммад Али, навоийшунос Афтондил Эркинов қатнашди.

Мен Ингеборг Балдауфни шарқшунослик соҳасининг атоқли вакили Аннемария фон Габайнга қиёслагим келади. Габайн жуда сермаҳсул олима бўлганлиги сабабли, вафотидан сўнг ўнга яқин шогирди йиллар давомида унинг биобиблиографияси тузиш билан банд бўлишган экан. Ингеборг Балдауф ҳам шарқ мамлакатлари тили, адабиёти ва маданиятининг турли жабҳалари қамраб олинган салмоқдор ва кенг миқёсли тадқиқотлари билан Габайннинг изидан бормоқда. Йирик шарқшунос олимлар Аннемария фон Габайн, Вилле Банг Кауп, Йоханнес Бенцинг, Аннемария фон Шиммел, Карл Ҳайнрих Менгес каби заҳматкаш олимларнинг эзгу анъанасини давом эттираётган олиманинг айтишича, унинг бисотида ҳали чоп этилмаган кўпгина тадқиқотлари бор бўлиб, уларни тез орада ғарб илм оммаси, шу жумладан, бизга ҳам тақдим этиш тараддудида экан.³

Фойдаланилган адабиётлар

1. «Жаҳон адабиёти», 2016 йил, 12-сон.
2. Балдауф И. XX аср ўзбек адабиётига чизгилар. –Т.: Маънавият, 2001. 3–4-бет.
3. Зиёуз.уз
4. Дунё.инфо.уз

² Балдауф И. XX аср ўзбек адабиётига чизгилар. –Т.: Маънавият, 2001. 3–4-бет.

³ Дунё.инфо.уз

**DAVLAT ULUSHI ISHTIROKIDAGI JAMIYATLARDA MHXS
ASOSIDA BUXGALTERIYA HISOBINI YURITISH VAMOLIYAVIY
HISOBOTLARINI TUZISH TARTIBI**

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Annotatsiya: Ushbu maqolada davlat ulushiga ega bo'lgan jamiyatlarda MHXS asosida buxgalteriya hisobini amalga oshirish masalalari muhokama etiladi.

Kalit so'zlar: integratsiya, xalqaro standart, hisob tizimi, moliyaviy hisobotning xalqaro standartlari, hisobot, transformatsiya.

KIRISH

Bugungi kunda davlat ulushiga ega bo'lgan kompaniya va firmalarning operatsiyalarini buxgalteriya hisobida aks ettirish xalqaro standartlarga javob beradigan tarzda olib borish uchun moliyaviy hisobotni xalqaro standartlari asosida tashkil etish, hisob tizimini xalqaro amaliyotda qabul qilingan tizimga moslash, buxgalteriya hisobining asosi bo'lgan hisobvaraqlar rejasi ishlab chiqilib amaliyotga tadbiiq etilishi hisob tizimini xalqaro amaliyotga mos ravishda yuritish imkoniyatini yaratadi.

ADABIYOTLAR SHARHI

Ayrim mutaxassislar fikricha, davlat ulushi mavjud bo'lgan aksiyadorlik jamiyatlarining faoliyatini reyting asosida baholashda - bu turli kredit tashkilotlarini moliyaviy ko'rsatkichlari asosida baholashning taqqoslama tizimidir [1]. Ana shundaytaqqoslama tizim bu moliyaviy hisobotning xalqaro standartlari hisoblanadi. Masalan rivojlanayotgan davlatlarda banklarning engmuhim ko'rsatkichi bu kredit ishonchligi hisoblanadi. Bank reytingiyuqorida ta'kidlab o'tganimizdek, uning asosiy moliyaviy ko'rsatkichlari asosida, yoki qisqacha balansi asosida tuziladi. Bizning fikrimizcha, xo'jalik yurituvchi sub'ektlarning moliyaviy hisobotlarini xalqaro standartlar asosisida tuzilishi ularning moliyaviy hisobotlarini chet ellik investorlar tomonidan o'qishi va tushuna olishi imkoniyati yaratiladi. Natijada aksiyador lik jamiyatlarining aksiyalarini fond bozorida joylashtirish va uning kotirovkasini to'g'ri belgilash imkoniyati yaratiladi.

Ushbu masalada jahon iqtisodiy tizimiga integratsiyalashuvida moliyaviy hisobotlarning xalqaro standartlarini o'rnini belgilashda muhimligini Rossiyalik iqtisodchi-olim L.B.Trofimovaning ta'kidlashicha, "Jahonda amalga oshirilayotgan iqtisodiy islohotlarning natijasida moliyaviy hisobotlarning xalqaro standartlariga o'tishi uchun shart-sharoit yaratilishi, Rossiya davlatidagi yirik biznesning jahon iqtisodiy tizimiga integratsiyalashuvi natijasida taqdim etilayotgan moliyaviy

hisobotlarni biznes vakillari tushunadigan shakllarda taqdim etishni doimiy ravishda takomillashtirib, uni moliyaviy hisobotning xalqaro standartlariga moslashtirib borishni zaruriyatini keltirib chiqaradi” [2].

TADVIQOT METODOLOGIYASI VA EMPIRIK TAHLIL

Yuqorida bildirilgan fikrlardan shuni aytish mumkinki, buxgalteriya hisobi standartlari buxgalteriya hisobini yuritish va moliyaviy hisobotni tuzishga doir minimal talablari, uni tashkil etish, yuritish va moliyaviy hisobotni tuzishga doir maxsus talablarni bajarishni belgilab beradi. Ushbu masala aksiyadorlik jamiyatida yanada muhim ahamiyatga egaligi va ularning aksiyalarini jahon fond birjalariga joylashtirilishi uchun beriladigan axborot va moliyaviy hisobotlarni xalqaro talablarga moslab taqdim etishning zaruriyatini keltirib chiqaradi.

Xorijiy mamlakatlarda aksiyadorlik jamiyatlarining faoliyatini reyting baholash usullarining samaradorligi, albatta, aksiyadorlik jamiyatlariga nisbatan qo‘yilgan reyting natijalariga muvofiq qanday chora-tadbirlar amalga oshirilishi yo‘llari orqali ifoda etiladi.

Moliyaviy hisobotning xalqaro standartlariga o‘tishni jadallashtirish orqali xorijiy investorlarni zarur axborot muhiti bilan ta‘minlash va xalqaro moliya bozorlariga kirish imkoniyatlarini kengaytirish, shuningdek, hisob va audit sohalari mutaxassislarini xalqaro standartlar bo‘yicha tayyorlash tizimini takomillashtirish maqsadida:

1. Belgilansinki, aksiyadorlik jamiyatlari, tijorat banklari, sug‘urta tashkilotlari va yirik soliq to‘lovchilar toifasiga kiritilgan yuridik shaxslar:

2021 yil 1 yanvardan boshlab, MHXS asosida buxgalteriya hisobi yuritilishini tashkil etadi va 2021 yil yakunlaridan boshlab moliyaviy hisobotni MHXS asosida tayyorlaydi, qonun hujjatlarida MHXSga o‘tishning ertaroq mud- datlari nazarda tutilgan yuridik shaxslar bundan mustasno;

Shunday tartib o‘rnatilsinki, unga muvofiq moliyaviy hisobotni ixtiyoriy ravishda MHXSga muvofiq tayyorlaydigan tadbirkorlik sub’ektlari buxgalteriya hisobining milliy standartlari bo‘yicha moliyaviy hisobot taqdim etishdan ozod etiladi. Demak aksiyadorlik jamiyatlari 2021 yil 1 yanvardan boshlab, MHXS asosida buxgalteriya hisobi yuritilishini tashkil etadi va moliyaviy hisobotlarini xalqaro standartlar asosida taqdim etadi.

Xalqaro hisob tizimini joriy qilishda eng avvalo aksiyadorlik jamiyatlari faoliyatida buxgalteriya hisobini to‘g‘ri tashkil qilish va yuritish, uni xalqaro hisob tizimiga moslab tashkil etish muhim ahamiyatga egadir. Chunki u aksiyadorlik jamiyatlari aksiyalari fond birjalari orqali chet ellik investorlarga sotishda moliyaviy hisobot shakllari xalqaro amaliyotda qabul qilingan tartibda tashkil etish muhim

hisoblanadi. Buning uchun esa buxgalteriya xodimlari buxgalteriya hisobi va moliyaviy hisobotni asosiy tamoyillari va uslubiy asoslari to'g'risida yetarli darajada tushuncha va bilimlarga ega bo'lishlari zarur.

Buxgalteriya hisobi aksiyadorlik jamiyatlari mablag'lari va ularning tashkil topish manbalarining harakatini ko'rsatadi. U aksiyadorlik jamiyatlarning operatsiyalari ustidan yoppasiga va uzluksiz kuzatish olib borish, kuzatish natijasida olingan ma'lumotlarni o'lchash va hujjatlarda qayd qilish hamda ularni yagona bir o'lchovda, ya'ni pulda ifodalab umumlashtirish tizimidan iboratdir. Buxgalteriya hisobi ma'lumotlaridan foydalanagan holda korxonaning aktiv va passiv operatsiyalari rejalashtiriladi.

XULOSA VA MUNOZARA

Ushbu yuqoridagi moliyaviy hisobotning xalqaro standartlarini qo'llash jarayonini tahlil qilish va uni amaliyotga joriy etish tizimini o'rganish asosida quyidagi xulosa va takliflar ishlab chiqildi:

1) Eng avvalo turli davlatlarda tashkil etilgan hisob tizimini tahlil qilish natijasida jahon hamjamiyatida qo'llanilayotgan moliyaviy hisobotlarni halqaro standartlariga moslashtirish, ayniqsa kompaniya va firmalar moliyaviy ko'rsatkichlariga baho berishda va ularning halqaro miqyosda harakat qilishida vamuhi ahamiyat kasb etadi. Shu nuqtai nazardan ham O'zbekiston Respublikasidagi aksiyadorlik jamiyatlarining moliyaviy hisobotlarni xalqaro standartlar asosida tayyorlash, moliyaviy hisobotning xalqaro standartlarini amaliyotga qo'llashning ishchi rejasi va uning ketma-ketlik dasturini ishlab chiqish lozim.

2. Xalqaro standartlar bo'yicha sezilarli ta'sir mavjud bo'lgan chog'idagi (shu'bakompaniyalariga oid) investitsiyalar hisobi aksiyadorning xo'jalik yurituvchi sub'ekt kapitalidagi ulushi hajmini hisobga oluvchi usul bo'yicha amalga oshirilganda quyidagi holatlar mustasno bo'lishi lozim deb o'ylaymiz:

- agar kapital qo'yilmalar faqat yaqin kelajakda, ya'ni keyingi navbatdagi sotilishi uchun amalga oshirilsa yoki saqlansa;
- investor sezilarli ta'siridan boshqa foydalanmaganda;

3. sho'ba kompaniya o'z faoliyatini qat'iy cheklashlar sharoitida amalga oshirganidabuxgalteriya hisobining o'ziga xos jihatlari vujudga keladi.

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BODY LANGUAGE AND VOICE DEVELOPING.

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Annotation: This article provides information about Body language and voice developing.

Keywords: Reading, writing, speech, pantomime, modern human society, methods.

If you want to learn how to solve human communication tools, then read the article. It contains a lot of useful information. Touch is often equated with body language. Again, this is a bit of a stretch in social psychology, involving bodily pantomime, pantomime, pantomime, eye movement, reflexes, and interpersonal space. There are two types of communication in modern human society: verbal and non-verbal.

For humans, oral communication is the main method of basic universal communication.

The basis of communication between people is the transmission of information and emotional states.

But there is still a way for people to communicate.

The main thing to express the content of thought and speech is verbal communication.

The technical means of oral communication are combined with the following factors:

Communal norm-speech etiquette and speech culture

Contact by contact with no contact

Content of speech and style of communication

Size and location of information

Non-verbal communication, verbal, is a means of information transfer. What is the difference between verbal communication and non-verbal communication?

Difference in own funds of this type of communication. Non-verbal means of communication and sometimes replace speech exchange. Means of verbal communication are spoken and written speech. Verbal communication tools include: Oculus. Information that reduces the psychological distance - eye movement, frequency of visual contact, length of pause.

Cassica. Apressive combines motionless movements, fog, poses, gestures.

Humphrey behavior. This method of communication is built for hand to hand, patting, kissing.

Chronological. (Late) use of time in communication.

Prosemic. Communication, distance and geographical location are taken into account - direction and distance.

Sensitive. Sensory perception is the voice, taste, warm feeling of the interlocutor.

Paraverbal communication is determined by pro-verbal and extralinguistic tools: intonation, vocalization, voice, pause, sigh, cry, cough, timbre, laughter.

Reflects the characteristics of the personality of a person who is not bad: mood, emotional background, attitude to others. This voluntary communication can be broken down into elements that are difficult to read (poses, gestures, facial expressions, gazes).

They are intuitively accepted.

A person adapts verbal communication and behavior to life conditions. It reveals the inner world of a nobody and shapes the state of mind.

The sum of all the messages of all the messages of all the messages of all the messages of all the messages of all the messages of all the messages of the human body. It is as follows:

Gesture

Facial expressions

Tone of voice

Intonation

What is in psychology, what is it in psychology? Here is the answer in a nutshell:

It is the interaction of personalities without the use of words.

Information people convey to each other through pictures, intonations, gestures, facial expressions, pantomime and changes in the communication scene.

With non-verbal means of communication, speech directly or with any sign and not presented in the form of any sign.

The elements of informal communication allow the receiver to have a wider view of the message received from the sender, because such messages say a lot about such situations:

Situation

Intention

Feelings

Assumptions

Most of the time, sending and receiving instant messages happens at the subconscious level. When we have a "gut feeling" or a "gut feeling" that we are lying, body language does not go hand-in-hand with words. Informal communication is the process of sending and receiving messages without using spoken or written words. Also called manual language. Similar to how cursive can emphasize written language, nonverbal

behavior can emphasize parts of a verbal message. Nonverbal Communication 1956- Psychiatrist Jürgen Ruesch and author Weldon Kees in the book *Unconventional Communication: Notes on Visualizing Human Relationships*. However, nonverbal messages have been recognized as an important aspect of communication for centuries. For example, in "The Progress of Education" (1605), Francis Bacon wrote that "the lines of the body in general reveal the intelligence and inclination, but the movements of the face and parts are carried out ..." humor and the state and will of the mind. "Types of Nonverbal Communication. Judy Burgun (1994) identified seven different intermediate dimensions: (1) kinesics or body movements, including facial expressions and eye contact, (2) voice, vocalics or paralanguage, which includes volume, pitch, and timbre; (4) our physical environment, creations or objects, (5) proxemics or personal space, (6) haptics or touch, and (7) chronicles or time.« Signs, or symbols, include all signs that repeat words, numbers, and punctuation. They range from the monosyllabic thumb movements of equestrians, to more complex systems such as American Sign Language for the deaf, where uneven signals have a direct verbal translation. However, it's important to note that signs and symbols are culturally specific. The thumb and index finger used to express "A-Okay" in the United States are less common in some Latin American countries. demanding an aggressive and aggressive interpretation. "How Nonverbal Signals Influence Verbal Speech." Psychologists Paul Ekman and Wallace Friesen (1969), in discussing the relationship between nonverbal and verbal messages, identified six important ways in which nonverbal communication directly affects our speech.«First, we can use nonverbal cues to emphasize our words ... All good speakers know that they can do this with strong movements, changes in vocal volume or speed of speech, temporary pauses, and so on ...»."Secondly, our non-verbal behavior can repeat words , we can say yes to some .Third, non-literal words can be substituted for words, often there is no need to put words into words, a simple gesture (for example, shake your head shaking, , ' and so on.)"Fourthly, we can use non-verbal signals to regulate speech, because receiving these signals, these gestures and speeches allow us to exchange the conversational roles of speaking and listening Fifth, nonverbal messages sometimes contradict what we say. A friend says she had a great time at the beach, but we notice that her voice is flat and her face shows no emotion. We are sure that it is. "Ultimately, we can use nonverbal cues to complement the verbal content of our message... Being upset makes us angry, depressed, depressed, or just a goes aside» .Unvertafel signals the words we use reveal the true nature of our feelings. "As usual, experts say that word-of-mouth communication itself reflects the impact of a message." 93 percent is derived from indirect information, and only 7 percent is from oral information." But this number is misleading. Based on two 1976 studies, they compared the symbols of the vines to human beings. Although other research has not supported the 93 percent, both children

and adults are more likely to interpret the other words of words than verbatim words. They believe more in things that are not. "Like the rest of us, airport security officers like to think they can read body language. The Transportation Security Administration is using thousands of 'behaviors' to find facial expressions and other illicit clues that could identify terrorists in a \$1 billion training o But critics say these efforts have done a lot without stopping a single terrorist or disturbing tens of thousands of passengers a year, but the TSA appears to have fallen for a classic self-delusion: you intelligence of liars by watching their dead bodies." Most people believe that liars lose themselves by losing their eyes or acting nervously, and many law enforcement agencies trained to look for specific categories such as looking up in a certain way. But in scientific experiments, people doing the hard work, human rights defenders and other supposed experts are no better than ordinary people, even if they are more confident in their abilities."Summary: Everyone learns languages throughout life: local or foreign, as well as a programming language. However, many do not know about the existence of a public language. This is called the language of Narkhal communication. The peculiarity of body language in human communication is considered simple, because the impulses of subconsciousness are no more than ordinary speech.

Scientists have proven that no more than half of the information is transmitted by funds. It is necessary to understand the meaning of body language and learn to follow it.

Conclusion:

Only facts are conveyed in simple words, but they are not enough to convey emotions and feelings. The non-appreciated can be revealed through language by revealing their attraction. The language of the body is more truthful than the language of words, because non-existent elements (facial expressions, gestures, intonation) convey the falsity or falsehood of words. The language of non-conversational communication tells that the interlocutor is actually thinking and defining his position. Non-bad language can be understood by all people, regardless of their gender and age. The main thing is how to pay attention to the interlocutor's behavior and correctly interpret the specific means of communication used by this person.

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SPEAKING IS AN INTERACTIVE PROCESS.

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Annotation: This article provides information about speaking is an interactive process.

Key words: Speech, language, specific language community, dialogical speech.

Speech is the use of language in the processes of expression and exchange of ideas, a certain way of life of language as a separate type of social activity. Speech refers to the processes of its oral (voice) and written manifestation, that is, the process of speaking and its result (speech ideas, works, stored in memory or recorded in writing). Speech is the use of language in the processes of expression and exchange of ideas, a certain way of life of language as a separate type of social activity.

In the linguistic theory, the concept of Speech is contrasted with the abstract concept of language, which is a system of means of expression accepted in a specific language community, and with the specific, somewhat more general concept of language, which is one of the most characteristic manifestations of social existence (life). In order to influence other people's behavior and activities, the original Speech (external speech), i.e. speech, which serves to convey information and messages to them, in the form of articulation of language signs perceived by the auditory organs (recorded and repeated with the help of sound recording equipment) or appears in the form of a conditional reflection of these signs in the writing. In addition to original speech ("external speech"), there is also internal speech. It focuses on discussing and solving various issues that help the speaker to know. Internal speech takes place on the basis of external notes, without the use of sound or writing, only in the form of ak/shy processes that take place with clear images of words in voice speech. Written speech differs from oral speech in that it is somewhat formed, the words are carefully selected, grammatically clear but complex, and the tone, facial expressions, and hand movements characteristic of oral speech cannot be used directly. There are monologic (see Monologue) and dialogue (see Dialog) types of speech. In addition to the communication-intervention function, speech can perform other functions, such as a poetic function. A special form of speech is reading.

Communicative, interactive and perceptive aspects of communication. The communicative aspect of communication refers to its functions as a process of interpersonal exchange of information, knowledge, ideas, and thoughts. Language serves as the main tool of this process. Language is a means of communication between

people, with the help of which people convey information and so on to each other. It is known that there are mainly 2 types of speech as a means of communication: written speech and oral speech. Oral speech itself is divided into dialogic and monologic types. The content, character, and duration of a dialogic speech directly depend on the personal views, interests, mutual relations, and goals of the persons involved in the dialogue. That is why dialogic conversations between a teacher and a student, emotional leaders, diplomats, and friends who meet on the street are different from each other.

A monologic speech is an address of one person to another person or a group of people, and it has conditions such as psychological structure, logical completion of thoughts, and the need to follow grammatical rules while speaking. For example, a student preparing for a lecture, from the time of preparation to the end of the lecture, experiences a number of internal mental experiences, spends a lot of time and energy on it. Compared to dialogical speech, this type of speech is more complicated. Communication carried out by means of language is called verbal. The interactive side of communication. On the interactive side of communication, it provides direct influence on each other in joint activities. Thanks to this, people can demonstrate a number of abilities, such as working in cooperation, helping each other, learning from each other, and achieving coordination of actions. Thanks to this, the teacher can influence the personality of the child in a targeted manner. As a matter of fact, any communication, if it does not consist of meaningless, aimless, empty words, always has the opportunity to change the behavior of those who enter into communication, their attitudes. It can be seen that the behavior management depends on certain psychological laws. The reason for this is the various norms and rules adopted in the society. Because, in the processes of mutual communication and interaction, the images of such behavior are absorbed into the minds of people, and everyone accepts them as a norm. [6] For example, it is a norm of behavior that teenagers and young people in general should give way to adults in public places. Adherence to this norm or not is controlled by the system of social control. That is, in the above conditions, if a teenager does not give way to an elderly person on the bus, the public will immediately call him to social order. Therefore, each person performs different roles in different circumstances, and how these roles are performed and their compliance with people's expectations is monitored through the social control system. That is why people who enter into communication always control their own behavior and the behavior of others and adapt to each other in their actions. [1] But sometimes having many roles in a person can lead to role conflict. For example, if a school teacher has a child in the class he is teaching, he may experience such a conflict during the lesson, that is, he has to perform the role of both father or mother and teacher at the same time. Or a teacher

who comes to the home of a misbehaving student struggles between the roles of teacher and guest at the same time.

Interactions of persons performing different roles are controlled by a system of expectations. For example, whether he wants it or not, certain actions are expected from the teacher, which should not contradict the teacher's role. [2]The actions of a person who acts in accordance with his roles and always behaves according to the norm are called moral actions. For example, the manners of a teacher, the fact that he is a master of his profession, the ability to understand the hearts of children, and the way he works taking into account their age and individual characteristics, are signs that he has manners.[3] A rude person is the opposite. So, in the process of mutual communication, one person has a psychological effect on another person. This effect may or may not be understood by both parties. That is, sometimes we do not understand why one person has a strong influence on us, and another person, on the contrary, does not have any influence. This is an important problem in pedagogy. Each pedagogue has his own style of influence and power of influence. The influence of the teacher's personality on children was clearly observed in the following experiment. Elementary school students were given many toys and told not to touch only one of them, the red wooden toy. The children were left alone, and their movements were secretly monitored. [5]Many children still touch the forbidden toy. In the second series of the experiment, it was said that it is now possible to touch all toys, but only the lid of the red box cannot be opened. A photo of the teacher of these children was hung on top of this box. In this series, compared to the first, the number of "prohibition violators" has decreased sharply. So, this clearly proves the influence of the teacher's personality on the child's actions.[4]

Conclusion:

When it comes to interpersonal influence, it is also necessary to talk about the role of the teacher's reputation. Because a reputable person will always have his position and influence in that prestigious group. A person's reputation is his ability to have a willful and emotional influence on other people. It is known that reputation is not acquired only by deeds or life experience, but its real basis is the correct relationship of a person with people, the combination of his human qualities and other positive qualities. Psychological reputation is the most important criterion of influence.

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TEXNOLOGIYA FANINI O‘QITISHNI DASTURIY TA’LIM
VOSITALARIDAN FOYDALANIB TAKOMILLASHTIRISH METODIKASI

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ANNOTATSIYA

Ushbu maqolada texnologiya fanini o‘qitishda dasturiy ta’lim vositalardan foydalanib takomillashtirish metodikasini ishlab chiqish hamda dars davomida foydalaniladigan pedagogik dasturiy vositalar yordamida o‘qitishni tashkil etish, ularning turlarini o‘rganish usullari tadqiq qilingan.

Kalit so‘zlar: dasturiy ta’lim vositalari, pedagogik ta’lim vositalari, o‘rgatuvchi daturlar, test dasturlari, texnologiya fani, texnologiyani o‘qitish texnologiyasi, texnologik jarayonlar.

ANNOTATION

In the process of studying technology at Ushba, the development of educational methods from educational materials and methods of developing pedagogical tools that help production classes, study production methods.

Key words: production of education, production of pedagogical education, educational software, test programs, science of technology, teaching technology, technology, technological processes.

Kirish

Bugungi kunda zamon shiddat bilan rivojlanib borar ekan, bo‘lg‘usi pedagoglardan yana ham yuksakroq marralarni ko‘zlash, fan, texnika va texnologiyalar borasidagi yangiliklardan xabardor bo‘lish talab etilmoqda Qadim zamonlardan beri ulig‘ ajdodlarimiz yangilikka ishtiyoqmand bo‘lib kelganlari va sharqda renesans davrini boshlab berganliklarini dunuo hamjamiyati tan olgan.

Xususan ilm olishga, hunar o‘rganishga, biror bir kasb egasi bolishga intilish bizning bobo kalonlarimizda juda kuchli bo‘lgan va bu o‘z navbatida diyorimizda juda ko‘p dunyo ilm-fani rivojida katta hissa qo‘shgan allomalar etishib chiqishiga sabab bo‘lgan. Bugungi kunda yurtimizda ta'lim sohasida amalga oshirilayotgan tub islohatlar yurtboshimiz Shavkat Miromonovich Mirziyoyev aytganlaridek, mamlakatimiz kelajagi hisoblangan yoshlarning Vatanimiz ravnaqi yo‘lida har taraflama yetuk shaxs sifatida rivojlanishi, ularning raqobatbardosh kadrlar bo‘lib yetishishi uchun xizmat qilib kelmoqda. XXI asr fan texnika shiddat bilan

rivojlanayotgan davrda har bir sohaga xorijiy tajribalar, yangi loyihalar kirib kelayotgani mamlakatimiz rivoji va ta'lim sohasida ulkan hissa qo'shib kelmoqda.

Avvalo texnologiya fanini o'rganishdan oldin texnologiya so'zining ma'nosini anglab olishimiz kerak. Texnologiya (grekcha: „*techno*“ — hunar, usta va „logos“ - fan, ta'lim)- ilmiy-praktika asosida xom-ashyoni tayyor mahsulotga aylantirishning usullari.

Texnologiya (yunoncha *techne* — san'at, mohirlik, uquv) — sanoat, qurilish, transport, qishloq xo'jaligi va boshqa sohalarda mahsulotlar olish, ularga ishlov berish va ularni qayta ishlash usullari tartibga solingan tizim; shu usullarni ishlab chiqish, joriy qilish va takomillashtirish bilan shug'ullanadigan fan. Har bir sohaning o'ziga xos texnologiyasi bo'ladi: kon ishlari texnologiyasi, mashinasozlik texnologiyasi, qurilish texnologiyasi, qishloq xo'jaligi va boshqalar.

Masalan, qurilish ishlari texnologiyasi bir qancha operatsiyalar yig'indisidan tashkil topgan: yer ishlari (yerni tekislash, kotlovan va transheyalar qazish); poydevor yotqizish; devor tiklash (g'isht terish, panel o'rnatish); antiseysmik belbog'lar va temirbeton ustunlar ishlash; qavatlararo va tom yopmalarini montaj qilish, tom yopish; elektr, gaz va suv tarmoqlarini o'tkazish; pardoz ishlari va h.k. Har qaysi operatsiyani o'ziga xos bajarish usullari bor. Masalan, pardozlashda avval devor tekislanadi (mayaklar o'rnatiladi), qora suvoq, keyin toza suvoq qilinadi, so'ngra oqlanadi (bo'yoq beriladi) yoki gulqog'oz (oboy) yopishtiriladi.

Amalda texnologik jarayonlar qanchalik puxta ishlangan, tavsiya etilayotgan usullar chuqur tajriba va ilmiy yondashuvga asoslangan bo'lsa, tayyorlanadigan mahsulot (avtomobil, bino yoki inshoot va h.k.) shunchalik sifatli bo'ladi. Texnologiyaning fan sifatidagi roli va vazifasi mahsulot tayyorlashning eng zamonaviy va samarali usullarini yaratishdan iborat texnologiya Fan va texnika rivojlanib borgan sari texnologiya ham yangilanib va o'zgartirib turiladi. Har qaysi sohada texnologiyani ishlab chiqish uchun texnologik hujjatlarni ishlab chiqish, tipaviy texnologik jarayonlar, standartlashtirilgan jihozlar va uskunalardan foydalanishning yagona tartibi bo'lishi lozim

Texnologiya mahsulot ishlab chiqarish uchun sanoat protseslarda foydalanuvchi materialning, xom-ashyonining yoki ayrim mahsulotning bichimini, o'lchamini, hususiyatini, kuyini o'zgartirish shartlaridan iborat texnologiya. Umumiy sanoat protsesning bo'lagi bo'lib hisoblanuvchi ishlab chiqarish, tashiish, saqlamoq, nazorat qilish haqidagi ish-harakatlar ham *texnologiya* deb ataladi. Jamiyatning o'zgarishiga bog'liq ishlab chiqarishning, xizmatning, o'qitishning, v.b. turli sohalarga innovatsiya texnologiyasi tushunchasi kirilmoqda. Hozirgi vaqtda texnologiya:

- oldingi qatordagi texnologiya;
- qoldiqsiz texnologiya;
- ishlab chiqarish va qayta ishlash texnologiyasi;

- xalqaro standartga mos texnologiya bo‘lib bo‘linadi.

Ma'lumki, rivojlangan mamlakatlar o'z iqtisodiy doktrinalarida tashqi tahdidlarga qarshi kurashishga, rivojlanayotgan mamlakatlar esa ichki tahdidlarga qarshi kurashishga ko'proq e'tibor berishadi. O'zbekiston uchun tashqi tahdidlardan biri ilg'or texnologiyalarni ishlab chiqish va amalga oshirish sohasida ortda qolishdi.

Sanoat rivojlanishining industriyasiga barqaror o'tishning eng muhim omillaridan biri – bu umumta'lim maktablarida “Texnologiya” fanini o'qitishni yangi bosqichga ko'tarishdir. Shuningdek, “Texnologiya” fanini o'zlashtirgan umumta'lim maktablari bitiruvchilari sanoat sohasining barcha tarmoqlarida xususiy injiniring, ilmiy tadqiqot va tajriba konstruktorlik bazalarining yana-da rivojlanishi, bir so'z bilan aytganda yuqori qiymatli raqobatbardosh sanoat mahsulotlari ishlab chiqarilishida “drayver” rolini bajarishi aytib o'tildi.

Ta'lim turli mazmuni uzviyligi va uzluksizligini ta'minlash hamda fan dasturlarini to'liq izchilligini ta'minlash maqsadida texnologiya fanidan “Uzluksiz texnologiya fani konsepsiyasi” va fan dasturlarini takomillashtirishdan iboratdir.

Pedagogik dasturiy vositalar – kompyuter texnologiyalari yordamida o'quv jarayonini qisman yoki to'liq avtomatlashtirish uchun mo'ljallangan didaktik vosita hisoblanadi. Ular ta'lim jarayonini samaradorligini oshirishning istiqbolli shakllaridan biri hisoblanib, zamonaviy texnologiyalarning o'qitish vositasi sifatida ishlatiladi. Pedagogik dasturiy vositalar tarkibiga: o'quv fani bo'yicha aniq didaktik maqsadlarga erishishga yo'naltirilgan dasturiy mahsulot (dasturlar majmuasi), texnik va metodik ta'minot, qo'shimcha yordamchi vositalar kiradi.

Pedagogik dasturiy vositalarni quyidagilarga ajratish mumkin:

o'rgatuvchi dasturlar – o'quvchilarning bilim darajasi va qiziqishlaridan kelib chiqib yangi bilimlarni o'zlashtirishga yo'naltiradi;

test dasturlari – egallangan bilim, malaka va ko'nikmalarni tekshirish yoki baholash maqsadlarida qo'llaniladi;

mashq qildirgichlar - avval o'zlashtirilgan o'quv materialini takrorlash va mustahkamlashga xizmat qiladi va o'qituvchi ishtirokidagi virtual o'quv muhitini shakllantiruvchi dasturlar. Pedagogik dasturiy vositalar yaratishga qo'yiladigan talablar.

Pedagogik dasturiy vositalarni yaratish texnologiyasini amalga oshirish maqsadida ularning an'anaviy vositalardan ustunligini tasdiqlovchi qator ijobiy omillar mavjud. Mazkur omillar didaktik, psixologik, iqtisodiy, fiziologik guruhlarga ajratildi.

Pedagogik dasturiy vositalarga qo'yiladigan didaktik talablarga quyidagilar kiradi: ilmiylik, tushunarli, qat'iy va tizimli bayon etilishi bilan birgalikda (pedagogika, psixologiya, informatika, ergonomikaning asosiy tamoyillarini, zamonaviy fanning fundamental asoslarini hisobga olib, o'quv faoliyati mazmunini qurish imkoniyatini ta'minlash), uzluksizlik va yaxlitlik (ilgari o'rganilgan

bilimlarning mantiqiy oqibati hamda to'ldiruvchisi hisoblanadi), izchillik, muammolilik, ko'rgazmalilik, faollashtirish (o'qitish mustaqilligi hamda faollilik xususiyatining mavjudligi), o'qitish natijalarini o'zlashtirish [mustahkamligi](#), muloqotning interfaolliligi, o'qitish, tarbiyalash, rivojlantirish va amaliyotning yaxlit birligi.

Metodik talablarga quyidagilar kiradi: aniq o'quv fanining o'ziga xos xususiyatlarini hisobga olish, ma'lum bir faning o'ziga xosligini hisobga olish, axborotni zamonaviy metodlari o'zaro bog'liqliligi, o'zaro aloqadorligi, turli-tumanligi, amalga oshirilishi.

Psixologik talablarga idrok etish (verbal-mantiqiy, sensor-perseptiv), tafakkur (tushunchaviy-nazariy, ko'rgazmali-amaliy), diqqati (qat'iyliligi, boshqaga ko'chishi), motivasiya (ishlashda faol shakllari, yuqori darajada ko'rgazmalilik, o'z vaqtida qayta aloqa yordamida o'quvchilarning yuqori darajadagi motivasiyalarini doimiy ravishda rag'batlantirish), xotira, tasavvuri, yoshi va individual psixologik xususiyatlarini hisobga olish (egallagan bilim, ko'nikma va malakalarini hisobga olib, o'quv fani mazmuni hamda o'quv masalalari murakkablik darajasi o'quvchilarning yosh imkoniyatlari va individual xususiyatlariga mos kelishi, o'quv materialini o'zlashtirishda ortiqcha his-hayajonli, asabiy, aqliy yuklamalardan ta'sirlanishdan himoyalash) kiradi.

Texnik talablarga shaxsiy kompyuterlar [va ularning tashqi qurilmalari](#), test o'tkaziladigan manbalar kiradi.

Tarmoq talablariga «mijoz-server» arxitekturasi, Internet-navigatolar, tarmoq operasion tizimlari, telekommunikasiya, boshqaruv vositalari (o'qitish jarayonini individual va jamoaviy ishlari, tashqi qayta aloqa) kiradi.

Estetik talablarga quyidagilar kiradi: tartiblilik va ifodalilik (elementlari, joylashishi, o'lchami, rangi), bezashning funksional vazifasi va ergonomik talablarga mosligi.

Maxsus talablarga quyidagilar kiradi: interfaollik, maqsadga yo'nalganlik, mustaqillik va moslashuvchanlik, audiolashtirish, ko'rgazmalilik, kirish nazorati, intellektual rivojlanish, differensiasiyalash (tabaqalashtirish), [kreativlik](#), ochiqlik, qayta aloqa, funksionalilik, ishonchlilik.

Ergonomik talablarga quyidagilar kiradi: do'stonalik, foydalanuvchiga moslashish, ekran shakllarini tashkil etish.

Metodik talablar pedagogik dasturiy vositalar asosida o'qitishga mo'ljallangan o'quv fanining o'ziga xos xususiyatlarini, uning qonuniyatlarini, izlanish metodlari, axborotga ishlov berishning zamonaviy usullarini joriy qilish imkoniyatlarini hisobga olishni ko'zda tutadi. Fanlardan yaratiladigan pedagogik dasturiy vositalar quyidagi metodik talablarga javob berishi kerak:

1. Pedagogik dasturiy vositalar – o`quv materialini taqdim etishning tushunchali, obrazli va harakatli komponentlarining o`zaro bog`liqligiga tayangan holda qurilishi.

2. Pedagogik dasturiy vositalar o`quv materialini yuqori tartibli tuzilma ko`rinishida ta`minlashi. Fanlararo mantiqiy o`zaro bog`liqlikning hisobga olinishi.

3. Pedagogik dasturiy vositalarda ta`lim oluvchiga o`quv materialini bosqichma-bosqich o`zlashtirganligini turli xildagi nazoratlarni amalga oshirish asosida aniqlash imkoniyatlarining yaratilishi.

Pedagogik dasturiy vositalar yaratishda o`quvchilarning psixofiziologik xususiyatlarini hisobga olish. Pedagogik dasturiy vositalarni qo`llash asosida o`quvchilarning mustaqil ta`lim olish ko`nikma va malakalarini shakllantirishda o`quvchilarning funksional va psixofiziologik imkoniyatlari inobatga olinishi shart. Pedagoglarning pedagogik dasturiy vositalar asosida imkon qadar ko`proq ma`lumotlarni yoritishga intilishi o`quvchini ortiqcha toliqtirishga olib kelishi mumkin. O`z navbatida ma`lumotlarni uzatish tezligini oshirish esa ma`lumotlarni o`zlashtirish sifatini pasayishiga, xatoliklar sonining ortib borishiga, o`quvchining o`zini his qilishi va sog`ligiga salbiy ta`sir qiladi.

Fiziologik-gigienik sohada amalga oshirilgan tadqiqotlar kompyuterda ishlashda bilim oluvchilarning aqliy ish qobiliyati o`zlashtiriladigan ma`lumotlar hajmiga teskari proporsional ravishda o`zgarib borishini e`tirof etadi. Bu quyidagi sabablar bilan izohlanadi:

- ko`rish organlariga tushadigan yuklamaning ortib borishi;
- yangiliklarni qabul qilishda yuzaga keluvchi dastlabki ruhiy ko`tarinkilikning tinib qolishi;
- yuzaga kelishi mumkin bo`lgan noaniqlik va xatoliklar tufayli salbiy hissiyotlarning yig`ilib borishi;
- katta miqdordagi ta`limiy resurslarni qabul qilish undan keyingi axborot resurslarini faol o`zlashtirishga to`squinlik qiladi.

Bu holat ta`lim jarayonida pedagogik dasturiy vositalarni ishlab chiqish va joriy etishda zarur didaktik, psixofiziologik hamda metodik talablarni hisobga olgan holda ishlab chiqilishi zaruratini yuzaga chiqaradi.

Pedagogik dasturiy vositalarning psixofiziologik jihatdan samaradorligi birinchidan: o`quvchilarning o`quv materiallarini o`zlashtirishi, tarbiyalanganlik va [intellektual rivojlanganligi](#), ishchanlik ko`rsatkichlari, motivasion barqarorlik darajalari bilan belgilanadi. Ikkinchidan, o`qituvchi faoliyati bilan bog`liq bo`lib, o`qitish konsepsiyalari, pedagogik texnologiyalari va ta`lim vositalaridan rasional foydalanish ko`rsatkichlari, o`qituvchining mehnat faoliyatiga nisbatan barqaror motivasiyasi, ish qobiliyati bilan belgilanadi.

Mualliflik dasturlari. Bugungi kunda jahonning rivojlangan mamlakatlari ta`lim tizimlarida turli o`rgatuvchi dasturiy vositalardan keng foydalanilmoqda. O`rgatuvchi

ko`rgazmali dasturiy vositalar mualliflik dasturiy ta`minotlari yordamida yaratiladi. Ta`lim jarayonida bunday dasturlardan foydalanish yuqori natijalarga olib kelmoqda, sababi auditoriyada uzatiladigan bilimlarga oid axborotlarni qabul qilish va vazifalarni bajarishda o`quvchi bir vaqtning o`zida eshitib, ko`rib, o`zlashtiradi.

Mualliflik dasturiy ta`minoti — kompyuter texnologiyalari yordamida o`quv jarayonini qisman yoki to`liq avtomatlashtirish uchun mo`ljallangan dasturiy vosita hisoblanadi. Ular ta`lim jarayoni samaradorligini oshirishning istiqbolli shakllaridan biri hisoblanib, zamonaviy texnologiyalarning o`qitish vositasi sifatida qo`llaniladi. Mualliflik dasturiy ta`minotlar yordamida elektron darsliklar yaratish juda qulay. Elektron darsliklar, kompyuter texnologiyalaridan foydalangan holda eng muhim tushuncha va qonuniyatlarni tushunish hamda yodda saqlashni maksimal darajada yengillashtiradi.

Xulosa. Xulosa qilib shuni aytish mumkinki texnologiya darslarini o`tishda o`qituvchi dasturiy ta`lim vositalaridan foydalana olsa uning o`tayotgan darsi sifatli va unumli bo`ladi. Chunki inson eshitgan narsalarining 40% ini eslab qolsa, ko`rgan narsalarining esa 60% ini esida saqlaydi. Shuning uchun o`quvchilarda dars o`tish jarayonida texnik vositalardan foydalanilsa samaradorlik yaxshi bo`ladi.

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MAKTABGACHA YOSHDAGI BOLALARGA INGLIZ TILINI O'RGATISH USULLARI

Termiz davlat pedagogika instituti

Xorijiy til va adabiyoti fakulteti

Maktabgacha va boshlang'ich ta'limda

xorijiy til (ingliz tili) yo'nalishi

1-kurs talabasi

Normamatova Charos Abdulahad qizi

Annotatsiya: ushbu maqolada maktabgacha yoshdagi bolalarga ingliz tilini o'rgatish usullari yozilgan bo'lib, hozirda ingliz tili dunyo tili bo'lib bormoqda shu bois uni maktabgacha ya'ni boqcha yoshidan boshlash kerak maqola shu haqida ma'lumot beradi.

Kalit so'zlar: chet tili, o'rganish, bola, dars, shakl, Talqin va tadqiqotlar, nutq, metodika, uslub.

Jamiyatda chet tiliga bo'lgan talab, bir tomondan, shuningdek, ota-onalar tomonidan til nafaqat zamonaviy insonni tarbiyalashning omili, balki uning jamiyatdagi ijtimoiy va moddiy farovonligining asosi ekanligini tushunishi boshqa tomondan bu lahzada chet tilini erta o'rganishni ayniqsa mashhur va dolzarb qilish. Agar 20 yil oldin tilni bilish faqat ba'zi sohalar ishlarida talab qilinadigan bo'lsa, endi kamida bittasini o'zlashtirish kerak edi. Chet tilini o'qitishning asosiy muammosi talabning yoshi. Ma'lumki, bolalar o'rganish uchun qulayroqdir. Yaqin vaqtgacha o'qitish metodikasi bolalarga qaratilgan edi maktab yoshi, endi ota-onalar chet tilini o'rganishni iloji boricha erta boshlashga intilmoqda. Maktabgacha yoshdagi bolalarni chet tiliga o'rgatishning asosiy maqsadlari: • bolalarda chet tilida boshlang'ich muloqot qobiliyatlarini shakllantirish; • o'z maqsadlariga erishish, hayotiy aloqa sharoitida fikr va hissiyotlarini ifoda etish uchun chet tilidan foydalanish qobiliyati; • chet tillarini yanada o'rganishga ijobiy munosabat yaratish; • boshqa mamlakatlar hayoti va madaniyatiga qiziqishni uyg'otish. Maktabgacha yoshi, ayniqsa, chet tilini o'rganishni boshlash uchun juda qulaydir. Bu yoshdagi bolalar til hodisalariga nisbatan sezgirligi bilan ajralib turadi, ular o'zlarining nutq tajribalarini, tilning "sirlarini" tushunishga qiziqishadi. Ular Talqin va tadqiqotlar respublika ilmiy-uslubiy jurnali №5 39 kichik hajmi osongina va qat'iy eslashadi til materiali va uni yaxshilab ko'paytiring. Yoshi bilan bu qulay omillar kuchini yo'qotadi. Chet tilni o'rganish uchun erta yosh afzalroq bo'lishining yana bir sababi bor. Bola qancha yosh bo'lsa, shuncha kamroq bo'ladi. So'z boyligi yilda mahalliy til, ammo shu bilan birga uning nutqiga bo'lgan ehtiyojlari ham kam: kichik bolada aloqa sohalarida katta yoshdagilarga qaraganda kamroq, u hali murakkab aloqa muammolarini hal qilishi shart emas. Bu shuni anglatadiki, u chet tilini

o'zlashtirganda, ona va chet tillaridagi imkoniyatlar orasidagi bunday katta farqni sezmaydi va uning muvaffaqiyat hissi kattaroq bolalarnikiga qaraganda yorqinroq bo'ladi. Bolalarni o'qitish - bu maktab o'quvchilari va kattalarga qaraganda mutlaqo boshqacha uslubiy yondashuvni talab qiladigan juda qiyin masala. Agar kattalar chet tilida gaplashsa, bu uning boshqalarga o'rgatishi mumkin degani emas. Uslubiy jihatdan nochor darslarga duch kelganda, bolalar uzoq vaqt davomida chet tilidan nafratlanishlari va o'z qobiliyatlariga bo'lgan ishonchlarini yo'qotishlari mumkin. Maktabgacha yoshdagi bolalar bilan faqat tajribali mutaxassislar ishlashi kerak. Maktabgacha yoshda, ingliz tilini o'qitishda, bolalar asta-sekin kommunikativ kompetentsiya asoslarini rivojlantiradilar, bu ingliz tilini o'rganishning dastlabki bosqichida quyidagi jihatlarni o'z ichiga oladi: •fonetik nuqtai nazardan to'g'ri takrorlash qobiliyati inglizcha so'zlar o'qituvchi, ona tili yoki ma'ruzachining orqasida, ya'ni eshitish diqqatini, fonetik eshitish va to'g'ri talaffuzni bosqichma-bosqich shakllantirish; •inglizcha so'z boyligini o'zlashtirish, birlashtirish va faollashtirish; •ma'lum miqdordagi sodda grammatik tuzilmalarni o'zlashtirish, izchil bayon tuzish. Metodika to'g'ridan-to'g'ri ta'lim tadbirlarini o'tkazish bolalarning til qobiliyatlari tuzilishining yoshi va individual xususiyatlarini hisobga olgan holda qurilishi va ularning rivojlanishiga yo'naltirilgan bo'lishi kerak. Chet tilida muloqot motivatsiya va yo'naltirilgan bo'lishi kerak. Bolada chet tiliga nisbatan ijobiy psixologik munosabatni yaratish kerak va bunday ijobiy motivatsiyani yaratish usuli o'ynashdir. O'yin - bu ham tashkil etish shakli, ham bolalar ma'lum miqdorda to'planadigan darslarni o'tkazish usuli inglizcha so'z boyligi, ko'plab she'rlar, qo'shiqlar, qofiyalarni sanash va boshqalarni o'rganing. Darslarni o'tkazishning ushbu shakli til ko'nikmalarini va nutq qobiliyatlarini o'zlashtirish uchun qulay sharoit yaratadi. O'yin faoliyatiga ishonish qobiliyati chet tilida nutq uchun tabiiy turtki berishga, hatto eng oddiy iboralarni ham qiziqarli va mazmunli qilishga imkon beradi. Chet tilini o'qitishda o'ynash ta'lim faoliyatiga zid emas, balki u bilan organik ravishda bog'liqdir.

Maktabgacha yoshdagi bolalarga ingliz tilini o'rgatishning o'ziga xos xususiyati shundaki, u shunchaki stolda o'tirib, kitob va daftarlarni varaqlamaydi. Jarayon zerikarli bo'lmasligi kerak va bolalar o'zlari bilimga intilishlari kerak. Bolalar aniq o'ylashadi, hamma narsani so'zma-so'z qabul qiladilar, gapirishadi oddiy jumlar... Agar o'qituvchi nimanidir tushuntirsa, u aniqlik, misol keltirishi kerak. Shuning uchun ingliz tili maktabgacha yoshdagi bolalar uchun o'yin. Faqatgina ushbu shakl orqali siz ijobiy natijalarga erishishingiz va bolada chet tiliga nisbatan ijobiy munosabatni shakllantirishingiz mumkin. Ta'lim shakllari iloji boricha ko'proq leksik birliklarni o'zlashtirishga emas, balki mavzuga qiziqishni tarbiyalashga, bolaning muloqot qobiliyatlarini rivojlantirishga va o'z fikrlarini ifoda etishga qodir bo'lishi kerak. Bolaning kompetentsiyasida til birliklarining keyingi o'sishini o'z zimmasiga oladigan bolani minimal mablag' bilan ta'minlashga imkon beradigan, materialni

o'zlashtirishning ma'lum fazilatlariga erishish muhimdir, ulardan vaziyat va mazmunli foydalanish. Treningning boshidanoq bolalar bilan ingliz tilida ishlashning ma'lum bir uslubini rivojlantirish, muloqotning eng odatiy holatlariga mos keladigan marosimlarni joriy etish kerak. Bunday marosimlar (salomlashish, xayrlashish, qisqa mashqlar, ingliz tilida qabul qilingan xushmuomalalik formulalaridan foydalanish) bolalarga chet tili aloqasini o'rnatishga imkon beradi, ingliz tiliga o'tishni osonlashtiradi, bolalarga dars boshlanganligini, endi darsning ma'lum bir bosqichi o'tishini ko'rsatadi. Trening muvaffaqiyatli bo'lishining eng muhim sharti bolalarning nutq-fikrlash faoliyatini faollashtirish va ularni chet tili muloqotiga jalb qilishdir. Bolalar so'zning ma'nosiga munosabatda bo'lishlari va ovozli ketma-ketlikni mexanik ravishda eslab qolmasliklari uchun nutq harakatlarining tartibini (savollar tartibi, manzillar, ob'ektlarning nomlari va boshqalar) doimiy ravishda o'zgartirish kerak. O'yinlarni takrorlashda har xil bolalar etakchi, faol ishtirokchi bo'lishlari shart, shunda hech Talqin va tadqiqotlar respublika ilmiy-uslubiy jurnali №5 41 bo'lmaganda bir marta barcha bolalar o'quv vazifasida ko'zda tutilgan nutq harakatlarini bajaradilar. Qishloq joylardagi boshlang'ich maktab o'quvchilari odatda ingliz tili muhitidan ancha uzoq bo'lgan sharoitda o'sishadi va bolalarning fikrlashi mavhum shaklda qolaveradi, bolalarning yangi bilimlarni o'zlashtirish jarayoni doimo hissiyotlarga tayangan holda kechadi. Shuning uchun, bog'cha yoshidagi bolalarga ingliz tili o'qituvchilari o'qitishda oson metodikalar orqali, o'quvchilar atrofidagi buyumlardan, kartochkalardan va boshqa o'quv qo'llanmalaridan to'liq foydalanishadi. "Banana" va "apple" kabi so'zlarni o'qitishda o'qituvchilar banan va olma kabi mevalarni ko'rsatib birdaniga rangni bildiruvchi yangi so'zlarni ham o'rgatib ketishlari mumkin. Bolalar o'quv mashg'ulotlarini tashkil qilish uchun sinfdagi narsalar orqali ularni chet tilida qo'llanilishini o'rgatib borishadi. Albatta, o'qitish mobaynida buyumlardan foydalanishda o'qituvchilarning metodikasi katta ro'l o'ynaydi. Misol uchun, tegishli so'zlarni o'rgatayotganda, siz avvalo buyumni bolaga ko'rsatib uni gapirishga undaysiz, o'quvchilar so'zlarni talaffuz qiladi va ular talaffuz qilgan so'zni mustahkamlash uchun kartochkalardagi rasmlardan foydalanib yana bir bor yangi so'zni takror talaffuz qildiriladi. So'zlarni o'qitishda o'qituvchilar matn mazmunini belgilab olishlari va o'quvchilar e'tiborini jalb qilish uchun tarbiyachi ular bilan birgalikda so'zlarni talaffuz qilib doskaga suratini chizish orqali ularning e'tiborini tortishlari mumkin bo'ladi. Shuning uchun hozirda Xitoyda tarbiyachidan rasm chizish mahoratiga ega bo'lish talab qilinadi. Bu nafaqat o'qitishning qiyinchiliklarini qisqartiribgina qolmay, balki o'quvchilarni o'rgangan bilimlarni asta-sekin mustahkamlashga yordam beradi. O'quvchilar ingliz tilini o'rganish jarayonida o'zlaridagi yutuqlarni his etishlari uchun har bir o'quv mashg'ulotiga mukammal yondashish kerak. Ana shundagina bolalarda o'rganishga motivatsiya uyg'onadi. Hozirgi kunda Xitoylik bog'cha yoshidagi bolalar yangi bilimni qabul qilish imkoniyatlari juda ilgarilab ketganligi sababli bog'chalardagi o'qitish dasturlari

shunga mos ravishda intensivlashtirilgan. Sinf muhitini yaxshilash uchun qo‘shiq va harakatli o‘yinlardan foydalanish. Moslashuvchan sinf atmosferasini yaratish, ba'zida har qanday ta'lim usulidan ko'ra muhimroqdir. Sinfda dars boshida inglizcha yoqimli qo'shiq bilan o'qituvchi boshchiligidagi barcha bolalar birgalikda qo'shiq kuyladilar va uning ohangiga mos ravishda biroz raqsga tushadilar. Bu o‘z-ozidan ularning tanalarini chiniqtirib, yanada tetik bo‘lishga va qo‘shiqni so‘zlarini tezroq yod olishga yordam beradi. Inglizcha muhit, muhimi, yaxshi o'quv atmosferasiga tabiiy ravishda kirishga imkon beradi. Bolalarning o'zini-o'zi boshqarish qobiliyati sust bo‘lib, butun mashg‘ulot davomida e’tiborini jamlashi va egallab olishi qiyin. Shuning uchun, o'qituvchi bolalar tinglashni yaxshi ko'radigan qo'shiqlarni, she'rlarni yoki tilni chiniqtirish uchun tez Talqin va tadqiqotlar respublika ilmiy-uslubiy jurnali №5 42 aytishlarni, yoki bo‘lmasam bolalar yaxshi ko'radigan animatsion multfilmni taqdim etishi kerak. Multfilmlar. Bolalar chet tilini o‘rganish mobaynida multfilmdagi gaplarni tushunmasa-da, multfilmdagi qahramonlarning harakatlari orqali ular ishlatayotgan so‘zlarni tushunishga harakat qiladi. Bu esa bolalar uchun til o‘rganishda qiziq va samarali yo‘l hisoblanadi.

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Annotatsiya. Maqolada o'zbek bolalar adabiyotining rivojlanishi va adiblarimizning qo'shgan hissalarini haqida so'z boradi. Adabiyot bu insonni aqliy va ruhiy rivojlantiruvchi vositadir.

Kalit so'zlar. Xalq og'zaki ijodi, bolalar adabiyoti, hozirgi zamonaviy bolalar adabiyoti, ma'rifatparvarlik adabiyoti.

Kirish.

Ma'lumki, xalq og'zaki ijodi na'munalari yozma adabiyotining maydonga kelishi va rivojlanishiga boy manbai bo'lib xizmat qiladi. Kitoblar esa yoshlarni yetuk va barkamol inson sifatida tarbiyalashda asosiy omillardan biridir. Har bir davlat, jamiyat o'z kelajagini qurishda bolalar tarbiyasida, ilmiy egallashda, ularning kelajaklarini yaratishda bolalar adabiyoti muhim ahamiyatga ega. O'zbek xalq og'zaki ijodiga: topishmoq, rivoyat, afsona, ertaga, matal va doston singari aksariyat qismi bolalarga mo'ljallab yaratilgan og'zaki ijod namunalari kiradi.

Asosiy qism. Bolalar adabiyotiga o'zgarish xos xususiyatdir ya'ni bolalar adabiyoti o'zgaruvchan hodisa bo'lib, u kitobxon yoshi, tarixiy davr va ijtimoiy muhit bilan bevosita bog'liq. Shuningdek, Yusuf Xos Hojibning "Qutadg'u bilig" ("Saodatga olib boruvchi bilim") dostonida hamda Ahmad Yassaviy, Rabg'uziy asarlarida til, ilm, fan, odob-axloq masalalari keng qamrab olinadi. Kitobxon yoshini hisobga olish bolalar adabiyotining eng asosiy xususiyatlaridandir.

Bundan tashqari bolalar adabiyotining yana bir xususiyati uning harakatga boyligidir. Chunki bolalar adabiyotida syujetga bo'lgan talab ham kelib chiqadi. U voqealarning tezkor, qiziqarli, fantaziyaga boy ravishda yechilishini talab qiladi. O'zbek bolalar adabiyoti Jahon bolalar adabiyotining ilg'or an'analari ta'sirida rivojlanadi. Jahon bolalar adabiyotining nodir namunalari o'zbek tiliga tarjima qilingan bo'lib ular sirasiga kiruvchi "Gulliverning sayohatlari" (J. Svift), "Robinzon Kruzo" (D. Defo) kabi jahon adabiyotining nodir asarlari o'zbek bolalarning ham sevib mutolaa qiladigan asarlari bo'lib kelmoqda.

Alisher Navoiy butun faoliyati va ijodiyotini insonning baxt saodati

uchun kurashgan, xalqning osoyishtaligiga, o'zaro urushlarning oldini olishga, obodonchilik, ilm-fan, san'at va adabiyot taraqqiyotiga bag'ishladi. U adaolatparvar, donishmand davlat arbobi, o'zbek muntaz adabiyotining yangi taraqqiyot pog'onasiga ko'targan buyuk so'z san'atkori sifatida, davrning madaniy hayotiga rahnamo bo'ldi, ilm-fan, san'at va adabiyot ahllariga homiylik qildi, ko'plab shogirdlar yetishtirdi.

XV- XVI asrlarda yashab, ijod etgan Zahiriddin Muhammad Boburning "Boburnoma" asarida o'sha davr hayotiga doir tarixiy voqealar bilan birga, ilm-fanga oid qimmatli ma'lumotlar berilgan, turli xalqlarning urf-odatlarini, til, san'at va adabiyotida yoritilgan. Gulxaniy "Zarbulmasal" asarida o'zining muhim ijtimoiy qarashlarini el-ulus taqdiriga munosabatini hayotiy timsollar orqali ifodaladi.

Ma'rifatparvarlikni bayroq qilib ko'targan Abdulla Avloniy, Behbudiy, Hamza, Fitrat, Munavvarqorilar tomonidan yozilgan darslik va qo'llanmalarda bolalar hayoti, o'qishi, axloq-odobi haqida materiallar berilgan.

Bolalar adabiyoti yildan yilga rivojlanib bordi. 30-yillarga kelib, she'riyatda Zafar Diyor, Sulton Jo'ra, Quddus Muhammadiy, Ilyos Muslim, Adham Rahmat, Shukur Sa'dulla, Mahmuda Oqilova kabi bolalar ijodkorlari yetishib chiqdilar. Sadridin Ayniy, G'afur G'ulom, Hamid Olimjon, O'zbekiston, Elbek, Shakir Sulaymon va G'ayratilar ham o'zbek bolalar adabiyotini yuksaltirish uchun munosib hissalarini qo'shdilar. Bolalar qissachiligida Oybek, G'afur G'ulom, Abdulla Qahhor, Mirkarim Osim kabi ulug' adiblarning xissasi katta.

Bolalar adabiyotiga o'zining munosib xissasini qo'shgan Xudoyberdi To'xtaboyevning ("Sariq devni minib", "Qasoskorning oltin boshi", "Shirin qovunlar mamlakati") asarlarida bolalarning har tomonlama yuksalishiga katta yordam beradi.

Xulosa

Yuqorida tilga olingan asarlar yosh kitobxonni nimagadir o'rgatadi, nimagadir da'vat etadi. Bu asarlarning ko'pchiligida ilgari surilgan ona Vatanga muhabbat, uning ozodligi va baxti uchun jon fido qilish, noshukur bo'lmaslik, ota-ona pand-nasihatiga quloq solish, odamlar xizmatini bajarish, beminnat yordam ko'rsatish kabi yuksak g'oyalar har bir o'quvchi yoshga o'qish, bilim olish, sergak va tadbirkor bo'lish hamda quvnoqlikka intilish uchun katta yordam beradi.

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VOCABULARY TO YOUNG LEARNERS VERBAL AND WITH ACTION

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Annotation: In this article, discusses how to teach verbal and with action vocabulary to young learners, and other additional information is also mentioned.

Keywords: vocabulary, reading, listening, speaking, writing, final, pre-teach vocabulary.

Аннотация: В этой статье обсуждается, как учить юных учащихся вербальной и практической лексике, а также упоминается другая дополнительная информация.

Ключевые слова: словарный запас, чтение, аудирование, говорение, письмо, итоговая, предварительная лексика.

A **vocabulary** is a set of familiar [words](#) within a person's [language](#). A vocabulary, usually developed with age, serves as a useful and fundamental tool for [communication](#) and [acquiring knowledge](#). Acquiring an extensive vocabulary is one of the largest challenges in learning a [second language](#).

Types of vocabulary

Reading vocabulary

A person's reading vocabulary is all the words recognized when reading. This class of vocabulary is generally the most ample, as new words are more commonly encountered when reading than when listening.

Listening vocabulary

A person's [listening](#) vocabulary comprises the words recognized when listening to speech. Cues such as the speaker's tone and gestures, the topic of discussion, and the conversation's social context may convey the meaning of an unfamiliar word.

Speaking vocabulary

A person's speaking vocabulary comprises the words used in [speech](#) and is generally a subset of the listening vocabulary. Due to the spontaneous nature of speech, words are often misused slightly and unintentionally, but facial expressions and tone of voice can compensate for this misuse.

Writing vocabulary

The written word appears in registers as different as formal essays and social media feeds. While many written words rarely appear in speech, a person's written vocabulary is generally limited by preference and context: a writer may prefer one synonym over another, and they will be unlikely to use technical vocabulary relating to a subject in which they have no interest or knowledge.

Final vocabulary

The American philosopher [Richard Rorty](#) characterized a person's "final vocabulary" as follows:

All human beings carry about a set of words which they employ to justify their actions, their beliefs, and their lives. These are the words in which we formulate praise of our friends and contempt for our enemies, our long-term projects, our deepest self-doubts and our highest hopes... I shall call these words a person's "final vocabulary". Those words are as far as he can go with language; beyond them is only helpless passivity or a resort to force.

Vocabulary growth

During its infancy, a child instinctively builds a vocabulary. [Infants](#) imitate words that they hear and then associate those words with objects and actions. This is the [listening vocabulary](#). The [speaking vocabulary](#) follows, as a child's thoughts become more reliant on their ability to self-express without relying on gestures or babbling. Once the [reading](#) and [writing vocabularies](#) start to develop, through questions and [education](#), the child starts to discover the anomalies and irregularities of language.

In [first grade](#), a child who can read learns about twice as many words as one who cannot. Generally, this gap does not narrow later. This results in a wide range of vocabulary by age five or six, when an English-speaking child will have learned about 1500 words.

Vocabulary grows throughout one's life. Between the ages of 20 and 60, people learn about 6,000 more lemmas, or one every other day. An average 20-year-old knows 42,000 lemmas coming from 11,100 word families. People expand their vocabularies by for e.g. reading, playing [word games](#), and participating in vocabulary-related programs. Exposure to traditional print media teaches correct spelling and vocabulary, while exposure to text messaging leads to more relaxed word acceptability constraints. For English language learners (ELLs), vocabulary development is especially important. The average native English speaker enters kindergarten knowing at least 5,000 words. The average ELL may know 5,000 words in his or her native language, but very few words in English. While native speakers continue to learn new words, ELLs face the double challenge of building that foundation and then closing the gap.

You may be surprised at how quickly a new ELL student can communicate verbally with peers, but remember that there is a big difference between [social English and academic English](#). Reading, writing, speaking, and understanding academic English happen in the classroom. Using a combination of the following strategies will help ELLs to close the gap.

Pre-teach vocabulary

Before doing an activity, teaching content, or reading a story in class, pre-teaching vocabulary is always helpful, especially for ELLs. This will give them the chance to

identify words and then be able to place them in context and remember them. You can pre-teach vocabulary by using English as a second language (ESL) methods such as:

1. Role playing or pantomiming
2. Using gestures
3. Showing real objects
4. Pointing to pictures
5. Doing quick drawings on the board

Using the Spanish equivalent and then asking students to say the word in English

To ensure mastery of more complex words and concepts, you might want to follow these six ESL steps:

1. Pre-select a word from an upcoming text or conversation.
2. Explain the meaning with student-friendly definitions.
3. Provide examples of how it is used.
4. Ask students to repeat the word three times.
5. Engage students in activities to develop mastery.
6. Ask students to say the word again.
7. Focus on cognates

Cognates are words in different languages that are derived from the same original word or root. Note that about 40% of all English words have similar cognates in Spanish! This is an obvious bridge to the English language – if the student is made aware of how to use this resource.

Cognates are related words like family and familia, director and director, and conversation and conversación. False cognates do exist (mano in Spanish means hand, not man), but they are the exception to the rule. Encourage ELLs to guess at words and try to decipher text based on this existing knowledge. The more familiarity a teacher has with Spanish, the easier it is to point out these connections.

Use computers and television

When geared to ELLs, computer programs and television programs are proven supplements to helping ELLs build language and reading skills. Computers are a non-threatening way to help children work on their own or with a buddy to learn vocabulary, sounds of English, syntax, reading, and writing. Educational children's television can also be a wonderful way to increase many reading skills, including vocabulary and comprehension.

Use audio books

Help ELLs build vocabulary by providing books with tapes in a listening center on one side of the classroom. By hearing and seeing the word in context at the same time, ELLs pick up its meaning and also gain prosody, and oral fluency.

Use a word wizard box

Ask students to bring new words into the classroom that they hear at home, on TV, or anywhere else and drop these words into a word wizard box. At the end of class, pull out a word and ask who wrote it. Have students tell you where they heard the words and how they were used. Ask students to use these new words in their discussions and writing.

Conclusion:

Tell students that they are going to work together in groups to make a drawing of an animal idiom's literal meaning and then act out its real, or figurative, meaning. They will see if the drawings and skits they make provide enough information for their classmates to figure out what the idiom really means. To begin, select a group of three students to demonstrate the activity. Tell this group that their idiom is "to let the cat out of the bag" and that this idiom means "to give away a secret."

Divide the group tasks as follows: One student will draw the idiom the way it would look if it meant literally what it said: by drawing a sketch of a cat leaping out of a paper bag. This student labels the drawing with the idiom, "to let the cat out of the bag." The other two students develop a brief skit about the figurative meaning of the idiom: "to give away a secret." For example, they could develop a simple scene where someone finds out about a surprise birthday party, because a brother or sister gives it away beforehand. The last line could be: "You let the cat out of the bag."

When the group is finished, have them show the idiom's literal meaning in the drawing, and then act out its figurative meaning in the skit. Have the group challenge their classmates to guess the idiom's figurative, or intended, meaning and then correctly use the idiom in a sentence: Shirin let the cat out of the bag when she told Farhod about the surprise birthday party. When the whole class has understood how this activity works, assign a different animal idiom, with its figurative meaning, to other groups of students. Each group then works out its plan for making the drawing and acting out the skit. Have the groups take turns demonstrating their idioms to the class, so the class can guess the idiom's figurative meaning and use it in a sentence.

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**BOSHLANG‘ICH SINIF O‘QUVCHILARINI MUSTAQIL
FIKRLASHGA O‘RGATISH**

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Urganch tumani 20- umumiy o‘rta talim maktabi boshlang‘ich sinf o‘qituvchisi.

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Annotation: this methodology provides information on the methodology of teaching primary school students to independent and creative thinking.

Keywords: independent work, development of creative activity, mental activity, independent thinking, conscious practical activity.

Annotatsiya: Ushbu metodikada boshlang‘ich sinf o‘quvchilarini mustaqil va ijodiy fikrlashga o‘rgatish metodikasi borasida ma’lumotlar keltirilgan.

Kalit so‘zlar: Mustaqil ish, Ijodkorlik faoliyatini rivojlantirish, aqliy faoliyat, mustaqil fikr yuritish, ongli amaliy faoliyat.

Boshlang‘ich sinf o‘quvchilarini mustaqil fikrlashga o‘rgatuvchi usullardan yana biri - mustaqil ish metodidir. Nafaqat boshlang‘ich sinflarda, balki umuman ta’lim sohasida keng qo‘llaniladigan o‘quvchilarning mustaqil ishlari ta’lim samaradorligini oshiruvchi vosita sifatida doimiy ravishda tadqiqotchilar diqqat markazida bo‘lib kelgan. Metodist olimlar mustaqil ishlardan dars jarayonida keng foydalanishni doimo yoqlab chiqqanlar. Chunki o‘quvchilarning bilimlarni egallash va mustaqil fikrlashga o‘rgatish, avvalambor, mustaqil ishlarni bajarish, oldida turgan muammo va masalalarning yechimini topish jarayonida shakllanadi. Shunday ekan, o‘quvchilarning mustaqil ishlari nima degan savolga to‘xtalib o‘tmoq joiz. Unga turlicha javob berganlar. Jumladan, ba’zi olimlar mustaqil ishlar deganda o‘qituvchining bevosita yordamisiz, ammo uning nazorati ostida bajariladigan vazifalarni tushunishsa, boshqalari o‘quvchilardan faol aqliy faoliyatni, tashabbuskorlikni, avval olingan bilimlarni amaliyotda qo‘llashni talab qiladigan ishlar deb bilishadi. Masalan, pedagogika fanlari doktori, professor A.G‘ulomov mustaqil ishlarga shunday ta’rif beradi: «Mustaqil ishlar deganda biz, avvalo, o‘qituvchining bevosita rahbarligida uyushtiriladigan hamda o‘quvchilarning ona tilidan egallaydigan nazariy bilimlarini mustahkamlash va ko‘nikmalarni takomillashtirishga xizmat qiladigan, ma’lum maqsadga qaratilgan faol ongli faoliyatni tushunamiz». O.Roziqov esa ona tili darslarida qo‘llaniladigan mustaqil ishlarni «o‘qituvchining bevosita ishtirokisiz, ammo uning ko‘rsatmalari va rahbarligida bajariladigan, nazariy-amaliy materiallar ustida uyushtiriladigan, o‘quvchilarning ongli ravishda faoliyat ko‘rsatishlarini ta’minlaydigan grammatik, orfografik vazifalar» sifatida tushunadi. Jumladan, S. Matchonov: «... mustaqil ishlar ta’lim-tarbiyaning ajralmas qismi hisoblanadi. Uning

o'ziga xos xususiyati o'quv topshiriqlarining o'qituvchi ishtirokisiz, bevosita o'quvchi tomonidan bajarilishi bilan belgilanadi va asosan matn ustida ishlash orqali amalga oshiriladi, qo'shimcha adabiyotlardan samarali foydalanishni nazarda tutadi» deb yozadi. Bizningcha, mustaqil ishlar o'quvchilarning aqliy imkoniyatlarini namoyon qilishga imkon beradigan, o'qituvchining bilvosita va bevosita ishtirokida, ammo bevosita yordamisiz nazariy-amaliy materiallar ustida bajariladigan vazifalar bo'lib, o'quvchilarning nafaqat bilim darajalarini, balki ularning o'zlashtirgan bilimlarini amaliyotda qo'llay bilishlarini, mustaqil va mantiqiy fikrlash darajalarini aniqlash va shakllantirish imkoniyatini beradigan ongli amaliy faoliyatdir. Mustaqil ishlar tasnifiga oid bir qancha qarashlar mavjud. Metodist olimlar guruhlariga ajratishda mustaqil ishlarining u yoki bu jihatlariga e'tibor qaratganlar. Mustaqil ish turlarining boshlang'ich sinf o'quvchilarini ijodiy fikrlashga o'rgatishdagi o'rni. Barcha o'quv predmetlarida bo'lgani kabi boshlang'ich sinf ona tili darslarida ham o'quvchilarni mustaqil fikrlashga o'rgatishda mustaqil ishlar muhim o'rin tutadi. Ular quyidagi xususiyatlariga ko'ra xarakterlanadi: - mustaqil ishlarda bajarish so'ralgan shartlar o'quvchilardan izlanuvchanlikni talab qilishi; - o'quvchilarni mustaqil holda hukm, xulosa va umumlashmalar chiqarishga yo'naltirishi; - mustaqil ishlarni bajarish jarayonida o'quvchilarda yangi bilimlarni egallashga ehtiyoj tug'ilishi. Reproduktiv mustaqil ishlar. Reproduktiv mustaqil ishlar o'quvchilarning avval olgan bilimlarini amalda qo'llashni nazarda tutadi.

Bunday mustaqil ishlarga namuna asosidagi mustaqil ishlar, sharhlab yozish, grammatik topshiriqli diktantlar kiradi. Bu xildagi mashqlar o'quvchilarning mustaqil fikr yuritish jarayoniga qisman ta'sir ko'rsatadi va u ko'pincha darslik mashqlari asosida o'tkaziladi. Quyida darslikdan tashqari bo'lgan namuna asosidagi mustaqil ishlarining ayrim variantlarini keltiramiz.

Boshlang'ich sinf o'quvchilari ijodiy faoliyatini rivojlantirishda interfaol metodlar va o'yinlardan foydalanish boshlang'ich ta'limda o'quvchilarning ijodiy faoliyatlarini rivojlantirishda evristik va muammoli ta'limdan tashqari bilishga yo'naltirilgan, ilmiy asoslangan ta'lim metodlaridan va o'yindan foydalanish ham maqsadga muvofiq. Boshlang'ich ta'limda ishbop, rolli, syujetli o'yinlardan foydalanish muhim ahamiyat kasb etadi. Ijodkorlik faoliyatini rivojlantirishda ijodiy qobiliyatni shakllantirishga, ilmiy-ijodiy izlanishlarga yo'llaydigan, bilishga oid ilmiy faoliyatni tashkil etish shakl va metodlaridan foydalanish o'z samarasini berdi. Bu borada ijodiy faoliyatni rivojlantirish darslariga dialog-darslar munozara, bahs, suhbatlar, fantaziya, izlanish darslari, muammolar qo'yish va ularni yechish darslari; ishtirokchilik darslari, modellashtirish, badiiy texnik ijodkorlik, ijod qilish, kichik kashfiyotlar yaratish, insholar yozish, solnomalar tuzish, ishbop o'yinlardan, innovatsion metodlardan foydalanish kabilar eng samarali bo'ldi. ta'lim jarayonida dars shakllarining o'yin usullari sifatida o'qitishning ma'lum bir paytida

o'tkaziladi.

Ma'lumki, boshlang'ich sinf o'quvchisi kattalarning hatti-harakatini taqlid qilishga qiziqadi. Bunda ta'lim jarayonida qo'llanilayotgan ishbop o'yinlardan foydalanish katta ahamiyat kasb etadi. Bolalarga mo'ljallangan ishbop o'yinlar takrorlash, mustahkamlash, o'tilganlarning qay darajada o'rganilganligini (diktantlar, musobaqalar, krossvordlar, sirtqi sayohatlar rolli o'yinlar, dramatik sahnalar tarzida) aniqlash maqsadida o'tkaziladi. Ishbop o'yinlarni hayotiy vazifalarni imitatsiya va modellashtirish asosida tashkil etish samarali natijalarga olib keladi. Bunday o'yinlar faqat bilishga oid bo'lmay, dunyoqarashni kengaytirish, hamda hissiy ta'sir etishi bilan ham xarakterlidir.

Masalan, boshlang'ich ta'limda "Nima uchun?", «T-chizma», «FSMU», «Tarmoq (Klaster)», "Ikki qismlik kundalik" kabi innovatsion metodlardan foydalanganda o'quvchilarda ijodiy faoliyatni rivojlantirishga bevosita yordam beradi.

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BOSHLANG'ICH SINFLARDA MATEMATIKA O'QITISH METODIKASI O'QUV PREDMETI SIFATIDA

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Urganch tumani 20- umumiy o'rta talim maktabi boshlang'ich sinf o'qituvchisi.

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Annotatsiya: Ushbu maqolada boshlang'ich sinflarda matematika o'qitish metodikasi o'quv predmeti sifatida haqida ilmiy ma'lumotlar keltiriladi.

Kalit so'zlar: o'qitishning o'ziga xos xususiy metodlari, pedagogik, fan, ta'lim, o'quvchi, matematika o'qitishning amaliy maqsadi.

Matematika o'qitish metodikasi eng avvalo, kichik yoshdagi o'quvchilarni umumiy tizimda o'qitish va tarbiyalash vazifasini qo'yadi. Umumiy metodika boshlang'ich sinf matematikasining mazmunini va tizimlilikini aks ettiradi, har bir bo'limni o'qitishning o'ziga xos xususiy metodlarini o'rgatadi. Xususiy metodika matematika o'qitishning asoslangan metodlarini va o'qitish formalarini, shuningdek, o'quv faoliyatini tashkil qilish yo'llarini ko'rsatadi. Ma'lumki, o'qitish tarbiyalash bilan o'zaro mustahkam bog'liqdir. Ushbu metodika o'qitishni tarbiyalash bilan qo'shib olib borish yo'llarini o'rgatadi. Boshlang'ich sinflarda matematika o'qitish metodikasi bir necha fanlar bilan chambarchas bog'liqdir: 1) o'qitish asosi bo'lgan matematika bilan; 2) pedagogika; 3) psixologiya; 4) boshqa o'qitish metodikalari bilan (ona tili, mehnat ...). Boshlang'ich sinflarda matematika o'qitish kursi o'quv predmetiga aylangan. Boshlang'ich sinflarda matematika o'qitish metodikasining o'qitish vazifalari: a) ta'lim-tarbiyaviy va amaliy vazifalarni amalga osbirishi; b) nazariy bilimlar tizimini o'rganish jarayonini yoritib berishi; d) o'quvchilarning dunyoqarashini shakllantirish yo'llarini o'rgatishi; e) ta'limni insonparvarlashtirishi; . f) matematika o'qitish jarayonida insonni mehnatni sevishga, o'zining qadr-qimmatini, bir-biriga hurmati kabi fazilatlarini tarbiyalashni ko'rsatib berishi; g) o'qitish metodikasi I-IV sinflar matematikasining davomi bo'lgan V-VI sinf matematikasi mazmuni bilan bog'lab o'qitishdan iborat. Boshlang'ich matematika kursining vazifasi maktab oldiga qo'yilgan o'quvchilarga fan asoslaridan puxta bilim berishda yangi texnologiyadan foydalanish, ularga hozirgi zamon ijtimoiy-iqtisodiy bilimlarni berish, kasb-hunarga qiziqtirish, kasblarni ongli tanlashga o'rgatish" kabi vazifalarni hal qilishda yordam berishdan iborat. Shunday qilib, boshqa bar qanday o'quv fani kabi matematika boshlang'ich kursi o'qitishning maqsadi quyidagi uch omil bilan belgilanadi: 1. Matematika o'qitishning umumta'limiy maqsadi; 2. Matematika o'qitishning tarbiyaviy maqsadi; 3. Matematika o'qitishning amaliy maqsadi. Matematika

o'qitishning umumta'limiy maqsadi o'z oldiga quyidagi vazifalarni qo'yadi: a) o'quvchilarga ma'lum dasturi asosida matematik bilimlar berish. Bu bilimlar matematika fani to'g'risida o'quvchilarga yetarli darajada ma'lumot berishi, ularni matematika fanining yuqori bo'limlarini o'rganishga tayyorlashi kerak. Bundan tashqari, dastur asosida o'quvchilar o'qish jarayonida olgan bilimlarining ishonchli ekanligini tekshira bilishga o'rganishlari, nazorat qilishning asosiy metodlarini egallashlari lozim; b) o'quvchilarning og'zaki va yozma matematik bilimlarni tarkib toptirish lozim bo'ladi. Matematikani o'rganish o'quvchilarning o'z onalarida nutq madaniyatini to'g'ri shakllantirish, o'z fikrini aniq, ravshan va lo'nda qilib bayon eta bilish malakalarini o'zlashtirishlariga yordam berishi kerak; d) o'quvchilarni matematik qonuniyatlar asosida haqiqatlarini bilishga o'rgatish. Bunday bilimlar berish orqali esa o'quvchilarning fazoviy tasavvur qilish xususiyatlari shakllanadi hamda mantiqiy tafakkur qilishlari yanada rivojlanadi.

Boshlang'ich sinflarda matematika o'qitishning tarbiyaviy maqsadi o'z oldiga quyidagi vazifalarni qo'yadi: a) o'quvchilarda ilmiy dunyoqarashni shakllantirish; b) o'quvchilarda matematikani o'rganishga bo'lgan qiziqishlarni tarbiyalash. Boshlang'ich sinf o'qituvchisining vazifasi o'quvchilarda mustaqil mantiqiy fikrlash qobiliyatlarini shakllantirish bilan birga ularda matematikaning qonuniyatlarini o'rganishga bo'lgan qiziqishlarini tarbiyalashdan iboratdir; d) o'quvchilarda matematik tafakkurni va matematik madaniyatni shakllantirish.

Matematika darslarida o'rganiladigan ibora, amal belgilari, tushuncha va ular orasidagi qonuniyatlar o'quvchilarni atroflicha fikrlashga o'rgatadi. .. Boshlang'ich sinflarda matematika o'qitishning amaliy maqsadi o'z oldiga quyidagi vazifalarni qo'yadi: a) o'quvchilar matematika darsida olgan bilimlarini kundalik hayotda uchraydigan elementar masalalarni yechishga tatbiq qila olishga o'rgatish, o'quvchilarda arifmetik amallar bajarish malakalarini shakllantirish va ularni mustahkamlash uchun maxsus tuzilgan amaliy masalalarni hal qilishga o'rgatish; b) matematika o'qitishda texnik vosita va ko'rgazmali qurollardan foydalanish malakalarini shakllantirish. Bunda asosiy e'tibor o'quvchilarning jadval va hisoblash vositalaridan foydalana olish malakalarini tarkib toptirishga qaratilgan; d) o'quvchilarni mustaqil ravishda matematik bilimlarni egallashga o'rgatish. O'quvchilar, imkoni boricha, mustaqil ravishda qonuniyat munosabatlarini ochishlari, kuchlari yetadigan darajada umumlashtirish qilishlari, shuningdek, og'zaki va yozma xulosalar qilishga o'rganishlari kerak. O'qitish samaradorligining zaruriy va muhim sharti o'quvchilarning o'rganilayotgan materialni o'zlashtirishlari ustidan nazoratdir. Didaktikada uni amalga oshirishning turli shakllari ishlab chiqilgan. Bu o'quvchilardan og'zaki so'rash; nazorat ishlari. va mustaqil ishlar; uy vazifalarini tekshirish, testlar, o'tkazish kabi usullardir. Didaktikada dars turiga, o'quvchilarning yosh xususiyatlariga va h.k. bog'liq ravishda nazoratning u yoki bu shaklidan

foydalanishning maqsadga muvofiqligi masalalari, shuningdek, nazoratni amalga oshirish metodikasi yetarlicha chuqur ishlab chiqilgan. ' Boshlang'ich maktabda matematika o'qitish metodikasida mustaqil va nazorat ishlari, o'quvchilarda yakka (individual) yozma so'rov o'tkazishning samarali vositalari yaratilgan. Ba'zi didaktik materiallar dasturning chegaralangan doiradagi masalalarining o'zlashtirilishini reyting tizimida nazorat qilish uchun, boshqalari boshlang'ich maktab matematika kursining barcha asosiy mavzularini nazorat qilish uchun mo'ljallangan. Ayrim didaktik materiallarda (ayniqsa, kam komplektli maktab uchun mo'ljallangan) o'qitish xarakteridagi materiallar, boshqalarida esa nazoratni amalga oshirish uchun materiallar ko'proqdir. Boshlang'ich maktab matematikasida barcha didaktik materiallar uchun umumiy topshiriqlarning murakkabligi bo'yicha tabaqalashtirilishidir. Bu materiallar tanlangan g'oyaga ko'ra ma'ium mavzu bo'yicha topshiriqning biror usulini bajarishi o'quvchining bu mavzuni faqat o'zlashtirganligi haqidagina emas, balki uni to'la aniqlangan darajada o'zlashtirganligi haqida ham guvohlik beradi. Amaliyotda, o'qituvchilar ko'pincha biror topshiriqning usullarini biri boshqalaridan soddaroq yoki murakkabroq deb aytadilar. Bundan tashqari, didaktik materiallar qanchalik san'atkorona tuzilgan bo'lmasin, ularning mazmuni va tuzilishida qanchalik sermahsul va chuqur g'oyalar amalga oshirilmasin, ular baribir barcha metodik vazifalarni tezda hal etishga qodir emas. Shunday qilib, didaktik materiallarni o'quvchilarning o'quv materialini o'zlashtirish darajasini nazorat qilish usullaridan biri sifatida qarash lozim. Shu bilan birga muayyan usul mazkur sinf, mazkur o'qituvchi uchun eng yaxshi usul bo'lishi mumkin. Shu sababli, didaktik materiallar o'qituvchini o'quvchilarning bilimlarni o'zlashtirish darajasini aniqlash imkonini beradigan individual tekshirish uchun nazorat turlarini tuzishdan xalos eta olmaydi. Bu umummetodikaning asosiy vazifalaridan biridir.

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READING SKILLS AND THEIR DEVELOPMENT

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Abstract. This article provides feedback on reading skills and their development.

Keywords: reading, complex, technical, sound, meaningful, understanding

Educational institutions set the tasks for the development and training of younger students. Following them, the teacher needs to formulate universal educational actions in students. Along with them, the most important result of mastering the main educational program is the formation of the skill of reading texts of different genres and styles.

First of all, it is necessary to distinguish meaningful reading from technical reading, which is considered in the works in the literary reading lessons. Reading is a complex work, which distinguishes the process of transcribing written speech into sound speech and understanding the meaning of the read text.

These two types of reading are closely connected and together constitute "full reading". Without mastering the mechanism of reading, understanding the meaning of what has been read is impossible, so technical reading is only the sounding out of the text, while meaningful reading implies primarily the construction of one's own thoughts and understanding on the basis of what has been read. M. Azimova thinks that the mechanism of sense-making is "collision of meanings", when a reader compares different variants of comprehension of reality reflected in a text [37, p. 117]. K.D. Ushinsky, L.S. Vygotsky and other researchers pointed to this in their works [8, p. 58].

Today in modern school practice there is often a lot of work on the development of technical reading skills with complete neglect of the formation of reading skills. Although the entire course of literary reading is aimed precisely at comprehension of the meaning of the work.

The development of mechanical reading is the first step in mastering the meaningful reading and gradually turns into an action for realization of conscious reading, comprehension of the read, which eventually becomes the main goal of reading [32, p. 61]. In the study of reading fiction texts the considered skill is understood as comprehension of the moral thought of the work. Since in a fiction text it is not the words themselves that matter, but their purpose in the text, the main purpose of meaningful reading of works is the birth of own meanings from the meanings available

in the text, due to the presence of the subjective worldview of each individual [32, p. 158].

Many researchers have recognized the role of reading as important in the spiritual development of a person, but only if reading is aimed at awareness and comprehension of what has been read [6, p. 14]. Some scholars consider meaningful reading as a kind of perception process, using the concept of "meaningful text perception".

The formation of reading skills at the moment is the need of modern society in general and each person in particular. Semantic reading is a very broad concept, the understanding of which, although it has certain characteristics among different scientists in various fields of science, nevertheless has a common essence for all. Semantic reading is reading comprehension, the ability to see "between the lines" and the ability to draw public conclusions based on the studied texts.

The formation of reading skills involves work on increasing the pace, expressiveness, awareness of the content of the reading. The teacher creates his own set of tasks to improve the efficiency of work in these areas. The formation of reading comprehension, speed, techniques is really important. Each of these components is first formed, worked out as a skill and, with the help of exercises, gradually rises to the level of skills, which is performed without difficulty, received completely automatically and then is used to successfully study other disciplines. As a teacher we should focus on the exercises that increase the development of each skill separately. These tasks easily fit into the structure of a reading lesson, they can be given to children at home for independent work.

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TECHNIQUES TO IMPROVE ENGLISH SPEAKING SKILLS

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Abstract. In this article, opinions were expressed about the methods of formation of speaking skills.

Keywords: speech, play, record, translating, improve, learn phrases, sound, native speaker

There are also a variety of techniques to help improve your English speaking skills. Try your hand (or should we say mouth) at these:

Speech shadowing: Basically, this is copying how a native speaks. Speech shadowing can be done most simply by watching videos or a movie with subtitles. First, read the sentence and speak it out loud. Then, play it back with the native speaker speaking it. Try to pause in between to copy the flow and pattern as closely as possible. If you want, you can record yourself doing this to compare it with the way the native speaker sounds.

Self-talk: Whether you choose to speak your thoughts out loud or record yourself singing, talking to yourself and hearing the words will help you improve. You can also read out loud.

Think in English: This probably won't come naturally, but you can help train yourself to think in English by first translating the thoughts in your head. Otherwise, you can keep a journal or diary of thoughts and write them in English.

Retell a story in English: Start with something simple, like a fairytale or traditional story from your childhood. Then you can take this to the next step and challenge yourself to retell a story that someone else shares in English. This helps to check your comprehension and understanding.

Frequently Practice to Improve Your English Speaking Skills

From friends to strangers, you can always find someone who speaks English to practice with. Here are a few more ideas on how and where you can speak English:

Participate in public speaking events: Public speaking events, from forums and conferences to slam poetry events, offer a good place to listen to others speak. You can also potentially apply to be a speaker. If it's something less formal, like sharing your creative writing or telling a story in front of a small group of friends, public speaking can really showcase your skills. Go to language cafes: Language cafes exist around the world. This is a place for people to come together and practice the languages of their choice in small group settings.

Using apps: Technology is here to assist in learning languages. From apps like Duolingo to Busuu, which lets you speak to native speakers, you can improve your English speaking skills wherever you go.

Chat with Siri: Want to speak to someone at a random time of night or simply set reminders on your phone to benefit your productivity? Chat with Siri!

Strategies and English Trainings

Everyone has their own favorite methods and ways of improving their English communication. There is no one right or wrong choice, so you can pick as many or as few as you wish and mix it up:

Talk to Yourself: Share your thoughts or read out loud.

Use a Mirror: Watch yourself speak to build confidence.

Focus on Fluency, Not Grammar: It's ok to take time to learn grammar. But it's more important to be able to communicate your thoughts first.

English Tongue Twisters: Try English tongue twisters to master the sounds of each letter.

Listen and Repeat: Practice and keep practicing by listening and repeating what you hear.

Pay Attention to Stressed Sounds: The language has a rhythm and certain syllables are stressed in both words and sentences.

Sing Along to English Songs: Use music to memorize words.

Learn Phrases, Not Words: By learning longer phrases, you combine words in context and can memorize both their meaning and pronunciation.

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WAYS TO DEVELOP LISTENING SKILLS

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Abstract. This article provides feedback on ways to develop listening skills.

Keywords: visualize, concepts, speaker, Limit judgments, interrupt, Empathize

Listening skills are an essential part of good communication. When you are an attentive listener, you can begin to improve relationships, make decisions more effectively and reach agreements with others quickly.

It can be beneficial to evaluate your current listening skills to determine areas for improvement. Here are some ways to improve your listening skills:

Visualize what the speaker is saying

Try to conjure up mental images of what the speaker is talking about while you are listening to help retain information. This may be a literal picture or other concepts that relate to the topic. This will help you to remember keywords and phrases when you listen for long periods. Visualizing what the speaker is saying will also help you to not have to prepare for what to say next. If you happen to lose focus, make sure to immediately refocus.

Limit judgments

Listen without criticizing the speaker in your mind while they talk. Even if the message causes you agitation or alarm, try to avoid thinking about negative or judgmental comments because this compromises your ability to listen. You also want to listen with an open mind and understand that the person is giving you their perspective. You may realize that they make more sense as they continue to talk to you, and you won't know the full story without listening.

Don't interrupt

Everyone speaks and processes information at different rates. If someone is delivering their message slowly, try to cultivate patience and wait for them to finish before trying to rush them along by guessing the next thing they are going to say or replying before they have finished talking. Interrupting sends the wrong message to the speaker. It may suggest that what you have to say is more important, that you don't care about what they are saying or that the conversation is a competition.

It is also important to refrain from offering solutions. Most often people just want you to listen. However, if you have a brilliant idea, you may consider asking if you can share your ideas before you offer your solution.

Wait for a pause to ask questions

You may not understand everything someone says to you. It is best to wait until they pause to ask them to back up and provide clarification for the topic or phrase you misunderstood.

Ask clarifying questions

Asking clarifying questions helps to keep the conversation on topic. You only want to ask questions that pertain to your understanding rather than ask a question about something that is not related to the main idea the speaker is trying to get across. When you ask clarifying questions without interrupting, it shows that you are listening, paying attention and willing to discuss things further.

Empathize with the speaker

Empathy is essential to effective listening. You should mirror the emotions the speaker has. For instance, if their face conveys sadness or joy then your facial expressions and words should also convey similar emotions. Empathizing with the speaker takes concentration and expends energy, but it allows for open communication and establishes relationships.

Pay attention to nonverbal cues

Some of the communication that takes place between individuals is nonverbal. You can learn a great deal about someone through their body language and tone of voice when they are communicating with you. It is easy to detect boredom, enthusiasm or irritation on someone's face when they talk depending on their eyes, mouth and position of their shoulders. Therefore, listening also includes paying attention to nonverbal cues. It helps you to make inferences based on what a person means when they are talking to you.

Provide the speaker with feedback

Feedback can be verbal and nonverbal. You can use verbal feedback by saying things like, "I understand that must be difficult," or "OK." You can use nonverbal cues such as nodding your head and using appropriate facial expressions.

The goal is to send signals to the speaker so they know that you are actively listening. In a situation where someone is giving you tasks, make sure to repeat the task list back to the speaker so they know you understand what to do. Writing down what they say also shows attentiveness.

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USING ICT IN SUPPORT OF LANGUAGE TEACHING AND LEARNING

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Abstract. Computers have made a triumphal entry into education in the past decade, and only a dyed-in-the wool Luddite would deny that they have brought significant benefits to teachers and students alike. However, an uncritical use of computers can be just as disadvantageous to students as a refusal to have anything to do with them. In this article we discuss some of the ways of projects that computers can be used in English language teaching, with a view to helping colleagues make the most of the opportunities they offer to ESL students.

Keywords: English, ICT, target groups, online participants, open-access resources.

English is considered to be a global language and henceforth learning and comprehending it, has been acknowledged worldwide today. English has become the tool for learning, business and most importantly communication. In order to improve the whole experience of English language acquisition we have to integrate ICT (Information and Communication Technology) with current learning methodology. ICT has been discovered to be a very powerful tool for educational change and reform. With the help of ICT enabled English Language classes, the faculties would find it more easy to conduct classes. It has been proved to be an excellent method of enhancing the teaching and learning process. This is the technology era, and these days even a toddler is familiar with the use of computers and laptops. This is major reason as to why technology has come up with the idea of ICT enabled learning methodology, which could help the children of today's generation in a better way and enhance their skills. It has been explained that ICT enabled language learning can help one to ameliorate the efficiency and effectiveness of their learning process. It is a very flexible, interactive and rich platform that would provide the users a whole new different experience.

We are in the Digital era today, and this is the age of technological learners. These technological learners know well how to use technological tools without any formal instruction as such. Even if they require instruction, they would be able to grasp and implement it very quickly. These learners interact and communicate with others mostly with the help of electronic mediums like mails, internet etc. They obtain most of the information from electronic devices, which has made such tools, a very essential component of their daily life.

Using ICT in a classroom as a tool for language learning has a lot more benefit. It gives stimulus to undertake the tasks that the students may otherwise avoid. In an ICT enabled language learning class, the students would conduct the activities on the computer software platform and they will not have any sorts of hesitations or inhibitions. It would make repetitive tasks more interesting and would have content which could be in multimedia formats. The use of multimedia while learning English could help in creating a long lasting impact on the learners.

The role of Teacher will change from an Instructor's role to that of a Coordinator. Self-paced independent learning methodology is what is being propagated with the help ICT enabled English Language Teaching.

This activity provides training in the application of pedagogical principles in teaching languages with technology and promotes the effective use of ICT tools and open resources in support of quality language teaching and learning. The key reference tool is the “ECML inventory of ICT tools and open educational resources”. The activity initiates local and regional clusters of multipliers promoting the use of ICT tools and open educational resources.

Language education is an area where open-access resources, online courses, virtual classrooms and social networks based on information and communication technology (ICT) are being increasingly used to give learners access to information, promote interaction and communication, and enhance digital literacy skills. However, the rapid development of tools and resources presents both opportunities and challenges. In order to maximize the potential of ICT in language teaching, it is crucial that it is used in a pedagogically sound way that corresponds to the individual needs of the learners. It is also important that the use of ICT is introduced and supported in a sustainable way and in a range of pedagogical approaches that promote lifelong learning.

Target groups

- 1) Language teacher
- 2) Teachers trainers
- 3) Language policy makers
- 4) Multipliers

Results and benefits

This initiative will benefit teachers, teacher trainers and other stakeholders involved in language teaching, who will be able to make use of the training activities and the training materials as well as other resources on the website. The workshops, for teachers and multipliers, will be based on a strong ‘hands-on’ approach. The online aspect of teaching will also be reinforced by involving remote (“online”) participants in all aspects of communication and group work. This part-online delivery and the integrated social media (Twitter) will guarantee that the project reaches the largest

possible number of teaching professionals, giving them hands-on experience of online learning and teaching and integrating them into a growing community of practice of European language professionals.

All participants will be required to take part in preparatory activities prior to the workshop (via the workspace), participate actively in the workshop itself and also take part in post-workshop activities (web involvement and dissemination within their own context).

Teachers will become aware that the effective blending of appropriate pedagogical principles with technology is crucial for creating successful language learning activities, and they will develop a set of skills necessary to do this on their own, in their own professional context.

They will become aware of their own needs in terms of continual professional development and will be shown ways of pursuing this development in a self-directed way.

Development and individualization of training modules in the use of available ICT tools and open resources in language teaching and learning (An initial set of modules developed by the ECML expert team will be refined, based on workshop participant feedback)

Initiation of local or regional clusters of multipliers promoting the use of ICT tools and open educational resources

Long-term benefits

After the workshop participants will be able to support their colleagues in raising awareness of the importance of integrating pedagogy and technology, tackling obstacles that might currently hinder effective integration of ICT in their teaching context, while building on their own strengths and experiences.

Multipliers and teacher trainers will be able to use the unique training program developed by the team and the freely available activities and training modules in their own delivery of workshops in the member state concerned, reaching a much larger audience. This will eventually have a cascading effect.

Feedback from participants and local coordinators to language policy makers will raise their awareness of the needs of language teachers, teacher trainers and multipliers. Overall, this will lead to a more bottom-up understanding of the need for professional development and integration of pedagogy and technology in the area of ICT use, which will increase digital literacy.

Thus, the new and modern technologies are inevitable in language teaching and learning.

Present teachers are using technologies in ELT classroom like multimedia projector, internet, presentation software, word processing, digital video, web page, E-mail, video conferencing, Interactive whiteboard and other online dictionaries, electronic

dictionaries etc. but teachers often used LCD presentation, word processing and internet in language pedagogy. Teachers were used technology to develop different skills and system like listening, speaking, reading, writing, pronunciation and vocabulary but teachers often used technology to develop listening, speaking and vocabulary enrichment. 21st Century teachers adopt ICT based approaches like blended learning, flipped learning, cyber learning, virtual learning etc. to make the students proficient in foreign language for their betterment in life.

The classroom management is a complex mission because choosing the right strategy is the main problem since the approaches and the methods of teaching differ and vary. The teaching methods changed throughout time. Thus, the teacher has to be a good designer to get a perfect management. We should say that ICT transforms the way of teaching and learning. Teachers need frequent access to The ICT in order to be able to use it in teaching. The integration of ICT has a great benefit for learners and teachers. In general, the arrival of ICT has impacted everything in our life. ICT is a good way to master the language phonetics, and that is a useful reinforcement for a good understanding of the difficult aspects.

Unfortunately, the attention and the motivation of both teachers and learners related to the use of ICT in teaching English as Foreign Language have no significance under the absence of the necessary equipment. The different Ministries of national education and higher education have to react by bringing some changes at the level of the educational program, as well as by enriching classes with materials such as computers, data shows, and internet.

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INGLIZ TILINI O'QITISHDA ZAMONAVIY INTERAKTIV METODLAR.

*Farg'ona viloyati Marg'ilon shahri 5- maktab ingliz tili o'qituvchisi Axmatjonova
Buvzulayxo Murodilla qizi*

Annotatsiya: Ushbu maqolada Ingliz tilini o'qitishda zamonaviy interaktiv metodlardan foydalanish haqida ma'lumotlar berilgan.

Kalit so'zlar: Ingliz tili o'qitish metodikasi, zamonaviy metodlar, interaktivlik, axborot texnologiyalari, innovatsion texnologiyalar.

Ingliz tili (inglizcha: English) — hind-yevropa oilasining german guruhiga kiruvchi til. Ingliz xalqining tili. Avstraliya, AQSH, Birlashgan Qirollik, Hindiston, Irlandiya, JAR, Kanada, Liberiya, Malta va Yangi Zelandiyaning rasmiy tili. Ingliz tili dunyodagi eng ko'p ishlatiladigan tillar ichida 3-o'ringa turadi (Ispan hamda Mandarin Xitoycha tillardan keyin). Yevropa Ittifoqining asosiy tili.

Mamlakatimiz mustaqillika erishgandan so'ng chet tillarni o'rganishga talab keskin oshdi davlatimiz tomonidan til o'rganishga keng imkoniyatlar yaratilmoqda. Bugungi kunda maktablarda zamonaviy kompyuterlar, elektron manbalar, Internetga kirish imkoniyati mavjud. Axborot texnologiyalaridan foydalanish nafaqat maktab o'quvchilarining mashg'ulotlarining turli bosqichlarida, balki odatiy ingliz tili darslarida ham mumkin. An'anaviy darsning sxemasidagi kompyuter texnologiyalarini joriy etish o'qituvchiga o'quv jarayonini kompyuterdagi ishining bir qismini kompyuterda ishlashni, o'quv jarayonini yanada qiziqarli, rang-barang, qizg'in. Kompyuter o'rnini bosa olmaydi, lekin faqat o'qituvchilarni to'ldiradi. Kompyuterni jalb qilish sizga har qanday darsni jozibali va haqiqatan ham zamonaviylashtirishga imkon beradi. Har qanday vazifani bajarish, kompyuterdan foydalanib, darsdan foydalanib, darsning intensivligini oshirish imkoniyatini yaratadi. O'zgaruvchan materiallardan foydalanish va operatsion rejalar o'qishni individuallashtirishga yordam beradi. Kompyuterda o'qitishning barcha bosqichlarida qo'llanilishi mumkin: yangi materiallar, birlashtirish, takrorlash, bilimlarni boshqarish, ko'nikma va ko'nikmalarni tushuntirishda qo'llanilishi mumkin. Shu bilan birga, bola uchun u turli xil funktsiyalarni bajaradi: o'qituvchilar, ishchi vositalari, o'quv qurollari, o'qish ob'ekti, hamkorlik qilish guruhi, o'yin muhiti, o'yin-kulgi. Bu yangi pedagogik texnologiyalarni joriy etishga yordam beradi, masalan: ma'lumotlar va kommunikativ, kompyuter va multimedia texnologiyalari bir-biri bilan chambarchas bog'liq. Amalga oshirish axborot texnologiyalari Maktab o'quv jarayonini faollashtirish uchun zaruriy shartlarni yaratadi. Kompyuter texnologiyasi talabalarning shaxsiy fazilatlarini oshkor etish, saqlash va rivojlantirishga yordam beradi. Maktablarda har bir fan dars jarayonida shu bilan birga ingliz tilli ularning faoliyatida har doim axborot texnologiyalaridan

(ma'lumotni saqlash, qayta ishlash va uzatish vositalari) ishlatgan; Ularning takomilini oshirish samaradorligini oshirishga yordam beradi. Shuning uchun kompyuterdan eng mukammal axborot manbai sifatida, kitob, favvora, televizor, kalkulyator, videomagnitori va boshqalar yordamida kompyuterdan foydalanish. Tabiiyki, o'quv jarayonini takomillashtirishga olib keladi. Kompyuterlar va dasturiy ta'minotning rivojlanishi ularning rivojlanmagan foydalanuvchilari, shu jumladan ham maktabgacha bolalarni o'zlashtirishning eng soddaligiga olib keldi. So'nggi yillarda Maktablarda innovatsion texnologiyalardan foydalanish masalasi tobora ko'proq ko'tarilmoqda. Bu nafaqat yangi texnik vositalar, balki o'quv jarayonlari va o'qitish usullari, o'quv jarayoniga yangi yondashuvdir. O'quv jarayoniga innovatsion texnologiyalarni joriy etish Chet tillarini ehtiyojlarga nisbatan chet tillarini o'rganish jarayonida ta'lim va ta'lim usullarini takomillashtirish bilan bog'liq. Chet tillarida o'qitishning asosiy maqsadi -bu maktab o'quvchilarining kommunikatori madaniyatini shakllantirish va rivojlantirish, chet tilida amaliy mahoratni o'rganish. O'qituvchining vazifasi har bir o'quvchi uchun til bilan amaliy mahoratni yaratish, har bir o'quvchi faoliyatini, ijodini ko'rsatishga imkon beradigan bunday o'quv usullarini tanlash kerak. Hamkorlik, loyihaning metodologiyasi, yangi axborot texnologiyalaridan foydalangan holda zamonaviy pedagogik texnologiyalar, yangi axborot texnologiyalaridan foydalanish, Internet-resurslarni bolalarning qobiliyatlarini hisobga olgan holda, ularning ta'lim darajasi, ularni individuallashtirish bilim darajasini oshirishda yordam beradi. Aloqaviy yondashuv -bu muloqotni uyg'otadigan strategiya bo'lib, ular bilan aloqa qilishning moddiy va usullarini ongli ravishda tushunishga qaratilgan. Foydalanuvchi Internetdagi kommunikativ yondashuvni amalga oshirish uchun bu juda qiyin emas. Kommunal vazifa muammoni yoki munozara uchun savol tug'ilishi kerak va o'quvchilar shunchaki ma'lumot almashish, balki uni baholash ham mumkin. Ushbu yondashuvning boshqa turdagi faoliyat turlaridan farqlashga imkon beradigan asosiy mezon shundan iboratki, o'quvchilar o'z fikrlarini bildirish uchun til birligini tanlaydilar. Internativ yondashuvda Internetdan foydalanish yaxshiroq emas: uning maqsadi chet tilni o'rganishda va ularning bilim va tajribasini kengaytirish orqali chet tilini o'rganishda manfaatdor. Internet resurslaridan foydalangan holda chet tillarini o'rganish uchun asosiy talablardan biri bu interaktivlik usulida odatiy deb nomlanadigan darsda o'zaro ta'sir yaratishdir. Interaktivlik "o'zaro maqsadga erishish va nutq mablag'lari natijasini" uyushtirish, muvofiqlashtirish va to'ldirishdir. Haqiqiy til bilan mashg'ulotlar, Internet ko'nikmalar va ko'nikmalarni shakllantirishda yordam beradi, shuningdek, lug'at va grammatika o'rganishda haqiqiy qiziqish va, shuning uchun samarali hisoblanadi.[1] Interaktivlik nafaqat hayotdan haqiqiy vaziyatlarni yaratmaydi, balki o'quvchilarni chet tillari orqali etarli darajada javob berishga majbur qiladi. Shaxsiy dars berishni taklif qiluvchi texnologiyalardan biri bu loyihalar usuli ijodkorlik, kognitiv faoliyat, mustaqillikni rivojlantirish yo'lidir. Loyihalarning

tipologiyasi turlicha. Haqiqiy amaliyotda bu turli xil ilmiy-tadqiqot, ijodiy, amaliy yo'naltirilgan va axborotning belgilari mavjud bo'lgan aralash loyihalar bilan shug'ullanishi kerak. Loyihaning ishi o'qish, audit, nutq va grammatika tilini o'rganish uchun ko'p darajadagi yondashuvdir. Loyihaning usuli o'quvchilarda faol mustaqil fikrlarni rivojlantirishga katta hissa qo'shadi. Menimcha, loyihalarni tayyorlash bolalarni hamkorlik qilishga o'rgatish va hamkorlikni tayyorlash o'zaro yordami va ijodiy qobiliyatlarni ko'taradi. Shu bilan birga ingliz tilini o'rganish bo'yicha innovatsion ta'limning mohiyati shundaki, o'quv jarayoni deyarli barcha talabalar bilim jarayoniga jalb qilinishi yangi ped texnologiyalarni qo'llash dars sifatini oshiradi. Misol uchun quydagi pedagogik texnologiyalarni qaraydigan bo'lsak.[2]

"Karusel" texnologiyasi. Ko'plab innovatsion texnologiyalar singari, karusel qarzga olingan. Bolalar bunday ish turadi, odatda juda ko'p. Ikkita halqa hosil bo'ladi: ichki va tashqi. Ichki halqaning tashqi tomoniga qarab harakatsiz talabalar, tashqi tomondan har 30 sekundda aylanib yuradigan tashqi tomondan. Shunday qilib, ular bir necha daqiqa gapirish uchun vaqtlari bor va suhbatdoshini o'zlarining o'ng tomonida ishontirishga harakat qilishadi. Lauretik tabiatning dialoglari mukammal darajada amal qiladi, mavzu - tanishish, millati, jamoat joyida suhbat va boshqalar. Yigitlar hayajon bilan gapirishadi, kasb dinamik va samarali o'tadi. "Sotsiologik so'rov" texnologiyasi. U bolalarning harakati davomida taklif qilingan mavzu bo'yicha ma'lumot to'plash uchun hisob davomida harakatlanishni o'z ichiga oladi. Har bir ishtirokchi vazifalar ro'yxati bilan ro'yxatni oladi. O'qituvchi savol-javoblarni shakllantirishga yordam beradi, o'zaro ta'sir ingliz tilidan boshlanishini ta'minlaydi. "Qurilishi tugallanmagan taklif" texnologiyasi. Bolalarni tugallanmagan taklifni o'qishga taklif qilinadi va uni har qanday so'z bilan davom ettiring, bu xayolga kelgan birinchi fikr. Takliflar juda noaniq boshlanadi, shuning uchun yigitlar buni yakunlash uchun deyarli cheksiz imkoniyatlarga ega. Ular turli xil hayot joylariga taalluqli va har qanday mavzularni qamrab olishi mumkin.[3]

O'rta maktablarda ingliz tili o'rgatishda uchraydigan grammatik qiyinchiliklar xususida gapirilganda, o'quvchilar ko'plab qiyinchiliklarga duch kelishlarini aytish joiz. Kishi tilidagi hamma so'zlarni bilsa-yu, gaplar, so'zlar o'rtasidagi bog'lanishlarni bilmasa, u nutqning mazmunini tushunishga qiynaladi. Shuning uchun o'rta maktablarda o'quvchilarga grammatikani o'rgatish judayam muhimdir. Agar o'quvchi grammatik ko'nikmalarni yaxshi egallamagan bo'lsa, u o'z fikrini to'g'ri bayon eta olmaydi. Gapirishda, yozishda va tarjimada qiynaladi. Til grammatikasi o'ziga xos murakkab sistemadir. Shuning uchun ham uni o'zlashtirish oson emas. Maktab o'quvchilari quyidagi qiyinchiliklarga odatda duch keladilar: Artikl muammosi. Buni grammatika o'rganishdagi eng katta muammo desa ham bo'ladi. Ko'pchilik ingliz tili o'rganuvchilar bilan suhbatlashib ko'rganimizda, deyarli hammalari ingliz tili grammatikasini o'zlashtirishlarida asosan artikl va zamonlar qiyinchilik tug'dirishini

aytganlar. Darhaqiqat, o'zbek tilida aynan artikl so'z turkumi bo'lmagani uchun uni qo'llashda va tarjima qilishda qiynaladilar. Artikl qoidalarni yod olish kerak. Biroq qoidalardagi talaygina istisno holatlari o'rganuvchilarga, ayniqsa maktab yoshdagilarga, uni o'zlashtirishni murakkablashtiradi. [4] Tarjimasi aniqroq qilib o'rgatilsa, o'quvchilar artiklni qo'llashda ko'p qiyinchiliklarga uchramaydilar. Masalan: noaniq artikl bir, qandaydir bir deb, aniq artikl esa o'sha, haligi deb tarjima qilinadi deb o'rgatish mumkin. Bir so'z bilan aytganda, artiklning ishlatilish holatlarini bolalarga misollar yordamida qayta-qayta tushuntirilsa, ingliz tilidagi bu yordamchi so'z turkumini o'zlashtirishdagi qiyinchiliklarni kamaytirib bartaraf etsa bo'ladi. Ingliz tili grammatikasini o'zlashtirishdagi qiyinchiliklardan yana biri predloglardir. O'zbek tilida predloglar kelishik qo'shimchalari bilan ifodalanadi. Ingliz tilida esa kelishik qo'shimchalari predloglar orqali ifodalanadi. Jumladan, o'zbek tilidagi o'rin-payt kelishigi, ingliz tilida in, on, at predloglari bilan ifodalanishi mumkin. Masalan: in — in January, in 2015, in a week on — on Monday, on January 15, on birthday at — at the weekend, at 10 o'clock O'rin payt kelishigining qo'shimchasi, o'rin joyini bildirganda ham ingliz tilida yuqoridagi predloglardan foydalanamiz. Masalan: in — in Uzbekistan, in Madrid, in our week on — on the sofa, on the table at — at the station, at school ingliz va o'zbek tillarida so'z tartibining o'xshash emasligi. Ma'lumki, ingliz tilida so'z tartibi qat'iydir, aksariyat hollarda darak gap boshida doim ega turadi ketidan esa kesim keladi. O'zbek tilida esa gap bo'laklari o'rnini almashtirsak ham ma'nosi o'zgarmaydi. Tarjimada esa o'quvchilar qiyinchiliklarga uchraydilar. Metodistlar fikriga ko'ra, ingliz tili grammatikasini o'rgatishda, avvalambor, grammatika minimumini to'g'ri tanlash va ingliz tili grammatikasini o'ziga xos xususiyatlarini inobatga olish taqozo etiladi. Ingliz tili grammatikasini o'ziga xos qiyinchiliklari va xususiyatlari quydagilar: ingliz tilidagi noto'g'ri fe'llar mavjudligi, ingliz tilidagi gap qurilishni qat'iyligi, ingliz tilidagi artikillar, predlog va zamonlarning ko'pligidir. Shu kabi xususiyatlar ingliz tili grammatikasini o'zbek tili grammatikasidan farqlaydi. J. Jalolov fikriga ko'ra, grammatikani o'quvchilarga o'rgatishda asosan ikkita yo'ldan foydalanishimiz mumkin: 1. Induktiv. 2. Diduktiv. Induktiv usulda o'quvchilarga avval qoida so'ngra esa misol beriladi. Diduktiv usulda esa avval misol so'ngra qoida beriladi. Maktab yoshidagi bolalarga ingliz tilini o'rgatishda avvalo bolalar uchun rang-baranglikka e'tibor berishimiz zarur. Rasmlar asosida yoki qo'shiq va she'rlar orqali ham ingliz tili grammatikasini o'rgatishimiz mumkin. Maktablarda kuzatilayotgan muammolar qatorida o'quvchida darsga nisbatan passivlik, zerikish, diqqatni jamlay olmaslik kabi jihatlar ham mavjud. Ingliz tilini o'rgatishdagi leksik qiyinchiliklarga kelsak, ular quyidagilar: ingliz tilidagi deyarli barcha so'zlar turli ma'nolarni anglatadi. Ya'ni bir so'z birdan oshiq ma'noni anglatadi. M. Norovanning ta'kidlashicha, ingliz tilida bitta so'z maksimal 23ta ma'noni

berar ekan. Ingliz tili lug'atining ma'lum qismi boshqa tillardan kirib kelganligi; Ingliz tilining idiomalarga boyligi hamda bir qancha boshqalar.

Xulosa qilib aytganda, Ingliz tili darslarida innovatsion usullarni qo'llash hamda grammatikadan foydalanish natijasida o'quvchilarning mantiqiy fikrlash qobiliyatlari rivojlanadi, nutqi ravonlashadi, tez va to'g'ri javob berish malakasi shakllanadi. Bunday usullar o'quvchida bilimga ishtiyoq uyg'otadi. O'quvchi darslarga puxta hozirlik ko'rishga intiladi. Bu esa o'quvchilarni ta'lim jarayonining faol sub'yektlariga aylantiradi.

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DIDACTIC METHODS ON THE UPBRINGING OF A CHILD IN THE WORK OF ABDULLAH AVLANI “TURKISH GULISTAN YOHUD ETHICS

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Annotation: this article talks about the methods of upbringing mentioned in the work of the famous children adibi and the first Uzbek pedagogue Abdullah Avlani “Turkish Gulistan yohud morals”. A. It is revealed how the consequences of immaturity reflected in avlonian stories affect the decline of society.

Keywords: thinking, Intelligence, Science, perception, upbringing, child, teacher, manners.

The names of the great, the great ones who have broken the service of the land will be attributed to eternity. Over the centuries, their services will be mentioned. One such great breed is Abdullah Avlani. Pedagogue, public figure and writer Abdullah Avloni worked selflessly on the way to literate the children of the nation and prepare mature scientists, specialists from them, to see the motherland free, as an active participant in the jadiq movements that erupted in our country at the beginning of the 20th century. It was for this purpose that he actively worked in many areas.

A number of his works, written on the topic of upbringing, have become a slogan in today's educational institutions. Including the work “Turkish Gulistan yohud ethics” stands among the important works that enrich libraries. Abdulla Avlani says that this work was influenced by the work of the Persian classical poet Sheikh Muslih al-Din Saadi “Gulistan” and wrote it in imitation; “This work of Ban nochizonami was written by the petitions of several teachers of my brothers and I took courage...many times after the experiment, I found it worthy to write in the way of adibi Reverend Sheikh Saadi, even though it was a difficult task for me to carry out this shortcoming.” It can be said that this work is a book of ethics written in Uzbek by the method of Saadi's work “Gulistan”. This work of Abdullah Avlani was published in 1913 in Tashkent in the Ilin printing house in a lithographic (tashbosma) way.

It ' no one that make me feel like I don't,

I am a patient and my nation is dying why a patient ?

As Abdullah Avloni begins this work with such verses, his devotion to his nation, his joyfulness are felt. He is indeed a man who has urged the people to the knowledge and enlightenment, and who knows nothing about the path. Abdulla Avlani wrote about manners and upbringing in such a way that the young person who read it-the old one understands and receives spiritual nourishment.

“It is not a good upbringing for the child's peace and blessings, but to keep the body clean, to teach good manners, to keep it from bad manners.” Also, the famous writer expressed an opinion against some views on upbringing and skillfully proved the correctness of his opinion. For example, these words in the work” Turkic Gulistan or morality " are clear evidence of this. “There is an excellent effect of education on the fact that the building of our morality is beautiful and beautiful, some say that " upbringing has no effect on morality, this is how people grow in their original creation, nature is unchanging.

Bad breath does not heal with medicine , Silk immortal thread, color with Alvan .
Feed the fruit of a tree, bad, Bulur good grafted, with fear ...”

Alternatively in this work, Abdullah Avloni cited a number of hadiths. In particular: "the happiness of every nation, the peace and pleasure of the States depends on the good upbringing of young people. It is sufficient for fathers not to raise children thoroughly, and for fathers not to raise orphans of their own nationality.” There is a person who reads the work” Turkish Gulistan or morality " who is not mistaken in raising a child. This has proven itself in the following sentences. "Now it has become clear that it is necessary to start upbringing from the date of birth, to strengthen our body, to radiate our thoughts, to beautify our morals, to brighten our minds."It is known from the hadiths that after the birth of a child, one should not delay his upbringing, but start from the same date of birth. The appearance of this kentic place in the upbringing of a child, even if it is delayed for 2-3 days, was mentioned through the words of the Prophet.

"Who does upbringing? Is it registered ? the question " what?" To this question: the first is home education. This is the main task. The second is school and Madras education. If he answers that this is a father, a teacher, a mudarris and a government task, a man will say “ " what kind of Mothers Do you say, without knowledge, no head, no hands, no hands ? And from whom they will bring up what they do not have.” Here is the word that crushes a person's heart and burns his bosom. What do we say to his father, " which father ? Do you say to fathers who are full, Capricorns, Trumpeters, who do not know the value of knowledge, and whose money is not smashed by their eyes for knowledge, without knowledge ? We must first educate themselves and educate them.” Behold, when he hears this word, the hands of hope will hit the armpits.

Upbringing is a long-term practical pedagogical process aimed at the formation of certain physical, mental, moral, spiritual, cultural qualities in a person, the process of influence of which is directed towards a specific goal. How to educate a child? The child is raised mainly by his mother. As they say, the more educated women in the nation, the more perfect people grow up, the greater the role of the mother in the upbringing of the child. A.As avlony intended, proper upbringing of children will cause the elimination of such bad vices as crime, terrorism, fanaticism, drug addiction in our

society. In time for what the consequences of neglect of upbringing lead to, Abdulla Avlani said: "today, the low-lying, bad guys, bastards, thieves, drug addicts and nashavands who blacken the face of our society are children whose upbringing is not paid attention to at all."he leaves writing. Therefore, in the activities carried out in preschool educational organizations, it is necessary to apply the stories and admonitions contained in this work. The need for similar works is especially felt in preschool educational organizations.

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BADIIY ASARDA SYUJET VA KOMPOZITSIYANING IFODALANISHI*Xaydarova Gullola Xoshimjonovna**O'zbekiston Respublikasi Ichki ishlar vazirligi**Farg'ona akademik litseyi ona tili va adabiyot fani oliy toifali o'qituvchisi*

Annotatsiya: Badiiy asar syujeti o'zaro aloqalar, qarama-qarshiliklar, kishilarning o'zaro munosabati u yoki bu xarakterning o'sishi va tashkil topishi bilan ko'rinar ekan, unga xarakterlarning kechinmalari tarixi ham kiradi. Fabula ham voqealardagi keskin burilishlar, voqeaning bir maromdan boshqa maromga birdan o'tishidir. Fabulaga tugun bilan echimni kiritadigan bo'lsak, syujetni asardagi voqealar oqimi deb hisoblay olamiz, ya'ni ularning bir-biriga bog'lanishidir, undagi aloqalar, qarama-qarshiliklar, xarakterlarning rivojlanishi tarixi, ana shu tarixning bosqichlaridir, asardagi tuyg'u va kechinmalarning mantiqiyligidir.

Kalit so'zlar: kompozitsiya, syujet, voqealar rivoji, tugun, yechim, konflikt.

Badiiy asarlarda voqealar borishida, xarakterlar taqdirida birdan kutilmagan keskin o'zgarishlar bo'ladi. Bu esa asarda yangi-yangi tugunlarni keltirib chiqaradi, kitobxonda qiziqishni kuchaytiradi. Ana shu tugun va yechimlarda xarakterlar mantiqi, voqea va xarakterlar rivojlanishi tarixi namoyon bo'ladi. Tugun va yechimlar o'z-o'zidan xarakterlar rivojlanishini ko'rsatmaydi. Xarakterlar va voqealarning rivojlanishi tarixi ana shu momentlar vositasida ochiladi. Syujetni qarama-qarshiliklar, xarakterlarning rivojlanishi tarixi, asardagi voqealar oqimi deb ta'riflashda asosan yirik nasriy va dramatik asarlarga xos xususiyatlar ko'zda tutilgan. Vaholanki, lirik asarlarda xarakter bo'lmaydi. Bo'lganda ham ularning rivojlanishi tarixi ko'rsatilmaydi, kichik janrlarda voqealar berilmasligi, ularning oqimi ko'rsatilmaligi mumkin. Shuning uchun ham syujet faqat asardagi voqealar oqimi, xarakterlarning rivojlanish tarixigina emas, asardagi tuyg'u va kechinmalar oqimi, ularning rivojlanish mantiqi hamdir.

Syujet elementlari: - ekspozitsiya (bayon qilish, izohlamoq) - syujetda tugundan oldin keladigan vaziyatdir. Ekspozitsiyada qahramonlar, ularning o'zaro munosabati, asosiy hodisalar to'g'risida ma'lumot, axborot berilib, ular bilan kitobxonni tanishtirishdir. Ekspozitsiyaning o'zi hali asosiy voqeani, asar konfliktini keltirib chiqarmaydi. Shunday bo'lsa ham u asardagi asosiy voqealarning xarakter va yo'nalishlarini belgilaydi. Ekspozitsiyaning qaerda kelishi yozuvchi niyatiga bog'liq. Shunga ko'ra ekspozitsiya turlicha bo'ladi: to'g'ri, kechiktirilgan, teskari. To'g'ri ekspozitsiya tugundan oldin keladi. Kechiktirilgan ekspozitsiya tugundan keyin voqea ichida yoki undan oldin keladi. Teskari ekspozitsiya esa asar oxirida keladi (V.Kaverin «Ikki kapitan»). Ekspozitsiya prologga yaqin turadi. Biroq prologdan farqli ravishda asarning asosiy voqeasi bilan ichki birlikka ega bo'ladi.

Tugun - qahramonlar o`rtasidagi to`qnashuvning boshlanishi, asarda qo`yilgan jumboqdir. Asar voqealari ana shu jumboqning yechilishi bilan tugaydi.

Voqealar rivoji - personajlar o`rtasidagi munosabatlardagi o`zgarishlar. Voqealar rivoji ko`p qatlamli, ko`p bosqichli bo`lishi mumkin. Yangi tugunchalar, bir tomondan, asosiy tugunni yanada murakkablashtirsa, ikkinchi tomondan, asosiy tugun yechilishining bosqichlari rolini o`ynaydi. Bunda qaxramonning oldingi tarixi, keyingi tarixi, tipik, tormozlanish, sir saqlash, topishish, kutilmagan o`zgarish kabi lahzalar ham bo`lishi mumkin.

Kulminatsiya - voqealar rivojining eng yuqori nuqtasi, konfliktning yechilishiga olib keladigan hayot va munosabatlar holatidir.

Yechim - hayotiy masalaning hal etilishi natijasidir. Yechim qahramonlarga munosabatni oydinlashtiradi, g`oyaviy va emotsional munosabatlarni o`tkirlashtiradi. Yechimda konflikt va voqealardan kelib chiqadigan g`oya ifodalanadi.

Postpozitsiya (tugallanma) - dramatik asarlarda esa final deyiladi. Bunda kurash natijasidagi kuchlarning joylashuvi ko`rsatiladi. Ekspozitsiya bilan postpozitsiya mustaqil g`oyaviy-badiiy darajaga ko`tarilsa, u prolog va epilog bo`ladi. Umuman, tugallanma personajlarning yechimdan keyingi holatidir.

Prolog - ekspozitsiya rolini o`ynaydi. Shu bilan birga, prologda tugun beriladi. Bu tugun kuchliroq bo`ladi.

Epilog - echimdan kengroq bo`lib, unda echimdan so`nggi qahramonlar taqdiri ko`rsatiladi. Epilog g`oyani yana ham chuqurlashtiradi. Ba`zan syujetni ham shaklga kiritishadi. Biroq syujetni butunlay shaklga kiritib bo`lmaydi.

Asarning asosiy konflikti syujetda ochiladi. Demak, syujet faqat shakl emas, mazmunga ham aloqadordir. Syujetda shakl bilan mazmun birlikda namoyon bo`ladi. Hayot kolliziyalarini bevosita ochadigan san`at turlaridagina syujet bo`ladi. Me`morchilik, xoreografiya va musiqaning ayrim turlarida syujet bo`lmaydi. Syujetda odamlarning o`zaro munosabatlari, simpatiya va antipatiyalari, ziddiyatlar aks etadi. Voqealarni dinamik ilg`ay olishda syujet qurish mahorati ko`rinadi.

Ayniqsa, dramada syujet qurish masalasi muhimdir. Dramada kulminatsiya butun voqealar taraqqiyoti jarayonida tayyorlanishi kerak. Syujet qiziqarli bo`lishi, quruq bo`lmasligi kerak. Syujet keskinligini qiziqarlilik bilan almashtirish ayrim asarlarni syujetdan voz kechishga olib keladi. Zamonaviy syujet katta ahamiyatga ega bo`ladi. Mavjud ilmiy va o`quv adabiyotlarida syujetning ikki turi haqida gapiriladi. Aslida esa, syujetning quyidagi to`rt turi bor: xronikali, retrospektiv, konsentrik va assotsiativ. Xronikali syujetda voqealar bir boshdan boshlanib, birin-ketin hikoya qilinadi. Xronikali syujet ishonarli bo`ladi. Biroq syujetning bu turi doim ham qulay vosita bo`la olmaydi, chunki xronikaning o`zi syujet bo`la olmaydi. Xronikalilik ko`pincha naturalistik bayonchilikka olib keladi, yorqin obrazlar yaratishga imkon bermaydi. Masalan, Navoiyning «Farhod va Shirin», «Layli va Majnun» dostonlarida,

Ayniyning «Esdaliklar»ida, P.Tursunning «O`qituvchi»sida voqealar qahramoning tug`ilishidan, to ma`lum yoshigacha beriladi. Biroq bu asarlarning kompozitsion qurilishi, voqealarni tanlash, saralash, umumlashtirish va ularni badiiy ifodalash mahorati, ularni joylashtirish, ya`ni kompozitsiya shunga olib keladiki, bu asarlarni o`qigan kishi unda ortiqcha narsa yo`q, barcha voqealar badiiy-estetik va ijtimoiy qimmatga egadir, degan xulosa chiqadi. Ularda e`tiborga loyiq va qiziqarli syujet hosil qilinadi.

Retrospektiv (orqaga qaytuvchi) syujetda voqealar bir boshdan birin-ketin hikoya qilinmay, balki voqeaning ma`lum joyida to`xtatib qo`yilib, uning o`tmishiga, oldingi voqealarga murojaat qilinadi. Ba`zi asarlar umuman ana shunday orqaga qaytishga asoslansa, ayrim masalalarda vaqti-vaqti bilan voqealar hamda qahramonlarning o`tmishiga qaytib turiladi. Masalan, M.SHoloxovning «Inson taqdiri» qissasi butunicha orqaga qaytishga asoslangan. A.Qodiriyning «Mehrobdan chayon» romanidagi Solih Mahdumning o`tmishi tasviri, H.Olimjonning «Zaynab va Omon»ida Zaynab bilan Omonning o`tmishi, O`.Hoshimovning «Tushda kechgan umrlar» romanida komissar va T.Malikning «Shaytanat» qissasida bosh qahramoni Asadbekning o`tmish hayoti tasviri kabilar vaqti-vaqti bilan orqaga qaytish namunasi bo`ladi.

Kontsentrik syujet tadqiqot syujet ham deyiladi. Unda voqea hikoya qilinmaydi, o`tmishga ham murojaat qilinmaydi. Kontsentrik syujetda biror hodisaning sabablari tahlil qilish jarayonida sodir bo`lgan voqealar kitobxon ko`z o`ngida jonlanadi. Masalan, O`.Umarbekovning «Yoz yomg`iri» qissasi boshida Chorsudan Mo`nisning jasadi topiladi. Uning qanday o`ldirilganligini yozuvchi ham, kitobxon ham, asar qahramonlari ham hikoya qilib bermaydilar. Jinoyat sabablarini tekshirish jarayonida kitobxon ko`z o`ngida sodir bo`lgan voqealar jonlanadi. Sofoklning «Shoh Edip», O.Abdullinning «O`n uchinchi rais» dramalari, H.G`ulomning «Mash`al», O.Yoqubovning «Larza», O`.Umarbe-kovning «Fotima va Zuhra», O`.Hoshimovning «Tushda kechgan umrlar», T.Malikning «Shaytanat» kabi asarlari ham syujetning ana shu turiga asoslanib qurilgan. Chunki kontsentrik syujet ko`pincha detektiv asarlar uchun xos bo`ladi. Assotsiativ syujet ilgarilari asosan lirik asarlar uchun xarakterli bo`lib, lirika tashqi hodisalarga shoirning munosabati yoki tashqi hodisalar ta`sirida shoir Shaxsida tug`ilgan tuyg`u va kechinmalarga asoslanardi. Hozirda syujet qurishning assotsiativ usuli yirik nasriy va dramatik asarlar uchun ham xos bo`lib qolmoqda. Bunday asarlarda hikoya qilinmaydi, balki qahramonning xotiralari, o`y-xayollari, tasavvurlari oqimi beriladi. Masalan, A.Muxtorning «Davr mening taqdirimda», «Chinor», S.Anorboevning «Umr», Ch.Aytmatovning «Alvido, Gulsari», «Asrga tatigulik kun», O`.Umarbekovning «Shoshma quyosh», O.Yoqubovning «Ko`hna dunyo» asarlari asotsiativ syujet asosida qurilgan. Lirik poemalar syujeti ham assotsiativ usulga asoslanadi.

Asarda har bir personaj o`z xarakteri va vazifasiga ega bo`ladi. Ularning barchasi asosiy narsaga, ya`ni voqealar rivojiga birlashtiriladi va shu bilan asar syujetini ochishga xizmat qiladi. Syujet bilan kompozitsiya ajralmasdir. Syujet bo`shligi kompozitsiyaning bo`shlig`ini keltirib chiqaradi. Aniq Shakllantirilmagan bo`sh kompozitsiya esa syujetni halok qiladi. Biroq yaxshi ishlangan kompozitsiyaning o`zi ham muvaffaqiyat keltirmaydi. Kompozitsiyaning qimmati g`oyaning qimmati bilan belgilanadi. Yaxshi kompozitsiyada ifodalangan g`oya syujetni ham yaxshilaydi. Demak, syujet asar mazmunini ochish shaklidir. Kompozitsiya - voqealar, obrazlar va asosiy g`oyani ochishga xizmat qiladigan vositalarning joylashtirilishi, me`yori va nisbatidir. Kompozitsiya - asarning qurilishi, tuzilishi, uning strukturasi. Kompozitsiya - asardagi barcha qismlarni uyushtiruvchi muvofiqlikdir, alohida elementlarning, voqea va epizodlarning joylashishi, elementlarning bir butunga xizmat qildirilishidir. Kompozitsiya markaziy figurani belgilab olib, so`ng boshqa personajlarni uning atrofida joylashtirishdir.

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ХАРАКТЕР И ФУНКЦИЯ ДЕТАЛИ В РАССКАЗАХ А.П.ЧЕХОВА

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Аннотация: Еще при жизни Антон Чехов (29 января 1860 г. — 15 июля 1904 г.) получил признание критиков. В 1888 году он получил Пушкинскую премию за свою художественную литературу, а в 1900 году он был избран почетным членом Российской академии наук как за свою художественную литературу, так и за свою драму.

Ключевые слова: характер, функция, деталь, А. П. Чехов.

ВВЕДЕНИЕ

Интерес к творчеству А.П. Чехова растет с каждым годом. Все отчетливее становится значение этого замечательного художника в развитии не только литературы, но и культуры в целом. Это обусловлено как особенностями его художественного стиля, мастерства, содержанием, тематикой и проблематикой его произведений, так и особенно- стями его языка. Именно Чехов впервые в мировой литературе смог с огромной убедительностью показать трагизм обыденности, безысходности, повседневности [1, с. 83]. Все то, что впоследствии стало чуть ли не главной темой XX столетия, впервые было обозначено в творчестве великого писателя, который вошел в русскую литературу как автор многочисленных юмористических рассказов. его короткие новеллы – это не увеселительное чтение, а суровая критика действительности, беспощадное разоблачение мещанства. Чеховское мастерство, его лаконизм, тонкая ирония, умение в простой форме рисовать и раскрывать человеческие характеры оказывали и оказывают огромное влияние на писателей всего мира.

МАТЕРИАЛЫ И МЕТОДЫ

Художественная литература Чехова отходит от шаблонного, тщательно продуманного рассказа, чтобы достоверно отражать русскую жизнь, концентрируясь на персонажах в самых обычных обстоятельствах, которые часто кажутся лишенными конфликта. Реалист, Чехов балансирует на тонкой грани между отстраненностью и причудливой, но сочувственной заботой о своих героях. В своем зрелом творчестве он, пожалуй, самый гениальный из русских мастеров, сострадательный и всепрощающий, редко резкий или доктринерский. Не менее важно, что зрелая работа отражает очень тщательное мастерство, достойное изучения только из-за своей техники.

РЕЗУЛЬТАТЫ И ОБСУЖДЕНИЕ

Антон Чехов публиковал свои первые рассказы и очерки в различных популярных журналах под псевдонимами, наиболее часто используемым из которых был «Антоша Чехонте». Как намекает этот псевдоним, поначалу он был неприятным и относительно уступчивым «мошенником», готовым набрасывать небрежные статьи, созданные для популярного читателя. Большинство из них представляют собой легкие, актуальные исследования социальных типов, часто насчитывающие менее тысячи слов. Многие из них представляют собой просто наброски или расширенные шутки, часто банальные или циничные. Некоторые представляют собой фарсы, построенные на карикатурах. Другие представляют собой краткие пародии на популярные жанры, включая романтические романы. Немногие проявляют большую оригинальность в предмете. Тем не менее, по своей технике, экономии выражения и темам ранние пьесы предвосхищают некоторые из наиболее зрелых произведений Чехова. В них Чехов экспериментировал с точкой зрения и особенно с использованием иронии как художественного приема. Он также установил свое предпочтение почти научной объективности в описании персонажей и событий, настаивая на том, что в ходе своей карьеры ему придется защищаться от недоброжелателей.

По мнению некоторых исследователей творчества А.П. Чехова, его можно, вслед за в. Шекспиром, отнести к наиболее востребованным драматургам в англоязычных странах, а с учетом количества иностранных языков, на которые переведены рассказы писателя, можно сказать, что А.П.Чехов является самым читаемым писателем XXI в. рассказы а.П. Чехова наполнены таким количеством разнообразных характеров, персонажей, ситуаций, профессий, мест бытования, что по ним можно строить концептосферу русской жизни и русского национально-культурного характера конца XIX в.

Тайна непостижимой гармонии чеховской прозы – в сочетании взаимоисключающих, на первый взгляд, особенностей: глубины содержания и небольшой формы, афористичности и простоты, узнаваемости сюжета и непредсказуемости его развития. Сколько мудрости передал нам писатель, если каждый его рассказ – это конкретный жизненный эпизод и одновременно – притча, «в которой словам тесно, а мыслям просторно».

ЗАКЛЮЧЕНИЕ

Склонность Чехова к иронии ярко выражена в его самом первом напечатанном рассказе «Письмо к ученому соседу», появившемся в 1880 году. делает претенциозные заявления о науке и знании с глупыми ошибками в синтаксисе, орфографии и дикции, ненароком обнаруживая свою хамскую глупость, пытаясь заискивать перед своим эрудированным соседом.

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**O'SMIRLARDA SALBIY XULQ-ATVOR
NAMOYON BO'LISHINING PSIXOLOGIK XUSUSIYATLARI.**

Karakulova Umida Abduvakilovna

O'zMU Jizzax filiali "Oila psixologiyasi" kafedrasi o'qituvchisi.

Xolboyev Jasurbek Baxriddin o'g'li, O'rozboyev Shaxzod Abdulla o'g'li

O'zMU Jizzax filiali

"Yoshlar psixologiyasi" yo'nalishi talabalari.

Annotatsiya: *Mazkur maqolada o'smirlarlik davriga xos bo'lgan salbiy xulq-atvor ko'rinishlari, ularning kelib chiqishi sabablari, rivojlanish shart-sharoitlari, namoyon bo'lishining psixologik xususiyatlari keltirilgan.*

Kalit so'zlar: *O'smirlik, ontogeniz, deviant, xulq-atvor, xarakter aksentuatsiyasi, bolalar va o'smirlar suitsidi, o'z-o'ziga baho berish, mardlik, jasurlik, tantiqlik.*

Bugungi kunda amalga oshirilayotgan chora-tadbirlarda, xususan o'smirlarning ta'lim jarayonidagi faolligini oshirish, shaxslararo munosabatlarga kirishishda empatiya hissini rivojlantirish, shaxs sifatida o'zini to'g'ri baholash, jamiyatda o'z o'rnini topishida yordam berish hamda axloqiy ko'nikmalar shakllantirilishining psixologik mexanizmlarini takomillashtirish dolzarb masalalar hisoblanadi.

O'zbekistonlik psixologlardan E.G'. G'oziyev, N.G'. Kamilova, G.Q. To'laganova, B.M. Umarov kabi olimlarning izlanishlarida bolalik va o'smirlik davridagi psixik xususiyatlarni o'rganishga qaratilgan tadqiqotlar o'tkazilgan bo'lib, ularda asosiy e'tibor deviant xulq-atvor, xarakter aksentuatsiyasi, bolalar va o'smirlar suitsidi, o'z-o'ziga baho berish va nazorat qilish muammolariga qaratiladi.

Inson onogenizida o'smirlik balog'atga yetish davri bo'lib, yangi xislar, sezgilar va jinsiy xayotga taalluqli chigal masalalarning paydo bo'lishi bilan xam xarakterlanadi. O'z davrida L.S.Vigotskiy bunday holatni psixik rivojlanishdagi krizis deb nomlagan. O'smirlik yoshida ularning xulq-atvoriga xos bo'lgan alohida xususiyatlarni asosan jinsiy yetilishning boshlanishi bilan izohlab bo'lmaydi. Jinsiy yetilish o'smir xulq-atvoriga asosiy biologik omil sifatida ta'sir ko'rsatib, bu ta'sir bevosita emas, balki ko'proq bilvositadir. O'smirlik davriga ko'pincha so'zga kirmaslik, o'jarlik, tajanglik, o'z kamchiliklarini tan olmaslik, urushqoqlik, yig'loqlilik, kabi xususiyatlar xos. O'smirlar va bolalar psixikasining yosh davrlarida o'ziga xos xususiyati mavjud bo'lib adabiyotlarda emotsional yetuk emaslik, kattalar avtoritetiga bo'ysunish, ishonuvchanlik, jinsga oid munosabatlar haqida xabardorligi va hayotiy tajribasining yetarli darajada emasligi, boshqa insonlarni mavjud harakatlarini oldindan ayta olish va murakkab vaziyatlarda tanqidiy hamda to'liq baholay olmaslik kabi sifatlar namoyon bo'ladi.

Bolalar kattalar singari bir maromda rivojlanmaydi, shuningdek, ijobiy va salbiy psixologik xususiyalar, nisbatan barqaror va tinch osoyishta kechadigan davrlar mavjud. Kattalarga nisbatan xulq-atvoridagi ijobiy va salbiy munosabatning paydo bo'lishi, negativizm singari nohush xulq-atvor alomatlari o'z-o'zidan kelib chiqadigan bevosita jinsiy yetilish tufayli poydo bo'ladigan belgilar bo'lmay, balki ular bilvosita ta'sir ko'rsatadigan, o'smir yashaydigan ijtimoiy shart-sharoitlar vositasi orqali, uning tengdoshlari, turli jamoalardagi mavqei tufayli, kattalar bilan munosabati, maktab va oilasidagi o'rni munosabatlari sababli yuzaga keladigan xarakter belgilaridir.

Mana shu ijtimoiy sharoitlarni o'zgartirish yo'li bilan o'smirlarning xulq-atvoriga to'g'ridan-to'g'ri ta'sir ko'rsatish mumkin. Ular tashqi ta'sirlarga va xissiyotlarga juda beriluvchan bo'ladilar. Shuningdek ularga mardlik, jasurlik, tantiqlik kabi psixologik sifatlar ham xosdir. Tashqi ta'sirlarga beriluvchanlik o'smirda shaxsiy fikrni yuzaga kelishiga sabab bo'ladi, lekin bu shaxsiy fikr aksariyat hollarda asoslanmagan bo'ladi. Shuning uchun ham ular ota-onalarning, atrofdagi kattalarning shuningdek, ustozlarning to'g'ri yo'lni ko'rsatishlariga qaramay o'z fikrlarini o'tkazishga harakat qiladilar. Juda ko'p o'smirlar bu davrda chekish hamda spirtli ichimliklarga qiziqib qoladilar. Bugungi kunda internet materiallarini tushunish yoki anglamasdan undan foydalanishga harakat qilishadi. Bu holatda chekuvchi, ichuvchi singari yangi rolda o'zini normal, qulay his qiladi. Bunday holatlarga tushgan o'smir juda tashvishga tushadi va unda krizis holati yuzaga keladi. Bu krizis o'smirning ma'naviy o'sishi psixikasidagi o'zgarishlariga ham bog'liqdir. Bu davrda bolaning ijtimoiy mavqei o'zgaradi, o'zining yaqinlari, do'stlari, tengdoshlari bilan yangi munosabatlar yuzaga keladi. Lekin eng katta o'zgarish uning ichki dunyosida yuzaga keladi. Ko'pgina o'smir yoshi davridagi maktab o'quvchilarida o'zidan qoniqmaslik holati kuzatiladi. Shuningdek, o'zi xaqidagi mavjud fikrlarining bugun unda sodir bo'layotgan o'zgarishlarga to'ri kelmayotganligi o'smirni asabiylashishiga olib keladi. Bu esa o'smirda o'zi xaqida salbiy fikr va qo'rquvni yuzaga keltirishi mumkin. Bunday o'smirdagi o'zgarishlarni uchun atrofdagilar, kattalar, shuningdek ota-onasiga qarshi chiqayotganligini anglay olmayotganligi tashvishga soladi.

Maxsus ijtimoiy psixologik adabiyotlarda hayotga chidamli, irodali iborasi mavjud. Bu iboraga taalluqli bo'lgan salbiy-xulq atvor larning paydo bo'lishi o'smir davridagi bolalardagi og'ir iztirob noqobiloila, spirtli ichimliklarni iste'mol qiluvchi ota-onalar, shavqatsiz kaltaklash, tabiiy ofat, kambag'allik, oiladardagi ajrim xolatlari kabilar ularni psixik rivojlanishiga salbiy ta'sir etadi.

Bu borada o'smirlarning ota-onasi, kattalar bilan qiladigan muloqoti asosan ularning katta bo'lganlik hissi asosida tuzilganligi sababli qo'llab -quvvatlashlariga ehtiyoj sezadilar. Ota onalar bilan faoliyat o'smirga kattalarni yaxshiroq tushinishlari uchun yordam beradi. O'smir o'zida bo'layotgan o'zgarishlar, uni tashvishga solayotgan muammolar xaqida kattalar bilan bo'lishishga katta ehtiyoj sezadi, lekin buni xech

qachon birinchi bo'lib o'zi boshlamaydi. O'smir o'ziga nisbatan yosh bolalardek qilinadigan muomila -munosabatiga qattiq norozilik bildiradi. O'smirlar muloqoti nihoyasida o'zgaruvchanligi bilan xarakterlanadi.

Qayd etib o'tilgan yo'nalganlik albatta kattalarning ham muloqot va munosabatda mavjud, lekin ular kattalarnikidan o'z emotsionalligi bilan farqlanadi. Tengdoshlari, shuningdek sinfdoshlari guruhida o'smir o'zining kelishuvchanlik xususiyati bilan namoyon bo'ladi. O'smir yoshidagi o'quvchilarda «Biz» hissining shakllanishiga yordam beradi va uning ichki holatini mustaxkamlaydi. O'smir yoshdagi bola uchun do'st tanlash juda katta axamiyatga ega. O'smirlik davrida do'st juda qadimli hisoblanadi. Do'stlar doimiy ravishda ruhan, qalban yaqin bo'lishga extiyoj sezadilar. Bu extiyoj o'smir do'stlarning so'rashishi va ko'rishishlarida (qo'l berib, quchalab ko'rishish) birga o'tirish va birga yurishga xarakat qilishlarida ko'rinadi. Ko'pgina ana shunday juda yaqin munosabatlar, umumta'lim maktabi o'smir yoshi o'quvchilarining shaxs bo'lib shakllanishdagi, birgalikdagi xarakatlarini o'zi inson qalbida va xotirasida birumrga saqlanib qoladi.

Ko'pgina bunday oilalarda tarbiyalanayotgan o'smirlar hayotda mustaqil holda harakat qilishlari, o'z rejalarini amalga oshirishlari, qiyin ma'suliyatning o'z bo'ynilariga olishlari birmuncha qiyinroq. Ular ko'pincha intellektual xarakterdagi muammolarni ham qiyinchilik bilan yengadilar. Kattalarning bu davrdagi eng asosiy vazifalari o'smirning muammosini to'g'ri anglashi va erkin to'g'ri yashashiga yordam berishidir. Shuning uchun tashqi ta'sirlarga beriluvchan o'smir yosh qiz va o'g'il bolalarga alohida e'tibor qaratish zarur. Buning uchun ular bilan ishlashda g'oyaviy - siyosiy vatanparvarlik xissining shakllanishiga, mustaqil bilim olish, ijodiy fikr yuritishga o'z-o'zini boshqarish, anglash, baholash va nazorat qilishlariga imkon yaratish zarur. Ko'pincha o'qituvchilar o'smirlardagi salbiy xulq-atvor illatlarini tanqid qiladilar, o'smirlarga psixologik yondoshishda metodologik kamchilikka yo'l qo'yadi. Bu salbiy sifatlarning oldini olish chora va tadbirlarini ishlab chiqa olmaydi, o'smirlarda uchraydigan salbiy sifatlarni yo'qotish va yangi ijobiy xulq-atvor sifatlarini asta-sekin tarkib toptirish mumkin. O'smirlarning mustaqil faoliyatiga keng imkon berilishi, faoliyati takomillashib, psixikasi xar tomonlama rivojlanib borgan

O'smirlardagi salbiy xulq-atvorni korreksiya qilish maqsadida umumta'lim maktablarida turli ijtimoiy, motivatsion psixologik trening mashg'ulotlar va olib borilsa amaliy-psixologik maslaxatlar korreksion texnikalar va salbiy hulq-atvorni bosqichma bosqich o'zgartirish mumkin ya'ni, shaxsning o'zini-o'zi va o'z his-tuyg'ularini anglash, o'z shaxsini qayta baholash, hissiyotlar ustida ishlash, salbiy xulq-atvorni anglash, shaxslararo munosabatdagi qiyinchiliklar, kognitiv jarayonlarni rivojlantirish, barkamollikka intilish, ota-ona va pedagoglar bilan ishlash kabi mashg'ulotlar majmui qo'llanildi.

Ijtimoiy, motivatsion psixologik treninglar majmuini xalq ta'lim muassasalari amaliyotiga tatbiq etilishi orqali bola shaxsining pedagogik va psixologik jihatdan mukammal rivojlanishiga yordam beradi. Jumladan, maktab amaliyotchi psixologining ish rejasiga kiritilgan "Ijtimoiy psixologik muammolari mavjud bo'lgan o'quvchilarning salbiy burilish va og'ishlarining oldini olish"ga qaratilgan psixologik profilaktika, "Xulqida og'uvchanligi mavjud va moyilligi aniqlangan o'quvchilari bilan korreksiyalash ishlarini tashkil qilish" hamda "bolalar va o'smirlarning salbiy burilishi va og'ishlarining oldini olishda maktab pedagogik jamoasi va ota-onalarning hamkorligini takomillashtirish" kabi vazifalarini amalga oshirishda muhim ahamiyat kasb etadi.

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O‘SMIRLARDA DEVIANT XULQ-ATVOR SHAKLLANISHIGA OILAVIY NIZOLARNING TA’SIRI.

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Annotasiya Maqolada o‘smirlarda uchraydigan deviant hulq-atvorning kelib chiqishi sabablari, ko‘rinishlari haqida ma‘lumotlar berilgan. Oilaviy nizolar va ularning o‘smirlarda deviant hulq-atvor shakllanishiga ta’siri borasidagi olimlar fikrlari keltirilgan.

Kalit so‘zlar: deviant hulq-atvor, oilaviy tarbiya, o‘smirlar, oilaviy muammolar, nizolar, huquqbuzarlik, affektiv soha, disfunktsional oila, emotsional holat, agressiv xulq-atvor, beparvolik, referent guruh.

Hozirgi kunda nikoh va oila munosabatlari, oila institutini mustahkamlash turli soha mutaxassisarlari: yuristlari, demograflar, iqtisodchilar, sotsiologlar va psixologlar tomonidan jadal o‘rganilayotgan bo‘lsa-da, oilaviy muammolar, nizolar va oilada o‘zaro ziddiyatlar ortib bormoqda. Shuning uchun bu borada ko‘plab amaliy ishlar olib borilishi, sohaga oid xizmatlarni yanada takomillashtirish bugungi kunning dolzarb masalasiga aylangan. Xususan, bugungi kundagi ajralishlar sonining ortishi, oilaviy muammolarning barvaqt aniqlanmasligi, oldini olish chora-tadbirlarining qo‘llanilmasligi oilaviy nizolar kuchayishiga sabab bo‘lmoqda.

Shu bilan birga, oilada tarbiyaning salbiy omillarini ham esdan chiqarmaslik kerak. Bular:

- kattalarning noqonuniy xatti-harakatlari;
- ota-onalar ma‘naviyatining qashshoqligi;
- normal psixologik iqlimning yetishmasligi;
- moddiy qadriyatlarining ustunligi va boshqalar.

Oiladagi salbiy, beshafqat muhit, ma‘lum turdagi o‘smirlardagi qo‘pollik, yovvoyilik, sovuq munosabat kabi illatlarni paydo bo‘lishiga zamin yaratadi, ular atrofdagilarga nisbatan qarama-qarshi ruhda harakatlanib, tajovuzkorona buzg‘unchilik sifatlarini namoyon qilishadi.

Bola baxtli, mustahkam va sog‘lom oilada muloqot qilsa, u odatda o‘ziga va atrof-muhitga ishongan, atrofdagi madaniyat me‘yorlarini adolatli va o‘z-o‘zidan ravshan deb qabul qiladigan odobli shaxs sifatida shakllanadi. Bola o‘z kelajagiga ma‘lum bir tarzda yo‘naltiriladi. Agar oilaviy hayot qandaydir darajada qoniqarsiz bo‘lsa, bolalarda ko‘pincha tarbiyadagi bo‘shliqlar, me‘yorlarni o‘zlashtirmaslik va

deviant xatti-harakatlar rivojlanadi. O'smirlar o'rtasidagi huquqbuzarlik bo'yicha ko'plab tadqiqotlar shuni ko'rsatdiki, deviant xulq-atvorga ega bo'lgan yoshlarning aksariyati disfunktsional oilalarda tarbiyalangan. Bu sohada amerikalik tadqiqotchilar [ijtimoiy psixologiya](#) belgilovchi beshta asosiy omil aniqlandi [oilaviy hayot](#) disfunktsional sifatida:

- o'ta qattiq otalik intizomi (qo'pollik, isrofgarchilik, tushunmovchilik);
- onalik nazoratining yetarli emasligi (beparvolik);
- otalik mehrining yetishmasligi;
- onalik mehrining yetarli emasligi (sovuqlik, dushmanlik);
- oilada hamjihatlikning yo'qligi (janjal, dushmanlik, o'zaro dushmanlik). Bu

omillarning barchasi bolaning oilada ijtimoiylashuv jarayoniga va pirovardida deviant xulq-atvorga ega shaxsni tarbiyalashga sezilarli ta'sir ko'rsatadi.

Adler shaxsiyatni shakllantirishning muhim omili sifatida oila tuzilishini aniqlaydi, bola va unga mos keladigan ta'lim turlarining o'zgarishi deviant xatti-harakatlarning paydo bo'lishiga sezilarli va ko'pincha hal qiluvchi ta'sir ko'rsatadi.

V.V.Korolev o'smir yoshidagi huquqbuzarlikning psixologik holatlarini o'rganish davomida ularga xos bo'lgan quyidagi ijtimoiy-psixologik xususiyatlarni aniqlagan: odob-axloq, namunali xulq tajribalarining yo'qligi, do'stlik, sevgi, jasurlik kabi ijtimoiy qadriyatlarni qabul qilmasligi, ular haqidagi to'pori tushunchalar, o'z-o'zini o'ta past yoki juda yuqori baholash, huquqiy va ma'naviy qadriyatlarni noto'g'ri tushunish va ularga teskari munosabatda bo'lish, tashqi barcha ta'sirlarga beriluvchan bo'lish.

I.A.Semikashevaning izlanishlari bo'yicha bunday guruhga kiruvchi o'smirlar ota-onaga o'xshash xislatlarga ega bo'lib, alohida insonlarni emas, o'zi mansub guruhni hurmat qiladi. Bunday o'smirlar o'z xarakterlariga ko'ra mas'uliyat sezmaydi, biroq tengdoshlari orasida hamma qatori harakatlanadi.

S.A.Kulakovning ta'kidlashicha, bunday xulqli o'smirlar ko'pchiligi psixoterapevtlarning mijozidir, ularga aniq tashxis qo'yish mushkil, ammo ularning ko'pgina xislatlari me'yoriy jihatdan buzilgan. Affektiv sohada - ular hissiy bo'shanglik, depressiya va hayajonga tez beriladilar. Talab qilish sohasida erkinlik, himoyalanganlikka bo'lgan ehtiyojini yopib qo'yilishi, referent guruhiga xos bo'lishi, kognitiv sohada esa xulosa qilishni rad etish kuzatiladi.

B.N. Almazov disfunktsional oilalarning turlarini alohida ajratib ko'rsatdi: ta'lim resurslari yetishmayotgan oilalar, nizoli oilalar, axloqiy jihatdan noto'g'ri, pedagogik jihatdan qobiliyatsiz oilalarga.

L.S. Alekseeva va G.P. Bochkarev; disfunktsional, emotsional va zararli axloqiy muhitga ega oila turlarini ajratib ko'rsatdi.

A. Lichko va K. Leonhard ota-onalar bilan munosabatlarning buzilishi bilan xarakter va xatti-harakatlarning og‘ishlarining eng ko‘p uchraydigan ko‘rinishlarini aniqladilar:

- giper himoya qilish (haddan tashqari qo‘riqlash va nazorat);
- haddan ortiq g‘amho‘rlik (bolaning barcha ehtiyojlarini qondirish, uni barcha qiyinchiliklardan himoya qilish istagi);
- hissiy rad etish.

E.G. Eidemiller bolada og‘ishish shakllanishiga ta’sir ko‘rsatadigan, oiladagi quyidagi patologik rollarini aniqlaydi:

- ota-ona hissiyotlari doirasining kengayishi;
- o‘zining nomaqbul fazilatlarini bolaga o‘tkazish;
- ota-onalarning tarbiyasi muammolari;
- bolani yo‘qotish fobiyasi.

Ota-onalarning aksariyat qismi farzandlarining noto‘g‘ri tarbiyasi kelgusida noxush oqibatlarga olib kelishini tushunmaydilar. Psixologik tadqiqot natijalariga ko‘ra, bugungi kunda farzand tarbiyasi va yoshlardagi agressiv xulq-atvor normalarining namoyon bo‘lishida oilalardagi psixologik muhitning nosog‘lomligi, ota-onalarning farzand tarbiyasini “ikkinchi o‘ringa” qo‘yayotganligi va noto‘liq oilalar sonining ortib borayotganligi sabab bo‘lmoqda. Bu esa ta’lim muassasalari va mahallalarda yoshlarni ijtimoiy hayotga tayyorlash borasidagi nafaqat yoshlar balkim ularning ota-onalari bilan ham pedagogik bilimlar targ‘ibotini olib borishni taqozo etadi.

Xulosa qilib aytadigan bo‘lsak, oila tarbiyaning boshlang‘ich o‘chog‘idir. Oiladagi muhit bolalar xulq-atvorida o‘z aksini topadi. Doimiy nizoli vaziyat hukm surgan oilada, psixologik muhit buziladi va o‘smirga e’tiborsizlik kuchayadi. Natijada esa o‘smir xulqida og‘ishishlar yuzaga kela boshlaydi. Bunday vaziyat uzoq muddat davom etadigan bolsa, jiddiy deviatziyalarga olib kelishi mumkin. Nizoli oilada o‘smirlar doim e’tiborsiz va qarovsiz qoladi, oilaviy muloqotga muhtojlik sezadi, u o‘z galar panoh izlaydi, boshqa turli mashg‘ulotlar topadi, xatto jinoyatchilikka qo‘l urishi mumkin.

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**OLIY O‘QUV YURTI TALABALARIDA KASBIY VA AXLOQIY
SIFATLARI SHAKLLANISHINING PEDAGOGIK-PSIXOLOGIK TAJRIBA
ISHLARI NATIJALARI.**

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Annotasiya: *Maqola bo‘lajak pedagoglarning kasbiy va axloqiy madaniyatining shakllanishi, o‘tkazilgan pedagogik-psixologik tajriba-sinov ishlari va natijalarining statistik tahlili, olingan ta‘lim sifati va yaratilgan psixologik shart-sharoitlarning talaba imkoniyatlari va qiziqishlari doirasidan kelib chiqib amalga oshirilishi bilan tavsiflanadi.*

Kalit so‘zlar: *Kasbiy moslashish, kasbiy yo‘nalganlik, talaba, mutaxassis, mehnat jarayoni, bo‘lajak o‘qituvchilar, motivatsiya, qiziqishlar, tajriba-sinov, kasbiy faollik.*

Ma‘lumki, kasbiy moslashishda bo‘lajak mutaxassisning motivatsion tayyorgarligi muhim o‘rin tutadi. Bo‘lajak o‘qituvchining motivatsion tayyorgarligining asosini kasbiy yo‘nalganligi ya‘ni o‘z kasbi, mutaxassisligining mohiyatini tushuna olishi, kasbiy faoliyatiga nisbatan o‘zida pozitiv munosabatni tarkib toptirishi, kasbiy hayotiy maqsadlarining aniqligi, bilish faoliyatiga qiziqishning rivojlanishi tashkil etadi. Bu mutaxassisning ta‘lim olish jarayonidagi o‘zini shaxsiy va kasbiy rivojlantirishida, namoyon bo‘ladi. Shu nuqtai nazardan kelib chiqib, tajriba-sinov ishlari so‘rovnoma tarkibidagi I-blok murojatlari talabalardagi motivatsion tayyorgarlik, kasbiy yo‘nalganlik va kasbiy sifatlarning shakllanganlik darajasini baholashga qaratildi. Tajriba-sinov ishlarining yakuniy bosqichida qo‘lga kiritilgan natijalarning haqqoniyliги va ishonchliligini o‘rganish maqsadida ularni miqdor va sifat jihatidan tahlil etishga alohida e‘tibor qaratildi.

Pedagogik-psixologik tajriba-sinov ishlarining dastlabki bosqichida maxsus ishlab chiqilgan anketa so‘rovlari asosida sinaluvchilardagi kasbiy moslashishning mavjud holati yuqorida belgilangan mezonlar asosida aniqlandi va respondentlarning javoblari tahlil etildi.

Tadqiqotda asosiy maqsad bo‘lajak o‘qituvchilarni kasbiy moslashtirish darajasini oshirishga yo‘naltirilib, belgilangan maqsadning kafolatli natijasi pedagogik jarayonning shaxsning kasbiy yo‘nalganligi, kasbiy bilimlarning o‘zlashtirilishi, olingan ta‘lim sifati va yaratilgan pedagogik shart-sharoitlarning talaba imkoniyatlari va qiziqishlari doirasidan kelib chiqib amalga oshirilishini bilan belgilandi. Tadqiqot

doirasida olib borilgan tajriba-sinov ishlarining natijalarini tahlil etish mazkur fikrlarning amaldagi tasdig'ini yana bir bor isbotladi.

Ma'lumki, talabalik davri - mehnat hayotida o'z-o'zini aniqlab olish yoshi bo'lib, bu vaqt talabada o'zining kelajakdagi kasbiy hayotiy maqsadlarini aniq belgilab olish intilishi paydo bo'ladi. Bu davrda talaba ongli to'g'ri qaror qabul qilishi uchun birinchidan, amaldagi mehnat bozorining u yoki bu kasb turiga bo'lgan ehtiyojini, ikkinchidan, o'z moyilligi va bu kasb qo'yadigan talablarga qanchalik muvofiq kelishini bir so'z bilan aytganda tanlangan kasb mohiyatidan to'liq xabardor bo'lishi maqsadga muvofiq sanaladi.

So'rovnoma natijalarini o'rganish bo'lajak o'qituvchilarning motivatsion tayyorgarligini yoritishning quyidagi jihatlariga alohida e'tibor berish lozimligi ko'rsatadi:

1. Talabalardagi ichki sabablarga asoslangan kasbiy yo'nalganlik (motivlar, ehtiyojlar, maqsad va qiziqishlar asosida shakllangan kasbiy yo'nalganlik). Bu asosan 3-4 bosqich talabalariga xos xususiyat sifatida tadqiq etildi.
2. Talabalardagi tashqi sabablarga asoslangan kasbiy yo'nalganlik ya'ni kasbiy faoliyatning tashqi shart - sharoitlari va holatiga asoslangan yo'nalganlik.

Bu xususiyat aksariyat 1 - bosqich respondentlarida kuzatildi. Xususan,

Birunchi bosqich talabalarining 17 tasida pedagogik faoliyatga intilish darajasi yuqori, 20 tasida o'rta, 13 tasida quyi daraja aniqlandi.

Ikkinchi bosqich talabalarida bu ko'rsatgich quyidagicha ko'rinishni aks ettirdi, ya'ni jami 50 talabadan 12 tasida pedagogik faoliyatga intilishning yuqori darajasi, 17 tasida o'rta va 21 tasida quyi daraja kuzatildi.

Uchinchi bosqichda yuqori daraja 15 ta sinaluvchilarda, o'rta daraja 21 ta va quyi daraja 14 ta sinaluvchilarda aniqlandi.

Bitiruvchi kurs talabalarining so'rovnoma savollariga bergan javoblari tahlil etilganida pedagogik faoliyatga intilishning yuqori darajasi 25 ta, o'rta darajasi 13 ta va quyi daraja 12 ta sinaluvchilarda o'rganildi.

Natijalardan ko'rinib turibdiki, pedagogik faoliyatga intilish motivatsiyasi 1-4 bosqich talabalarida 2-3 bosqich talabalariga qaraganda yuqoriroq natijalar ko'zga tashlandi.

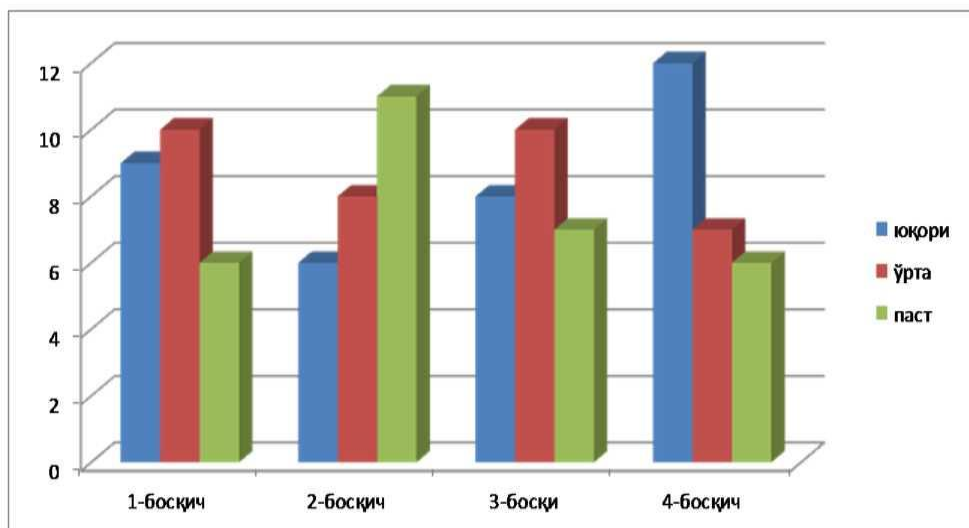
Buning sababini kasb tanlash motivlari, kasbiy o'zini anglash, kasbiy tasavvurlar bilan bog'lab tahlil etish maqsadga muvofiqdir. Chunki, dastlabki kasbiy tasavvurlar ta'sirida pedagogik faoliyatga intilish darajasi yuqori bo'lsa (1-bosqich), kasbiy faoliyatning shaxsga qo'yadigan talablari, kasbiy kompetentsiyalarni o'zlashtirishdagi mashshaqqatlar hamda moslashish jarayonidagi qiyinchiliklar bu intilishning muayyan davrda susayishiga (2-3 bosqich) sabab bo'lgan.

Kasbiy moslashish jarayonlarining samarali kechishi, kasbiy kompetentsiyalarni o'zlashtirish, kasbiy faoliyatda o'zini anglash esa 4-bosqich

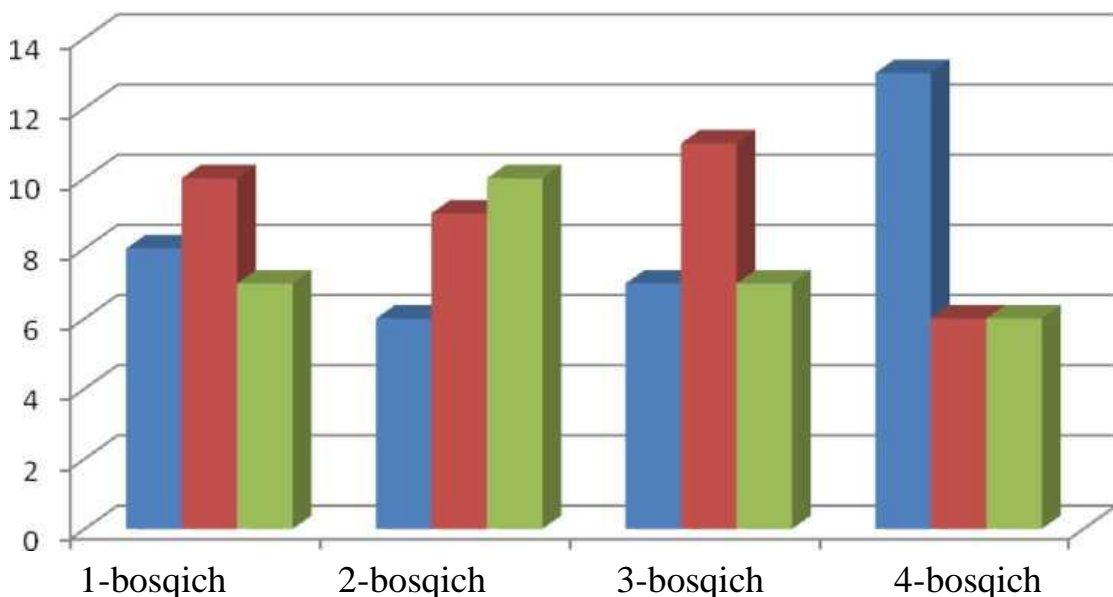
talabalirdagi faol kasbiy pozitsiyaning shakllanishiga sabab bo'lgan.

1.jadval Pedagogik faoliyatga moslashish darajasi

Bosqichlar	Tajriba avvalida, n = 200 ta					
	Tajriba guruhi (har bir bosqichda 25 tadan)			Nazorat guruhi (har bir bosqichda 25 tadan)		
	<i>yuqori</i>	<i>o'rta</i>	<i>past</i>	<i>yuqori</i>	<i>o'rta</i>	<i>past</i>
I	9	10	6	8	10	7
II	6	8	11	6	9	10
III	8	10	7	7	11	7
IV	12	7	6	13	6	6



1.rasm Pedagogik faoliyatga moslashish darajasi (Tajriba guruhi)



2.rasm Pedagogik faoliyatga moslashish darajasi (Nazorat guruhi)

Yuritilgan mulohazalardan ko‘rinib turibdiki, birinchi bosqich talabalaridagi kasbiy yo‘nalganlikning tashqi sabablarga asoslanishi ulardagi kasbiy axborot, kasbga munosabat va kasbiy maxsus bilimlarining to‘liqo‘zlashtirilmaganligining ifodasidir. Shuning uchun talabalarning pedagogik kasb doirasida muvaffaqiyatli harakat qilishini ta‘minlovchi bilish faolliginirivojlantirish, mustaqil bilim olishga, o‘z imkoniyatlarini kasbiy faoliyatda sinab ko‘rishga o‘rgatish, shuningdek, kasbiy bilim va ko‘nikmalarni faol o‘zlashtirishiga zamin hozirlash bilan shakllantirib borish maqsadga muvofiqdir.

Hulosa qilib aytganda, “Kasbiy moslashish darajasini aniqlash” so‘rovnomasining II - bloklaridagi murojatlar sinaluvchilardagi kasbiy moslashish darajasini aniqlash maqsadiga yo‘naltirildi. Shakllantiruvchi tajriba davrida amalga oshirilgan tadbirlar o‘zining amaliy natijalarini berdi. Bu holat ta‘kidlovchi tajriba davrida sinaluvchi- talabalar o‘rtasida qayta anketa so‘rovlarini tashkil etish va ularning natijalarini tahlil qilish chog‘ida dinamik o‘sish ko‘rsatkichlaridagi o‘zgarishlar ma‘lum bo‘ldi.

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IMPORTANCE OF MEDIA EDUCATION IN WORKING WITH STUDENTS

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Abstract: This article contains information about the importance of media education in working with students and the impact of mass media on the educational process and social and political activities today.

Key words: media and information literacy (MAS), Plan-etis, Grunwald declaration, stereotypes

Citizens of the country today have the opportunity to receive unlimited information and information collected by the world community. The quality of the information we receive and use has a great impact on our life choices and social and political activities. Today, reforms in the information environment, cooperation with the press "correctly define the priorities of relations" and mass media (mass media) "economic mechanisms of control over the activity, the closure of information sources, as well as editorials by authorities and administrative structures aimed at eliminating a certain level of pressure. At this point, the parliament is in the process of adopting a number of laws that ensure the "openness and transparency of the activities of the executive authorities, the reforms implemented in our country, and the internal and external policies of the state."

In particular, on May 5, 2014, the law "On the openness of the activities of state authorities and management bodies" was adopted in our republic. There is no doubt that this law will serve to make the national information space more transparent, expand it, and enrich the image of Uzbekistan in the global information space, as well as the content, form and methods of national content.

The development of techniques and technologies during the last twenty years has led to an incomparable expansion of media, information sources and information suppliers (libraries, archives, the Internet, etc.), and has made it possible for citizens to use and exchange its huge volume. As a result, citizens have the opportunity to assess the reliability of this information, to fully exercise their rights to express their opinion freely. That is why the current issue of ensuring media and information literacy (MAS) of citizens is put on the agenda.

According to Article 19 of the Universal Declaration of Human Rights, "Everyone has the right to freedom of belief and its free expression; this right includes the freedom to hold one's beliefs without hindrance and to seek, receive and impart information and ideas through any media regardless of frontiers." The implementation of this right is determined by the Grunwald Declaration on media education adopted in 1982. It shows

how political and educational systems can develop citizens' understanding of the phenomenon of communication and encourage their participation in mass media and (traditional and new) communications.

Mass media play an important role in the socialization of young people, this phenomenon is becoming more and more powerful. Much of the cultural capital of Plan-etis was transferred through the many types of vehicles they were very familiar with. This means a change in the attitude of various persons accompanying children and adolescents in their development.

Such a change should allow them to master this phenomenon through self-education. What is suggested by the organization of this collection is that it aims to simultaneously educate others about media and educate oneself about media.

By offering critical thinking about communication phenomena, media education should direct students to media activities that are as conscious and participatory as possible in the relevant life situation. Mass media activity requires people to be active in any communicative situation involving mass media. This means that they discuss their importance in a particular interaction while using media. Accordingly, media education should cover not only the cognitive, but also the affective sphere, starting from the personal character of the student, taking into account his linguistic abilities.

Readers/students need to understand and feel that the mass media is intentionally stimulating the need for consumer-oriented behavior. They must understand that new types of personal and public communication expand opportunities for active participation in economic, political and cultural life. And they need to understand and experience that electronic media has a significant influence on the organization and behavior of personal leisure time. In this regard, it is necessary to address the close relationship between the leisure and entertainment industry and the mass media in order to develop habitual behavior models.

Media education should enable students to navigate an increasingly media-informed world. They need to understand that the mass media contributes greatly to their political thinking. They need to understand that the expansion of communication technology gives people more opportunities to express themselves and participate in political life through "direct" democracy at the click of a button, and at the same time, better political information. , provides better information than government agencies. Over time, they have become the means of communication by encouraging passivity, dissuading people from direct participation in political life, distracting them from political conflicts, and political manipulation by well-funded interest groups. They need to learn how to use the media to make critical judgments and thus empower themselves to act.

They need to experience that mass media create their own reality not only as mediators of imaginary worlds, but also in projecting the image of reality. However,

readers/students should understand that this controlled reality cannot be neutral in its values. They should recognize the structure, design and effects of different media such as films, transparencies, etc. and they need to understand which content is mainly carried by which media. They need to know that the same content can be presented in different ways and therefore have different effects.

Media education should raise awareness of the media's often biased and clichéd presentation of social and gender roles.

Readers/students should be sensitive to how realistically the media presents everyday life situations (e.g. relationships between women and men, between employees and bosses, between young and old, etc.) . They need to understand that social and gender roles are subject to stereotypes.

Although the mass media cannot by themselves change the perception of the distribution of roles prevailing in our society, they are important in influencing and educating the public. By reflecting specific values, they contribute to the maintenance of core value concepts and can strengthen or weaken ideas, models and visions.

Media use is an important part of spending free time for young people, especially students. Therefore, it is natural to integrate media education into the process of working with youth. Working with young people means activities aimed at educating them outside the framework of formal education. For example, in Finland, the activities of youth community centers are well established, and highly qualified specialists work in them. Young people can easily visit these centers during working hours, usually in the evenings and on weekends. They come to the centers to interact and participate in various activities.

Specialists in working with young people, as media pedagogues, know their media world and media culture well. Youth media culture can be significantly different from that of adults. For this reason, in order to eliminate the misunderstanding between youth and adults and to ensure high-quality media education, it is necessary to have clear ideas about the essence of media and youth media culture. Such knowledge is especially necessary in the process of media relations and organization of youth events.

Most students want to be perceived as tech-savvy experts and media-savvy users, but they need support from adults, especially on issues of values, choices, and ethics. The place and role of the teacher in teaching the student the safety skills of media use is incomparable. In addition, youth professionals teach them to express their unique inner world through media (for example, by creating content and expressing their opinions in media appearances), while at the same time teaching the student can be of great help in learning more about intellectual property rights and age restrictions, and in obtaining information on other legal issues. Media education is not only a means of responding to threats and using the opportunities of media, but it also helps to focus attention on topics such as cyberbullying, alienation, racism and isolation. In addition,

media education helps to expand the participation of youth in the fight against these threats through the media. Information resource centers serve as a convenient space for discussions and debates on such topics, as they are traditionally equipped with the necessary media, in particular, computers connected to the Internet and game consoles.

In addition, by implementing creative projects, student-journalists develop the skills of evaluating the information distributed in the virtual space as experts. In addition, the constant creative environment in the educational process allows a young specialist to determine and sort out the content, purpose, and even the essence of media products coming from the outside from the initial stages of training.

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WORKING WITH STUDENTS AND ENSURING THEIR MEDIA AND INFORMATION LITERACY

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Digital media is a central medium of activity and growth for young people, and media education is part of the everyday life of anyone working with youth. Media, digital technologies and youth media culture offer new perspectives and opportunities for working with young people. The Society for Media Education has prepared a kit to support media education work with young people, which aims to reveal the role of media education in working with young people and to provide tools for media education with young people. Aimed at providing Media use is an important part of the leisure time of young people, especially students. Therefore, it is natural to integrate media education into the process of working with young people. Working with young people means activities aimed at educating them outside the scope of formal education.

For example, in Finland, youth community centers are well established and highly qualified specialists work in them. Young people can easily visit these centers during working hours, usually in the evenings and on weekends. They come to the centers to interact and participate in various activities.

Specialists in working with young people, as media pedagogues, know their media world and media culture well. Youth media culture can be significantly different from that of adults. For this reason, in order to eliminate the misunderstanding between young people and adults and to ensure high-quality media education, it is necessary to have clear ideas about the essence of media and youth media culture. Such knowledge is especially necessary in the process of media relations and organization of events aimed at young people.

Information resources and youth centers near libraries are an important platform for communication and discussions between adults and youth. Most students want to be perceived as tech-savvy experts and media-savvy users, but they need support from adults, especially on issues of values, choices, and ethics. The place and role of the teacher in teaching the student about media safety skills is incomparable.

In addition, youth professionals teach them to express their unique inner world through media (for example, through content creation and media appearances), while at the same time teaching students can be of great help in learning more about intellectual property rights and age restrictions, and in obtaining information on other legal issues.

Media education is not only a tool for responding to threats and leveraging the media, but it also helps to focus on issues such as cyberbullying, alienation, racism and

isolation. In addition, media education helps to increase the participation of young people in the fight against these threats through the medium of media. And information resource centers serve as convenient spaces for discussions and debates on such topics, as they are traditionally equipped with the necessary media, in particular, computers connected to the Internet and game consoles.

One of the simplest ways to approach media education is conversations with young people about media content, context, and their creation. Theater performances, game and movie evenings, or the premiere of a short film created by young people are practical methods of media education.

Projects related to the preparation of newspapers, magazines, blogs and video products are considered a relatively advanced method of media education. Information resource centers have the opportunity and time to implement such projects. It is possible to include a media and information literacy course as a facultative or optional subject in the educational process of different educational areas of the OO'U, in which all the educational modules listed above can be applied. In this case, the Internet is very useful, because it is possible to get help and advice on using the virtual environment.

Working with students in a virtual environment is a relatively new field. It includes topics such as creative self-expression and participation, as well as information about various threats: for example, cyberbullying, Internet addiction, grooming, i.e. gaining a child's trust for the purpose of sexual coercion. In addition, by implementing creative projects, student-journalists develop the skills of evaluating the information distributed in the virtual space as experts. In addition, the constant creative environment in the educational process allows a young specialist to determine and sort out the content, purpose, and even the essence of the media products coming from the outside from the first stages of training.

Why is media education important when working with students?

Young people spend several hours of the day working with mass media. Movies, music videos, and television series offer the ingredients for identity development: they are used to act out feelings and reflect on one's thoughts about them. Young people use media in many ways, but one of the most important is the Internet, where they find information, entertainment and friends. More and more young people have access to the Internet on their mobile phones or other mobile devices, which can be used to document, record and share daily life with others online. A young person's technical skills are acquired quickly, but becoming a strong, critical and active citizen of the information society is gradual and requires the help and time of adults.

Advantages of using media:

- Many media sources (feature films, music videos, visualizations, news) have very high production quality that can convey complex ideas in a short amount of time. It helps to develop quantitative thinking.

- Media offer both cognitive and affective experiences. If the scenes have a strong emotional content, it can provoke discussion, self-evaluation and self-evaluation.

- Using media sources helps connect students with culturally relevant events. As a result, a positive result of using media is that teachers need to keep their materials and examples up-to-date.

- News stories can be used to connect theories taught in the classroom to real-world events and policies.

Benefits of media for students:

- Popular media (movies, music, YouTube) are a familiar medium for students, helping to draw attention to the theories and concepts being discussed and keep students interested. Students can see theory and concepts in action. Not figuratively, but theories and concepts jump off the screen.

- Students can improve their analytical skills by analyzing media using the theories and concepts they are studying.

- Using media in the classroom allows students to see concepts and new examples while watching television, listening to music, or going to the movies with friends.

- Students can experience worlds outside of their own, especially when the media is vastly different from their local environment.

In addition to the many advantages, there are also a number of caveats that teachers should keep in mind when using media. Using media requires a thorough understanding of copyright law, an appreciation of the workload involved, and some skill in recognizing content that enhances learning rather than distracts.

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MIKROPROTSESSORNI BOSHQARISH VA MA'LUMOTLARNI QAYTA QILISH BIRLIGINI TUZILIK VA ASOSIY DIAGRAMASINI ISHLAB CHIQISH.

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Annotatsiya : Mikroprotsektor - bu shaxsiy kompyuterning markaziy bo'linmasi bo'lib, u ma'lumotlarga mantiqiy va arifmetik operatsiyalarni bajarish, ma'lumotlarni qayta ishlash va uzatish hamda mashinaning barcha bo'linmalarining ishlashini boshqarish uchun mo'ljallangan. Mikroprotsektor integral mikrosxemalarning bir yoki bir nechta o'zaro bog'langan yarimo'tkazgich chiplarida tayyorlanadi. Boshqarish davrlari, qo'shimchalar, registrlar, dastur hisoblagichlari va juda tezkor kichik xotiradan iborat.

Kalit so'zlar: Mikroprotsektor, Namlik, harorat , Display, paxta chigiti, ATMEGA, Kalibrlash.

Разработка структуры и принципиальной схемы микропроцессорного блока управления и обработки данных.

Разработка структуры и принципиальной схемы микропроцессорного блока управления и обработки данных.

Аннотация: Микропроцессор — центральный блок персонального компьютера, который предназначен для выполнения логических и арифметических операций над данными, обработки и передачи данных, управления работой всех узлов машины. Микропроцессор выполнен на одной или нескольких соединенных между собой полупроводниковых микросхемах интегральных схем. Состоит из цепей управления, сумматоров, регистров, программных счетчиков и очень быстрой малой памяти.

Ключевые слова: микропроцессор, влажность, температура, дисплей, семена хлопчатника, ATMEGA, калибровка.

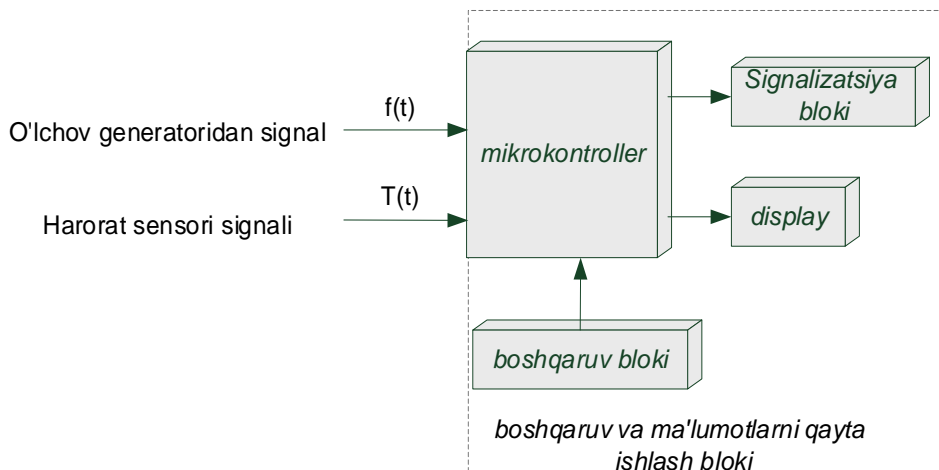
Development of the structure and main diagram of the microprocessor control and data processing unit.

Development of the structure and schematic diagram of a microprocessor control and data processing unit.

Abstract: A microprocessor is the central unit of a personal computer, which is designed to perform logical and arithmetic operations on data, process and transfer data, and control the operation of all units of the machine. A microprocessor is made on one or more interconnected semiconductor chips of integrated circuits. Consists of control circuits, adders, registers, program counters, and very fast small memory.

Key words: Microprocessor, Humidity, temperature, Display, cotton seed, ATMEGA, Calibration.

Namlikni o'lchash uchun mikroprotsessorli qurilmaning boshqaruv va ma'lumotlarni qayta ishlash blokining blok diagrammasi 1-rasmda ko'rsatilgan.



1-rasm. Namlikni o'lchash uchun mikroprotsessorli qurilmaning boshqaruv va ma'lumotlarni qayta ishlash blokining strukturaviy diagrammasi.

Mikroprotsessorli namlikni o'lchash moslamasining boshqaruv va ma'lumotlarni qayta ishlash blokining blok diagrammasi quyidagi asosiy bloklardan iborat: mikrokontroller, mikroprotsessorli namlikni o'lchash uchun boshqaruv bloki qurilma, signalizatsiya bloki va displey bloki.

Mikrokontroller harorat sensori va o'lchash transduseridan keladigan ma'lumotlarni qabul qilish, o'zgartirish va dasturiy ta'minotni qayta ishlash, o'lchangan qiymatlarni belgilangan (mos yozuvlar) qiymatlari bilan taqqoslash va displeyda namlik qiymatini ko'rsatish uchun mo'ljallangan. Ularga qo'shimcha ravishda, mikrokontroller, yozib olingan dasturga muvofiq, qurilmani bo'sh kyuveta bilan kalibrlaydi, o'lchovning boshlanishi va tugashini e'lon qiluvchi ovozli signal chiqaradi.

Tekshirish bloki ish rejimini tanlash va mikroprotsessor namligini nazorat qilish moslamasining ishlashini boshqarish uchun mo'ljallangan.

Displey o'lchangan va qayta ishlangan ma'lumotlarni (harorat qiymati, kalibrlash chastotasi va o'lchangan namunaning namligi) ko'rsatish uchun mo'ljallangan.

Boshqarish va ma'lumotlarni qayta ishlash blokining ishlash printsiplari quyidagicha: mikroprotsessor qurilmasi o'zining ichki xotirasida oldindan tuzilgan dastur bo'yicha ishlaydi. Qurilmani yoqqaningizdan so'ng, avval "CALIBRATION" tugmasini bosib. Bunda, birinchidan, atrof-muhit (material) harorati haqidagi

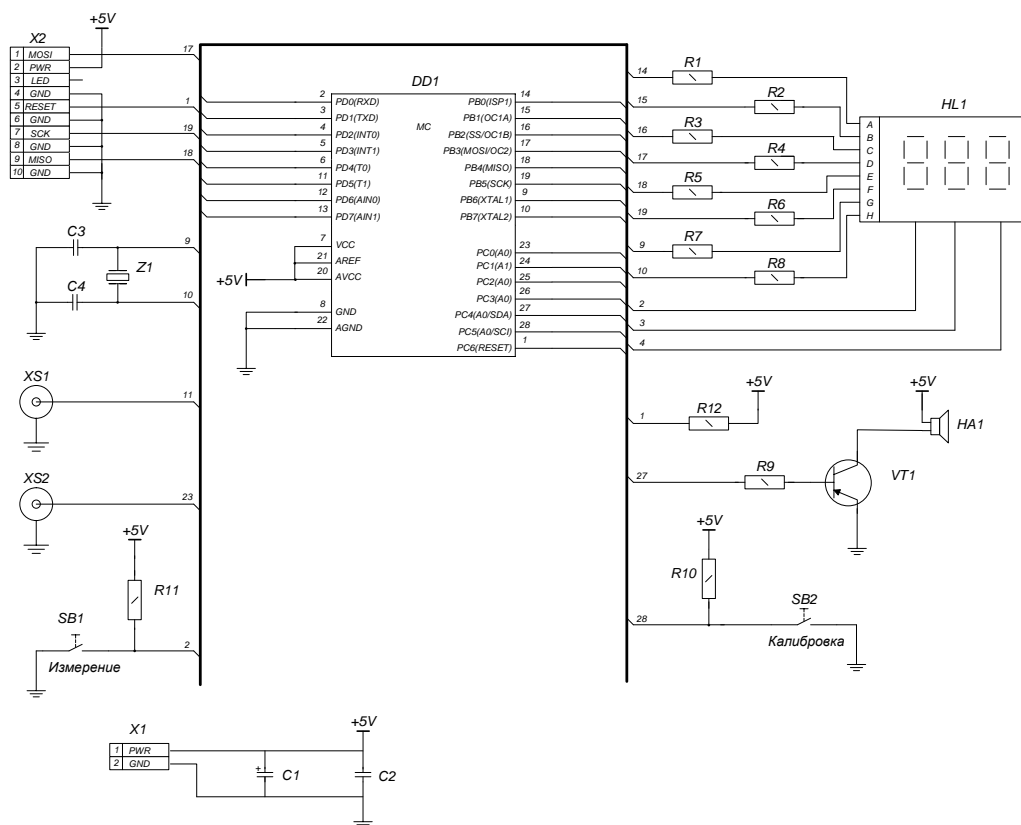
ma'lumotlar mikrokontrollerning raqamli kirishiga kiradi va kichik dastur bo'yicha qayta ishlanadi va displeyda o'nlik kod shaklida ko'rsatiladi. Harorat sensoridan olingan ma'lumotlarni qayta ishlagandan so'ng, mikrokontroller o'lchash transduseridan keladigan chastota ma'lumotlarini oladi, bu kyuvetaning kalibrlash qiymatini aks ettiradi. Bundan tashqari, ushbu ma'lumot kalibrlash tartibiga muvofiq qayta ishlanadi va displeyda o'nlik kod sifatida ko'rsatiladi.

Qurilmani kalibrlashdan so'ng "MEASUREMENTS" tugmasi bosiladi. Bu o'lchov pastki dasturini boshlaydi. Ushbu kichik dasturga muvofiq, o'lchangan namunaning namligini aks ettiruvchi chastota ma'lumotlari mikrokontrollerning kirishiga beriladi va kichik dasturga muvofiq qayta ishlanadi. Keyinchalik, o'lchangan namunaning namligi to'g'risidagi qayta ishlangan ma'lumot mos yozuvlar qiymati bilan taqqoslanadi va o'lchangan namunaning mos namligining tanlangan qiymati qurilma displeyida o'nlik kod sifatida ko'rsatiladi.

Mikroprotsessorga asoslangan namlikni o'lchash moslamasi barqarorlashtirilgan 5V quvvat manbai bilan quvvatlanadi. Mikroprotessorli qurilmaning ma'lumotlarini kuzatish va qayta ishlash blokining sxematik diagrammasini ishlab chiqish uchun biz uning har bir alohida blokini tanlaymiz va asoslaymiz.

Boshqarish va ma'lumotlarni qayta ishlash blokining sxemasini ishlab chiqish. Axborotni qayta ishlash blokining ishlash printsiipi quyidagicha:

SB1 va SB2 tugmalari yordamida mos ravishda qurilmani kalibrlash va namunaning namligini o'lchash jarayonlari amalga oshiriladi. Namuna (paxta chigiti - xom) namligiga mutanosib impuls chastotalari rozetka (XS1) orqali mikrokontrollerning (PD5(T1)) kirishiga beriladi. Mikrokontroller o'z xotirasida o'rnatilgan dastur bo'yicha belgilangan vaqt (10 soniya) davomida kiruvchi impulslarni qabul qiladi va qayta ishlaydi. Kiruvchi impulslarni qayta ishlash quyidagicha amalga oshiriladi: mikrokontrollerning o'rnatilgan taymeri tomonidan belgilangan davr bilan kiruvchi impulslar boshidan tsiklik so'roq qilinadi, so'ngra umumlashtiriladi va uning o'rtacha arifmetik qiymati hisoblanadi. Belgilangan o'lchov davridagi o'rtacha arifmetik qiymat o'lchangan namunaning namligini tavsiflaydi.



3-rasm. Boshqarish va ma'lumotlarni qayta ishlash blokining sxematik diagrammasi.

O'lchov boshida va o'lchov oxirida mikroprotsessor buzzer (HA1) yordamida qisqa ovozli signallarni ishlab chiqaradi va texnik xizmat ko'rsatuvchi xodimlarni o'lchash vaqtining boshlanishi va tugashi haqida xabardor qiladi.

Axborotni qabul qilish va qayta ishlash uchun ATMEGA8L-8PU mikrokontrolleri DD1 ishlatilgan. Ovozli signalni kuchaytirish uchun tovush signalini ogohlantirish uchun BC547 tipidagi VT1 tranzistorli kuchaytirgich ishlatilgan, AX-1205-H2 tipidagi kvarts karnay ishlatilgan. Qayta ishlangan ma'lumotlar va kalibrlash qiymatlarini ko'rsatish uchun LD-5361BS tipidagi uch xonali etti segmentli suyuq kristalli display ishlatiladi.

Mikrokontrollerdagi dasturlarni qayta yozish uchun dasturchini ulash uchun bosilgan elektron plataga ulagich (X2) o'rnatilgan. Panellarga mikrokontroller va suyuq kristall indikator o'rnatilgan.

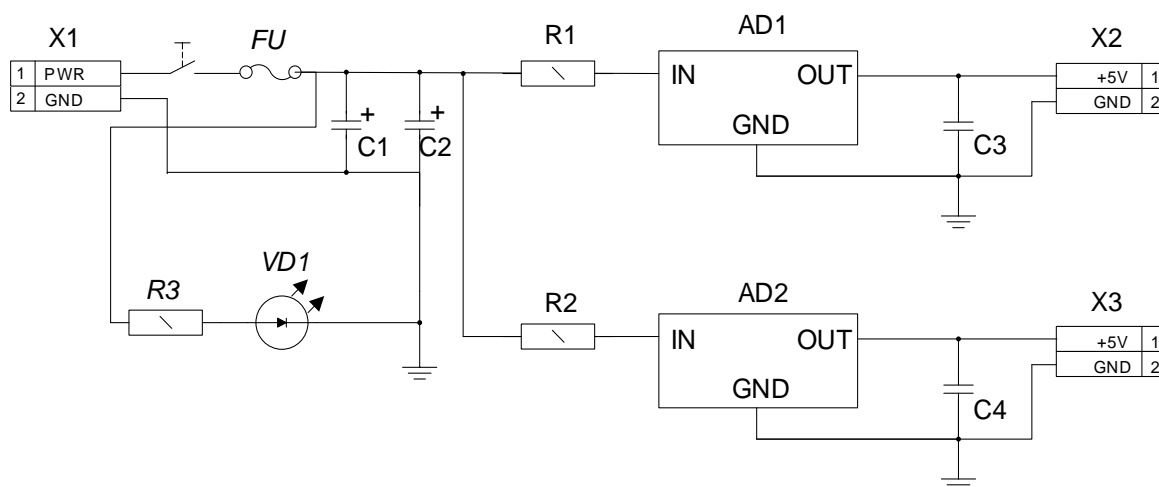
Kalibrlash vaqtida "Kalibrlash" tugmasi bosilganda, kalibrlash dasturini ishga tushiradigan mikrokontrollerning mos keladigan kirishiga nazorat signali yuboriladi. Ushbu kichik dasturga ko'ra, kalibrlash oxirida MK chiqishida kalibrlash vaqtining tugashi haqida xabar beruvchi qisqa ovozli signal hosil bo'ladi.

O'lchov vaqtida, "O'lchovlar" tugmasi bosilganda, o'lchash pastki dasturini ishga tushiradigan mikrokontrollerning mos keladigan kirishiga nazorat signali yuboriladi. Namuna namligini o'lchash belgilangan kichik dasturga muvofiq amalga oshiriladi.

O'lchov oxirida "O'lchov" vaqtining tugashini e'lon qiluvchi MC chiqishida qisqa ovozli signal hosil bo'ladi.

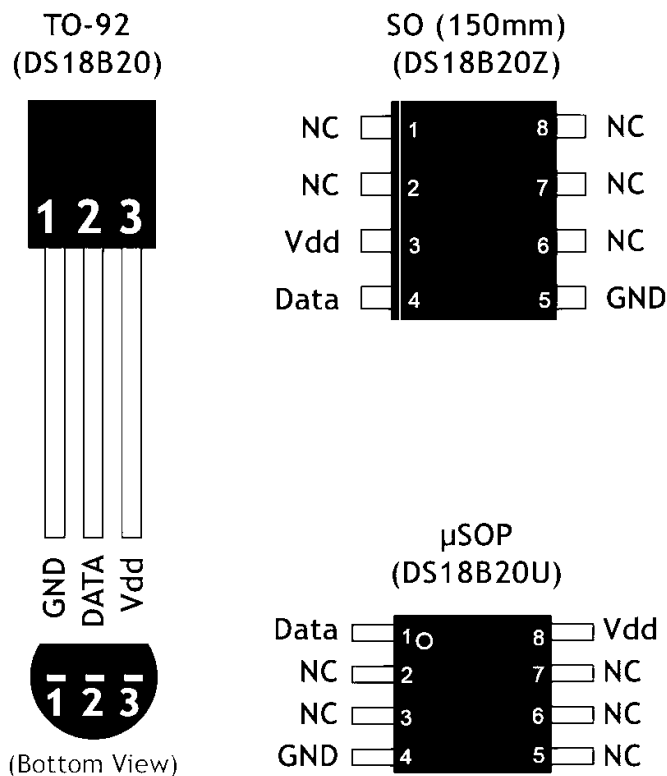
Kuchlanish stabilizatori birligining sxemasini ishlab chiqish. Kuchlanish stabilizatori kirish doimiy kuchlanishini 9-17 V (180-230 V) dan 5 V barqarorlashtirilgan doimiy kuchlanishga aylantirish va barqarorlashtirish uchun mo'ljallangan.

Avtonom stabilizatorlar chastota konvertori va axborotni qayta ishlash bloki uchun o'lchash qurilmalarida qo'llaniladi. Ikkala voltaj regulyatori ham bitta plataga o'rnatiladi. 7805 ST tipidagi banklar (AD1, AD2) kuchlanish stabilizatori sifatida ishlatilgan.



3.4-rasm. Voltaj regulyatorining sxematik diagrammasi

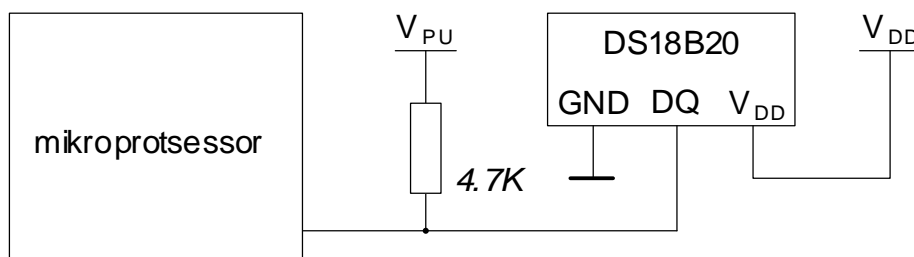
Harorat sensori tanlash. Harorat sensori sifatida biz DALLAS Semiconductors kompaniyasidan DS18B20 raqamli termometrni tanladik. Qurilmaning EEPROM xotirasida saqlanishi mumkin bo'lgan 9 dan 12 bitgacha bo'lgan dasturlashtiriladigan ruxsatga ega DS18B20 raqamli termometr [42]. DS18B20 1-simli avtobus orqali aloqa qiladi va shu bilan birga chiziqdagi yagona qurilma bo'lishi yoki guruhda ishlashi mumkin. Avtobusdagi barcha jarayonlar markaziy mikroprotssessor tomonidan boshqariladi.



5-rasm. DS18B20 harorat sensori umumiy ko'rinishi.

O'lchov oralig'i -55°C dan $+125^{\circ}\text{C}$ gacha va -10°C dan $+85^{\circ}\text{C}$ gacha bo'lgan oraliqda $0,5^{\circ}\text{C}$ aniqligi. Bunga qo'shimcha ravishda, DS18B20 tashqi quvvat manbai mavjud bo'lmaganda ma'lumot uzatish liniyasi kuchlanishidan ("parazit quvvati") quvvatlanishi mumkin.

DS18B20 harorat chiqishi Selsiy gradusida sozlangan. Harorat ma'lumotlari 16 bitli imzolangan raqam sifatida saqlanadi. Bayroq (S) bitlari haroratning ijobiy yoki salbiy ekanligini ko'rsatadi: musbat raqamlar uchun $S = 0$, manfiy raqamlar uchun esa $S = 1$.



6-rasm. DS18B20 mikrokontrollerga ulanish diagrammasi.

Tanlangan mikrokontroller qayta ishlangan axborotni ham, atrof-muhit harorati haqidagi ma'lumotlarni ham qabul qilish, qayta ishlash, saqlash va chiqarish imkonini beradi. Ma'lumotlar xotirasi va buyruqlar tizimining raqami ma'lum vaqt oralig'ida qayta ishlangan ma'lumotlarni qabul qilish, qayta ishlash va saqlashni tezda ta'minlaydi.

5 V kuchlanishli regulyator blokining konstruktiv, sxematik va ulanish sxemasi ishlab chiqilgan. Ishlab chiqilgan sxema doimiy oqimning kirish kuchlanishidagi

o'zgarishlarni 8,5 V dan 17 V gacha bo'lgan diapazonda barqarorlashtirish imkonini beradi.

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УСТОЙЧИВЫЕ АЛГОРИТМЫ АДАПТИВНОГО ОЦЕНИВАНИЯ СОСТОЯНИЯ ОБЪЕКТОВ УПРАВЛЕНИЯ С УЧЕТОМ ПАРАМЕТРИЧЕСКИХ ВОЗМУЩЕНИЙ

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Аннотация: В работе рассматривается стабилизация процедуры обращения матриц при оценивании состояния стохастических объектов управления и повысить точность определения истинной оценки вектора состояния при возмущении параметров объекта и наблюдателя.

Ключевые слова: фильтрация, фильтр Калмана, возмущения, матрица, оценивание, стохастическое уравнение.

Проблема оценивания реализаций случайных процессов, содержащих некоторую полезную информацию и протекающих в присутствии различного рода помех, возникает во многих областях науки и техники. В зависимости от назначения разнообразные технические системы передачи или извлечения информации функционируют в разных условиях и к ним предъявляются различные требования [1-2]. Если информационные параметры полезного сигнала изменяются на отрезке наблюдения, то задача оценки параметров также трансформируется в задачу фильтрации. При решении этой задачи необходимо получить оценку реализации непосредственно ненаблюдаемого случайного процесса на основании наблюдения реализации случайного процесса и известной априорной информации. Результатом решения задач фильтрации являются оптимальные правила оценок случайных процессов и соответствующие им структурные схемы оптимальных устройств оценивания, а также потенциальные характеристики качества их функционирования [3]. Заметим, что при решении разнообразных задач фильтрации весьма эффективными оказываются концепции условно-гауссовской фильтрации

При решении разнообразных задач синтеза систем управления динамическими объектами возникает проблема оценивания вектора состояния управляемого объекта на основе фильтра калмановского типа [4]. Важность этой проблемы состоит в том, что формирование управляющих воздействий в соответствии с принципом достоверной эквивалентности производится именно на основе вектора состояния объекта.

Рассмотрим объект управления, описываемый следующими уравнениями состояния и наблюдения

$$x_i = A_{i/i-1}x_{i-1} + w_i, \quad x(0) = x_0, \quad (1)$$

$$y_i = C_i x_i + v_i, \quad (2)$$

где x_i – n -мерный вектор состояния объекта в дискретный момент времени i ; $A_{i/i-1}$ – переходная матрица состояний размерностью $n \times n$; w_i – n -мерный вектора белых гауссовских шумов объекта с известной матрицей интенсивностей $Q_i \delta_{ij}$ и нулевым вектором математического ожидания; y_i – m -мерный вектор измерений; C_i -матрица измерений размерностью $m \times n$; v_i – m -мерный вектор белых гауссовских помех измерений с нулевым вектором математического ожидания и матрицей интенсивностей $R_i \delta_{ij}$; δ_{ij} – дельта-функция Кронекера.

Для подавляющего большинства практических задач обычно требуется обеспечить возможно более высокую точность оценивания вектора состояния, в том числе и при наличии тех или иных ограничений, то в любом случае для заданных моделей векторов состояния и наблюдения сначала целесообразно синтезировать оптимальные или квазиоптимальные алгоритмы обработки информации [4].

Для оценивания вектора состояния объекта (1), (2) при точном знании параметров объекта, матриц Q_i и R_i обычно используется классической фильтр Калмана:

$$\left. \begin{aligned} \hat{x}_{i+1} &= A_{i+1/i} \hat{x}_i + K_{i+1} (y_{i+1} - C_{i+1} A_{i+1/i} \hat{x}_i), \quad \hat{x}_0 = M(x_0); \\ K_{i+1} &= P_{i+1/i} C_{i+1}^T (C_{i+1} P_{i+1/i} C_{i+1}^T + R_{i+1})^{-1}; \\ P_{i+1/i} &= A_{i+1/i} P_i A_{i+1/i}^T + Q_{i+1}; \\ P_{i+1} &= (I - K_{i+1} C_{i+1}) P_{i+1/i}, \quad P_0 = M \left\{ (x_0 - \hat{x}_0)(x_0 - \hat{x}_0)^T \right\}, \end{aligned} \right\} \quad (3)$$

обеспечивающий минимум среднеквадратической ошибки фильтрации.

Возмущения параметров объекта и наблюдателя вектора состояния, неизбежные при функционировании реальных систем, приводят к принципиальной невозможности обеспечения оптимальной оценки состояния линейной системы фильтром (3). До настоящего времени были предприняты многочисленные попытки решения этой проблемы путем определения допустимых границ возмущения калмановской оценки или численным моделированием процесса оценивания вектора состояния конкретного объекта [5]. Такие подходы не позволяют решить главной задачи возмущенной фильтрации – оптимального в среднеквадратическом текущего оценивания ошибок калмановского фильтра, обусловленных его параметрическими возмущениями. В настоящее время рассмотрены варианты определения лишь верхней границы возмущения калмановской оценки, обусловленной «неопределенностью априорной неопределенности». Таким образом, решение задачи фильтрации параметрических возмущений фильтра Калмана, т.е.,

оптимального текущего оценивания ошибок калмановской фильтрации из-за погрешностей в определении параметров фильтра и его начальных условий, представляет интерес как с теоретической, так и с прикладной точки зрения. В дальнейшем при решении поставленной задачи используется математический аппарат исследования возмущений многомерных линейных систем, предложенный в.

Используя уравнение ошибки, представленное в [5], запишем уравнения для ошибки возмущенного фильтра (3.3) и случайной составляющей $\delta P_i^{(v)}$, функционально связанной с указанными шумами:

$$\delta \hat{x}_{i+1} = L_0 \delta \hat{x}_i + L_1 \delta A_{i+1}^{(v)} + L_2 \delta C_{i+1}^{(v)} + L_3 \delta Q_{i+1}^{(v)} + L_4 \delta R_{i+1}^{(v)} + L_5 \delta P_i^{(v)}. \quad (4)$$

$$\delta P_{i+1}^{(v)} = N_0 \delta P_i^{(v)} + N_1 \delta A_{i+1}^{(v)} + N_2 \delta C_{i+1}^{(v)} + N_3 \delta Q_{i+1}^{(v)} + N_4 \delta R_{i+1}^{(v)}, \quad (5)$$

где $\delta P_0^{(v)}$ - вектор ошибок определения элементов матрицы априорной ковариации; алгоритмы определения матриц $L_0 - L_5$, $N_0 - N_4$, в выражениях (4) и (5) приводятся в [6].

Истинная оценка x_{i+1}^0 вектора состояния объекта в текущий момент времени может быть определена как

$$x_{i+1}^0 = \hat{x}_{i+1} - \delta \hat{x}_{i+1},$$

где $\delta \hat{x}_i$ - возмущения вектора состояния объекта.

Уравнение (4) позволяет сформировать стохастическое уравнение истинной оценки в следующем виде:

$$x_{i+1}^0 = L_0 x_i^0 + K_{i+1} y_{i+1} - L_1 \delta A_{i+1}^{(v)} - L_2 \delta C_{i+1}^{(v)} - L_3 \delta Q_{i+1}^{(v)} - L_4 \delta R_{i+1}^{(v)} - L_5 \delta P_i^{(v)}, \quad x_0^0 = \hat{x}_0 - \delta \hat{x}_0 \quad (6)$$

Исходя из изложенного, определим далее задачу возмущенной фильтрации как задачу текущей оценки векторов (4) – (6), используя в качестве сигнала наблюдателя за оцениваемым расширенным вектором возмущенную калмановскую оценку \hat{x}_i .

Уравнение расширенного оцениваемого вектора в этом случае имеет вид

$$Z_{i+1} = G_L \cdot Z_i + G_N \cdot \left[\begin{matrix} (\delta A_{i+1}^{(v)})^T \\ (\delta C_{i+1}^{(v)})^T \\ (\delta Q_{i+1}^{(v)})^T \\ (\delta R_{i+1}^{(v)})^T \end{matrix} \right]^T + G_c,$$

где

$$Z_i = \begin{bmatrix} x_i^0 \\ \delta \hat{x}_i \\ \delta P_i^{(v)} \end{bmatrix}; \quad G_L = \begin{bmatrix} L_0 & 0 & -L_5 \\ 0 & L_0 & L_5 \\ 0 & 0 & N_0 \end{bmatrix}; \quad G_N = \begin{bmatrix} -G \\ G \\ G_1 \end{bmatrix}; \quad G_c = \begin{bmatrix} K_{i+1} y_{i+1} \\ 0 \\ 0 \end{bmatrix};$$

$$G = [L_1 \mid L_2 \mid L_3 \mid L_4], \quad G_1 = [N_1 \mid N_2 \mid N_3 \mid N_4].$$

Учитывая, что уравнение выходного сигнала калмановского измерителя можно представить как

$$y_i = C_i (\hat{x}_i + \Delta_i) + v_i,$$

где Δ_i – вектор ошибок оптимальной оценки вектора состояния невозмущенной системы объект-наблюдатель, уравнение наблюдения можно записать следующим образом [7]:

$$\hat{x}_{i+1} = A_{i+1/i}(x_i^0 + \delta\hat{x}_i) + K_{i+1}(H_{i+1}A_{i+1/i}\Delta_i + C_{i+1}w_{i+1} + v_{i+1}).$$

Функциональный характер данного уравнения позволяет получить уравнения искомого фильтра в форме условно-гауссовского фильтра непосредственно из доказательства основной теоремы условно-гауссовской фильтрации. Считая выполненными допущения, положенные в основу теории условно-гауссовской фильтрации [8], на основе [6] можно записать следующий алгоритм оценивания стохастического объекта при наличии параметрических возмущений:

$$\hat{Z}_{i+1} = G_c + G_L \hat{Z}_i + (G_L J_i A_c^T) F^+ (\hat{x}_{i+1} - A_c \hat{Z}_i), \tag{7}$$

$$J_{i+1} = G_L J_i G_L^T + G_N D_\xi G_N^T - G_L J_i A_c^T F^+ A_c J_i G_L^T, \tag{8}$$

$$\hat{Z}_0 = M(Z_0) = \begin{bmatrix} \hat{x}_0 \\ 0 \\ 0 \end{bmatrix}, \quad J_0 = \begin{bmatrix} D_{\delta x} & D_{\delta x} & 0 \\ D_{\delta x} & D_{\delta x} & \\ 0 & & D_{\delta P} \end{bmatrix},$$

$$F = E_p + A_c J_i A_c^T, \tag{9}$$

где

$$D_\xi = \begin{bmatrix} D_{A_{i+1}} & & & 0 \\ & D_{H_{i+1}} & & \\ & & D_{Q_{i+1}} & \\ 0 & & & D_{R_{i+1}} \end{bmatrix} \cdot \delta_{(i+1,j+1)};$$

$$A_c = [1 \ 1 \ 0] \otimes A_{i+1/i};$$

$$E_p = [K_{i+1} C_{i+1} A_{i+1/i} \ \vdots \ K_{i+1} C_{i+1} \ \vdots \ K_{i+1}] \begin{bmatrix} P_{i/i-1} & & 0 \\ & Q_{i+1} & \\ 0 & & R_{i+1} \end{bmatrix} [K_{i+1} C_{i+1} A_{i+1/i} \ \vdots \ K_{i+1} C_{i+1} \ \vdots \ K_{i+1}]^T,$$

где $D_{\delta x}$ – ковариационная матрица ошибок определения вектора начальной оценки; $D_{\delta P}$ – ковариационная матрица ошибок определения матрицы априорных ковариаций P_0 ; $D_{A_{i+1}} \delta_{(i+1,j+1)}$, $D_{C_{i+1}} \delta_{(i+1,j+1)}$, $D_{Q_{i+1}} \delta_{(i+1,j+1)}$ и $D_{R_{i+1}} \delta_{(i+1,j+1)}$ – соответствующие матрицы интенсивностей; \otimes – символ кронекерова произведения.

Матрица F вида (9), псевдообратная которой F^+ используется в (7) и (8) для оценивания Z и J , является симметричной плохообусловленной знаконеопределенной матрицей. С целью стабилизации искомого решения и придания большей численной устойчивости процедуре псевдообращения в (7), (8), необходимо использовать регулярные методы. При реализации (7) и (8)

будем использовать регуляризованный метод Холецкого факторизации симметричных матриц.

На основе симметричной матрицы F порядка n с элементами f_{ij} строится последовательность матриц

$$F^{(k)} = \left[\begin{array}{c|c} F_1^{(k)} & F_2^{(k)} \\ \hline 0 & F_3^{(k)} \end{array} \right], \quad k = 0, 1, \dots, \quad (10)$$

где $F_1^{(k)}$ – верхнетреугольная матрица размера $k \times k$, $F_2^{(k)}$ – прямоугольная матрица, $F_3^{(k)}$ – симметричная матрица порядка $n - k$, 0 – нулевая матрица.

Для этого у клетки $F_3^{(k)}$ определяется ведущий элемент путем сравнения максимальных ее элементов, стоящих на диагонали и вне диагонали:

$$|f_{\zeta\zeta}^{(k)}| = \max_{k < i \leq n} |f_{ii}^{(k)}|, \quad |f_{\tau\tau}^{(k)}| = \max_{k < i \leq n, i < j \leq n} |f_{ij}^{(k)}|.$$

Если $|f_{\zeta\zeta}^{(k)}| \geq |f_{\tau\tau}^{(k)}|$ и $|f_{\zeta\zeta}^{(k)}| > \varepsilon$, то у матрицы $F^{(k)}$ меняются местами ζ -е строка и столбец с $(k + 1)$ -ми строкой и столбцом соответственно.

После перестановок определяется матрица $F^{(k+1)}$, которая отличается от полученной после перестановок $F^{(k)}$ только элементами клетки

$$F_3^{(k)} = \left[\begin{array}{c|c} f_{k+1,k+1}^{(k)} & d^{(k)} \\ \hline (d^{(k)})^T & W_k \end{array} \right], \quad (11)$$

принимаяющей вид

$$\left[\begin{array}{c|c} |f_{k+1,k+1}^{(k)}|^{1/2} & \alpha^{(k)} \\ \hline 0 & F_3^{(k+1)} \end{array} \right], \quad (12)$$

где $\alpha^{(k)} = |f_{k+1,k+1}^{(k)}|^{-1/2} d^{(k)} \text{sign} f_{k+1,k+1}^{(k)}$, $F_3^{(k+1)} = W_3^{(k)} - (f_{k+1,k+1}^{(k)})^{-1} (d^{(k)})^T d^{(k)}$. Затем делается переход к следующему шагу факторизации.

Если $|f_{\zeta\zeta}^{(k)}| < |f_{\tau\tau}^{(k)}|$ и $|f_{\tau\tau}^{(k)}| > \varepsilon$, то вводится ортогональное преобразование

$$B_k = (b_{ii})_{i,j=1}^n, \quad (13)$$

элементы которого совпадают с единичной матрицей, за исключением четырех элементов, определяемых следующим образом: $b_{\tau\tau} = -b_{ss} = b_{\tau s} = b_{s\tau} = 2^{-1/2}$.

Вычисляется матрица

$$\hat{F}^{(k)} = B_k F^{(k)} B_k,$$

у которой затем τ -й столбец и s -я строка переставляются с $(k + 1)$ -м столбцом и $(k + 2)$ -й строкой так, чтобы полученный $(k + 1)$ -й диагональный элемент был наибольшим. Далее делается пересчет в соответствии с (11), (12) элементов клетки $\hat{F}_3^{(k)}$ и осуществляется переход к следующему шагу факторизации, при этом за $F^{(k+1)}$ принимается полученная $\hat{F}^{(k+1)}$.

Как только $|f_{\alpha}^{(k)}| \leq \varepsilon$ и $|a_{\xi}^{(k)}| \leq \varepsilon$ процесс факторизации прекращается и неортогональная факторизация матрицы F определяется в виде

$$F_{\varepsilon} = \hat{U}_{\varepsilon}^T \hat{I} \hat{U}_{\varepsilon}, \quad \hat{U}_{\varepsilon} = U_k B_{(k)},$$

где верхнетрапецеидальная матрица $U_k = (F_1^{(k)} : F_2^{(k)})$ составляется из клеток $F_1^{(k)}$ и $F_2^{(k)}$ полученной матрицы (10); $B_{(k)} = B_k \dots B_1$, где $B_i = I$, если преобразование (13) не проводилось; \hat{I} – диагональная матрица с k -м диагональным элементом, определяемым как $\hat{i}_k = \text{sign} f_{kk}^{(k-1)}$.

В случае, если симметричная матрица F порядка n имеет ранг $r \leq n$ и параметр регуляризации взят $\varepsilon = 0$, то в регуляризованном методе Холецкого, будет сделано ровно r шагов факторизации и

$$F_{\varepsilon} = F, \quad F^+ = B_{(r)} U_r^+ \hat{I} (U_r^+)^T B_{(r)}^T. \quad (14)$$

Если дополнительно F – неотрицательно-определенная матрица, то ведущим элементом является диагональный элемент, \hat{I} является единичной матрицей и тем самым

$$F_{\varepsilon} = U_r^T U_r = F, \quad F_{\varepsilon}^+ = U_r^+ (U_r^+)^T. \quad (15)$$

Приведенные алгоритмы позволяют стабилизировать процедуру обращения матриц при оценивании состояния стохастических объектов и тем самым повысить точность определения истинной оценки вектора состояния при возмущении параметров объекта и наблюдателя.

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AXBOROT TEXNOLOGIYALARINI TA'LIMDAGI AHAMIYATI

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Annotatsiya

Ushbu maqolada ta'limda axborot texnologiyalarini o'rni, dars mashg'lotlarida axborot texnologiyalarini qo'llash orqali dars sifati va yoshlarni IT sohasiga qiziqishlarini oshirish, bundan tashqari ta'limda multimedia vositalarini afzalliklari tadqiq etiladi.

Kalit so'zlar:

Axborot, kommunikatsiya, texnologiya, audio signal, video signal, multimedia, individual, motivasiya, kompyuter, Informatika.

ВАЖНОСТЬ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ В ОБРАЗОВАНИИ

Аннотация

В данной статье исследуется роль информационных технологий в образовании, качество уроков и повышение интереса молодежи к сфере IT за счет использования информационных технологий в обучении, а также преимущества мультимедийных инструментов в образовании.

Ключевые слова:

Информационные, коммуникационные, технологические, аудиосигналы, видеосигналы, мультимедиа, индивидуальные, мотивационные, компьютерные, Информатика.

IMPORTANCE OF INFORMATION TECHNOLOGY IN EDUCATION

Annotation

This article examines the role of Information Technology in education, the quality of the lesson through the use of Information Technology in lesson sessions and increasing the interest of young people in the IT field, in addition to the benefits of multimedia tools in education.

Key words:

Information, Communication, Technology, audio signal, video signal, multimedia, individual, motivation, Computer, Computer Science.

Axborot-kommunikatsiya texnologiyalari rivojlanishining zamonaviy jahon darajasi shundayki, respublikada jahon axborot makonining infratuzilmalari va milliy axborot-hisoblash tarmog'i integratsiyasiga mos keluvchi milliy tizimni yaratish milliy iqtisodiyot, boshqarish, fan va ta'lim samaradorligining muhim omili bo'lmoqda. Bu muammolar ancha murakkab va ayni paytda respublikamiz uchun dolzarbdir. Hozirda olib borilayotgan iqtisodiy, tuzilmaviy va boshqa o'zgarishlarni amalga oshirish natijalari respublikada axborotlashtirish bilan bog'liq muammolarning qanday va qaysi muddatlarda hal etishga ham bog'liqdir. O'quv fanlari bo'yicha elektron o'quv vositalarining yaratilishi mazkur fanlarni o'qitishda zamonaviy axborot-kommunikatsiya texnologiyalaridan foydalanish imkoniyatini yanada kengaytiradi. Rivojlangan mamlakatlarda o'qitishning usuli hozirgi kunda ta'lim sohasi yo'nalishlari bo'yicha tadbiiq qilinmoqda. Hatto har bir oila multimedia vositalarisiz xordiq chiqarmaydigan bo'lib qoldi. Multimedia vositalarining 81- yildagi yalpi oboroti 4 milliard AQSh dollarini tashkil qilgan bo'lsa 94-yil esa 16 milliard AQSh dollarini tashkil qildi. Hozirgi kunda esa sotilayotgan har bir kompyuterni mul'timedia vositalarisiz tasavvur qilib bolmaydi. Kompyuterlarning 70-yillarda ta'lim sohasida keng qo'llash yo'lida urinishlar zoye ketganligi avvalambor ular unumdorligining nihoyatda pastligi bilan bog'liq edi. Amaliyot shuni kursatmoqdaki, multimedia vositalari asosida o'quvchilarni o'qitish ikki barobar unumli va vaqtdan yutish mumkun. Multimedia vositalari asosida bilim olishda 30% gacha vaqtni tejash mumkin bo'lib, olingan bilimlar esa xotirada uzoq muddat saqlanib qoladi. Agar o'quvchilar berilayotgan materiallarni kurish asosida qabul qilsa, axborotni xotirada saqlash 25-30% oshadi. Bunga qushimcha sifatida o'quv materiallari audio, video va grafika ko'rinishda mujassamlashgan xolda berilsa, materiallarni xotirada saqlab qolish 75% ortadi.

Multimedia vositalari asosida o'quvchilarni o'qitish quyidagi afzalliklarga ega:

- 1) berilayotgan materiallarni chuqurroq va mukammalroq o'zlashtirish imkoniyati bor;
- 2) ta'lim olishning yangi sohalari bilan yaqindan aloqa qilish ishtiyoqi yanada ortadi;
- 3) ta'lim olish vaqtining qisqarish natijasida, vaqtni tejash imkoniyatiga erishish;
- 4) olingan bilimlar kishi xotirasida uzoq saqlanib, kerak bulganda amaliyotda qo'llash imkoniyatiga erishiladi. Informatika va axborot texnologiyalari fundamental fan sifatida kompyuter axborot tizimlari negizida istalgan ob'ektlar bilan boshqaruv

jarayonlarini axborot jihatidan ta'minlashni barpo etish metodologiyasini ishlab chiqish bilan shug'ullanadi.

Kompyuterlarni ta'lim tizimida qo'llash g'oyasi ancha ilgari paydo bo'lgan bo'lgan bo'lsada, ta'lim tizimining barcha sohalarida axborot texnologiyalarini qo'llash multimedia qurilmalari bilan jihozlangan kompyuterlar paydo bo'lgach to'liq ma'noda amaliyotga joriy etilib boshlandi. Multimedia vositalarini ta'limda qo'llash quyidagilarga imkoniyat yaratadi:

- ta'limning gumanizatsiyalashuvini ta'minlash;
- o'quv jarayonining samaradorligini oshirish;
- ta'lim oluvchining shaxsiy fazilatlarini rivojlantirish (o'zlashtirganlik, bilimga chanqoqlik, mustaqil ta'lim olish, o'zini o'zi tarbiyalash, o'zini o'zi kamol toptirishga qaratilgan qobiliyatlilik, ijodiy qobiliyatlari, olgan bilimlarini amaliyotga qo'llay olishi, o'rganishga bo'lgan qiziqishi, mehnatga bo'lgan munosabati);
- ta'lim oluvchining kommunikativ va ijtimoiy qobiliyatlarini rivojlantirish;
- kompyuter vositalari va axborot elektron ta'lim resurslari yordamida har bir shaxsning alohida (individual) ta'lim olishi hisobiga ochiq va masofaviy ta'limni individuallashtirish va differensiyalash imkoniyatlari sezilarli darajada kengayadi;
- ta'lim oluvchiga faol bilim oluvchi subyekt sifatida qarash, uning qadrqimmatini tan olish;
- ta'lim oluvchining shaxsiy tajribasi va individual xususiyatlarini hisobga olish;
- mustaqil o'quv faoliyatini olib borish, bunda ta'lim oluvchi mustaqil o'qib va rivojlanib boradi;
- ta'lim oluvchilarda, o'zlarining kasbiy vazifalarini muvaffaqiyatli bajarish uchun hozirgi tez o'zgaruvchan ijtimoiy sharoitlarga moslashuviga yordam beradigan zamonaviy ta'lim texnologiyalaridan foydalanish ko'nikmalarini hosil qilish. Multimedia vositalari yordamida shaxsga yo'naltirilgan ta'limni amalga oshirish jarayoni zamonaviy, ko'ptarmoqli, predmetga yo'naltirilgan multimediali o'quv vositalarini ishlab chiqishni va foydalanishni talab etadi. Ular tarkibiga keng ma'lumotlar bazasi, ta'lim yo'nalishi bo'yicha bilimlar bazasi, sun'iy intellekt tizimlari, ekspert-o'rgatuvchi tizimlar, o'rganilayotgan jarayon va hodisalarning matematik modelini yaratish imkoniyati bo'lgan laboratoriya amaliyotlari kiradi.

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O'LGHASH MOSLAMASINING KALIBRLASH ANIQLIGINI OSHIRISH UCHUN ENG KICHIK KVADRATLAR USULINI QO'LLASH

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Annotatsiya : Har qanday o'lchash moslamasining o'lchov aniqligini oshirish uchun o'lchashdan oldin kalibrlash talab qilinadi, bu o'lchash moslamasining ko'rsatkichlari va, masalan, ma'lum bir materialning namligi o'rtasidagi korrelyatsiyani (analitik, grafik yoki jadval shaklida) o'rnatishdan iborat bo'ladi. Ushbu bosqich tavsiflangan usulda juda muhim hisoblanadi, chunki namlikni miqdoriy aniqlashning aniqligi kalibrlash jarayonining to'g'riligiga bog'liq. Kalibrlash bog'liqligini yaratish uchun har xil namlik tarkibiga ega bo'lgan ma'lum bir materialning namunalari to'plamiga ega bo'lish talab etiladi. Shu bilan birga, o'lchash uskunasi kalibrlangan namlik oralig'i oraliqlarga bo'linadi, ularning uzunligi tanlangan intervalga va o'rnatilgan sensorlar mavjud namunalar soniga bog'liq.

Kalit so'zlar: Namlik, o'lchov generatori, eng kichik kvadratlar usuli , polinom, Gauss usuli,

Применение метода наименьших квадратов для повышения точности калибровки датчика

Аннотация: Для повышения точности измерения любого измерительного прибора перед измерением требуется калибровка. Он заключается в установлении корреляции (аналитической, графической или табличной) между показаниями измерительного прибора и, например, влажностью того или иного материала. Этот шаг очень важен в описываемом методе, поскольку точность количественного определения влажности зависит от точности процесса калибровки. Для установления градуировочного соотношения необходимо иметь набор образцов данного материала с различной влажностью. При этом калиброванный интервал влажности измерительного оборудования разбивается на интервалы, длина которых зависит от выбранного интервала и количества проб с установленными датчиками.

Ключевые слова : Влажность, генератор измерений, метод наименьших квадратов, полином, метод Гаусса,

Applying Least Squares to Improve Sensor Calibration Accuracy

Abstract: To improve the measurement accuracy of any measuring instrument, calibration is required before measurement. It consists in establishing a correlation

(analytical, graphical or tabular) between the readings of a measuring device and, for example, the moisture content of a particular material. This step is very important in this method because the accuracy of the moisture quantification depends on the accuracy of the calibration process. To establish the calibration ratio, it is necessary to have a set of samples of this material with different humidity. In this case, the calibrated humidity interval of the measuring equipment is divided into intervals, the length of which depends on the selected interval and the number of samples with installed sensors.

Keywords : Humidity, Measurement Generator, Least Squares, Polynomial, Gaussian

Bu ishda ishlab chiqilgan o'lchov moslamasining kalibrlash bog'liqligini qurish uchun o'lchangan namuna sifatida namligi 0% dan 25% gacha bo'lgan paxta chigitidan turli vaqt oralig'ida 11 ta namuna tanlab oldik. Ushbu namunalar Toshkent yog'-moy kombinati va O'zbekiston "SIFAT" markazi laboratoriyasida tayyorlangan. Ushbu namunalar VHS-1 o'lchash moslamasi yordamida, shuningdek, arbitraj usuli bilan oldindan o'lchandi.

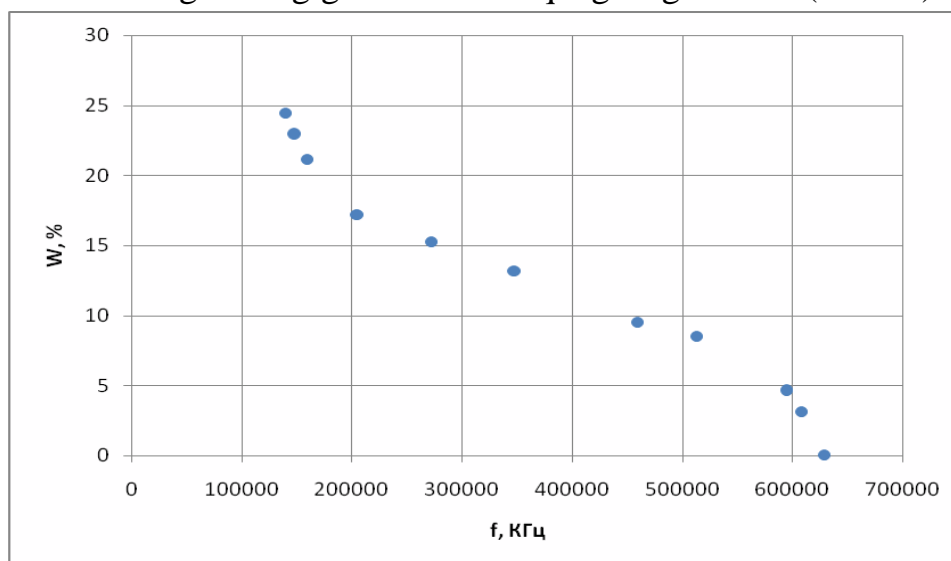
Tayyorlangan namunalar (namunalar) yordamida tavsiya etilgan sig'imli o'lchash moslamasi yordamida bir nechta o'lchovlar o'tkazildi va shunga mos ravishda har bir namuna uchun o'lchash generatorining chastotasining quyidagi qiymatlari olindi (1-jadval).

1-jadval.

Namlikning o'lchash transduserining chastotasiga bog'liqligi bo'yicha eksperimental ma'lumotlar

i	Namuna namligi (W_i), %	Generator chastotasini o'lchash (f_i), KHz
1	0	628959,3
2	3	608672,5
3	5	595148,0
4	8	513418,2
5	10	458931,7
6	13	346621,1
7	15	271747,3
8	18	203803,3
9	20	158515,7
10	23	146971,1
11	25	139274,7

1-jadvaldagi ma'lumotlardan foydalanib, o'lchov generatorining chastotasining o'lchangan namunaning namligiga nisbatan nuqta grafigi tuzildi (1-rasm).



1-rasm. Xom ma'lumotlarning nuqta grafigi.

O'lchov va hisob-kitoblar natijasida paxta xom ashyosi chigitining namligining bir qator asboblar ko'rsatkichlariga (o'rnatilgan qiymatlar) mos keladigan bir qator qiymatlari olindi. Namlik namunalari va asboblar ko'rsatkichlarining mos keladigan juftliklariga ko'ra, "asbob ko'rsatkichlari - paxta chigitining namligi" kalibrlash bog'liqligini qurish mumkin.

[1.2] mualliflarining fikriga ko'ra, eng kichik kvadratlar usuli turli parametrlarga bog'liqlik grafiklarini kalibrlashning eng samarali va oddiy usuli hisoblanadi. Shuning uchun kalibrlash bog'liqligini (regressiya egri chizig'ini) qurish uchun biz eng kichik kvadratlar usulidan foydalanamiz. Shunday qilib, eng kichik kvadratlar usuliga ko'ra, biz $W = k(f)$ kalibrlash bog'liqligi funksiyasini polinom sifatida tasvirlaymiz:

$$W = A_0 + A_1f + A_2f^2 + A_3f^3 + A_3f^3 + A_4f^4 + A_5f^5 + A_6f^6 + A_7f^7; \quad (1)$$

Haqiqiy o'lchangan qiymat va kalibrlash qiymatlari o'rtasidagi S_m farqi uchun formula tuzamiz:

$$S_m = \sum_{i=1}^{11} [W(f_i) - W_i]^2 = \sum_{i=1}^{11} [(A_0 + A_1f_i + A_2f_i^2 + A_3f_i^3 + A_4f_i^4 + A_5f_i^5 + A_6f_i^6 + A_7f_i^7) - W_i]^2; \quad (2)$$

Hosilalarni hisoblash va to'g'ri qismlarni nolga tenglashtirib, biz hosilalar uchun tenglamalar tizimining matritsasini qurdik:

$$\begin{cases} \frac{\partial S_m}{\partial A_0} = 2 \sum_{i=1}^{11} [(A_0 + A_1 f_i + A_2 f_i^2 + \dots + A_7 f_i^7) - W_i] = 0, \\ \frac{\partial S_m}{\partial A_1} = 2 \sum_{i=1}^{11} [(A_0 + A_1 f_i + A_2 f_i^2 + \dots + A_7 f_i^7) - W_i] f_i = 0, \\ \frac{\partial S_m}{\partial A_2} = 2 \sum_{i=1}^{11} [(A_0 + A_1 f_i + A_2 f_i^2 + \dots + A_7 f_i^7) - W_i] f_i^2 = 0, \\ \vdots \\ \frac{\partial S_m}{\partial A_7} = 2 \sum_{i=1}^{11} [(A_0 + A_1 f_i + A_2 f_i^2 + \dots + A_7 f_i^7) - W_i] f_i^7 = 0. \end{cases} \quad (3)$$

[2.3] ga ko'ra, ba'zi o'zgarishlardan so'ng biz quyidagi tenglamalar tizimini olamiz:

$$\begin{cases} 5A_0 + A_1 \sum_{i=1}^{11} f_i + A_2 \sum_{i=1}^{11} f_i^2 + \dots + A_7 \sum_{i=1}^{11} f_i^7 = \sum_{i=1}^{11} W_i, \\ A_0 \sum_{i=1}^{11} f_i + A_1 \sum_{i=1}^{11} f_i^2 + A_2 \sum_{i=1}^{11} f_i^3 + \dots + A_7 \sum_{i=1}^{11} f_i^8 = \sum_{i=1}^{11} f_i W_i, \\ A_0 \sum_{i=1}^{11} f_i^2 + A_1 \sum_{i=1}^{11} f_i^3 + A_2 \sum_{i=1}^{11} f_i^4 + \dots + A_7 \sum_{i=1}^{11} f_i^9 = \sum_{i=1}^{11} f_i^2 W_i, \\ \vdots \\ A_0 \sum_{i=1}^{11} f_i^7 + A_1 \sum_{i=1}^{11} f_i^8 + A_2 \sum_{i=1}^{11} f_i^9 + \dots + A_7 \sum_{i=1}^{11} f_i^{14} = \sum_{i=1}^{11} f_i^7 W_i. \end{cases} \quad (4)$$

Hisoblash natijalari 2-jadvalga kiritiladi.

2-jadval.

<i>i</i>	W_i	f_i	f_i^2	f_i^3	...	f_i^{14}
1	0	628959,3	$3,95 \cdot 10^{11}$	$2,48 \cdot 10^{17}$	...	$1,51 \cdot 10^{81}$
2	3	608672,5	$3,7 \cdot 10^{11}$	$2,25 \cdot 10^{17}$	...	$9,58 \cdot 10^{80}$
3	5	595148,0	$3,54 \cdot 10^{11}$	$2,11 \cdot 10^{17}$	...	$6,99 \cdot 10^{80}$
4	8	513418,2	$2,63 \cdot 10^{11}$	$1,35 \cdot 10^{17}$	...	$8,84 \cdot 10^{79}$
5	10	458931,7	$2,10 \cdot 10^{11}$	$9,66 \cdot 10^{16}$	...	$1,83 \cdot 10^{79}$
6	13	346621,1	$1,20 \cdot 10^{11}$	$4,16 \cdot 10^{16}$	...	$3,61 \cdot 10^{77}$
7	15	271747,3	$7,38 \cdot 10^{10}$	$2,01 \cdot 10^{16}$	...	$1,19 \cdot 10^{76}$
8	18	203803,3	$4,15 \cdot 10^{10}$	$8,46 \cdot 10^{15}$	...	$2,13 \cdot 10^{74}$
9	20	158515,7	$2,51 \cdot 10^{10}$	$3,98 \cdot 10^{15}$	...	$6,32 \cdot 10^{72}$
10	23	146971,1	$2,16 \cdot 10^{10}$	$3,17 \cdot 10^{15}$	...	$2,19 \cdot 10^{72}$
11	25	139274,7	$1,93 \cdot 10^{10}$	$2,70 \cdot 10^{15}$	...	$1,03 \cdot 10^{72}$
Σ	140	4080363,0	$1,89 \cdot 10^{12}$	$9,97 \cdot 10^{17}$	...	$3,28 \cdot 10^{81}$

3-jadval.

Tenglamalar sistemasini hisoblash natijalari

<i>i</i>	$f_i W_i$	$f_i^2 W_i$	$f_i^3 W_i$...	$f_i^7 W_i$	$W(f_i)$
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1	0	0	0	...	0	0,050254
2	1826017,5	$1,11 \cdot 10^{12}$	$6,76 \cdot 10^{17}$...	$9,28 \cdot 10^{40}$	3,139474
3	2975740,0	$1,77 \cdot 10^{12}$	$1,05 \cdot 10^{18}$...	$1,32 \cdot 10^{41}$	4,661703
4	4107345,6	$2,11 \cdot 10^{12}$	$1,08 \cdot 10^{18}$	...	$7,52 \cdot 10^{40}$	8,497527
5	4589317,0	$2,10 \cdot 10^{12}$	$9,66 \cdot 10^{18}$	...	$4,28 \cdot 10^{40}$	9,505292
6	4506074,3	$1,56 \cdot 10^{12}$	$5,41 \cdot 10^{17}$	...	$7,81 \cdot 10^{39}$	13,16293
7	4076209,5	$1,11 \cdot 10^{11}$	$3,01 \cdot 10^{17}$	...	$1,64 \cdot 10^{39}$	15,25177
8	3668459,4	$7,47 \cdot 10^{11}$	$1,52 \cdot 10^{17}$	...	$2,62 \cdot 10^{38}$	17,17791
9	3170314,0	$5,02 \cdot 10^{11}$	$7,96 \cdot 10^{16}$	...	$5,02 \cdot 10^{37}$	20,09961
10	3380335,3	$4,96 \cdot 10^{11}$	$7,30 \cdot 10^{16}$	...	$3,40 \cdot 10^{37}$	22,96847
11	3481867,5	$4,84 \cdot 10^{11}$	$6,75 \cdot 10^{17}$	...	$2,54 \cdot 10^{37}$	24,42640
Σ	35781680,0	$1,19 \cdot 10^{13}$	$4,99 \cdot 10^{18}$	...	$3,53 \cdot 10^{41}$	138,9413

Tuzilgan tenglamalar tizimi va hisoblangan hisoblangan ma'lumotlar (2-jadval va 3-jadval) yordamida biz koeffitsientlarni topamiz: $A_0, A_1, A_2, A_3, A_4, A_5, A_6, A_7$

Bunda $A_0, A_1, A_2, A_3, A_4, A_5, A_6, A_7$ ga nisbatan tenglamalar tizimi quyidagi shaklni oladi:

$$\begin{cases} 5A_0 + 2,36 \cdot 10^6 A_1 + 1,19 \cdot 10^{12} A_2 + \dots + 1,02 \cdot 10^{29} A_7 = 7, \\ 2,36 \cdot 10^6 A_0 + 1,19 \cdot 10^{12} A_1 + 6,85 \cdot 10^{17} A_2 + \dots + 6,57 \cdot 10^{46} A_7 = 1,88 \cdot 10^7, \\ 1,19 \cdot 10^{12} A_0 + 6,85 \cdot 10^{17} A_1 + 4,13 \cdot 10^{23} A_2 + \dots + 4,23 \cdot 10^{52} A_7 = 6,49 \cdot 10^{12}, \\ \vdots \\ 1,02 \cdot 10^{41} A_0 + 6,57 \cdot 10^{46} A_1 + 4,23 \cdot 10^{52} A_2 + \dots + 5,01 \cdot 10^{81} A_7 = 2,38 \cdot 10^{41}. \end{cases} \quad (5)$$

Olingan tenglamalar tizimi (5.40) tizimning kengaytirilgan matritsasiga muvofiq Gauss usuli [1, 4] bilan yechiladi:

$$\left| \begin{array}{cccccc} 10 & 4,07 \cdot 10^6 & 1,90 \cdot 10^{12} & \dots & 1,11 \cdot 10^{41} & 140 \\ 4,07 \cdot 10^6 & 1,90 \cdot 10^{12} & 9,97 \cdot 10^{17} & \dots & 6,61 \cdot 10^{41} & 3,58 \cdot 10^7 \\ 1,90 \cdot 10^{12} & 9,97 \cdot 10^{17} & 5,56 \cdot 10^{23} & \dots & 3,97 \cdot 10^{52} & 1,20 \cdot 10^{13} \\ & & \vdots & & & \\ 1,87 \cdot 10^{35} & 1,11 \cdot 10^{41} & 6,61 \cdot 10^{46} & \dots & 5,37 \cdot 10^{75} & 6,45 \cdot 10^{35} \\ 1,11 \cdot 10^{41} & 6,61 \cdot 10^{46} & 3,97 \cdot 10^{52} & \dots & 3,28 \cdot 10^{81} & 3,53 \cdot 10^{41} \end{array} \right|. \quad (6)$$

Kengaytirilgan matritsaning soddalashtirilgan shaklini olamiz

$$\begin{pmatrix} 1 & 370185,75 & 1,72 \cdot 10^{11} & \dots & 1,01 \cdot 10^{40} & 12,72 \\ 0 & 1 & 759469,7 & \dots & 6,45 \cdot 10^{34} & -4,1 \cdot 10^{-5} \\ 0 & 0 & 1 & \dots & 3,03 \cdot 10^{29} & 1,02 \cdot 10^{-11} \\ & & \vdots & & & \\ 0 & 0 & 0 & \dots & 2023320,65 & -1,06 \cdot 10^{-32} \\ 0 & 0 & 0 & \dots & 0 & 4,03 \cdot 10^{-38} \end{pmatrix} \quad (7)$$

[1, 4] ga asosan (5.39) tenglamalar tizimini Gauss usuli yordamida yechishda $A_0=117,9964$, $A_1=-1,3 \cdot 10^{-3}$, $A_2=6,4817 \cdot 10^{-9}$, $A_3=-1,0232 \cdot 10^{-14}$, $A_4=-1,6287 \cdot 10^{-20}$, $A_5=7,8447 \cdot 10^{-26}$, $A_6=-9,7335 \cdot 10^{-32}$, $A_7=4,0332 \cdot 10^{-38}$.koeffitsientlarni topamiz,

Agar topilgan koeffitsientlarni o'rniga qo'ysak, kalibrlash bog'liqligi $W = k(f)$ tenglamasi quyidagi ko'rinishga ega bo'ladi:

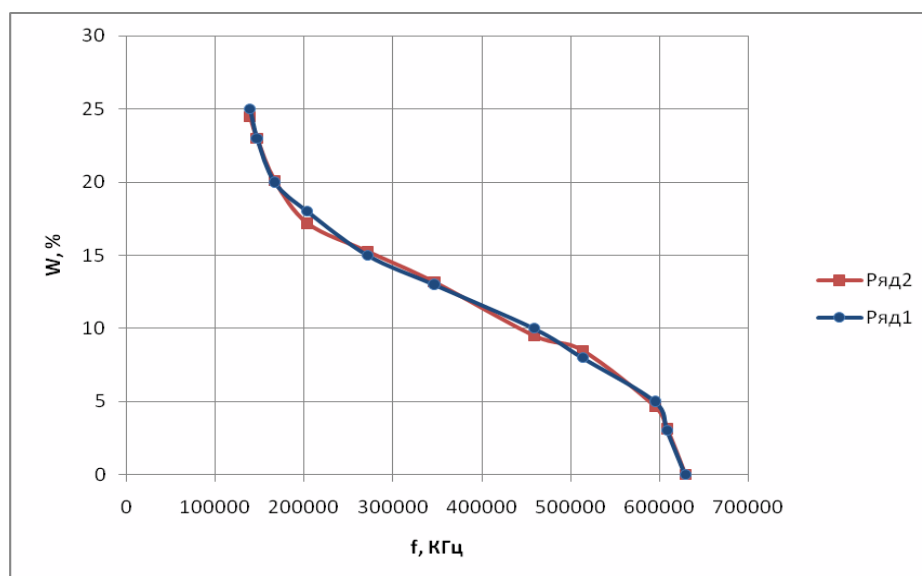
$$W = 117,9964 - 1,3 \cdot 10^{-3} f + 6,4817 \cdot 10^{-9} f^2 - 1,0232 \cdot 10^{-14} f^3 - 1,6287 \cdot 10^{-20} f^4 + 7,8447 \cdot 10^{-26} f^5 - 9,7335 \cdot 10^{-32} f^6 + 4,0332 \cdot 10^{-38} f^7. \quad (8)$$

(8) ifoda paxta chigitining namligining chastotaga kalibrlash bog'liqligining matematik modelidir.

$A_0, A_1, A_2, A_3, A_4, A_5, A_6, A_7$ koeffitsientlarining hisoblangan qiymatlaridan ko'rinib turibdiki, A_3 va undan yuqoriroq qiymatlar koeffitsientlari ahamiyatsiz qiymatlarga ega va shuning uchun ular bo'lishi mumkin. e'tibordan chetda qolgan. Yuqoridagilarni hisobga olgan holda o'lchash moslamasining kalibrlash bog'liqligining matematik modelini quyidagi shaklda yozish mumkin:

$$W = 117,9964 - 1,3 \cdot 10^{-3} f + 6,4817 \cdot 10^{-9} f^2. \quad (9)$$

Tuzilgan kalibrlash tenglamasini (5.43) inobatga olgan holda tuzilgan o'lchov o'tkazgich chastotasiga paxta xomashyosining namlik bog'liqligi grafigi 5.4-rasmda keltirilgan.



2-rasm. Tuzatish koeffitsientlari (1-qator) va ularsiz (2-qator) bilan kalibrlash tenglamasining grafigi.

Grafiklardan ko'rinib turibdiki, namlikning chastotaga bog'liqligi (2-rasm, 1-qator) kalibrlash koeffitsientlarini hisobga olgan holda qurilgan 2-rasmda (2-qator) ko'rsatilgan grafikdan ancha yaxshi.

Shunday qilib, paxta chigitining namligining o'lchov o'tkazgich chastotasiga bog'liqligi grafigini kalibrlashda eng kichik kvadratlar usulidan foydalanish o'lchash moslamasini kalibrlashning aniqligini oshirish imkonini berdi.

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**SIMSIZ TARMOQ TEXNOLOGIYALARI ORQALI O'LCHASH
NATIJARINI MASOFADAN BOSHQARISHNI TASHKIL ETISH
EVALYUTSIYASI**

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Abstract

CDMA (Code Division Multiple Access), GSM (Global Systems for Mobile Communications), TDMA (Time Division Multiple Access), 802.11, WAP (Wireless Application Protocol) wireless technology protocol), 3G and 4G (third and fourth generation technologies), GPRS (General Packet Radio Service, data packet transmission service), Bluetooth (medium and short distance network), EDGE (Enhanced Data Rates for GSM Evolution, improved GSM network).

Keywords: Wi-Fi (Wireless Fidelity) - "wireless connection", WLAN (Wireless Local Area Network - Wireless Local Area Network), medium and short distance network (Bluetooth)

Annotatsiya

CDMA (Code Division Multiple Access - kanallarni kodli taqsimlash texnologiyasi), GSM (Global Systems for Mobile Communications- mobil aloqa tarmoqlarining global tizimi), TDMA (Time Division Multiple Access-kanallarni vaqt orqali taqsimlash texnologiyasi), 802.11, WAP (Wireless Application Protocol-simsiz texnologiyalar protokoli), 3G va 4G (uchinchi va to'rtinchi avlod texnologiyalari), GPRS (General Packet Radio Service, ma'lumotlarni paketlab uzatish xizmati), Bluetooth (o'rta va qisqa masofa tarmog'i), EDGE (Enhanced Data Rates for GSM Evolution, takomillashtirilgan GSM tarmoq).

Kalit so'zlar: Wi-Fi (Wireless Fidelity) -«simsiz bog'lanish», WLAN(Wireless Local Area Network — Simsiz Lokal Tarmoq), o'rta va qisqa masofadagi tarmoq (Bluetooth)

Hozirgi kunda axborot texnologiyalari jadal tarzda rivojlanib borayotgan bir vaqtda aloqa, axborot almashinuvi ham juda katta tezlik bilan rivojlanib bormoqda. Aloqalarning qulayligi oshirishda aloqa vositalarini ham o'rni beqiyosdir. Chunki aloqaning sifatligi aloqa vositalariga chambarchas bog'liq. Dastlab aloqalarni faqat sim ulagichlar orqali amalga oshirilardi. Ushbu simlar foydalanuvchilarni aloqa markazlari orqali bir-biri bilan bo'g'lagan va shu tariqa shaxarlar, davlatlar orasida aloqa o'rnatilgan. Hozirgi kunda bunday simlarni zamonaviy ko'rishdagi

maxsulotlaridan foydalaniladi. Bularga misol qilib optik tolali simlarni keltiramiz. Bu bir qancha qulayliklarga ega. Lekin shunday tolali aloqalar ham zamon talablariga javob bera olmayapti. Chunki bu sim orqali aloqasining o'ziga bog'liq bir qancha noqulayliklari bor. Bularga misol keltirsak, bu simlarni qandaydir aloqa markazlarigacha tortib olib borish, simlarni joylashtirishdagi noqulayliklar va hokazo.

Bundan tashqari simlarni tayyorlash uchun ham xom ashyolar sarf bo'lishi kabi moliyaviy noqulayliklari mavjud. Shunday noqulayliklar va moliyaviy zararlardan qochgan holda yangi zamonaviy aloqa simsiz aloqalar ishlab chiqildi. Bunga misollar keltirsak, birinchi navbatda mobil aloqa va eng qulay aloqalardan biri hisoblanayotgan simsiz aloqa tizimidir. Simsiz aloqaga Wi-Fi, Wi-MAX, Wi-Bro va shunga o'xshash bir qator aloqa texnologiyalar kiradi.

Axborot uzatishning simsiz texnologiyalari tarixi XIX asrning oxiriga kelib birinchi radiosignal uzatilishi bilan boshlangan va XX asrning 20-yillarida amplituda modulyatsiyali radio qabul qilgichlar paydo bo'lishi bu texnologiyalarni rivojlanish jarayonlariga katta ta'sir ko'rsatdi. 1970-yillarga kelib tovushni radioto'lqinlar orqali uzatuvchi birinchi simsiz radiotelefonlar yaratildi. Dastlab bular analog tarmoqlarda ishlagan bo'lsa, 80-yillar boshida raqamli standartlarga o'tish boshlanganligini anglatuvchi, spektrni yaxshi taqsimlashini, eng yaxshi sifatli signalni va eng yaxshi xavfsizlikni ta'minlovchi GSM standarti ishlab chiqildi. XX asrning 90-yillarida simsiz tarmoqlar holatini mustahkamlash jarayonlari yuz berishi, bu texnologiyalarni jadallik bilan rivojlanishiga olib keldi. Bugungi kunda simsiz texnologiyalar kundalik hayotimizga mustahkam joylashib bormoqda, yuqori tezlikni ta'minlash bilan birga ular yangi qurilma va xizmatlarni taqdim etmoqda.

Yangi CDMA (Code Division Multiple Access - kanallarni kodli taqsimlash texnologiyasi), GSM (Global Systems for Mobile Communications- mobil aloqa tarmoqlarining global tizimi), TDMA (Time Division Multiple Access-kanallarni vaqt orqali taqsimlash texnologiyasi), 802.11, WAP (Wireless Application Protocol-simsiz texnologiyalar protokoli), 3G va 4G (uchinchi va to'rtinchi avlod texnologiyalari), GPRS (General Packet Radio Service, ma'lumotlarni paketlab uzatish xizmati), Bluetooth (o'rta va qisqa masofa tarmog'i), EDGE (Enhanced Data Rates for GSM Evolution, takomillashtirilgan GSM tarmoq) va shu kabi texnologiyalarning xilma-xilligi bu sohada tub burilish boshlanayotganini anglatib turibdi.

Simsiz lokal tarmoqlar (WLAN) hamda o'rta va qisqa masofa tarmoq (Bluetooth) larning rivojlanishi juda istiqbollidir. Simsiz lokal tarmoqlar aeroportlar, universitet va institutlar, mehmonxonalar, restoranlar, korxonalar va tashkilotlar tarmoqlarida ko'plab qo'llanilmoqda. Simsiz tarmoqlarni standartlarini ishlab chiqish 1990 yilda butunjahon IEEE (Elektr va elektronika bo'yicha muhandislar instituti) tashkiloti tomonidan 802.11 komiteti tashkil etilishi bilan boshlangan. Butunjahon o'rgimchak

to'ri va bu tarmoqda simsiz qurilmalar yordamida ishlash g'oyasi simsiz texnologiyalarning rivojlanish jarayonlariga muhim turtki vazifasini o'tadi.

Wi-Fi texnologiyasi hozirgi kunga kelib kompyuter olamida eng perspektiv kompyuter tarmoqlaridan biri hisoblanadi. Wi-Fi (Wireless Fidelity) — ingliz tili so'zlaridan tashkil topgan bo'lib, «simsiz bog'lanish» ma'nosini anglatadi. Wi-Fi texnologiyasi raqamli ma'lumotlarni radiokanallar orqali jo'natish turlaridan biridir. Ushbu texnologiya yaratilishida avvalo korporativ foydalanuvchilar uchun mo'ljallangan bo'lib, kabelli tarmoqni o'rnini egallashi bashorat qilingandi. Bizga ma'lumki kabelli tarmoqli kompyuter tarmog'ini yaratish uchun bir necha ming kabel tarmog'ini qo'lda o'rnatish hamda maxsus tarmoq topologiyasini o'rnatish talab qilinadi. Wi-Fi radiochastotalarning qisqartirilgan boshqaruv chastotalarida ishlovchi simsiz ma'lumot almashinish standartlashtirilgan texnologiyasi. Odatda Wi-Fi tarmog'i orqali WLAN(Wireless Local Area Network — Simsiz Lokal Tarmoq) tarmoqlar yaratiladi. Ushbu tarmoqda yuqori radioto'lqinlar orqali aloqa tashkil qilinuvchi hamda ma'lumot almashinishini ko'rish mumkin bo'ladi. Bu tizim kabelli tarmoqni kengayishi yoki unga alternativ sifatida bitta ofis, butun bir bino yoki bir maydon territoriyasida ishlatiladi. Wi-Fi texnologiyasi minglab kabel tarmog'ini tushirish kabi mablag'li jarayon uchun mablag'laringizni tejash bilan birga, o'rnatishni oddiyligi esa murakkab texnik o'rnatish jarayonlariga vaqtni iqtisod qilinishini bu tarmoqni boshqa tarmoqlardan ustun qilib qo'yadi. Simsiz tarmoqlar radiochastotalardan foydalanishiga sabab radioto'lqinlar bino yoki umuman ofislardagi devor yoki shunga o'xshagan to'siqlardan ham o'tib ketaveradi va umuman hech narsa unga to'siq bo'la olmaydi(masofadan tashqari albatta!). Simsiz tarmoqlar o'z-o'zidan kabelli tarmoqlardan ishonchliroq hisoblanadi. Ko'pchilik WLAN tarmoqlarini diapazoni yoki qoplash maydoni 160 metrni tashkil qiladi, bu albatta uning yo'lidagi to'siqlarning qanaqaligiga va qanchaligiga bog'liq bo'ladi. Ushbu tarmoqni ishlash tezligi kabelli tarmoq bilan tenglashashi ham mumkin va undan bir necha barobar yuqori ham bo'lishi mumkin. Bu albatta qaysi standartidan foydalanishga ham bo'g'liq bo'ladi.

So'nggi yillarda tarmoq texnologiyalarining rivojlanishi personal kompyuterlarning yagona tarmoqqa ulash, hamda umumjahon Internet tarmog'iga chiqish imkoniyati usullarini oshirib yubordi.

Hozirgi kunda deyarli barcha turdagi kompyuterlarda tarmoqqa ulanish yohud internetga chiqish imkoniyati mavjud. Keling ana shu hozirgi kunda deyarli barcha foydalanuvchilar foydalana olishi mumkin bo'lgan tarmoqqa ulanish usullarini biroz ko'rib chiqamiz.

1.Dial-Up. Telefon liniyasi orqali kommutatsiyalangan ulanish. Ushbu texnologiya ulanishdagi oddiylilik sababli yaratilganidan buyon ishlatilib kelinmoqda. Ikki modem bir-biri bilan telefon liniyasini ishlatgan holda aloqa o'rnatadi. Oddiy

holda ulanish birga-bir amalga oshiriladi hamda ma'lumot uzatish uchun barcha mavjud ovoz diapazoni chastotasidan foydalanadi. Lekin ushbu texnologiyaning ko'pgina kamchiliklari mavjud. Masalan: ma'lumot uzatishdagi past tezlik, tashqi ta'sir tufayli yuborilayotgan paketlarning qismi yo'qolish extimoli, ulanishning uzilib qolish extimoli hamda ulanish davrida telefon liniyasining butunlay band bo'lishi.

2.Keng polosali ma'lumot uzatish texnologiyasi. Ushbu texnologiya statsionar obyektlar uchun juda ham maqbuldir. Mavjud telefon tarmog'idan foydalangan holda bemalol ushbu texnologiya orqali yuqori tezlikka ega bo'lish mumkin, lekin liniyalar mavjud bo'lmasachi? Yangi liniyasini foydalanuvchi manzilgacha olib borish, juda ham qimmatga tushishi aniq. Uning ustiga ushbu texnologiyani har bir yangi foydalanuvchiga o'rnatish uchun ham foydalanuvchi ham uzatuvchi liniyasi tomonida ma'lum o'rnatish va tuzatishlar amalga oshirilishi lozim.

3.Ethernet texnologiyasi. Lokal tarmoq texnologiyasining eng keng tarqalgan turi bo'lib, 10 Mbit/s, 100 Mbit/s (Fast Ethernet), 1 Gbit/s hattoki 10 Gbit/s tezlik bilan ulanib turish imkoniyatiga egadir. Ethernet ning yutug'i tarmoq strukturasi tanlanishidagi qulayligidir. Ammo ushbu texnologiya kamchiligi, bu uning ma'lum masofadagina ishlay olishidir. Agarda vitaya para kabelini oladigan bo'lsak, u holda tarmoq masofasi 100 metrdan oshmasligi aniq. Uzaytirish uchun esa har 100 metrda qurilma qo'yishga to'g'ri keladi yoki optik toladan foydalanish zarur. Lekin qo'shni binolarni bir tarmoqda jamlash uchun bu juda qiyin hamda qimmatga tushishi mumkin.

4.Wi-Fi texnologiyasi orqali ma'lumot uzatish. Ushbu texnologiya Wi-Fi (802.11a/b/g/n standartida) ishlab, bino ichida 45 metr uzoqlikda, 100 metr ochiq joyda bemalol katta tezlikda stabil tarmoqqa ulanish imkonini beradi. Lekin katta hududda sifatli tezlikni ta'minlash uchun esa juda ham ko'p Wi-Fi nuqtalari o'rnatilishi lozim bo'ladi. Bu esa texnologiyaga bo'lgan harajatni oshishiga olib keladi. Muammolardan yana biri shuki, abonent, yani foydalanuvchini bir nuqtadan ikkinchi nuqtaga ko'chganida, ma'lumot almashinish hamda ulanishda to'xtovlar vujudga kelishidir.

Yuqorida ko'rib chiqilgan tarmoq texnologiyalari bugungi kunda qo'yilayotgan yuqori o'tkazuvchanlik, ishonchlilik hamda mobillik darajalarini o'zida qizman yohud to'liq aks ettira olgani bilan, narh bo'yicha bugungi operatorlarga to'g'ri kelmaydi. Aynan ushbu muammoni simsiz texnologiyaning yangi avlodi bo'lmish IEEE 802.16 standartli **Wi-MAX (Worldwide Interoperability for Microwave Access)** texnologiyasi hal qilishi mumkin. Wi-MAX texnologiyasini kengaytirish va rivojlantirish maqsadida 1999-yilda Wi-MAX-forumi ochildi va Wi-MAX texnologiyasiga quyidagi talablar qo'yildi:

Katta bo'lmagan hududlarga shu qatori ajratilgan rayonlar, chetki

(chetlashtirilgan) obyektlar Wi-MAX texnologiyasi asosida kommunikatsiya va axborot xizmatlaridan foydalanishga ega bo'lishi, rivojlanayotgan davlatlardagi 1,5 million aholini shu hisob ichidan 100 ta odam ATs larga ulanmagan va yirik shaharlar bilan simli aloqa orqali axborot, ma'lumot almashish sharoitiga ega bo'lmagan aholini kommunikatsiya va axborot xizmatlaridan foydalanish imkoniyatini yaratish. Wi-MAX texnologiyasi orqali yer kurrasidagi aholining teng yarmini kommunikatsiya va axborot xizmatlaridan foydalanishga erishish. Wi-MAX texnologiyasining asosiy maqsadlaridan biri universal simsiz aloqa orqali katta hududlarga ishonchli, sifatli kommunikatsiya va axborot xizmatlaridan foydalanish sharoitini yaratish bo'ldi. Bu orqali Wi-MAX texnologiyasi quyidagi farqlarga ega bo'ldi: Simli aloqa va yo'ldoshli aloqa tizimlaridagi servis-provayderlarga iqtisodiy tomondan effektivligini hal etish va bu orqali faqat potentsial abonentlarga erishibgina qolmay, balki bir joydan foydalanuvchi, (statsionar) abonentlar sonini oshirish bilan birga ularga kommunikatsiya va axborot xizmatlaridan foydalanishni sifatli yo'lga qo'yish.

Simsiz aloqa tizimlari boshqa simli texnologiyalar bilan moslashuvchanligi. Bu orqali simsiz aloqa maydonini kengaytirish (masshtablashtirish) imkoniyati paydo bo'ladi.

O'rnatish, ulanish sodda arxitekturasi bu orqali unga ketadigan xarajatlarni kamaytirilishiga olib keladi. Radioaloqa tizimlarida aloqa qamrab olish hududi uzoqligi muhim hisoblanadi. Hozirgi davrda yuqori maydonlarga mo'ljallangan ko'p simsiz aloqa tarmoqlarida obyekt va tarmoq oralig'ida to'g'ridan-to'g'ri ko'rinishga ega bo'lishi kerak. Wi-MAX texnologiyasi tarkibida IP protokollari bo'lganligi sababli lokal va korporativ tarmoqlarda qo'llanilishi mumkin.

Wi-MAX texnologiyasi har qanday, shu jumladan zich shahar imoratlari sharoitlarida ishlashga, aloqa yuqori sifati va malumotlar uzatish katta tezligini ta'minlashga imkon beradi. Wi-MAX texnologiyasidan simsiz ulanish nuqtalarini tashkil qilib, kompaniyalar bo'limlari o'rtasida tarmoqni tashkil qilib va ilgari ananaviy texnologiyalar sababli imkoni bo'lmagan boshqa masalalarni hal etib "oxirgi nuqta" keng polosali ulanishlarni yaratish uchun foydalanish mumkin.

Wi-MAX texnologiyasi yuqori tezliklarda Internetga ulanishni, Wi-Fi tarmoqlariga qaraganda keng zonalarini qoplash va ishonchlilikni ta'minlashga imkon beradi. Wi-MAX texnologiyasi -bu butun shahar hududida tashkil qilinadigan keng polosali simsiz ulanish tarmog'i, resiverdan baza stantsiyasigacha masofa esa kilometrlar bilan o'lchanadi. Wi-MAX qayd etilgan, mobil va harakatdagi ulanish senariylarini ta'minlaydi. Aloqa bilan ta'minlash masofasi-60 km, ulanish tezligi — 60 Mbit/s gacha.

Wi-MAX texnologiyasi ishlash prinsiplari: Wi-MAX sistemasi ikki asosiy qismdan iborat. Wi-MAX baza stansiyasi (yuqori qavatli binolar yohud maxsus ustinga o'rnatilishi mumkin).

Wi-MAX qabul qilgich (qabul qilgichli antenna, PC card yoki tashqi kartalar form faktori asosida). Baza stansiyasi va qabul qiluvchi abonent antenasi bog'lanishi uchun o'ta yuqori chastota diapazonidan (O'YuCh) foydalaniladi. 2-11 GHz. Bu bog'lanish agar ideal darajada bo'lsa, unda ma'lumot uzatish tezligi 20 Mbit/s gacha bo'ladi. Bu bog'lanish abonent va server orasida to'g'ridan-to'g'ri ko'rinish talab etmaydi. Shuni yodda tutish lozimki, Wi-MAX texnologiyasi nafaqat «oxirgi nuqta» («so'nggi mil»), balki regional tarmoqlar (ofis hamda rayonlar)ni bir biri bilan bog'lashda bimalol qo'llash mumkin. Qo'shni baza stansiyalari bilan O'YCh (o'ta yuqori chastota 10-66 GHz) to'g'ridan-to'g'ri radioaloqa rejimida doimiy bog'lanish o'rnatiladi. Bunday bog'lanishlar 120 Mb/s tezlikda ma'lumot almashish imkonini beradi. Albatta baza stansiyalarining to'g'ridan to'g'ri ko'rish orqaligina bir biri bilan ma'lumot almashinishi bu Wi-MAX ning minus tomoni. Lekin yuqori qavatli binolarda joy olgan baza stansiyalariga nima ham yuqorida bir-biri bilan bog'lanishga to'siq bo'la olmaydi.

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**PAXTANI MAYDA CHIQINDILARDAN TOZALASH JARAYONIDA
KO'P QIRALI QOZIQCHA TAYYORLANGAN QOZIQCHALARNING
PAXTA SIFAT KO'RSATKICHLARIGA TA'SIRINI O'RGANISH**

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Annotatsiya: Maqolada paxtani mayda chiqindilardan tozalash mashinasini ko'p qirrali qoziqchalari bo'lgan barabanlari qoziqchalar qirralar soni, diametr o'zgartirish yordamida paxtani mayda chiqindilardan samarali tozalash effekti keltirilgan. Baraban qoziqlarini bajarish variantlarining paxtaning mayda chiqindidan tozalash ta'siriga ta'siri natijalari berilgan. Ishlab chiqarishga tavsiya etilgan.

Kalit so'zlar: Paxta xom ashyosin, mayda chiqindi, qirrali, qoziqlar, diametr, tozalash ta'siriga ta'siri, silindrsimon qoziq, tozalash effekti, tolasining sifati, kamroq bo'shshadi, samarali tozalash.

**INVESTIGATION OF THE INFLUENCE OF POLYGROUND PILE
PREPARED PILE ON COTTON QUALITY INDICATORS IN THE
PROCESS OF CLEANING COTTON FROM SMALL WASTES**

Annotation: The article presents the effect of cotton cleaning machine from small waste by changing the number of edges and diameter of the drums with multi-faceted piles. The results of the influence of the options for performing drum piles on the effect of cleaning cotton from small waste are given. Recommended for production.

Key words: Cotton raw material, fine waste, edged, piles, diameter, effect on cleaning effect, cylindrical pile, cleaning effect, fiber quality, less loose, effective cleaning.

**ИССЛЕДОВАНИЕ ВЛИЯНИЯ ПОДГОТОВЛЕННОГО ВОРОТА
ПОЛИЗЕМЛЕННОГО ВОРОТА НА ПОКАЗАТЕЛИ КАЧЕСТВА
ХЛОПКА В ПРОЦЕССЕ ОЧИСТКИ ХЛОПКА ОТ МЕЛКИХ ОТХОДОВ**

Аннотация: В статье представлен эффект хлопкоочистительной машины от мелких отходов за счет изменения количества ребер и диаметра барабанов с многогранными ворсами. Приведены результаты влияния вариантов выполнения барабанных свай на эффект очистки хлопка от мелких отходов. Рекомендуется для производства.

Ключевые слова: Хлопковое сырье, мелкие отходы, окантованные, ворс, диаметр, влияние на очищающий эффект, цилиндрический ворс, очищающий эффект, качество волокна, менее рыхлая, эффективная очистка.

Paxta xom ashyosini mayda chiqindidan tozalash bo'yicha mavjud tadqiqotlar tahlili, shuni ko'rsatadiki, nazariy tadqiqotlarimiz tahlili asosida, takomillashtirilgan qoziqli barabanlardan foydalanishni hisobga olgan holda, qoziqning asosiy vazifalarini sanab o'tishimiz mumkin, tozalagichdagi barabanlar.

1. paxta erkin tolasini qabul qilish qoziqlar bilan ushlash;
2. paxtani gavaklarga bo'shatish;
3. paxtani to'r yuzasida sudrab borish;
4. tashiladigan paxtani ta'minlash;
5. paxtani mayda chiqindidan tozalash.

Afsuski, mavjud qoziq barabanlari yuqoridagi vazifalarni to'liq ta'minlay olmaydi.

Quyidagi variantlar uchun texnologik tajribalar o'tkazildi:

6. mavjud qoziq baraban;
7. takomillashtirilgan qoziqlar bilan tavsiya etilgan qoziqli baraban;
- 8.

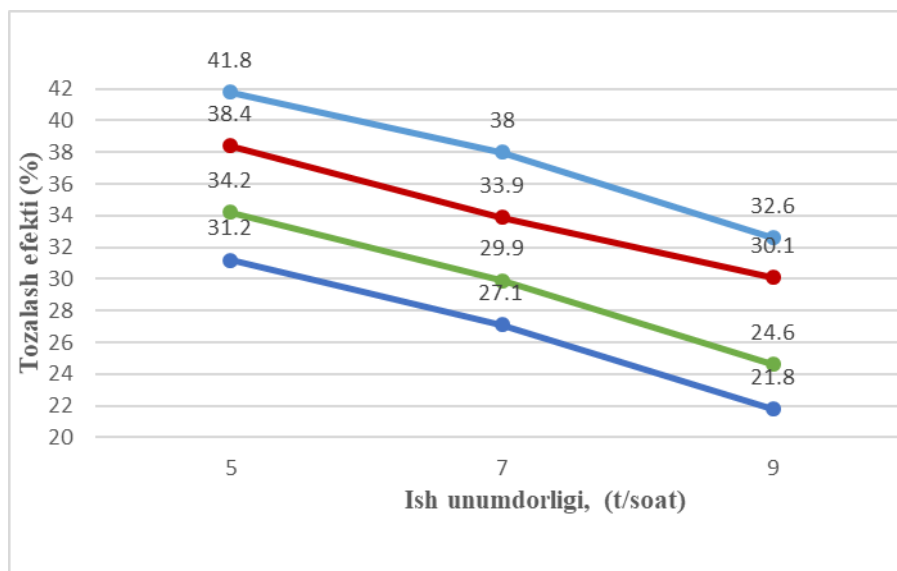
1-zonaga 6 (olti) qirrali qoziqlari diametri d1-8, yordamida paxtani mayda chiqindidan samarali tozalash effektiga ta'siri qoziq diametr kichik bo'lgan uchun yirik chiqindini maydalab aralashtirib yubormaydi;

2-zonaga 7 (etti) qirrali qoziqlar diametri d2-10, yordamida paxtani yirik chiqindidan tozalab 1-zonadan 2-zonadagi qoziqni diametri kattaroq bo'lgani uchun qirralari soni 7 (yetti)ga yetqazildi, sammarali tozalash effektiga ta'siri qoziqni diametr o'rtacha bo'lgan uchun yirik chiqindini maydalab aralashtirib yubormaydi;

3-zonaga 8 (sakkiz) qirrali qoziqlar diametri d3-12, yordamida paxtani yirik chiqindidan tozalab 2-zonadan 3-zona tozalagichning yakuniy qismi bo'lgani uchun qoziqni diametri kattaroq uning qirralari 8 (sakkiz)ga yetqazildi, tozalagichning yakuniy qismi sammarali tozalash effektiga ta'siri qoziqni diametr katta bo'lgan uchun paxtani mayda chiqindidan sammaral tozalash;

6,7,8 yuzli qoziqli barabanlar, qoziqlarning qirralari va diametrlari o'zgartirganda tajribalar olib kelish.

Tajribalar yukarida keltirilgan usullarga muvofiq amalga oshirildi. Texnologik tajribalar natijalari 1- rasmda grafiklar shaklida keltirilgan.

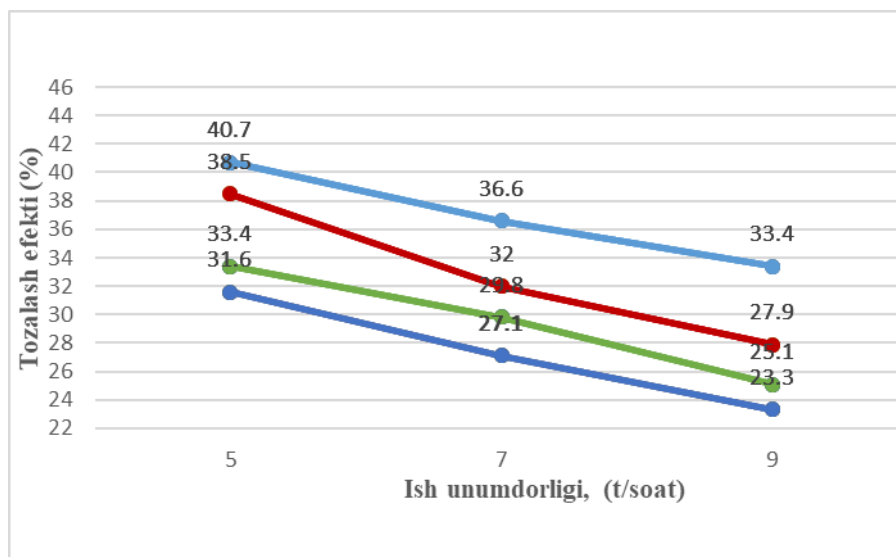


1-rasm. Baraban qoziqlarini bajarish variantlarining paxtaning mayda chiqindidan tozalash ta'siriga ta'siri

- 1 – takomillashtirilgan qoziqli baraban (1 - navli)
- 2 - silindrsimon qoziqli mavjud baraban (1 navli)
- 3 – takomillashtirilgan qoziqli baraban (3 - navli)
- 4 - silindrsimon qoziqli mavjud baraban (3 - navli)

Olingan grafik bog'liqliklar tahlili shuni ko'rsatadiki, mavjud qoziqli barabandan foydalangan holda tozalash samaradorligi 5 t/soat, paxta navi 1 bo'lsa, tozalash effekti 38.4% va 7 t/soat unumdorligi bilan mayda chiqindida paxta tozalash 33.9% gacha kamayadi. Unumdorlikning 9,0 t/soatgacha oshishi bilan tozalash effekti 30.1% gacha kamayadi. Takomillashtirilgan qoziqli barabandan foydalanilganda, 1-navli paxta, 5 t/soat unumdorligi bilan tozalash effekti 41,8% ni tashkil etdi va unumdorlik 9 t / soatgacha ko'tarilganda tozalash effekti 32,6% gacha kamayadi. Ko'rsatkichlarni taqqoslash shuni ko'rsatadiki, takomillashtirilgan qoziqli barabandan foydalanganda tozalash effekti mavjud qoziqli barabanga qaraganda $(3,4 \div 4,2)\%$ ga ko'proq bo'ladi. 3-navli paxta bilan tozalash effekti qiymatlarini tahlil qilish, bu farq $(2,7 \div 3,1)\%$ ga ko'proq bo'ladi. Buning sababi shundaki, takomillashtirilgan qoziqli barabandan foydalanilganda, qoziqlarning paxtaga turli egilish burchaklaridagi ta'siri natijasida paxta qo'shimcha ravishda bo'shatiladi va undan mayda chiqindi chiqadi.

Qoziqli barabanning qirralari sonining tozalash effektiga ta'sirini o'rganish muhimdir. 2-rasmda qoziqli baraban qirralari sonining paxtani mayda chiqindidan tozalash ta'siriga ta'sirini ko'rsatadigan grafiklar ko'rsatilgan. Olingan grafiklar tahlili shuni ko'rsatadiki, unumdorlikning (5,0÷9,0) t/soat oralig'ida ortishi bilan tozalash effekti proporsional ravishda kamayadi.



2-rasm. Paxtaning tozalash ta'sirining tozalagichning ishlashiga o'zgarishi grafiklari

- 1 - qoziqdagi qirralar soni 5 ta qoziq;
- 2 - qoziqdagi qirralar soni 6 ta qoziq;
- 3 - qoziqdagi qirralar soni 7 ta qoziq;
- 4 - qoziqdagi qirralar soni 8 ta qoziq;

Shunday qilib, u mayda chiqindi aralashmalarini ushlaydi va paxta xom ashyosi uchadigan yirik chiqindi bilan birlashadi. Bundan tashqari silindr simon qoziqli baraban paxtani ham mayda, ham yirik chiqindini tozalashda yetarlicha yuqori samaradorlikka ega emas. Olingan paxta tolasining sifati sezilarli darajada kamayadi. Qoziqli barabanlarining qirralari sonini ko'paytirish orqali tozalash effektining qiymati kamayadi. Shunday qilib, 5 qirrali qoziqli barabanlari bilan 5,0 t / soat unumdorlik bilan tozalash effekti 42,1% ni tashkil qiladi va 6 qirrali qoziqlar bilan 39,7%, 7 qirrali qoziqlar bilan u 36,6% gacha kamayadi. Shunga ko'ra, unumdorlikning 7,0 t/soat gacha oshishi bilan tozalash effekti 41,2% ga yetadi. Ya'ni, qoziqli barabanlarining qirralari soni paxta tozalashning mayda chiqindiga ta'sirini sezilarli darajada ta'sir qiladi. Tozalash boshlaganda, paxta xomashyosi kamroq bo'shshadi, shuning uchun birinchi barabanining eng kichik diametrlil bo'laklarini ajratish orqali paxtani samarali bo'shatish muhimdir. Yakuniy tozalash zonasida paxta ko'proq bo'shshadi, shuning uchun uni samarali tashish uchun baraban qoziqlarining diametri eng katta qilib qo'yildi. Shunga ko'ra, paxtani yirik chiqindidan tozalash uchun birinchi zonada qoziqlari 6 (olti) qirrali qilib tayyorlanadi, bu esa paxtani govaklarga bo'shatish imkonini beradi, uchunchi zonada esa 8 (sakkiz) qirrali bo'ladi. Shu bilan birga, paxta gavaklari 8 qirrali qoziqlari bilan o'zaro tasiri paytida ularning tormizlanishi maksimal darajada kamayadi.

Ma'lumki qoziqlarning orasidagi masofaning bir xil bo'lganligi uchun paxtaning yirik chiqindilarini zarba tasirida parchalab mayda chiqindia aralastirib samarali

tozalash pasayishiga olib keladi va shu bilan tozalash effektini kamaytiradi. Shu bilan birga, tavsiya etilgan paxta tozalash texnologiyasi bilan bu qoziqlar diametrining ta'sirini o'rganish muhimdir.

Xulosa

Paxtani mayda chiqindilardan tozalagichni yangi sxemasi ishlab chiqildi. Baraban qoziqlarini bajarish variantlarining paxtaning mayda chiqindidan tozalash ta'siriga ta'siri aniqlandi. Qoziqli barabanning qirralari soni va diametri parametrlari tavsiya etildi.

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PAXTANI QURITISH JARAYONIGA HAVO HARORATI TA'SIRINI

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Annotatsiya

Ushbu maqolada paxta tozalash korxonalarida paxta xom-ashyosini quritish usullari va quritish jarayonida havo haroratini ta'siri yoritib berilgan. Paxta-xomashyosini quritish Paxta tozalash korxonalarini ahamiyat jarayonlaridan biridir.

Kalit so'zlar:

Quritgich, barabanli quritgich, issiqlik generatori, qizdiruvchi qurilma, avtomatlashtirish.

**ВЛИЯНИЕ ТЕМПЕРАТУРЫ ВОЗДУХА НА ПРОЦЕСС СУШКИ
ХЛОПКА**

Аннотация

В данной статье рассмотрены способы сушки хлопкового сырья на хлопкоочистительных предприятиях и влияние температуры воздуха на процесс сушки. Сушка хлопка-сырца-один из важнейших процессов хлопкоочистительных предприятий.

Ключевые слова:

Сушилка, барабанная сушилка, теплогенератор, нагревательное устройство, автоматика.

**INFLUENCE OF AIR TEMPERATURE ON THE DRYING PROCESS OF
COTTON**

Annotation

This article covers the methods of drying cotton raw materials in cotton cleaning enterprises and the effect of air temperature during the drying process. Drying cotton-raw materials is one of the processes that attach importance to cotton cleaning enterprises.

Key words:

Dryer, drum dryer, heat generator, heating device, automation.

Quritgichlarni issiqlik bilan ta'minlagichlari. Barabanli quritgichlarni issiqlik bilan ta'minlash maxsus issiqlik ishlab chiqaruvchi qurilmalar yordamida ishlab chiqiladi.

Paxta tozalash korxonalaridagi barabanli quritgichlarni issiqlik bilan ta'minlash uchun tabiiy gaz bilan ishlaydigan TG-1,5 issiqlik generatorida, tabiiy gaz va suyuq yoqilg'ilarida ishlaydigan TJ-1,5 va ICh-1,9 rusumli issiqlik ishlab chiqaruvchi agregatlardan foydalaniladi.

Issiqlik ishlab chiqaruvchi agregatlarni tanlashda quritish jarayonidagi texnologik va sanitar-gigienik talablariga javob beruvchi yoqilg'ini to'la yondirish xususiyati va sifatli quritish agenti ishlab chiqishni ta'minlash kerak bo'ladi; qizdiruvchi qurilma soni quritish unumdorligiga muvofiqlik (bitta o'txona, bitta quritgichga ega bo'lishi maqsadga muvofiq); issiqlik ishlab chiqaruvchi qurilmalarni ekspluatatsiya qilishda ishonchliligi, xizmat ko'rsatishni qulayligi, uzoq muddatda ta'mirsiz ishlashi, shuningdek issiqlik ishlab chiqaruvchi qurilmalarni avtomatlashtirish kerak bo'ladi.

Issiqlik ishlab chiqaruvchi agregatlar uchun yoqilg'i. Yoqilg'i- bu yonish vaqtida ma'lum miqdorda issiqlik ajratuvchi yonuvchi maxsulotdir. Yoqilg'i qattiq, suyuq va gazsimon bo'lishi mumkin. Kelib chiqishiga ko'ra esa sun'iy yoki tabiiy bo'ladi.

Yoqilg'ining yonish xususiyati 1 kg qattiq, suyuq yoki 1m gazni yonishda ajralib chiqayotgan issiqlik miqdori deb ataladi.

Qizdirish xususiyati 29300 kJ/kg (7000 kkalG'kg) ga era bo'lgan yoqilg'i *shartli yoqilg'i deb ataladi*. Mazkur tushunchadan issiqlik miqdorini aniqlash uchun va texnik xisoblarda yondirish xususiyatini baxolash uchun foydalaniladi. Gazni yoki suyuq yoqilg'ini yonishda ajralib chiqayotgan issiqlik miqdori yoqilg'ining *qizdirish harorati deyiladi*.

Barabanli quritgichlar uchun asosan suyuq yoqilg'i kerosin qo'llanilib, u yongan vaqtda yuqori haroratga erishiladi. Lekin gazli yoqilg'ilardan foydalanish maqsadga muvofiq, chunki uni tozalash, quritish va tashib keltirish oson. Paxta tozalash korxonalarida tabiiy gazdan xam foydalaniladi. Uning yonish issiqligi 35200-38200 kJG'm³ ni tashkil etadi.

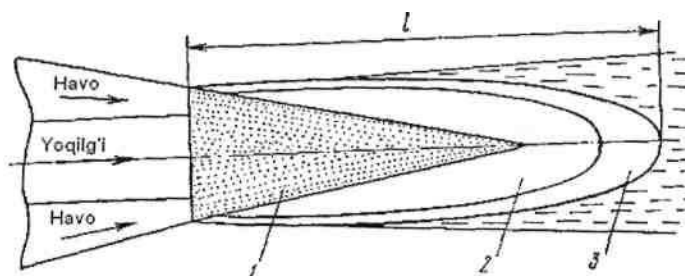
Gaz yoqilg'ilarini qizdirishi anchagina yuqori haroratga era bo'lib, uning foydali ish koeffitsienti ancha yuqori. Quritgichlar uchun bu afzallik muhim o'rin egallaydi, chunki haroratni tushirish uchun yonuvchi maxsulotlarni havo bilan aralashtirishga to'g'ri keladi. Gazli yoqilg'ini o'txonaga uzatish va uni sozlash, yoqish jarayonlari oddiyliigi uni avtomatik ravishda yoqilg'i uzatishni boshqarish imkonini beradi. Gaz yoqilg'ilaridan foydalanishning asosiy kamchiliklaridan biri -bu uning zaxarliligi va aralashmani havo bilan portlash extimolining yuqoriligidir. Lekin texnika xavfsizligiga to'la rioya qilib ishlatilsa yuqoridagi kamchiliklarni bartaraf qilish imkonini beradi.

O'txonadagi yoqilg'ini yonish jarayoni. Yondirish uchun foydalanadigan yoqilg'i aniq kontsentratsiyagacha havoda yaxshilab aralashtiriladi va olingan aralashma alanga olish haroratigacha qizdiriladi. Suyuq yoqilg'i alanganishi uchun uning

yuzasida yonuvchi bug' havoli aralashma hosil qilinib, u fakel bilan yoqiladi. Suyuq yoqilg'ining xususiyati shundan iboratki, bunda uning qaynash harorati xar doim alanganish haroratidan past bo'ladi.

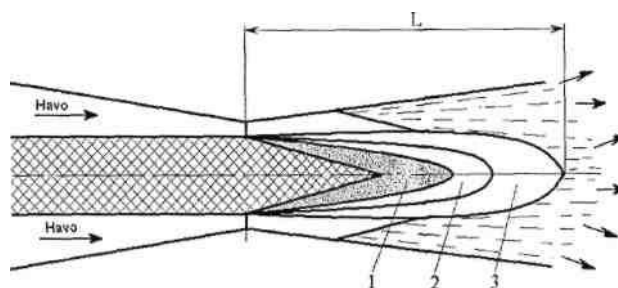
Suyuq yoqilg'ining tomchisi qizib turgan qizdirgichga tushganda qisman bug'lanadi va havo bilan aralashgan holda yuzasida yonayotgan bug' havo aralashmani hosil qiladi, u alanganish haroratigacha qizdirilganda yonib ketadi. Yoqilg'ining keyinchalik yonishi qizib turgan qizdirgichdan kelayotgan issiqligi evaziga uzluksiz bug'lanishni ta'minlaydi. Suyuq va gazli yoqilg'ilarning yonish alangasi 1 va 2-rasmlarda ko'rsatilgan.

U uchta zonaga era: birinchisida sochilgan yoqilg'i havo bilan aralashadi va tarkiblarga bo'linadi, ikkinchisida qizdirishi hosil bo'lib, hosil bo'lgan gaz aralashmasining bug'lanishi va dissotsialanishi sodir bo'ladi; uchinchisida gaz aralashmasi alanganadi.



1-rasm. Suyuq yoqilg'ining alanga olishi.

1- aralashtirish zonasi; 2-qizdirish va bug'lanish zonasi; 3- alanganish zonasi.



2-rasm. Gazli yoqilg'ilarning alanga olishi.

1 -aralashtirish zonasi; 2- qizdirish va bug'lanishi zonasi;
3- alanganish zonasi.

Qisqa alanga hosil qilish uchun qizdiruvchi kamera qaytargich bilan tayyorlanadi, unga havo urilgan sari yaxshi aralashadi va yonishi tezlashadi.

Suyuq yoqilg'ining sochilishi past bosimli forsunkalar orqali amalga oshiriladi. Yuza maydoni sochilmagan xolatda 0,065 m joyga 1 kg kerosinni va sochilgandan so'ng 0,04 mm diametrli tomchiga 175m² yuza maydoniga xuddi shunday miqdoridagi kerosin ketadi.

Sochilishi qancha yupqa bo'lsa, havo va issiqlik bug'i to'qnashish yuza maydoni shunchalik ko'p bo'ladi. Shu bilan bir qatorda sochilish, yonish jarayonini tezlashtiradi.

Havo tashqi xalqa kanali orqali keladi, sochilishni yaxshilagan xolda burama oqim hosil qiladi. Forsunkada maxovik rostlovchisi yordamida amalga oshiriladigan issiqlik uzatish moslamasi mavjud. Past bosimli forsunkada havo o'tishi uchun tirqish kesimini boshqarish mumkin, bu uning doimiy harakat tezligini sakdab qolish imkonini beradi va yoqilg'ini yupqa sochilish bilan ta'minlaydi. Natijada katta forsunkaning yonish samaradorligi ortadi. Xajm birligidagi yoqilg'ini to'liq yonib ketishi uchun zarur bo'lgan havo miqdori muhim sanaladi.

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MAKTABGACHA YOSHDAGI BOLALARDA KITOBXONLIKNI SHAKLLANTIRISH

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Annotatsiya: Maktabgacha yoshdagi bolalarda shakllangan tasavvur ta`limini tarbiyachi hayotiy tajribalariga asoslangan holda bor pretmet, shakllar va boshqalar haqida o`rgatib bolalarning fikrlash doirasini kengaytiradi. Bola ulg`aygan sari atrof-olamga bo`lgan qiziqishi ortib boraveradi. O`z navbatida ularga bo`lgan qiziqishlariga javob izlay boshlaydi. Tarbiyachi kuzatishlar tashkil etib, bolalarda paydo bo`lgan savollarga o`z vaqtida to`g`ri javob berishi shart. Yo`qsa bolalarda bo`lgan qiziqish inqirozga yuz tutadi. Psixologik jihatdan tahlil qilinganda bolaning fikrlash qobiliyati susayadi va aqliy o`shish jarayonida qiyinchiliklar yuzaga keladi.

Kalit so`zlar: tarbiya, tarbiyachi, kuzatish, tahlil qilish, pedagogic metodlar, psixologik tahlil

Psixolog R.Zazzoning fikricha, inson tug`ilgandan to yetuklik davrigacha bo`lgan psixik rivojlanishning asosini o`rtacha 3 yosh (ya`ni bu vaqtda bola juda sersavol bo`ladi) bo`lgan vaqtga to`g`ri keladi. Aql –idroknig bo`lagi. Qadim –qadim zamonlardan o`zbek xalqi o`z bolalarini kuchli, epchil, aqlli qilib tarbiyalashga katta ahamiyat bergan. Hali bolalarga ta`lim-tarbiya beradigan maktablar yo`q bo`lgan bir paytlarda xalq turli o`yinlar o`ylab topgan. Masalan, „Berkinmachoq“, „Chillak“ va shunga o`xshash o`yinlarda ishtirok etuvchi bolalarda chaqqonlik, epchilik kabi jismoniy hislatlar paydo bo`lib borgan. Xo`sh, endi bolalarning zehni charxlash uchun nima qilish kerak edi? Topishmoq, jumboq singari aqliy o`yinlar ana shu savolga javob izlash jarayonida xalq tomonidan yaratilgan.

Rus adibi M.Gorkiyning kitob insoniyatning aqliy kamolot bosqichiga ko`tarilishida naqadar bebaho rol o`ynayotganini uqtirib:”O`zimda mavjud hamma narsalar uchun kitob oldida burchdorman. Men kitoblarni sevaman, ularning har biri menga bir mo`jiza, yozuvchi esa sehrigar bo`lib ko`rinadi. Men kitoblar haqida chuqur hayajonlanishsiz, quvonch va shavq-zavqsiz gapira olmayman. Kitob meni o`zimga tanish bo`lgan hayot ichidan olib o`tadi, ammo hamma vaqt insonda men ilgari sezmagani va bilmagan qandaydir yangi narsani o`rgatadi,” - deganida ming bora haq edi. Chunki kitob insonda ma`naviy va axloqiy poklanishni, imon, insof, diyonat, or-nomusni, mehr-oqibatni va shunga o`xshash chinakam insoniy fazilatlarni shakllanishida yetakchi o`rinni egallaydi. Maktabgacha yoshdagi bolalar tarbiyasida kitobxonlikdan unumli foydalanish bugunning talabi ekanligi muhim. Tarbiyachi tomonidan badiiy asarga muhabbat uyg`otilishi sahnalashtirish, qo`l teatri, qayta

hikoya qildirish metodlari orqali amalga oshirilishi kerakligi tarbiyachidan bilim va mahorat talab qiladi.

Mustaqillik davri o`zbek adabiyoti hayotini o`rganish bilishning badiiy vositasi sifatida muhim ahamiyat kasb etmoqda. Zamondoshlarimizning, jumladan, yosh avlodning ruhiy holatini teran tadbiiq etishga, fikr doirasini kengaytirishga, his va tushunchalarining shakllanib, voqelikka to`g`ri munosabatda bo`lishga da`vat etadi. Mustaqillikning ilk yillaridayoq jamiyat taraqqiyoti, ravnaqi uchun ma`nan va jismonan sog`lom avlod tarbiyalash masalasini kun tartibiga qo`yish muhim qadam bo`ldi. Tarbiyachi-pedagoglar hayotining ma`nosi qobil farzandlar o`stirish, ularni ham jismoniy, ham aqliy, ma`naviy jihatdan mukammal qilib tarbiyalash, kamolini ko`rish, ota –onasi, Vataniga sadoqatli kishilar etib voyaga yetkazilishida muhim omil bo`lishdan iboratdir.

Ayni shu davrda o`zbek bolalar adabiyoti tom ma`nodagi haqiqatga tik boqadigan adabiyotga aylandi, yosh avlodni erksevarlik tuyg`ulari ruhida tarbiyalash ilk qadamlarini qo`ydi. Tarbiyachi va ota –onalar bolaga o`z vaqtida e`tibor berishlari jarayonida kitobga, nutq ravonligiga va tozaligiga diqqatni qaratishlari, ayni paytda, logoped va psixolog yordamida bola nutqining sofligiga erishishlari ham kerak bo`ladi. Bola ulg`aygani sari unga kattalardek munosabatda bo`lish kerak, yangi ma`lumotlar haqida o`rgatish kerak. Yaponiya davlatida mavjud tarbiya tizimida bolaga muntazam ravishda kitob o`qib berish holati katta yoshga yetganda oliy ta`limga a`lo natijalar bilan kirishida katta ahamiyatga egaligini ta`kidlashadi. Hatto chaqaloqlik davrida ham bolaning oldida kitob ushlab ertaklar o`qib berish bola ongida so`zga nisbatan mehr uyg`otadi.

Bolaga to`g`ri tarbiya yo`lini ko`rsatishda o`yinning ham ahamiyati katta. Tarbiya yoshidagi bolalar uchun mo`ljallangan o`yin turlari o`z navbatida ikki guruhga bo`linadi: ta`limiy va didaktik o`yinlar. Ta`limiy o`yinlar - o`z ma`nosidan ko`rinib turganidek, bolaga ta`lim berishdan iborat. Masalan, „Kattasini top“ o`yini. Bu o`yinda turlicha kattalikdagi shakllar mavjud bo`lib, bola shakllarni ajratishni, katta-kichik pretmetlarni farqlashni o`rganadi. Didaktik o`yin - bunda asosiy e`tibor aqlni rivojlantirishga qaratiladi. Bunga misol sifatida „Sujetli rolli o`yinlar“ ni aytish mumkin. Bu o`yin bolaga yaxshi-yomonni ajratishni, kattalarga bo`lgan hurmatni, hayvonlarga bo`lgan muhabbatni o`rgatadi.

Chukovskiyning ta`kidlashicha, bola o`zining dunyosini, o`zining mantiqini yaratadi, agar kim u bilan muloqotga kirishmoqchi bo`lsa, uning olamiga kirishi hamda u yerda yashashi lozim. Bolalar o`ziga xos devonalar, chunki aniq va mustahkam voqea-hodisalar ular uchun sho`x, quvnoq va o`tuvchan. Yo`q, bolalar aqlsiz emas, shunchaki ular yordamga muhtojdirlar. Ular o`z vaqtida bizning yordamimizsiz ham o`zlarini davolab oladi, gap shundaki, bu aqlsizlikning ichiga kirib olishda. Bu antiqa, hayratlanarli, go`zal, ummuman boshqa dunyoga kirib yashashdan hamda bolalar bilan

ularning tilida, o`sha boshqa olam tilida so`zlashishda, ularning qiyofalarini o`zida qabul qilishda hamda o`ziga xos mantiqini tushunishdadir.

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**FRUIT AND VEGETABLE GROWING IN BULUNG'UR DISTRICT
ABOUT CLUSTERS IN THE DIRECTION
DIRECTORY**

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A total of 2 fruit and vegetable farms, 1 grain farm, 1 potato farm and 5 grape farms have been established and are operating in Bulung'ur district of Samarkand region.

The fruit and vegetable agrocluster of "BULUNG'UR SANDVIK" LLC was formalized as a cluster by the decision of the district governor No. 1738-Q dated August 8, 2018, including a total of 346 hectares from the agrofirms of Uzbekistan, Mingchinor, Ulug'bek, A. Makhsumov and Beshkuvi in the district, of which 342 are used. 33 hectares of land area has been allocated for vegetable production based on a long-term lease agreement.

Also, 370 farms and their area of 1500.0 hectares and 342.33 hectares of the cluster itself were attached to the fruit and vegetable agro-cluster for growing vegetable products.

In the sale of fruit and vegetable products grown and processed by the "BULUNG'UR-SANDVIK" fruit and vegetable agrocluster, the enterprise exported 584 tons of dried vegetable products worth 2000.0 thousand US dollars during January-April 2022.

Infrastructural facilities and machinery and aggregates of the "BULUNG'UR-SANDVIK" cluster enterprise, the existing processing capacity is 40,000 tons, a normal warehouse is 200 tons, and the enterprise has 20 cargo vehicles and 10 different types of agricultural machinery.

For the harvest of 2022, the company allocated seeds and seedlings to farms for the cultivation of products in the amount of 2515.0 million soums, and payments to residents and other business entities that have not signed a contract will be made at the time of product purchase.

Fruit and vegetable agrocluster of "SAMARQAND GARDEN PLAST" LLC was formalized as a cluster by the decision of the district governor No. 1086-Q dated August 5, 2018, and a total of 1314.0 hectares of dry and unused land from the agrofirms "Dostlik" and "Bulung'ur" in the district were allocated to it for a long term. according to the lease agreement, it is allocated for horticultural activities.

As of October 1, 2021, an intensive orchard has been established on 588 hectares (327 ha of cherry, 195 ha of peach, 66 ha of chereshnya), and sufficient seedlings have been

prepared in nurseries for the establishment of an intensive orchard on an area of 400 hectares included in the 2022 project.

200 hectares of land area of 40 farms in the district was allocated based on the requirements of the production capacity of the fruit and vegetable agrocluster of "SAMARQAND GARDEN PLAST" LLC.

During January-April 2022, the company exported 103.4 tons of fruit and vegetables worth 275.4 thousand US dollars in the sale of fruit and vegetable products grown and processed by the fruit and vegetable agrocluster of "SAMARQAND GARDEN PLAST" LLC.

The infrastructure facilities, machinery and aggregates of fruit and vegetable agrocluster LLC "SAMARQAND GARDEN PLAST" have a processing capacity of 10,500 tons, a 4,500-ton refrigerated warehouse, and the enterprise has 22 different types of agricultural machinery. For the harvest of 2022, the seedlings were distributed to the farms with which the company signed a contract in the amount of 74.0 million soums in advance, and payments to the population and other business entities that did not sign the contract will be made at the time of product purchase.

The cluster of "PET AGRO OIL" LLC in the direction of grain production was established in the district by the decision of the district governor No. 125-7-93-Q/21 dated November 2, 2021, and futures for 15,239 tons of grain on an area of 6,290 hectares with 764 grain-growing farms in the district. contract was concluded. The cluster has provided mineral fertilizers and fuel lubricants as an advance to grain farms for the 2022 grain harvest.

In order to ensure the implementation of the decision No. 4704 of the President of the Republic of Uzbekistan dated May 6, 2020 "On measures to expand potato cultivation and further development of seed production in the Republic" by the decision of the district governor No. 327 dated May 25, 2020, the potato cluster "ZARAFSHON GREN AGRO" LLC was established, 2 new jobs were created in the cluster enterprise. 61 farms with 435 hectares of land were attached to the cluster enterprise. For the harvest of 2022, the cluster planted potato seeds on an area of 822 hectares, as a repeat crop, it is planned to plant elite and R-1 seed potatoes on an area of 400 hectares.

In 2022, the construction of a 300-ton refrigerated warehouse was planned by the cluster under the investment project, the project cost is 1200 million. soums, of which 400 mln. own funds, 800 mln. Soums is planned to be implemented at the expense of a bank loan, equipment will be brought from China, as a result, 5 new jobs will be created.

In order to develop viticulture in the district, to attract advanced technologies to the field, to organize grape cultivation in large plantations, according to the decision of the district governor No. 22-7-93-Q/21 dated July 21, 2021, the establishment of clusters in the field of viticulture was established, based on this, 5 Clusters were established in

the field of viticulture. Of these, 593 hectares of land of 52 farms were transferred to the "TURON GAFFAROV" Agro cluster, which was registered with state services on January 11, 2022,

On January 11, 2022, 480 hectares of land of 74 farms were transferred to the "OLQARTEPA" Agro cluster, which was registered with state services, and 1000 hectares of land of 57 farms were transferred to "KELAJAK BUNYODKORI" Agro cluster, which was registered with state services on January 11, 2022. On January 21, 2022, the state 437 hectares of land area of 37 farms were attached to the "BULUNGUR AGRO GROUP" LLC cluster, which was registered with state services, and 455 hectares of land area of 44 farms were attached to "SHOHJAKHON JSD" Agro cluster, which was registered with state services on January 12, 2022.

НАМАНГАН ВИЛОЯТИДАГИ ХЎЖА АМИН МАҚБАРАСИ

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Ушбу мақолада бугунги кундаги мавжуд тарихий обидаларни ҳолатини янгидан ўрганиш, уларни жойлашган ўринларини таҳлил қилиш, бино ва иншоотларни қайтадан техник рўйхатдан ўтказиш, тарихий маълумотлар асосида уларни мазмун-моҳиятини бойитиш бўйича маълумотлар баён қилинган. Шунингдек, мақолада Наманган вилоятидаги тарихий обидаларни замонавий қиёфага келтириш асосида халқаро туризмни ривожлантириш бўйича муҳим масалаларга ҳам эътибор қаратилган

Калит сўзлар: *маданий ёдгорликлар, маданий мерос объектлари, замонавий шаҳарсозлик, зиёратгоҳлар, масжидлар, гумбаз*

Кириш: Бугунги кунда дунёда тарихий меъморий ёдгорликларни сақлаш ва улардан фойдаланишга оид самарадор йўналиш бўйича “ЮНЕСКО ташаббуси билан 413 та қадимий шаҳарлар ҳудудидаги Бутунжаҳон моддий маданий мерос ёдгорликлари рўйхатига киритилган 1007 та объектлардан 779 таси меъморий ёдгорликлар”[1] эканлиги диққатга сазоводир. БМТ, ЮНЕСКО, ICOMOS каби нуфузли ташкилотлар томонидан маданий меросни сақлаш ва уларни келгуси авлодга етказишга доир “Бутун жаҳон маданий ва табиий меросини ҳимоя қилиш тўғрисидаги конвенция (1972); Тарихий шаҳарларни ҳимоя қилиш ҳақидаги халқаро хартия (Вашингтон хартияси, 1987); Обидаларни, иншоотлар гуруҳини ва диққатга сазовор жойларни рўйхатга олишнинг асосий қонун-қоидалари (1996); Таҳлил қилиш, консервация ва меъморий меросларнинг тузилишини қайта тиклашнинг асосий қонун-қоидалари (2003); Маданий мерос ҳисобланган - тузилма, объект вайроналарининг атрофини сақлаб қолиш тўғрисидаги Сиан декларацияси (2005)”[2] каби халқаро ҳужжатларнинг мунтазам равишда қабул қилиниши бу соҳада нақадар муҳим аҳамият касб этади.

Дунёда сўнгги йилларда архитектура меросини ҳар томонлама ўрганиш ва сақлаш, уларнинг замонавий архитектура амалиётидаги алоҳида ўрни, туризм инфраструктурасини такомиллаштириш каби йўналишларда бир қатор илмий изланишлар олиб борилмоқда. Шунингдек, ҳозирда тарихий ёдгорликларни сифатли таъмирлаш ва тиклаш, боғ-парк архитектурасини яратиш ва тарихий ёдгорликларнинг график реконструкциясини бажариш, қадимги шаҳарларнинг тарихий кўринишини сақлаш юзасидан илмий тадқиқотлар олиб бориш долзарб аҳамият касб этади.

Асосий қисм: “Ўзбек халқининг маданий мероси минг йиллар давомида яратилган. Унда турли даврларда Ўзбекистон ҳудудида эътиқод қилинган зардуштийлик, буддизм, ислом ва бошқа динлар яратган маънавий–ахлоқий кадриятлар мужассамлашган. Унда бутун дунёга машхур Имом Ал-Бухорий, Ат-Термизий, Фаробий, Беруний, Ибн Сино, Аҳмад Яссавий, Бахоуддин Нақшбандий, Улуғбек, Алишер Навоий, Машраб каби буюк мутафаккирларнинг билим ва салоҳияти гавдаланган. Бу меросда Амир Темур ва Бобурларнинг давлатчилик ва сиёсий қурилиш тажрибалари, буюк меъморчилик ёдгорликлари, тасвирий санъат, мусиқа, амалий санъат асарлари, халқ урф-одатлари ва анъаналари уйғунлашган.

Ҳозирда мамлакатимизда моддий маданий мерос объектлари сони 7500 га яқин. Уларнинг барчаси давлат муҳофазасига олинган. Республикаимизнинг барча ҳудудларида маданий мерос ёдгорликлари жуда кўпчиликини ташкил этади.

Айни пайтда Наманган вилоятида ҳам туризм соҳасини ривожлантириш борасида изчил чора-тадбирлар амалга оширилмоқда. Вилоятда 274 та маданий мерос объекти мавжуд бўлиб, шундан 98 таси архитектура ёдгорлиги, 152 таси археология ёдгорлиги, 8 таси монументал санъат асарлари, 16 таси диққатга сазовор жойлар, зиёратгоҳлардир.

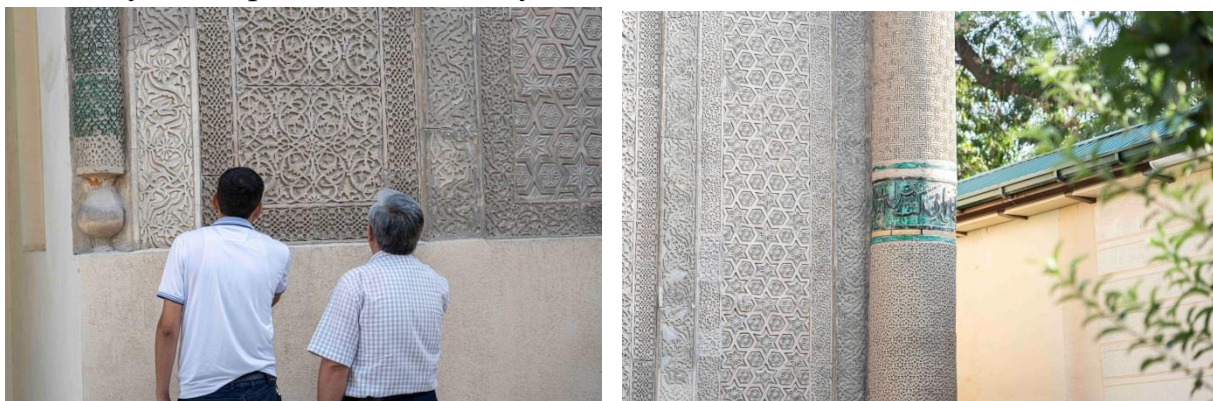
Наманганда яқин келажакда туризм соҳасини такомиллаштириш борасида барча маданий мерос объектларини рўйхатдан ўтказиш, таъмирлаш ишларини олиб бориш билан биргаликда замонавий санитар-гигиеник шахобчалар барпо этиш, туристик объектларга олиб борувчи йўл кўрсаткич белгиларини ўрнатиш, барча қулайликларга эга меҳмонхоналар қуриш бўйича кенг қамровли ишларни амалга ошириш режалаштирилган.

Хўжамнинг мақбараси - Наманган шаҳрида сақланиб қолган ноёб ёдгорликлар қаторида Кўзагарлик кўчасидаги «Хожамнинг қабри» мақбарасидир. Ушбу мақбара ҳақида И.Е.Плетновнинг 1968 йилги «Ўзбекистон» нашриётида «Хўжа Амин қабри» номи билан чоп этилган рисоласи бор. Унда мақбарани «Хожа Амин қабри» деб нотўғри талқин қилинади ва мақбара қурилишига оид деярли ҳеч қандай маълумот берилмайди, асосан мақбарага таъриф бериш билан кифояланилади.

Сўнги вақтлардаги изланишлар натижасида мақбара, масжид ва мадраса тарихига доир баъзи маълумотлар топилди. Булар кекса кишилар билан сужбатлашганда ёзиб олинган оғзаки эсдаликлардан иборат бўлиб, ёзма манбалар етарли бўлмагани учун, Ушбу эсдаликларнинг ҳақиқатга яқин бўлганларидан бирини мисол келтирамиз. Айтишларича, деб сўз бошланади, адабиётшунос Аҳмад Убайдуллохнинг «Наманган ҳақиқати» рўзномасидаги 2006 йил 22 ноябрь сонидаги «ноёб ёдгорлик» мақоласида. XVI асрнинг охирида

Шайхонтохур (аслида тўлиқ исми Шайх Хованди Тохур) авлодидан Иминхўжа Парранда деган киши Тошкентдан Наманганга келиб, ўрнашиб қолади. Бу ерда унга ихлос қилувчи кишилар кун сайин кўпайиб боради. Натижада тез кунда катта ер - сув, бехисоб бойликка эга бўлади. Иминхўжа парранданинг Холдорхўжа деган ўғли бўлиб, Холдорхўжадан икки ўғил қолади. Каттаси Ёқубхўжа қашқарга кетади, кичиги Иброхимхўжа эса Наманганда қолади. Иброхимхўжанинг қизи бўлиб, уни Мирхўжа Эшон деган кишига турмушга узатади. Иброхимхўжа вафотидан кейин ўғли бўлмаганлиги учун барча бойлиги куёви Мирхўжа эшонга қолади. Мирхўжа эшон мерос қолган бойликлар эвазига қайнотаси Иброхимхўжа хотираси учун тахминан XVII аср охири, XVIII аср бошларида Иброхимхўжа қабрини олди тарафига мақбара қурилишини бошлаб юборади. Қурилишга ўша даврдаги мохир меъморлар жалб қилиниб, мақбара жуда нозик дид билан қуриб битказилади.

Мақбара биносини безашда XIV аср бошида Ўрта Осиё меъморчилиқ бисотидан унутилиб кетган ўйма сопол (терракота)дан фойдаланилган. Бу санъат Ўрта Осиё меъморчилигида бир неча юз йиллар йўқолиб кетиб, ҳеч қутилмаганда Намангандаги Хўжамнинг қабри мақбарасини бунёд этишда ажойиб ўйма тарзида қайтадан дунёга келади.



Расм:

Бинонинг асосий чехраси, пештоқи, равоқсимон, аркли ва бурчаклари кичик минорали қилиб ишланган. Пештоқ энли ва энсиз белбоғлар билан безатилган. Белбоғларга ўсимликлар тасвири ҳамда штрихлар солинган. Энли белбоғлар сопол парчинлар билан безатилган бўлса, энсиз белбоғлар ганжигга икки қатламли ўйма нақш солиб ишланган. Энсиз белбоғлардаги ўйма нақшнинг замини илгари қизил, рангга бўялгани ҳамда тиниқ оқ нақшнинг фони бўлиб хазмат қилганини таъкидламоқ лозим. Эндиликда ҳар иккала қатламнинг ҳам ранги бир хил бўлиб кўринади ва тусига кўра, ўйма сопол парчасидан фарқ қилмайди.

Пештоқ қопламаси рангли сиркор кошинлар билан безатилган. Унинг атрофларидаги бир - бирига монанд ишланган оч яшил ва тўқ сариқ ғиштли фасад - чехранинг мураккаб, жимжимадор фониди яққол ажралиб туради.

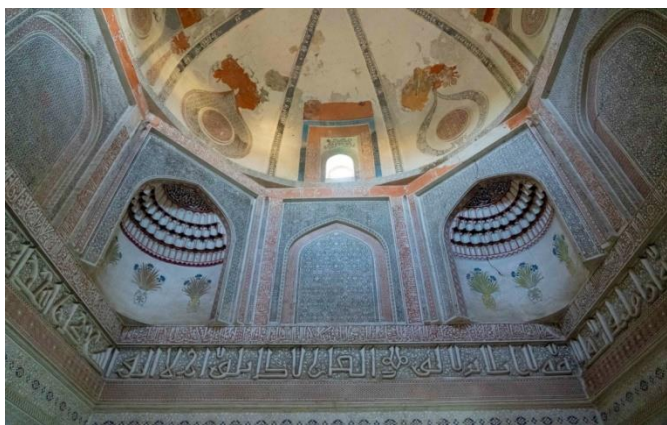
Аркнинг учбурчак танчасига барги бештадан бўлган катта - катта гуллар нақшланган. Аркнинг таянчларига яшил тусли кошинлар билан қопланган устунчалар ўрнатилган. Учта ҳалқа кўринишда ўйиб ишланган тўқ сариқ тусли конуссимон тоқи - равоқ ўзига киши эътиборини жалб қилади. Бурчаклардаги гулдасталарнинг қўйи қисми тўқ сариқ ва яшил сиркор нақш билан қопланган.



Мақбаранинг ичкари қисми ажойиб меъморчилик санъати билан безатилган. Панелнинг юқорисидан харфлар билан ёзилган ва ўсимликлар тасвири солинган беама белбоғ ўтади.

Бу деворлар асосидаги тортилган чизиққа ўхшайди. Иккинчи ана шундай белбоғ деворнинг арк, гумбаз атрофига чирой бериб туради.

Шарқ меъморлари қадимдан биноларни безашда араб ёзувларидан фойдаланишган. Жумладан, «Хўжамнинг қабри» мақбарасининг ташқари ва ичкари қисмлари ҳам араб ёзуви хати кўфий, хати райхоний, хати насталиқ турлари билан жимжимадор қилиб безатилган. Айниқса, меъмор ўз диққат - эътиборини мақбаранинг ички деворларига ҳамда ҳалқа каби айлантириб ёзилган оятларга берган. Мазкур ёзувлар орасида ёдгорликнинг қурилиш тарихига оид бўлган кўп жойлари тушиб кетган, бироқ бинони қурган устанинг номи сақланиб қолган.



Мақбарага кираверишдаги ўймакор эшик устига ва мақбара ичидаги гўрхонага чиқиш эшиги устида «Амалии уста Муҳаммад Иброҳим ибн Абдурахим», яъни Абдурахим ўғли уста Муҳаммад Иброҳим ишлади, деб ёзиб қўйилган. Уста Муҳаммад Иброҳим мақбаранинг шарқ томонидаги эшик устига

*Хат давр варақи дахр бинобад сад сол,
Бечора нависанда ки дар хок равад,*

Яъни, «Бу ёзилган хатлар олам саҳифасида юз йиллар қолади, бечора ёзувчи эса тупроқ бўлиб кетади», деган сўзларни ёзиб қолдирган.

Мақбаранинг ғарб томонидаги хўжалар, қабристони эшиги устига турли диний сўзлар ёзилган. Мақбарадаги мавжуд ёзувлар уста Муҳаммад Иброҳимнинг мохир хаттот эканлигини ҳам тасдиқлайди. Уста маҳаллий меъморчилик мактаби анъаналарининг ўз даври даражасидан бирмунча юқори турадиган нодир монументал, меъморчилигининг намунасини яратишга муваффақ бўлган.

Хулоса. Наманган шаҳри ўзининг бой тарихий меъморий обидаларига эга. Шулардан Хўжамнинг мақбараси замонавий функцияларга мослаштириш, уларни сақлаш масалалари ҳақида лойиҳавий таклиф бериш бугуннинг долзарб вазифаларидандир. Чунки, бу ёдгорлик Наманган тарихини, маданиятини, меъморий анъаналарини ўзида акс эттирган ноёб объектлардир.

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USE OF INNOVATIVE METHODS IN DEVELOPING PROFESSIONAL SKILLS OF STUDENTS

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ABSTRACT: Vocational training is a complex and multifaceted process, based on which the opportunities for successful work in a particular profession, personal orientation, professional knowledge, skills, qualifications and professional qualities, work experience are integrated. appears in the

The effectiveness of innovative methods and technologies in its formation today is great. Students' knowledge and skills are developed through the use of innovative methods in the educational process in order to improve the professional skills of students. In this article, I want to highlight the role of innovative methods and the importance of modern technology in professional development.

KEYWORDS: innovative methods, information technology, professional skills, educational effectiveness, pedagogy.

The Cabinet of Ministers of the Republic of Uzbekistan adopted a resolution "On measures for further development of computerization and introduction of information and communication technologies" in order to improve the professional skills of students in the educational process and to improve the skills and qualifications of teachers. Adoption of Resolutions No. 200 of June 6, 2002, No. 25 of February 16, 2006 "On Further Improving the System of Retraining and Advanced Training of Teachers". The use of innovative information technologies in the educational process will increase the effectiveness of teaching methods, change the work of teachers, improve their pedagogical skills, improve the pedagogical system. effective effect on structural change. In the professional skills of a teacher based on modern information technologies;

- simplifies the complex process of developing the technological basis of education at the level of modern requirements;
- special skills and competencies are formed to organize the teaching process on the basis of modern innovative technical means;
- Due to the openness of distance learning courses, there is a need for quality control and quality control of training materials;
- students' independent activity in the educational process improves, the effectiveness of the teaching process passes from teacher to student;
- Increases the organization and personal participation of students in the organization of the educational process;

- The use of modern communication technologies provides feedback to each student in the pedagogical activity of the teacher.

Today, the teacher must take into account the capabilities and needs of students in the educational process. The system of education and upbringing promoted by the teacher should be person-centered, that is, differentiated, taking into account the different characteristics and qualities of the individual. Any system of education and upbringing is formed and developed in a certain social, scientific, technical, economic, cultural and, finally, political environment. Socio-economic factors are the top priorities of this environment. Scientific and technological progress, cultural and political environment can develop or slow down socio-economic changes. The education system serves to fulfill the main tasks of socio-economic and cultural development of the society, as secondary schools and higher education institutions prepare people for economic, cultural and political activities. That is why the teacher of educational institutions plays an important role as a cornerstone of the educational process.

It is recognized by pedagogical scientists that one of the most important indicators of the use of such technologies in the educational process is the improvement of the ability to use different methods in modern educational institutions on the basis of innovative technologies. In particular, U.Sh. Begimkulov stressed the need to create a computer information environment in educational institutions and a database capable of meeting modern requirements, the development of hypertext and multimedia, imitation in teaching, communication systems, input, systematization, storage of necessary information using computer technology and suggests creating a database that is recommended for use. Therefore, in order to develop the knowledge, skills and competencies of teachers using innovative information technologies, as well as to improve the pedagogical skills of teachers in accordance with modern requirements, initiates the organization of distance learning courses.

When using innovative technologies, the teacher can perform a number of tasks depending on its content. Innovative technology-based methods with active use perform the following main didactic functions:

- develops students' interest in science through the use of multimedia technology;
- At the same time, due to the interactivity of education, students' thinking skills are activated and the effectiveness of learning materials is increased;
- is important in that it allows you to model and visualize processes that are difficult or complex to demonstrate in real situations;
- Assimilation of learning materials are effective not only according to the level, but also according to the level of logical perception achieved by students;
- Provides the opportunity to organize distance learning not only for students who are learning or online education, but also for students who miss classes without a reason;

- Provides students with the opportunity to carry out specific research by searching for, finding, and answering problematic material through independent research;
- Provides opportunities for students to master a new topic, solve examples, essays, essays, self-study of educational materials, selection and analysis of information and data.

The clear orientation of a student's professional skills is determined by his / her worldview, interest in the pedagogical profession, and ability to engage in it. Researchers (N.V. Kuzmina, G.A. Murray, A. Adiner, N.A. Aminov, etc.) study the motives of students' desire to improve their professional skills and divide them into three types:

- Motives indicating the existence of compelling reasons;
- Motives based on interest in the study of certain disciplines;
- Motives that reflect the need to strive to communicate with people. If these aspects are analyzed, the validity of career choice motives is not only one of the important subjective factors in reaching the peak of pedagogical activity, but also has a significant impact on the overall state of vocational training.

In the process of preparing future professionals for professional activity, it is important that they have the personal, spiritual, moral, psychological and physical qualities necessary for future professional activity and their development indicators. After all, any professional activity requires a person to possess certain qualities.

In describing their professional activities, most scholars refer to N.V. Kuzmina and Z.F. They rely on Yesarova's research. They distinguish the following components in the professional training of educators:

1. Knowledge (possessing gnostic ability).
2. Constructiveness (ability to design).
3. Communicativeness.
4. Organization.

Cognition (Greek —gnosis - —knowledge) refers to the student's field of knowledge, which includes in-depth knowledge of the subject, communication, psychological characteristics of the specialist, knowledge of self-awareness. Constructiveness (the ability to design) - this means a separate design of the activities of the specialist, taking into account the personal activities and educational goals.

Communicativeness is a special feature of a specialist, which involves interacting with people and colleagues. In this case, the effectiveness of professional activity depends on its communication. Communication should be didactic.

Organization is the ability of a specialist to organize his / her personal activity, as well as methodologically correct activity, which is one of the important conditions for success in the educational process.

The student's organizational skills are manifested, firstly, in the ability to organize the team, in which to unite the team, and secondly, in the ability to properly organize their personal work. It should be noted that these qualities, which should be reflected in the professional image of the specialist, are important not only in their interactions with colleagues, but also in their relationships with others.

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ЎЗБЕКИСТОНДА КАСБГА ЙЎНАЛТИРИШ МАРКАЗЛАРНИНГ ИННОВАТЦИОН АРХИТЕКТУРАСИНИ ШАКЛЛАНТИРИШ

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Аннотация: Мақолада касбга йўналтириш илмий марказларни шакллантиришни ривожлантириш масалалари, шужумладан, уларнинг комплекс режаслаштириш ечимлари кўриб чиқилган.

Таянч сўзлар: архитектура, инновация, марказ, ижодкор шахс, касб, ҳунар, истиқбол.

Жадаллашган давр талаби эса, етук билимли малакага эга касб эгаларини тайёрлаш бўлиб қолмоқда. етук билим ҳамда кўникмага эга кадрлар, ўз касбини ривожини таъминлаши, мамлакатдаги ишлаб чиқариш ҳамда меҳнат бозорига замонавий тажрибаларни олиб кириш орқали рақобатга дош бериши мумкин.

Шу боис, сўнгги йилларда Республикада ишсиз аҳолини халқаро замон талабидан келиб чиққан ҳолда касб-ҳунарга ўқитиш ва тайёрлашга алоҳида эътибор бериб келинмоқда. Хозирги замон талабида ташкил этилган касб-ҳунар мактаблари, мономарказлар, коллеж ва техникумларда ҳудудлар эҳтиёжидан келиб чиққан ҳолда ўқишлар ташкил этилиб, аҳоли қизиққан соҳанинг мукамал мутахассиси бўлиб етишмоқда.

Аммо, ўтказилган ўрганиш ва таҳлиллар натижаси шуни кўрсатмоқдаки, бугун ташкил этилган 330 та касб-ҳунар мактаби, 173 та коллеж ва 207 та техникум кутилган натижа ва самара билан фаолият кўрсатмаяпти. Жумладан, улардаги имкониятнинг атиги 40-50 фоиздан фойдаланилмоқда. “Ишга марҳамат” мономарказлари бор-йўғи 10 фоиз ишсизларни қамраб олган.

Бундай салбий ҳолат эса, эртамиз эгалари бўлган ёшларимиз тақдирига бефарқ бўлмаган ҳар бир раҳбар ва масъулни ўйлантириши керак. Боиси, биргина 2022 йилнинг ўзида жами 16 миллиард долларлик 9 мингдан зиёд йирик ва ўрта лойиҳалар амалга оширилмоқда. Уларга 300 мингга яқин малакали ишчилар керак бўлади.

Касбга ўргатиш марказининг сиғими, яъни қанча ўқувчига мўлжалланиши синфларнинг 15 иштирокчидан (келгусида 20 иштирокчидан кўп бўлмаган) ташкил топишидан ва ўқув муддатини 11 йилга белгиланишидан келиб чиққан ҳолда аниқланади, бунда 1-11 синфларнинг сони мактаб ёшидаги болаларнинг қамраб олишни ҳисобга олган ҳолда

(посёлка ёки шаҳар микроараёни аҳолиси ёш бўйича таркибининг асосий жihatларини ҳисобга олган ҳолда) белгиланади. Касбга ўргатиш марказнинг максимал сифими 40 та гуруҳдан ошмаслиги лозим.

Касбга йўналтириш марказ тармоқларини ҳисоблаш посёлкалар, шаҳарлар, туманлар аҳолисининг демографик (ёш бўйича) структура (тузилма)сига мувофиқ равишда мактаб ёшидаги болаларнинг сони ҳисобга олинган ҳолда амалга оширилади.

Касбга йўналтириш марказлар асосий хоналарининг ориентацияси синифлар ва кабинетларнинг жанубий ва жанубий-шарқий ориентациясини кўзда тутиши тавсия этилади, тасвирий санъат ва чизмачилик, информатика кабинетлари учун шимолий ориентация маъқул.

Шимолий ориентацияни 1-4 синфлар ва био лабораториясидан ташқари, бошқа ўқув кабинетлари ва лабораториялар учун қўллаш мумкин.

Деразаларнинг 75-285⁰ азимутга қаратилган ориентациясида исиб кетишнинг олдини олиш мақсадида ва ўқув жойдарининг тўғри инсоляциясини тиклаш учун қуёшдан ҳимоялаш кўзда тутилиши лозим. Қуёшдан ҳимоя қурилмаларини танлаш маҳаллий шаройитлар бўйича лойиҳага асосан белгиланади.

Ошхона иссиқ цехлари учун шимолий ориентация маъқул. Касбга йўналтириш марказлари кам қаватлиларини (бир икки қаватли) учун қуёшдан ҳимояланишни кўкаламзорлаштириш орқали таминлаш мумкин бундай ҳолатларда дарахтларни бинодан камида 10 м узоқликда жойлаштириш талаб этилади.

Ҳажмий-режавий ечимларга ва асосий хоналарга қўйиладиган талаблар. Касбга йўналтириш марказлар биноларидаги хоналарнинг таркиби ва майдони функционал-ташкилий ва педагогик талаблардан келиб чиққан ҳолда ўқув режасидаги ўқув хоналарнинг соатбай юкмасини ҳисобга олган ҳолда ҳисоблашлар орқали аниқланади.

Касбга йўналтириш хоналари. Касбга йўналтириш ва меҳнатга ўргатиш хоналарининг майдони *1-жадвал* га мувофиқ қабул қилиниши тавсия этилади. Касбга ва меҳнатга ўргатиш хоналарини қоидага кўра, шовқин чиқарувчи манбалар бўлганлиги учун қайта ишланадиган комбинациялашган устахоналардан ташқарига бевосита ёки синфлар, ўқув хоналари валабораториялардан чиқиш эшиклари бўлмаган, устахона туташган йўлак (коридор) орқали ташқарига чиқиладиган кўшимча чиқиш жойлари бўлиши шарт.

Мажлис залидаги ўринлар сони ҳисобланган сифими бўйича 20-25%, кўргазмалар майдони 50% ни кўзда тутиши керак.

Ётоқхонада дам олиш ва дарс тайёрлаш хоналарининг майдонини яшовчилар умумий сонинг 50%и учун бир нафар иштирокчига 1,25м² тўғри келишини ҳисоблаб, қабул қилиш тавсия этилади.

Ўқув-спорт машғулоти учун бинолар ҳар бир иштирокчига 0.9м² ҳисобланган юкламага мувофиқ қабул қилинади. Ўқув хоналари секцияси ёки ухлаш секцияси орқали спортзалга ўтишнинг лойиҳада кўзда тутилишига рухсат етилмиди. Спорт зални ўғил болалар ва қизлар учун алоҳида ечиниш-кийиниш хоналари майдони юзаси 42м² дан кам бўлмаслиги лозим. Мураббийлар хонаси 8-12м² бўлган хона кўзда тутилиши керак

Ҳеч шубҳасиз айтиш мумкин, бугунги кунда она юртимизда дунёдаги бошқа мамлакатларнинг диққат эътиборини ўзига жалб қилаётган, замонавий таълим ва тарбия тизими, ўқув масканлари барпо этилди. Бу ўқув юртлари энг илғор илм-фан ва тараққиёт сирларини ўзлаштиришга, бир нечта касб-хунарни, хорижий тилларни, интернет ва ахборот-коммуникация технологияларини пухта эгаллашга имконият яратиб, замон талабига жавоб берадиган етук рақобатбардош ёш кадрларни тайёрлашга хизмат қилмоқда. Мухими шуки, ёшларимиз мактаб, лицей, касб-хунар мактаблари, техникум ва олий ўқув юртларини тамомлаб, она юртимизга, Ватанимизга садоқатли фарзанд бўлиб, ҳаётга онгли қадам қўйишга, жамиятда ўз муносиб ўрнини эгаллашга қодир бўлади .

Хулоса қилиб айтганда, давлатнинг буюклигини, кудратини қурилган ҳамда барпо қилинаётган замонавий бино ва иншоотлардан, такрорланмас архитектуравий ёдгорликларидан билиш мумкин бўлади.

Касбга йўналтириш инновацион марказларни ташкил қилиниши, ёшларимизнинг замонавий техника ва технологияларга бўлган қизиқишларини қўллаб-қувватлаш, уларда ижодий тафаккур ва яратувчанлик қобилиятини ривожлантириш, давлат ва жамиятни ривожланишида ижобий роль ўйнайди. Ёшлар ғоялари бирлашиб инновация марказларида ихтироларга айланади, ривожланишнинг янги истиқболли стратегик режалари яратилади.

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ФАРҒОНА ВОДИЙСИ ҚАДИМГИ АРХИТЕКТУРАСИНИ ШАКЛЛАНИШИ ВА РИВОЖИДА ҚУРИЛИШ МАТЕРИАЛЛАРИНИНГ РОЛИ.

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Аннотация

Ушбу мақола муаллифи Фарғона водийси худудидаги қадимги меъморчиликнинг - бронза давридан милоднинг биринчи асригача шаклланишида қурилиш материаллари конструкцияларини ролини очиб берган. Қурилаётган давр кесимида Ўрта Осиёнинг бошқа худудларидаги қурилиш материаллари ва конструкцияларидан фарқли ўлароқ Фарғона водийси меъморчилик ривожига уларнинг турлари, ўлчамлари ва ўзига хос хусусиятларини аниқланган.

Калит сўзлар: *хом ғишт, зичланган турпоқ, гумбаз, ораёпма, сагана иншооти, сарой, ертўла, девор.*

Аннотация

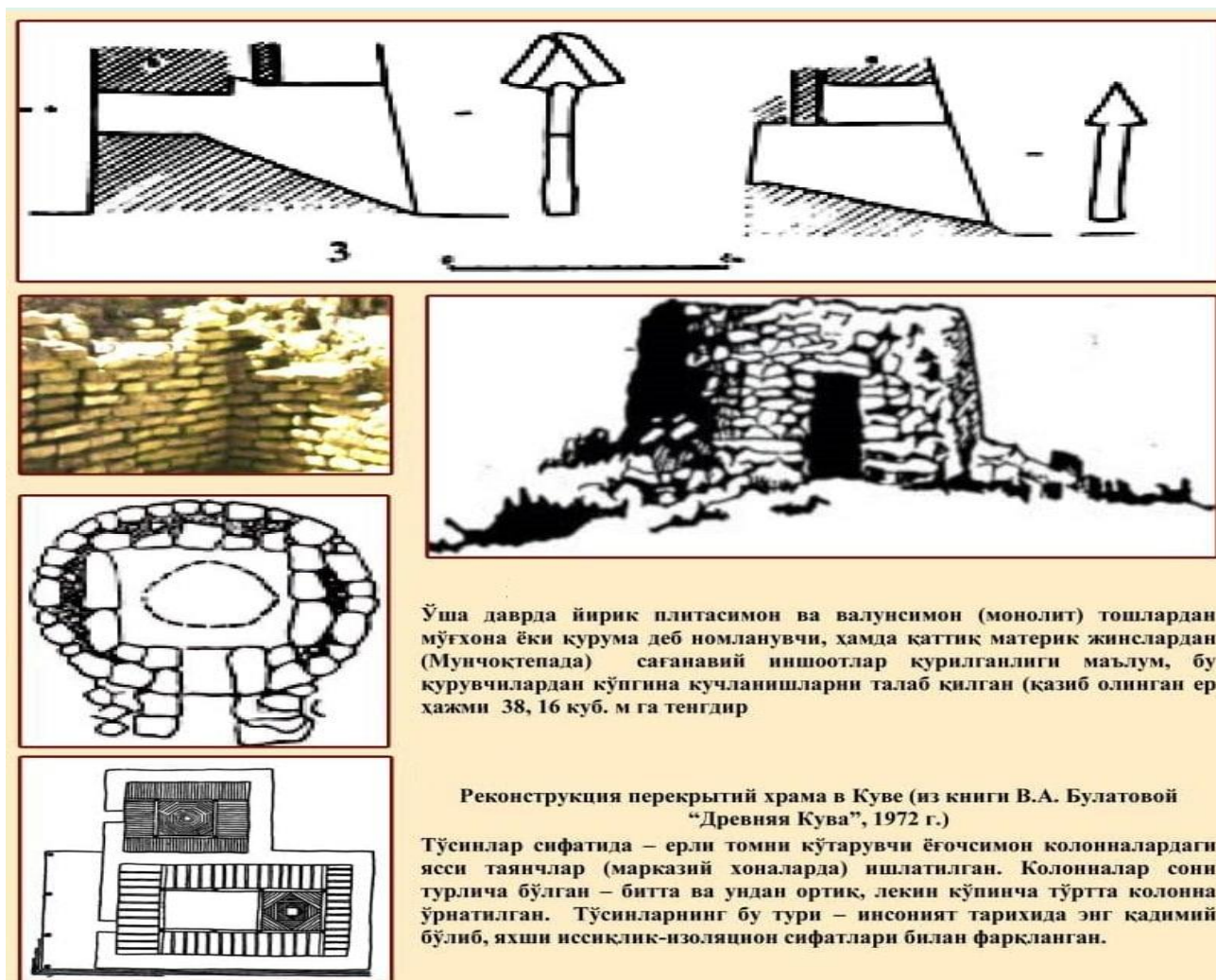
Автор данной статье раскрывают роль строительных материалов и конструкции при формировании древнего зодчества на территории Ферганской долины – от эпохи бронзы до первых веков нашей эры. На примере развития строительных материалов и конструкции выявляются характерные особенности, отличающие от других регионов Средней Азии рассматриваемого отрезка времени определены их виды, размеры и особенности

Ключевые слова: *сырцовые кирпичи, утрамбованный грунт, купола, перекрытия, погребальная сооружения, цитадель, землянка, стена.*

Қадимги Фарғона водийсининг қурилиш маданияти (ҳарбий маданият каби) ва шаҳарсозлик ривожига кўп жиҳатдан ҳуст маданият ташувчиларининг узоқ ўтроқ ҳаёт фаолияти ҳамда кўчманчи қабилалар анъаналари кўмак берган. Масалан, Дальварзин шаҳридаги уч деворни қуришда турли материаллар ва қурилиш усулларидан фойдаланилган. Хусусан, материал сифатида хом ғиштлар, зичланган лой, гувала (лойнинг қурилган кесаклари) ва пахсадан (Қувада ярим ерости типли оддий хоналардан пахсадан қурилган ерусти уйларига ўтишни кузатиш мумкин) фойдаланилган. Қурилиш усуллари орасида ғиштли терма ва қоплама (облицовка) (Дальварзиндаги ертўла деворлари бутун баландлиги бўйлаб хом ғиштлар билан қопланган), пахса бўлаклари ва 2-томонлама қобикли ғиштли термалар кенг қўлланилган. Зичланган тупроқдан

фойдаланиб қурилган Дальварзин деворлари секин-аста икки томонидан хом ғиштлар билан териб чиқилган. Қобикли терма ғиштлар фақатгина ўлчамлари билан эмас, балки ранги билан ҳам фарқланган яъни тўқ рангдан то ботқоқли-яшил ранггача. Бунда хом ғиштлар стандарт ўлчамга эга эмас эди, чунки шаклсиз, сомон аралаштирмасдан аниқ чегаралар билан тайёрланган. Улар бетонсифат шаклда бўлиб (Чустда ғишт ўлчамлари 54-55x32x8-10 см) , белгитамғага эга (Бақтрия, Хоразм, Марғилон, Сўғд каби). Дальварзинда бундай тамғалар 20 дан ортиқ бўлган. Чустда турли ўлчамга эга (улар орасида 55x32x8 см ўлчамли тўғрибурчакли шакл ҳам мавжуд) 20 та вариантдан ортиқ ғиштлардан фойдаланилгани маълум . Бир текис ғиштли терилган деворлар кейинчалик хом ғиштлар билан қопланган. Бу қобикли терма деб номланган ва келгусида Эйлатон шаҳри деворларини қуришда фойдаланилган. Бундай усулларнинг гувоҳлик беришича, бошқа иншоотлар билан таққослаганда қалъалар қуришда мураккаброқ ва турли-туман конструктив ечимлардан фойдаланилган.Кўрилаётган даврдаги ғишдан қурилган уй-ертўлаларда “ғишдан платформа қуриш йўли билан” терраса кўринишидаги шаклни ҳосил қилувчи термалар учрайди (Дальварзиндаги ертўла). Кейинчалик Қорадарё шаҳрида “зинапоясимон терраса”ли сағаналар қурилганлигини кузатиш мумкин . Дальварзин ва Чустдаги ертўла деворлари сувалган ва “бундай қурилиш усули Ўрта Осиёда қадимги даврда уй қурилишида биринчи марта кузатилган”.

Эйлатон ғиштлири ҳам аниқ чегаралар ва барқарор шаклга эга бўлмасида, аммо сомон аралаштириб тайёрланган. Маълумки Эйлатон қалъа деворлари қурилишидаги ғишт ўлчамлари 42-46x29-31x8-10 см ни ташкил қилган. Лекин, шундай ғиштлар билан бир қаторда квадрат шаклдаги мумтоз ғиштлар (Эйлатон деворларида) ҳам ишлатилган. Лекин Шуробашот даврида зичланган лойдан девор қуриш ва уларни хом ғишдан қобикли қоплаш ҳали ҳам сақланиб қолган (Шуробашот). Мелоддан аввалги II асрдан бошлаб, асосий қурилиш материали пахса ва хом ғишт бўлган.



Ўша даврда йирик плитасимон ва валунсимон (монолит) тошлардан мўғхона ёки қурума деб номланувчи, ҳамда қаттиқ материк жинслардан (Мунчоктепада) сағанавий ишшоотлар қурилганлиги маълум, бу қурувчилардан кўнгина кучланишларни талаб қилган (қазиб олинган ер хажми 38, 16 куб. м га тенгдир

Реконструкция перекрытий храма в Куве (из книги В.А. Булатовой "Древняя Кува", 1972 г.)

Тўсинлар сифатида – ерли томни кўтарувчи ёғочсимон колонналардаги ясси таянчлар (марказий хоналарда) ишлатилган. Колонналар сон турлича бўлган – битта ва ундан ортиқ, лекин кўпинча тўртта колонна ўрнатилган. Тўсинларнинг бу тури – инсоният тарихида энг қадимий бўлиб, яхши иссиқлик-изоляцияцион сифатлари билан фарқланган.

Расм 1

Тўғрибурчакли айрим ҳолларда квадратсимон ғиштлардан фойдаланиш кузатилган ва уларда кам ҳолларда белгилар қўйилган. Ђишт ва пахса комбинацияси қалъа деворларини барқарор характер билан таъминлаган (Эйлатон, Марҳамат деворлари, Поп қалъаси), пахсали деворлар дарзланиши олдини олган ҳамда пахсанинг қуриш жараёнларини тезлаштирган. Бундай усул Эйлатон даври қурилишида ҳам Ўрта Осиёнинг бошқа худудларида ҳам ишлатилган. Шунинг учун қадимги фарғоналиклар бундай техника билан таниш бўлганлар ва ундан унумли фойдаланганлар деб таъкидлаш мумкин (фақатгина қадимги эмас, балки Илк ўрта аср даврида ҳам).

Қадимги Фарғона архитектураси ва қурилишидаги уйғониш даври сифатида фарқланувчи қушон даврида (эрамизнинг II-IV асрлари) ноаниқ чегарали тўғрибурчак шаклидаги ва доимий ўлчамлари 42-48x32-37x3-10 см, 45x35x10 см чегарасида бўлган ғиштлардан ҳамда гувала ва пахсадан фойдаланилган. Бронза даврида маълум бўлган тамғали-белгилар (Дальварзинда) кейинчалик (Симтепа, Эйлатонда) Ўрта Осиёнинг бошқа қадимги цивилизация марказларида ҳам ишлатилган. Масалан Симтепа кўп сонли тамғали ғиштлар топилган ягона ёдгорликдир. Овал, С, Ф ва бошқа ҳарфлар кўринишидаги бармоқлар билан

чизилган тамғалар Марҳамат шаҳри ғиштларида ҳам учрайди, бу ерда икки ўлчамли 37x23x10 см ва 40x40x10 см ли мумтоз ғиштлардан фойдаланилган. Тўсинлар ясси (Симтепадаги марказий парад залларидаги ёғочсимон устун-колонналар) ёки у ёки бу бинолар аҳамиятига кўра аркасимондир. Бу давр ёдгорликларида турар-уй ва хўжалик аҳамиятига эга хоналар билан ўралган, ёғоч устунли парад заллари кузатилган .

Илк ўрта аср даври учун 1:2 нисбатдаги турли ўлчамдаги (масалан, 52x32x8-9 см) тўғрибурчак шаклдаги (қалқонсимон аркали тешиклари териш учун) хом ғиштлар характерлидир. Бу даврда тупроқли кесак-гувалали блоклар (Майда-тепа шаҳри қалъа деворларида) ишлатилган. Улар турли ўлчамда бўлган (70x70, 60x60, 60x50 см). Тўғрибурчак шаклдаги ғиштларга ўтиш ва пахсали блоклардан фойдаланиш фақатгина Фарғонада эмас, балки Тоҳирстон, Сўғд, Уструшоннинг илк ўрта аср архитектурасида ҳам кузатиш мумкин. Хом ғишт-пахсали қурилиш тажрибалари эса (масалан, аралаш терма) келгусида тошли плиталардан қурумлар ёки мўғхоналар қуришда ишлатилган. Лой-тупроққа майдаланган сомон қўшилган. Сомон билан аралашган лой-тупроқ деворларни сувоқ қилиш учун ҳам ишлатилган (масалан, Мунчоқтепа ерости сағаналарида). Аралаш термадан фойдаланиш аввалги даврларда ҳам фойдаланилган бўлиб, ғиштлар ва пахса қаторларини кетма-кет териш иншоот (айниқса, қалъа деворлари) чидамлилигини оширган.

Хом ғиштлар билан бир қаторда, тошли плиталардан фойдаланиш ҳолатлари ҳам маълумдир, Бу ҳақида Б.А.Литвинский фикрича: “Қайроқ-қумликлар тошли плиталардан турар-уй қуриш усуллари билишган”. Ўрта Осиёнинг тоғли ва тоғолди ҳудудларида ҳозирги даврда ҳам мергелсимон оҳақтошдан кесилган плиталар кўринишидаги ёки дарё тоши кўринишидаги тош ишлатилади (масалан, девор асосларида). Ўша даврда йирик плитасимон ва валунсимон (монолит) тошлардан мўғхона ёки қурум деб номланувчи ҳамда қаттиқ материк жинслардан (Мунчоқтепада) сағанавий иншоотлар қурилганлиги маълум. Бу қурувчилардан кўп куч талаб қилган (қазиб олинган ер ҳажми 38, 16 куб. м га тенгдир) (**расм 1**). Бу иншоотларда турли конструкциялардан фойдаланилганини кузатиш мумкин: тропларнинг бир неча турлари; юқори-эллипсоид чегараларга эга аркалар; турли-туман ёлғон гумбазлар ва аркалар; аркасимон-ясси тўсинлар, Булар ёлғон арка ва ясси тўсин усуллари бирлаштиради. Бу эса тош-монолитлардан сағанавий иншоотларда мураккаб тўсинларни қуриш имкониятига эга қадимги фарғоналикларнинг юқори даражадаги қурилиш тажрибалари ҳақида гувоҳлик беради.

Хом ғишдан фарқли равишда пишган ғишт айрим ҳоллардагина ишлатилган ва асосан қўшимча вазифани бажарган. Масалан, облицовка сифатида (Исфарин воҳасида), ўчоқларни теришда (Қорабулоқда), полларни теришда (Қува ва

Ахсикентдаги турар-уйларда 21x21x3-4 см ва 22x22x3-4 см ўлчамли пишган ғиштлар билан пол терилган) қўлланилган. Шунингдек, Ахсикентда (XI-XII асрлар) бой хонадон турар уйида пишган ғиштан гумбаз тўсинли ажойиб ерости хонаси қурилганлиги маълум, унга ўтиш зинапоясимон-перспективали троплар билан амалга оширилган. Ушбу материалнинг кенг ишлатилишига XI асрда Қувада ғиштарни пишириш ўчоғининг мавжудлиги гувоҳлик беради. Алебастрдан гидроизоляция сифатида фойдаланишни ҳам таъкидлаб ўтиш лозим (у билан ички юза ва хона деворлари сувалган).

Қадимги Фарғона қурилиш техникаси ривож ҳақидаги ёрқинроқ тасаввурни қалъа архитектураси беради. Масалан, деворларда кўпинча “тасмасимон пахса” ишлатилган, у айрим ҳолларда ғиштли термани эслатади (Қувада). Бу “ўзига хос арматура бўлиб, пахсани мустаҳкамлайди ва бир вақтнинг ўзида сейсмобелбоғ ролини бажаради”. Ахсикент (XII аср ўрталари) деворларини қуришда ҳам, ўзига хос технология хом ғишт ва пахсали футляр орасига лой-тупроқнинг зичланган тасмасимон қатламларини теришдан фойдаланилган, бу деворни монолитлигига эришиш имконини берган. Антисейсмика сифатида қумли ва камишли белбоғлардан фойдаланилган. Шунингдек, деворларни теришда ғиштли ва блокли термалар ҳамда тош ва шағаллар ишлатилган.

Тўсинлар сифатида ерли томни кўтарувчи ёғочсимон устунлардаги ясси таянчлар (марказий хоналарда) ишлатилган. Уларнинг сони турлича бўлган, битта ва ундан ортиқ, лекин кўпинча тўртта устун ўрнатилган. Тўсинларнинг бу тури инсоният тарихида энг қадимий бўлиб, яхши иссиқлик-изоляция сифатлари билан фарқланган. Тўсинлар сифатида аркасимон (Қувадаги устахоналар) тўсинлар ишлатилган, уларни теришда лой-тупроқли қалқонсимон ғиштлардан фойдаланилган. Коробкали аркалардан фойдаланиш ҳолатлари ҳам маълум (Қорабулоқдаги саройда) бўлиб, аркага таянч бўлган деворлар жуда қалин бўлган. Аркалар кўпинча қия кесимлар билан, айрим ҳолларда эса кўндаланг кесимлар билан терилган (Қайрағочда). Шунини таъкидлаш лозимки, хом ғишт-пахсали архитектура тажрибаларидан тошли плиталар (аралашмасиз) билан ишлашда ҳам фойдаланилган. Улардан сағанавий иншоот (курум) ларда тропларнинг турли вариантлари (“диагоналли” деб номланувчи) ёлғон гумбаз ва аркалар қурилган. Эллипсоид гумбазга ўтиш зинапоясимон-перспективали троплар орқали амалга оширилган (Ахсикентдаги ертўла хонаси). Хоналар томдаги ёруғлик люклари (ҳам аркасимон ҳам ясси тўсинларда) ёки ҳовличалар ёки айвонлар ҳамда эшик тешиклари орқали ёритилган ва бундай усул Ўрта Осиё архитектурасида ишлатилган.

Шундай қилиб, қадимги Фарғона қурилиш маданиятида анъаналар меросини кузатиш мумкин. Масалан, антик анъаналар илк ўрта аср даврида ўз давомига эга. Лекин фарғоналик қурувчилар бутун Ўрта Осиё учун умумий бўлган

қурилиш усуллари билан таниш бўлганлар. Масалан қурилиш соҳасида ишлатилувчи антисейсмик усуллар, ғиштли ва блокли термалар бирлашуви, лойни пляястлар билан забутовкалаш ва х.к. лардан фойдаланиш.

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