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**CONFERENCE ON THE ROLE AND IMPORTANCE OF SCIENCE IN
THE MODERN WORLD**

VOLUME-02, ISSUE-06

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MODDANING MAGNIT XOSSALARINI O'RGANISH TARIXI.

Termiz davlat universiteti

Mamanazarov B.Q

Tarixiy ma'lumotlarga ko'ra «magnetizm» va «magnit» so'zlari yunon provinsiyasi Magneziya va Magnes shahri nomidan kelib chiqqan. Chunki bu shahar atrofida temirni o'ziga tortuvchi tosh-magnetit qazib olingan. Bu ma'lumotni Lukresiy Kar o'zining «Moddalar tabiati haqida» kitobida bayon qiladi. Pliniyga ko'ra, «magnit» so'zi magnetitni topib olgan Magnes ismli cho'pon nomidan kelib chiqqan. Magnetit - judda murakkab tuzilmali magnit kristall sinfiga tegishli moddalardan biridir. Aynan magnetit esa - temir ferritdir. Fransuz olimi Neel bunday turdagi kristallarning magnit tuzilishini anglab, ular uchun - ferrimagnit nomini kiritdi. Ferrimagnetizm nazariyasini yaratgani uchun 1970 yilda Neel fizika bo'yicha Nobel mukofotiga sazovor bo'lgan.

Birinci eksperimentator - magnetolog sifatida Per de-Marikurni hisoblash mumkin. U torella - magnetitdan yasalgan sharsimon magnit bilan o'tkazilgan tajribalarda, torella meridianlari bo'ylab uzun temir bo'lagi yo'nalishlarini o'rnatdi. Shuningdek u 1269 yilda magnit qutbi tushunchasini kiritdi. Magnetizm birinchi ilmiy monografiya Gilbert tomonidan yozilgan. U magnetizm bo'yicha o'zining davrigacha mavjud bo'lgan tadqiqotlarni, shuningdek o'zining keng tadqiqotlari natijalarini bayon qilgan. U Per de-Marikurning torella bilan bog'liq tajribalarini takrorlab, torella - Yerning modeli bo'lishi mumkinligini ko'rsatdi. U magnit jism sifatida qarab magnitning tortish xususiyatini «magnit ruhi» bilan tushuntirgan.

Dekart magnit hodisalar bo'yicha materialistik qarashlarni Gilbert qarashlariga qarshi qo'ygan. Dekartning magnit vintiklari o'sha vaqtda ma'lum bo'lgan yagona magnit materiallarga ta'lluqli hisoblanadi. Gollandiyalik Burgmans 1778 yilda temirni paramagnetiklar o'ziga tortishini va diamagnetiklar esa uni o'zidan itarishini kashf etdi. 1820 yildan boshlab magnetizm bo'yicha zamonaviy tadqiqotlar davri boshlandi. Bu tadqiqotlar davrini shartli ravishda 3 qismga bo'lish mumkin.

1 - davr Erstedning elektr va magnetizm orasidagi bog'liqlikni kashf etishdan boshlanadi deb hisoblash mumkin. U doimiy tokning magnit strelkaga ta'sirini kuzatdi. Frantsuz akademiyasida qilgan ma'ruzasida Amper magnetizm sababi molekulyar toklar ekanligi haqida gapirgan. Shuningdek u elektr toki va magnitlarning ekvivalentligi haqidagi teoremani ham isbotlagan. 1831 yilda

M. Faradey elektromagnit induksiya qonunini kashf etdi va keyinchalik Burgmans tajribalarini takrorlab, diamagnetizm va paramagnetizm tushunchalarini kiritdi. 1845 yilda diamagnetizmni tadqiq qilish bilan bog'liq ravishda, u magnit maydon tushunchasini ham kiritdi. Yana magnit maydoniga joylashtirilgan shaffof shishadan o'tuvchi yorug'likning qutblanish tekisligini burilish effektini kashf etdi. Bu davrda Maksvell tenglamalari ham yaratildi.

2 - davr ferromagnetiklar noxiziqli magnit xossalarini va favqulodda kuchli maydonlarni miqdoriy o'rganish bo'yicha dastlabki eksperimental ishlar bilan boshlandi. Stoletov «Temirning magnitlanish funksiyasi haqida» nomli ilmiy ishida temirning magnit singdiruvchanligini magnit maydon kuchi bilan bog'liqligini o'rgandi. 1890-yillarda elementar zarra - elektron kashf etildi. 1896 yilda Zeeman magnit maydonida spektral chiziqlarning bo'linib ketish effektini kuzatdi. Keyinchalik Lorens, Zeeman effektining elektron nazariyasini yaratdi. 1897 yilda Larmor magnit moddada elektron haqidagi teoremani isbotladi. O'sha yillarda P. Kyuri diamagnetikning qabul qiluvchanligining temperaturaga teskari proporsionalligini isbotladi.

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USING PEDAGOGICAL TECHNOLOGIES IN WORKING WITH PARENTS OF PRESCHOOL CHILDREN WHEN TEACHING DRAWING SKILLS

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Abstract

In the article, the author pays special attention to the importance of using pedagogical technologies in working with parents to preserve and develop parental relationships with preschool children.

These technologies instill confidence in children, broaden their horizons, and technologies give the child the opportunity to cope with internal experiences and improve relationships with their parents.

Keywords: technologies, pedagogical. children, parents, learning, drawing.

"Pedagogical technology is usually called a direction of foreign pedagogy, which aims to increase the effectiveness of the educational process, guaranteed by the achievement of planned learning outcomes by students."

Pedagogical (educational) technology can be called a complex consisting of:

- some idea of the planned learning outcomes;
- diagnostic tools for the current state of students;
- a set of learning models;
- criteria for choosing the optimal model for these specific conditions.

What is a model of pedagogical technology?

The model can be considered as steps. The first step includes methods and forms and relates to didactics, the second or lower step includes pedagogical technique (tools and techniques), they are supplemented by the personal characteristics of the teacher (attitude, gestures, behavior), which is pedagogical skill.

How can and should we, specialists-educators, help parents raise and educate their children and use pedagogical technologies when teaching preschool children drawing skills? The most important thing is that parents have the necessary literature, teaching aids, books that help to comprehensively develop and educate their children under their direct supervision (i.e. mastering the model teaching and

upbringing of their child). And therefore, the first task of the family, if we are talking about the spiritual and aesthetic qualities of raising a preschool child, is to develop his spiritual and aesthetic sensitivity to everything around him through model teaching as an integral part of pedagogical technology.

We, scientists, must provide a mechanism and tools with which parents can prepare and educate, i.e. prepare their children well for school.

And this is a completely accessible task. After all, from birth, a child is ready to learn, even the smallest child has elementary spiritual and aesthetic feelings. He reaches out his hands to a bright toy, sings along to a cheerful song, dances to the rhythm of the music, etc.

A mother does the right thing when she says to her child during a walk: "Look at how beautiful the sky is today, soft blue, with light, dancing clouds, and mountains with a haze. And admire the autumn park: some trees are glowing with the sun's rays, others are yellow-orange, and there in the distance are yellow-green. And how beautiful are all these shades in the blue autumn sky! " "How beautiful is the khan-atlas, it shimmers in the sun with all the colors of the rainbow! And do you know the legend about this material and the master who invented it?" Such observation under the guidance of an adult contributes to the development of a more precise and subtle distinction in the child and the formation of spiritual and aesthetic qualities in preschool children. This obliges parents to choose things that a preschooler uses in their everyday life more carefully, to avoid things that are gaudy and tasteless in form (toys, clothes). For example: "Which of these two bowls do you like more?" The child is very willing to make such a choice: "Why do you like this bowl more?" Parents help children understand what qualities and properties of an object can be attributed to a positive aesthetic assessment. What is beautiful, majestic and harmonious, what is carefully and lovingly made, such as Granny Khamro's toys, what is pleasant in color combinations, etc. Even the simplest aesthetic judgments and recommendations that a child hears from parents have a great influence on the formation of spiritual and aesthetic qualities. If a child hears from his parents that the pattern (badam) on a man's skullcap is beautiful in its combination of symbols and colors, and on a woman's, the plant patterns are beautiful because they are bright, elegant, and this symbolism also protects its owner from the evil eye, the child hears from an adult about the history and legend of the origin of the silk material - khan atlas (that all the colors of the rainbow are hidden in this material and this is a reflection of the rainbow in a mountain river, that this or that act is beautiful because it is modest, noble, etc. Then, under the influence of his parents, the child gradually begins to understand that not only what is bright and elegant is beautiful, but also

what is masterfully executed, what is truthfully and harmoniously executed. Drawing classes provide great opportunities for the formation of spiritual and aesthetic qualities. The basis of these classes should be the systematic development of the child's ability to actively and purposefully examine objects and phenomena surrounding him and to convey what he sees in a drawing as best he can. It is very important to have the right approach to the drawing process in the family from the very beginning. That is, it is very important to correctly use pedagogical technologies that will help parents correctly and skillfully manage this process of their child's development. To help parents, we have developed a series of methodological literature based on pedagogical technologies for preschool children of different ages (from 3 to 6 years old). In the books for parents "Let's Draw Together" (in Russian and Uzbek), parents receive information about the process of working with children of younger preschool age, about the specifics of working at home and the method of work as co-creation, where the child receives an unfinished plot and brings it to a meaningful conclusion together with his parents. Co-creation is joint actions of a parent and a child, joint completion of tasks. Joint actions of the teacher with children are one of the methods of developing creativity, since the visual abilities of children are still very limited. By offering the child to finish drawing some part, detail of an object, the parent arouses the child's keen interest, joy, and the opportunity to see a familiar object in its full image. The purpose of this method is to correctly form the methods of action when depicting a complete form. From the time the child learns to understand and highlight the form, it is possible to teach form-building movements. In the individual practical workbooks "Drawing for Kids" No. 1, No. 2, No. 3, the child, together with adults, learns and studies drawing skills during practical exercises, while spiritual qualities are simultaneously formed. For example, you need to feed the mother lamb and the son lamb with juicy, green grass. The lambs want to eat. Or the sun needs to draw rays for butterflies, hedgehogs, flowers and everyone will be warm and happy. The parent takes a lot of interesting and informative information about the legend from the notebook - the history of the national material khan-atlas. But the child learns not only the story of the talented and brave master who invented this pattern, but also paints the dress of the dancing girls with strokes. The parent reads poems that are selected for each technical method that is given in these notebooks. Under the guidance of the parent, the child develops technical drawing skills, consolidates them, performing many exercises on this knowledge, which are supposed to take into account the age characteristics of preschool children. When drawing, the child does not just depict certain phenomena of the life around him or an object, but expresses his attitude to

the depicted by means within his power. Therefore, the process of drawing in a child is associated with an assessment of what he depicts, and in this assessment, the child's feelings, including spiritual and aesthetic ones, always play a large role. Striving to convey this attitude, the child seeks means of expression, mastering technical methods and skills of drawing with a pencil, felt-tip pen and paints. Workbooks for mastering drawing skills help parents to manage the drawing process, i.e. to optimally develop drawing skills. Working with a child, upon completing all the tasks in an individual notebook, a parent learns better about the abilities and individual characteristics of their child. For example, as parents note, some children (younger) draw with one color, others actively choose a color scheme, and others are fans of graphic drawing. The manner of execution is also peculiar: For example, some draw large, without detailing their image with small details, others, on the contrary, create a small image, but strive for decoration and detailing. This is explained by how each child individually masters drawing skills. And the parent sees and understands how successfully this process is going, how the use of pedagogical technologies helps him to manage the process of mastering the drawing skills of his child. Some parents noted that after the first demonstration their children immediately began to successfully complete the proposed tasks-exercises in an individual notebook, other children required repeated demonstrations and reinforcement of the given exercise, and the third category of children required more systematic, long-term work and support from their parents. The notebooks we offer are designed taking into account the different psychological characteristics of children. To master one educational task, for example, a brushstroke, up to 10 exercises in different versions are offered, which helps the parent to consolidate the same technical skill in an interesting and entertaining way. The child practices the educational task in a playful, entertaining way. And the result is that the child develops this skill. As a result, we have noticed and state that children who have mastered visual skills and abilities well have rich sensory experience, they have developed perception and their drawings are expressive, interesting. They are self-confident, the failures they encounter in the process of work do not upset them, and they remember the mistakes and do not repeat them in future work. The parent should support the child in the process of work, instill in him confidence that he himself can correct his mistakes. Prompt in time (but do not dictate your decisions), verbally supplement the logical connection of the depicted, call for help from the younger child, if there is one in the family, even ask the child for help on how best to depict this or that object to an adult, if he is drawing at the same time with the child. The last pedagogical technique forms such qualities in the child as mutual

assistance. Analyzing the work of parents according to the developed pedagogical technologies and introducing them into the practice of the family, we analyzed the acquisition of drawing skills by children when examining their practical works by the parents themselves. They included the following analysis criteria: spiritual and emotional attitude to the process of creating an image, the content of the work, the transfer of form, the structure of the object, composition, color, visual material, independence of the work performed. As a result of the research work, the most interesting, expressive and creative were those drawn works of preschool children who had well learned and consolidated, i.e. freely mastered the drawing skills. We have found that the use of pedagogical technologies in working with parents of preschool children in teaching drawing skills increases efficiency when parents guide the child's work process individually, mastering a set of learning models and defining models for specific conditions. The parents themselves write about the results of their guidance in children's mastering drawing skills.

Thus, the analysis of pedagogical technologies in the work of preschool children in teaching drawing skills shows that teachers and parents highly appreciate the development of spiritual and aesthetic qualities of the child of the third millennium.

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ISOTONIC SOLUTIONS: CONCEPTS AND CALCULATION METHODS

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Abstract. Isotonic solutions play a crucial role in pharmaceutical sciences, medical applications, and biological systems. This thesis examines the fundamental concepts of isotonic solutions, explores various methods for calculating isotonic concentrations, and discusses their practical applications. The osmotic pressure relationship between solutions and biological fluids determines the isotonic nature of pharmaceutical preparations.

Introduction. Isotonic solutions are aqueous solutions that have the same osmotic pressure as a reference solution, typically blood serum, tears, or other physiological fluids. The concept of isotonicity is fundamental in pharmaceutical sciences, particularly in the formulation of injectable medications, eye drops, nasal sprays, and other preparations that must be compatible with body fluids to prevent cellular damage and patient discomfort.

The human body maintains a delicate osmotic balance, and introducing solutions with significantly different osmotic pressures can cause cellular dehydration (hypertonic solutions) or cellular swelling and potential lysis (hypotonic solutions). Therefore, achieving isotonicity is critical for patient safety and therapeutic efficacy.

Osmotic pressure and tonicity

Osmotic pressure is a colligative property that depends on the number of dissolved particles in solution rather than their chemical nature. Van't Hoff's equation describes the relationship between osmotic pressure and solution concentration:

$$\pi = iMRT$$

Where:

- π = osmotic pressure
- i = van't Hoff factor (number of particles formed per molecule)
- M = molar concentration
- R = ideal gas constant
- T = absolute temperature

Tonicity specifically refers to the effect of a solution on cell volume when the cell is placed in that solution. While osmolarity measures the total concentration of solute particles, tonicity considers only those solutes that cannot cross the cell membrane.

Physiological reference standards

The standard reference for isotonic solutions in pharmaceutical applications is:

- Blood serum: osmotic pressure equivalent to 0.9% w/v sodium chloride solution

- Tears: osmotic pressure equivalent to 0.9% w/v sodium chloride solution

- Intracellular fluid: varies but generally maintained at physiological osmolarity

Methods for calculating isotonic concentrations

Sodium chloride equivalent method

This method expresses the isotonic concentration in terms of the amount of sodium chloride that would produce the same osmotic effect. The sodium chloride equivalent (E) represents the amount of NaCl that is osmotically equivalent to 1 gram of the drug substance.

Calculation Formula: Amount of NaCl needed = 0.9% - (Drug concentration × E)

Example: For a 1% atropine sulfate solution:

- E value for atropine sulfate = 0.13

- NaCl needed = 0.9% - (1% × 0.13) = 0.9% - 0.13% = 0.77%

Freezing point depression method

This method utilizes the relationship between freezing point depression and osmotic pressure. The freezing point of blood serum (-0.52°C) serves as the reference standard.

Calculation:

- Determine the freezing point depression of the drug solution

- Calculate the additional depression needed to reach -0.52°C

- Add appropriate amount of sodium chloride to achieve this depression

Formula: $\Delta T_f = K_f \times m \times i$

Where:

- ΔT_f = freezing point depression

- K_f = freezing point depression constant for water (1.86°C·kg/mol)

- m = molality

- i = van't Hoff factor

Osmolality method

This method directly measures or calculates the osmolality of the solution and adjusts it to match physiological osmolality (approximately 285-295 mOsm/kg).

Calculation steps:

1. Calculate the osmolality contribution of the active ingredient
2. Determine the deficit to reach physiological osmolality
3. Add appropriate isotonic agent to make up the deficit

White-Vincent method

This graphical method uses isotonic solutions of various concentrations to determine the isotonic concentration of a drug substance through interpolation.

Procedure:

1. Prepare solutions of varying concentrations
2. Measure freezing points or osmotic pressures
3. Plot concentration vs. freezing point depression
4. Determine isotonic concentration by interpolation

Conclusion. Isotonic solutions are fundamental to safe and effective pharmaceutical therapy. Understanding the theoretical principles and practical calculation methods enables pharmaceutical scientists to develop formulations that are compatible with biological systems. The various calculation methods each have specific applications and advantages, and the choice of method depends on the specific formulation requirements, available data, and regulatory considerations.

The importance of isotonic solutions extends beyond basic pharmaceutical compatibility to encompass patient comfort, therapeutic efficacy, and safety. As pharmaceutical technology advances, the principles of isotonicity remain constant while the methods for achieving and validating isotonic solutions continue to evolve.

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ПОТЕНЦИАЛ БЛОКЧЕЙН-ТЕХНОЛОГИЙ В БОРЬБЕ С КОРРУПЦИЕЙ И МОШЕННИЧЕСТВОМ В БАНКОВСКОЙ СФЕРЕ УЗБЕКИСТАНА

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Коррупция и мошенничество остаются одними из основных барьеров на пути эффективного функционирования банковской системы. В условиях цифровой трансформации возникает необходимость внедрения инновационных инструментов, обеспечивающих прозрачность и надежность финансовых операций. Блокчейн-технология — один из таких инструментов, предлагающий децентрализованную, неизменяемую и открыто проверяемую архитектуру.

В Узбекистане реформы в банковском секторе и интерес к цифровым технологиям создают благоприятную почву для внедрения блокчейна. Доказательством этому можно привести тот факт, что в Узбекистане имеются нормативные акты, регулирующие использование блокчейн-технологий и криптоактивов. Страна с 2018 года активно развивает правовую базу в этой сфере. Например, 3 июля 2018 года был принят Указ Президента №ПП–3832 «О мерах по развитию цифровой экономики в Республике Узбекистан», который определил стратегическое направление на цифровизацию, включая развитие технологии блокчейн в государственном управлении и банковской сфере.

Но не смотря на ряд мер по развитию блокчейн технологий, в Узбекистане зафиксированы случаи неправомерной выдачи кредитов, манипуляций с бухгалтерией и конфликтов интересов в распределении финансов. Прозрачность банков повышается, однако цифровые инструменты учета и аудита пока недостаточно развиты.

Таблица 1.

Преимущества блокчейн-технологий

Проблема	Блокчейн-решение
Подделка документов	Смарт-контракты с верификацией данных
Непрозрачность транзакций	Децентрализованный и отслеживаемый реестр

Ручные манипуляции	Автоматизация процессов и невозможность редактирования данных задним числом
Конфликт интересов	Общедоступный аудит и устранение посредников

Анализ приведенный в Таблице 1. показывает, что внедрение блокчейн технологий имеет ряд преимуществ. Блокчейн — это не просто технология хранения, а инструмент доверия. Она минимизирует риски, которые ранее решались только с привлечением посредников (аудиторов, нотариусов и т.д.). Каждое из представленных решений может быть адаптировано для разных отраслей: банковское дело, логистика, страхование, государственное управление.

Автоматизация и неизменяемость данных — это мощная защита от злоупотреблений и манипуляций. Прозрачность повышает доверие, особенно в странах с высоким уровнем коррупции или слабым контролем за транзакциями.

Для Узбекистана применение этих решений особенно актуально:

- в госзакупках — для предотвращения подделки тендерных документов;
- в банковской системе — для отслеживания кредитной истории и платежей;
- в земельном реестре — для исключения махинаций с собственностью.

Наряду с преимуществами имеются и ограничения внедрения блокчейн технологий:

- Недостаточный уровень цифровой грамотности персонала;
- Отсутствие юридической базы для полноценного внедрения блокчейна;
- Потенциальное сопротивление со стороны управленческих структур из-за риска потери "теневых" схем.

Внедрение блокчейна может значительно повысить прозрачность в банковском секторе. Особенное внимание следует уделить интеграции технологии в процессы:

- KYC/AML (знай своего клиента / борьба с отмыванием средств),
- автоматического одобрения микрокредитов,
- мониторинга движения средств по субсидиям и государственным программам.

Международный опыт (например, проект «GovChain» в Эстонии) показывает, что даже частичное внедрение реестров на базе блокчейн снижает коррупционные риски на 30–50%.

Блокчейн способен стать мощным инструментом в борьбе с коррупцией и мошенничеством в банках Узбекистана. При этом требуется политическая воля, нормативная поддержка, инвестиции в инфраструктуру и обучение кадров. Пилотные проекты с участием коммерческих банков и Центрального банка могут стать первым шагом в этом направлении.

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KRIPTOVALYUTALAR: MOHIYATI VA ZAMONAVIY MOLIYA BOZORIDA RIVOJLANISH TENDENSIYALARI

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Ma'lumki, mamlakatimizda «Raqamli O'zbekiston — 2030» strategiyasiga muvofiq iqtisodiyot tarmoqlari va hududlarini raqamlashtirish, davlat axborot tizimlari va elektron xizmatlarni joriy etish, shuningdek, raqamli texnologiyalardan keng foydalanishni ta'minlash bo'yicha xalq ta'limi, davlat xizmatlari, sud, moliya va bank tizimida kompleks chora-tadbirlar amalga oshirilmoqda. Xususan, prezidentimizning 2020 yil 28 apreldagi “Raqamli iqtisodiyot va elektron hukumatni keng joriy etish chora-tadbirlari to'g'risida”gi qarorida 2023 yilga borib raqamli iqtisodiyotning mamlakat yalpi ichki mahsulotidagi ulushini 2, ushbu sohadagi xizmatlar hajmini 3 baravar oshirish, ular eksportini 100 million AQSh dollariga yetkazish vazifasi qo'yilgan. Bu esa molyaviy texnologiyalar sohasida real amaliyot va bu boradagi ilg'or xorij tajribalari asosida ilmiy tadqiqotlar olib borish va sohani rivojlantirishda joriy etish maqsadga muvofiqligini ko'rsatadi.

Olib borilgan tahlillarimizga ko'ra bugungi kunga kelib, kriptovalyutalarning yagona ta'rifi mavjud emas. Masalan, Xalqaro hisob-kitoblar banki (BIS) ularni “virtual valyuta” (“virtual currency”¹), “raqamli valyuta” (“digital currency”) va “kriptovalyuta” (“cryptocurrency”²) tushunchalari bilan qiyoslab, ushbu “raqamli valyuta”ni quyidagi asosiy xususiyatlar orqali tavsiflaydi:

- faqat elektron shaklda emissiya qilinadi;
- milliy valyutalarda chiqarilmagan va ular bilan bog'lanmagan;
- hech kimning majburiyati emas (an'anaviy puldan farqli o'laroq);
- ichki qiymati nolga teng, ya'ni to'lovlar oqimini yaratmaydi;
- “peer-to-peer” almashinuvi, ya'ni taqsimlangan reyestr texnologiyasidan foydalangan holda tizim ishtirokchilari o'rtasida to'g'ridan-to'g'ri (markazlashtirilmagan) almashinuv uchun foydalaniladi;
- pulning ayrim xususiyatlariga ega bo'lgan aktiv (xususan, to'lov vositasi hisoblanadi).

Shunday qilib, Xalqaro hisob-kitoblar banki kripto valyutaga bir qator o'ziga xos xususiyatlarga ega aktiv sifatida qaraydi. Bundan tashqari, Xalqaro hisob-

¹ European Central Bank. *Virtual currency schemes*. ECB Report. 1–55, October 2012.

² Bank of international settlements, CPMI. *Digital currencies*. 2015; Bank of international settlements, CPMI. *Central bank digital currencies*. 2018.

kitoblar banki raqamli valyutalarni elektron pulning potentsial o'rnini bosuvchi vosita sifatida ko'rsatishi diqqatga sazovordir. An'anaga ko'ra, pul tushunchasi uning bajaradigan funksiyalari orqali aniqlanadi.

Xususan, Yevropa markaziy banki hisobotiga ko'ra, "pul - bu operatsiyalarda qiymat almashish uchun keng qo'llaniladigan har qanday narsa. Pul to'lov vositasi (almashinuvi), qiymatni saqlash vositasi (jamg'arish vositasi) va qiymat o'lchovi bo'lib xizmat qiladi"³. Mamlakatning umumiy pul massasining faqat kichik bir qismi odatda banknotlar va tangalar shaklida muomalada bo'ladi.

Shuningdek, Yevropa markaziy banki elekton pullar (e-money)ni shunday ta'riflaydi, xususan, "elekton pullar (e-money) bu boshqa tashkilotlarga to'lovlarni amalga oshirishda keng qo'llanilishi mumkin bo'lgan, pul qiymatini texnik uskunada elektron saqlashdir"⁴.

Qoidaga ko'ra elektron pullar fiat valyutalar bilan bir xil hisobda saqlanadi. Kriptovalyutalar uchun esa bu boshqacha ishlaydi.

Yevropa markaziy banki kriptovalyutalarni "virtual valyutalardan foydalanishning markazlashtirilmagan ikki tomonlama sxemalari"⁵ deb ataydi. Shu bilan birga, virtual valyuta deganda ma'lum sharoitlarda pulga muqobil sifatida ishlatilishi mumkin bo'lgan Markaziy bank, kredit instituti yoki boshqa elektron pul emitenti tomonidan chiqarilmaydigan qiymatning raqamli tasviri tushuniladi.

Xalqaro valyuta fondi (XVF, IMF) ham kriptovalyutasining qat'iy ta'rifini keltirmaydi. Biroq, XVF talqiniga ko'ra, kriptovalyutalar bu valyutalar emas, balki investitsiya qilish juda xavfli bo'lgan aktivlardir⁶.

Tabiiyki, savol tug'iladi: yuqorida sanab o'tilgan pul xususiyatlaridan qaysi biri kriptovalyutalarga xos hisoblanadi?

Bugungi kunda kriptovalyutalar qisman to'lov vositasi vazifasini bajaradi, chunki iqtisodiy agentlarning ayrim guruhlari ularni tovarlar va xizmatlar uchun to'lov vositasi sifatida qabul qilishga tayyor. Xalqaro hisob-kitoblar banki hisobotiga ko'ra, "pul — bu jamoat ishonchiga ega bo'lgan davlatga bo'sunuvchi muassasa tomonidan qo'llab-quvvatlanadigan ajralmas ijtimoiy kelishuvdir"⁷.

Shu bilan birga, kriptovalyutalar bugungi kunda asosiy kriptovalyutalar kursining yuqori o'zgaruvchanligi tufayli ishonchli jamg'arish vositasi va qiymat o'lchovi emas. Kriptovalyutasining kurs qiymati talab va taklif asosida bozorda

³ European Central Bank. *Virtual currency schemes — a further analysis*. ECB Report; February 2015:1–37.

⁴ URL: https://www.ecb.europa.eu/stats/money_credit_banking/electronic_money/html/index.en.html

⁵ European Central Bank. *Virtual currency schemes — a further analysis*. ECB Report; February 2015:1–37.

⁶ International Monetary Fund. *Money, transformed. The future of currency in a digital world*. Finance and development. 2018;55(2).

⁷ Bank of international settlements, CPMI. *Central bank digital currencies*. 2018.

o'rnatiladi. Shu munosabat bilan kurslarning yuqori o'zgaruvchanligiga ikki jihat ta'sir qiladi: birinchidan, yuqori spekulyativlik, ikkinchidan, kripto valyutasining cheklangan taklifi, ya'ni, bozor talabiga javoban uning taklifini elastik ravishda kengaytirish qiyinligi. Shu sababli, bugungi kunda kripto valyutalar xarid qobiliyatini saqlab qolish uchun ishonchli vosita bo'lib xizmat qila olmaydi. Kripto valyutalar kursining beqarorligi, shuningdek, kripto valyutalar birliklarida ifodalangan narxlarni tez-tez qayta ko'rib chiqish zarurati tufayli kripto valyutalarni qulay qiymat o'lchovi deb hisoblash mumkin emasligini ham bildiradi. Bundan tashqari, kursning yuqori o'zgaruvchanligi (kripto valyutalar hech kimning majburiyati emasligi bilan birga) kripto valyutalarga bo'lgan ishonchni ma'lum darajada pasaytiradi, bu ham ularning to'liq "pul" sifatida tarqalishiga imkon bermaydi.

Ammo "pul" dan farqli o'laroq, kripto valyutalar ma'lumotlarni saqlash va uzatishning o'ziga xos funksiyasini bajaradi. Birinchidan, kripto valyutalarning blokcheynlari himoyalangan va o'zgartirish mumkin bo'lmagan barcha tranzaksiya ma'lumotlarini saqlaydi. Shu munosabat bilan, har qanday masalalarni hal qilish uchun har doim ushbu ma'lumotlar manbasiga murojaat qilish mumkin.

Ikkinchidan, ko'plab kripto valyutalar smart-shartnomalarni yozish qulayligi uchun maxsus ishlab chiqilgan bo'lib, bu nafaqat vositachilardan xalos bo'lish va ko'plab turdagi bitimlar uchun vaqt va pul xarajatlarini kamaytirish, balki kripto valyutalar blokcheyniga ushbu bitimlar to'g'risida ma'lumotlarni yozish imkonini beradi, ya'ni, vijdotsiz kontragentlarning xohishiga binoan o'zgartirish mumkin bo'lmaydi.

Yuqorida aytib o'tilganidek, kripto valyutalar ishonchli jamg'arish vositasi emas, boshqacha qilib aytganda, uzoq vaqt davomida barqaror harid qobiliyatiga ega emas. Shu bilan birga, kripto valyutasi kontekstida mulk huquqi masalasi munozarali bo'lib, u har bir mamlakatdagi qonuniy tartibga solishga bog'liq.

Kripto valyutalar ko'pincha yer, ko'chmas mulk yoki aksiyalar va obligatsiyalardan farqli o'laroq, egasiga pul oqimlarini olishni ta'minlamaydi. Aynan shu jihat ham odatda kripto valyutalarda ichki (asosiy) qiymat yo'qligini tushuntirish uchun ishlatiladi, bu alohida ekonometrik tadqiqotlarda ham tasdiqlangan⁸. Shu bilan birga, kripto valyutaga bo'lgan talab asosan agentlarning uning kurs qiymatining oshishi haqidagi umidlari bilan bog'liq va bunday kontekstda kripto valyutalar o'z egalariga ularni saqlashdan iqtisodiy foyda keltirishi mumkin.

⁸ Cheah E.-T., Fry J. Speculative bubbles in Bitcoin markets? An empirical investigation into the fundamental value of Bitcoin. *Economics Letters*. 2015;130:32–36.

Shunday qilib xulosa qiladigan bo'lsak, keng talqin qilishda kriptovalyutalar aktivlarning alohida xususiyatlarini tavsiflaydi. Zero, bunga qaramay, kriptovalyutalar mavzusi so'nggi yillarda muhokama qilinayotgan juda muhim mavzuga aylandi va ularning rivojlanish istiqbollari masalasi hozircha ochiqlicha qolmoqda.

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UTILIZING ARTIFICIAL INTELLIGENCE TO PREDICT CONSUMER ACTIONS AND MARKET TRENDS IN E-COMMERCE

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Abstract. This paper explores how artificial intelligence (AI) is transforming e-commerce by forecasting consumer behavior and detecting market trends. Through machine learning, sentiment analysis, and predictive analytics, AI enables businesses to personalize services, optimize inventory, and enhance decision-making. The integration of AI tools allows for real-time responses to shifting customer preferences, resulting in improved customer satisfaction and increased competitiveness. Ethical considerations, such as data privacy and algorithmic bias, are also discussed.

Keywords: Artificial Intelligence, Consumer Behavior, E-commerce Trends, Predictive Analytics, Machine Learning

In today's rapidly evolving digital landscape, the rise of artificial intelligence (AI) has significantly transformed the way e-commerce platforms operate. One of the most remarkable contributions of AI to online retail is its ability to predict customer behavior and identify emerging market trends. These predictive capabilities allow businesses to make more informed decisions, optimize marketing strategies, personalize customer experiences, and stay ahead of competitors. As consumer preferences shift rapidly due to global events, technological developments, and social influences, the use of AI in forecasting has become not only advantageous but essential. This essay explores the various ways in which artificial intelligence is applied in anticipating consumer behavior and recognizing e-commerce trends, emphasizing the profound impact it has on modern retail.

Artificial intelligence operates through complex algorithms and machine learning models that can analyze vast amounts of data at unprecedented speed and accuracy. Unlike traditional methods of market analysis, AI tools are capable of processing unstructured data from a wide variety of sources such as social media platforms, search queries, browsing history, product reviews, and transaction records. These data points offer invaluable insights into the preferences, needs, and motivations of consumers. By identifying recurring patterns and anomalies, AI can forecast purchasing behaviors, suggest optimal inventory levels, and even detect upcoming fashion or product trends before they become mainstream. In this way,

businesses gain a competitive edge by proactively adjusting their offerings based on predicted market shifts rather than reacting to them after they occur.

One of the most popular AI technologies employed in e-commerce is machine learning, which enables systems to continuously improve over time as they are exposed to more data. For instance, recommendation engines, which have become a standard feature on most online retail platforms, use machine learning to analyze a user's previous interactions, purchases, and preferences to suggest relevant products. These engines do more than just boost sales—they enhance customer satisfaction by making the shopping experience more convenient and personalized. As a result, consumers are more likely to remain loyal to a brand that understands and anticipates their needs. Amazon, for example, attributes a significant portion of its revenue to its powerful recommendation system, which leverages AI to predict what users are likely to buy next.

Predictive analytics is another AI-driven method that has proven incredibly valuable in the context of consumer behavior forecasting. This approach involves using historical data to build predictive models that estimate future outcomes. For example, during the holiday season or major shopping events like Black Friday, AI systems can anticipate spikes in demand for specific products and help retailers stock their inventories accordingly. Furthermore, these systems can forecast the potential impact of discounts, promotions, and advertisements on different customer segments. This allows companies to design more effective marketing campaigns targeted at specific demographics. By predicting which products are likely to sell well, businesses can reduce waste, optimize supply chains, and increase profitability.

The role of AI in sentiment analysis also plays a crucial part in forecasting trends. Sentiment analysis tools utilize natural language processing (NLP) to evaluate customer opinions, emotions, and attitudes expressed in online reviews, social media comments, and feedback forms. This analysis provides a deeper understanding of how customers perceive products, brands, and services. When negative sentiments are detected in reviews of a newly launched product, businesses can quickly take corrective action before the issue escalates. Conversely, if a product is receiving overwhelmingly positive feedback, companies can increase production and promotional efforts to capitalize on its popularity. In essence, sentiment analysis enables businesses to stay in tune with consumer opinions and adjust their strategies in real-time.

Chatbots and virtual assistants, powered by AI, not only enhance customer service but also collect valuable data that can be used to forecast behavior. Every interaction with a chatbot provides information about what customers are looking

for, what problems they encounter, and what features they value most. This information, when analyzed in bulk, can reveal overarching trends and preferences. For instance, if a significant number of customers inquire about a certain product feature, it could indicate a growing demand that the company should address. Additionally, these tools can help segment customers based on their behavior, allowing for more precise targeting in marketing campaigns.

In conclusion, artificial intelligence has revolutionized the way e-commerce businesses predict and respond to consumer behavior and market trends. By leveraging vast datasets and sophisticated algorithms, AI enables retailers to make more accurate forecasts, personalize customer experiences, optimize inventory management, and enhance marketing efforts. As technology continues to advance, the role of AI in e-commerce will only become more prominent. Businesses that embrace this technology responsibly and strategically will be better positioned to meet the evolving needs of consumers and thrive in an increasingly competitive online marketplace.

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АЁЛЛАРДА ЖАРОҲАТДАН КЕЙИНГИ СТРЕСС МУАММОЛАРИНИНГ ЎРГАНИЛИШИ

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Аннотация: Стресс муаммоси янги асримизнинг умумқабул қилинган муаммоларидан ҳисобланади. Биз эмоционал стрессларнинг олдини ололмаймиз, ундан четлаша олмаимиз, муаммо ҳам шундаки биз стрессорлар билан келиша олмаимиз.

Калит сўзи: Стресс, физиологик, психологик, урушлар, жиноят, авария, фалокат, оғир касалликлар, қўрқув, ёрдамга муҳтожлик, апатия.

Аннотация: Стресс — одна из самых распространенных проблем нашего нового века. Мы не можем предотвратить или избежать эмоционального стресса, и проблема в том, что мы не можем справиться со стрессорами.

Ключевые слова: Стресс, физиологический, психологический, война, преступление, несчастный случай, катастрофа, серьезная болезнь, страх, потребность в помощи, апатия.

Abstract: Stress is one of the most common problems of our new century. We cannot prevent or avoid emotional stress, and the problem is that we cannot cope with stressors.

Key words: Stress, physiological, psychological, war, crime, accident, disaster, serious illness, fear, need for help, apathy.

Стресс ҳолатларини инсон ҳаётининг турли даврларида турлича бўлиши олимлар томонидан тадқиқ этилган (Н.Н.Бехтерева, 1974; Ф.Е.Васильюк, 1999, М.В.Коркина, 1998, Л.А.Китаев-Смык, 1983). Бу тафовутлар ҳам асаб, ҳам гормонал тизимдаги ёш даврларига хос ўзгаришлар билан боғлаб тушунтирилади.

Стресс сабаблари организмнинг биологик бутунлиги ҳамда инсондаги психологик ҳолатга ҳам таҳдид солади. Ана шу асосда олимлар стресс ҳолатларини 2 гуруҳга – физиологик ва психологик стрессга тафовутлашади. Физиологик стрессни физиологик таъсирлар – турли ҳилдаги тўсиқлар, шунингдек, кучли овозлар, кучли ёруғлик, ҳавонинг юқори ҳарорати, вибрациялар ва х.к. келтириб чиқаради. Психологик стресс вазиятнинг фавқулоддалиги инсоннинг юзага келган вазиятга муносабати ва унинг

мураккабликни баҳолаши билан белгиланади. Вазифанинг кутилмаганда ўзгартирилиши, зарур тайёргарликнинг йўқлиги, вақт тиғизлиги, ишнинг юқори аҳамиятга эга эканлиги, шунингдек топширилган вазифа учун шахсий масъулият – психологик стрессга олиб келувчи типик вазиятлар ҳисобланади. Шунингдек психологик стресс ахборот ва эмоционал стрессга тафовутланади.

Эмоционал стресс инсоннинг жисмоний хавфсизлигига таҳдид уйғонганда (урушлар, жиноят, авария, фалокат, оғир касалликлар, унинг иқтисодий муваффақияти, ижтимоий мавқеи, шахслараро муносабатлари хавф остида қолганида (ишини йўқотиш, пулсиз қолиш, оилавий муаммолар, касалликлар ва х.к.) юзага келади. Стрессга муносабатнинг ташқи кўринишдан турлича, лекин якуний натижага бўлган муносабат жиҳатидан ўхшашлигига қараб 2 тури ажратилади: улардан биринчиси тормоз реакцияси – ҳаракат фаоллигининг сустлашуви, янги ахборотни идрок қилиб ва эсда олиб қолишнинг қийинлиги, хаттоки оддий ҳаракатларни ҳам бажаришга қодир бўлмасликда намоён бўлади. Бунда асосий эмоциялар сифатида кўрқув, ёрдамга муҳтожлик, апатия кузатилади. Ташқи кўринишдан қарама-қарши бўлган реакция импульсив реакция номини олган. Бундай реакцияда ташқаридан инсон максимум даражадаги фаолликни намоён этади, доимий ҳаракатда бўлади, шошқалоқ, кўп гапиради, бир вақтнинг ўзида бир нечта ҳар хил ишларни бажаришга киришади, бироқ уларнинг бирортасини ҳам охирига етказмайди. Фикрлаш тез ва кўпинча майда нарсаларда қотиб қолади. Кайфияти ниҳоятда ўзгарувчан бўлиб, кўзғалувчанлик агрессия билан ўрин алмашиб туради. Турли одамлар учун қийин вазиятда хулқ-атвор типининг турли кўринишлари хосдир. Баъзи инсонларда тормоз реакцияси устунлик қилса, бошқа одамларда импульсив реакция етакчилик қилади. Лекин шуни унутмаслигимиз керакки, стресс бу оддий асабий зўриқиш эмас. Кўпгина олимлар биологик стрессни асабий зўриқиш билан ёки кучли эмоционал кўзғалувчанлик билан бир ҳолат деб қарайдилар.

Стресс - аффектни эслатади. У ҳам, аффектга ўхшаб, қийин ҳаётий шароитларда, хавфли вазиятларда, қайсики жуда тез, кутилмаганда содир бўладиган ва зудлик билан уни бартараф этиш зарур бўлган ҳолларда. Стресс ҳолатида - инсон ҳатти-ҳаракатлари чигаллашади, тартибсиз ҳаракатлар қила бошлайди, нутқ бузилади. Қабул қилиш, фикрлаш ва эслаш қобилятида хатоликлар кузатилади. Вазият мос келмайдиган ноадекват эмоциялар намоён бўлади.

Россиялик тадқиқотчи В.А.Бодров томонидан стрессга хос вазиятлар сифатида қуйидаги ҳолатлар келтириб ўтилган:

- Индивиднинг ҳаётидаги муҳим бўлган вазият;
- Стрессли таъсирларнинг кучи ва узоқлиги;
- ноаниқлик, вазиятни назорат қилиш ва бошқариш ҳолатларининг мавжуд эмаслиги;

- башорат қилиш имкониятининг йўқлиги. (Бодров В.А., 1996, 70б)

Стрессга муносабатнинг жинсий тафовутларини тадқиқ этган олимлар (Либин А.В. 2006, Г.Крайг, 2005) қиз болалар ва ўғил болаларда унинг турлича намоён бўлишини таъкидлайдилар. Стрессга муносабатлардаги жинсий тафовутлар кўпроқ уни енгиш усулларида намоён бўлиши тадқиқотларда аниқланган. (Nolen-Hoeksema, 1990).

Аёллар стресс ҳолатида кўпроқ шу ҳолатга олиб келган сабаблар ҳақида ўйлар эканлар, эркаклар эса депрессив эмоциялардан қочиб, бошқа бир фаолиятга, масалан жисмоний фаолликка эътиборларини жалб қилар эканлар ва шу йўл билан ўзларидаги салбий ҳолатни енгишга ҳаракат қилар эканлар. Аёллардаги стресс ҳолатига олиб келган сабабларни ҳадан зиёд изчил таҳлил қилиш уларнинг шу доирада узоқ муддат қолиб кетишлари ва тушкунлик ҳолатига тез тушиб қолишларига олиб келар экан.

Стрессга бўлган реакцияларнинг типик шакллари ижтимоийлашув жараёнининг махсули бўлиб, ҳаёт давомида шаклланади. Аёллардаги реакциялар кўпроқ пассив, ҳиссиётларга тўпланган, эмоцияларни намоёйиш қилиш ва бошқалар билан ўртоқлашишга қаратилган бўлса, эркакларда жисмоний ва эмоционал фаоллик, ўзининг заифлигини кўрсатмасликка интилиш, ўз кайфиятини бошқалар билан муҳокама қилмаслик кузатилади.

Стресс ҳолатларини ўрганиш бугунги кунгача кам ўрганилган ва мунозарали мавзулардан бири ҳисобланади. Бу соҳада А.В.Брушлинский, Л.П. Гримак, Л.Я. Дорфман, Н.Д. Левитов, Ю.Е.Сосновикова, А.Н. Леонова, Л.Г., Дикая, Е.П. Ильин, А.В.Махнач, А.О.Прохоров, И.И.Чеснокова, А.И.Юрьев ва В.А.Ганзен, Г.К.Тўлаганова, Е.Хрульнова ва бошқалар тадқиқот олиб борганлар.

Стресс доимо эмоциялар билан боғлиқ, эмоциялар эса бизнинг ҳаётимизда муҳим ўрин тутди. Улар инсоннинг фақатгина ташқи кўринишини эмас, балки ички органлар фаолиятини, асаб тизими ҳолатини ҳам ўзгартириб юборади. Эмоция сўзининг илмий аниқланиши шундай – бу инсоннинг ўз ўзига ва атроф муҳитга муносабатини акс эттирадиган психик жараёндр. Бизга бирор нарса ёққанида ижобий эмоциялар юзага келади, агар индифферент ҳолат бўлса ҳам, барибир кейинчалик кўзгалувчанликка олиб келади, бу ҳам эмоция.

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TALABALARINING TADQIQOTCHILIK QOBILYATLARINI RIVOJLANTIRISHNING PEDAGOGIK PSIXOLOGIK XUSUSIYATLARI

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Annotatsiya. Ushbu maqolada oliy ta'lim muassasalari talabalarining tadqiqotchilik qobiliyatlarini rivojlantirishning pedagogik psixologik xususiyatlari hamda talabalarining tadqiqotchilik qobiliyatlarini rivojlantirishning pedagogik-psixologik xususiyatlarini tadqiq etish asosida amaliy tavsiyalar ishlab chiqishdan iborat. Bundan tashqari talabalarining tadqiqotchilik qobiliyatlarini rivojlantirishning pedagogik psixologik xususiyatlari borasida o'zbek va xorij olimlarining ilmiy tadqiqotlari hamda xulosa va tavsilari tahlil qilingan va o'rganilgan.

Kalit so'zlar: kreativlik, iste'dod, qobiliyat, intellekt, persesiya, motivasiya, didaktika, psixokorreksiya va psixokonsultasi, mantiqiy, pragmatik qobiliyat, sub'yektivizm, kognitiv pozisiya, stimul, ong nazorati, regulyatsiya, kommunikatsiya.

ПЕДАГОГИКО-ПСИХОЛОГИЧЕСКИЕ ОСОБЕННОСТИ РАЗВИТИЯ ИССЛЕДОВАТЕЛЬСКИХ СПОСОБНОСТЕЙ СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ

Аннотация. Данная статья представляет собой разработку практических рекомендаций на основе исследования педагогико-психологических особенностей развития исследовательских способностей студентов высших учебных заведений, а также педагогико-психологических особенностей развития исследовательских способностей их студентов. Кроме того, были проанализированы и изучены научные исследования узбекских и зарубежных ученых, а также выводы и рекомендации по педагогическим психологическим особенностям развития исследовательских способностей их студентов.

Ключевые слова: креативность, талант, способности, интеллект, персеверация, мотивация, дидактика, психокоррекция и психоконсультирование, логика, прагматические способности, субъективизм, когнитивная позиция, стимул, контроль сознания, регуляция, коммуникация.

PEDAGOGICAL PSYCHOLOGICAL FEATURES OF THE DEVELOPMENT OF RESEARCH ABILITIES OF STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS

Annotation. This article consists in developing practical recommendations based on the pedagogical psychological characteristics of the development of

research abilities of students of higher educational institutions, as well as the research of pedagogical-psychological characteristics of the development of research abilities of their students. In addition, scientific research and conclusions and recommendations of Uzbek and foreign scientists have been analyzed and studied on the pedagogical psychological characteristics of the development of research abilities of their students.

Key words: creativity, talent, ability, intellect, persecia, motivation, didactics, psychocorrection and psychoconsult, logical, pragmatic ability, subjectivism, cognitive positivity, stimulus, mind control, regulation, communication.

Kirish. Jahonda yuqori darajadagi intellektual qobiliyatli, salohiyatli, ijodkor, bilimdon avlodni tarbiyalash, jamiyat taraqqiyotini ta'minlash va uning boshqa mamlakatlar orasidagi eng yuqori reytingini ta'minlab, uning rivojiga ta'sir etadigan eng asosiy omillar sifatida tadqiq qilinmoqda. Bugungi davrida «yuqori qobiliyatli yoshlarni aniqlash, ularni tizimli dastur yordamida qo'llab-quvvatlash» ga alohida e'tibor berish orqali ma'naviy-axloqiy va psixologik jihatdan barqaror shaxsni tabiylash masalalari dolzarb muammolardan bo'lib qolmoqda. Statistik ma'lumotlarga qaraganda dunyoda qobiliyatli bolalarning umumiy soni 1-2% dan 20% gachani tashkil qilmoqda. Matematik statistik mutaxassislar ma'lumotlariga ko'ra, normal taqsimot qonunidan foydalangan holda, har qanday rivojlanish bosqichida ham qobiliyatli bolalarning umumiy ulushi 68-70% oralig'ida deb baholanmoqda. Bu borada bolalarning faoliyat indikator ko'rsatkichi sifatida salohiyatini intellektual mezonlar orqali belgilanishi, uning kreativligi, iqtidori, intellektual qobiliyati, talanti jamiyatning strategik zahirasi sifatida e'tirof etilishi bilan bog'liq muammolarni o'rganish zaruratini yuzaga kelmoqda.

Ta'lim tizimida talabalarning intellektual va tadqiqotchilik qobiliyati muammosi keng ko'lamdagi psixologik-pedagogik tadqiqot predmeti sifatida ko'plab tadqiqotchilarning diqqat markazida bo'lib kelgan. Ushbu muammo bir necha jabhalarda o'rganilgan bo'lsa ham psixikaning muntazam rivojlanib borishi sababli ushbu mavzuni tadqiq qilish hamda o'rganishga doimo ehtiyoj sezilaveradi. Shuningdek, A.K.Belausovning tajribalari shuni ko'rsatdiki, biror sohaga tegishli qobiliyatlarga ega odamlar ushbu soha uchun zarur bo'lgan bilim ko'nikma va malakalarni osongina o'zlashtiradilar hamda olingan natijalar samaradorligi bilan boshqalardan farq qiladilar. Insondagi mavjud intellektual qobiliyat uning hayoti va faoliyatida muhim rol o'ynaydi hamda uni qaysi faoliyat sohasi uchun ko'proq mos kelishini aytishga imkon beradi. Lekin, qobiliyat bilim, ko'nikma yoki malaka emas, chunki, jamiyatda biror natijaga erishmagan uquvsiz deb baholangan insonlar

keyinchalik biron-bir sohaning yetakchi mutaxassisi sifatida elga tanilishi, yuqori lavozimni egallashi, tadbirkor shaxs sifatida kamol topishi hodisasi tajribada ko'p uchraydi. Shu sababdan, bilim, ko'nikma va malakalarni egallash jarayonida qobiliyatlar namoyon bo'lsa-da, biroq ular bir-biriga bevosita taalluqli emas. S.S.Bilyukovning ta'kidlashicha, bilim ko'nikma, malakalar insonni o'z ustida tinmay ishlashi va mashq qilish natijasida egallanadigan aniq voqelik, deb tasavvur qilinsa, qobiliyatlar shaxsning hali ro'yobga chiqmagan ichki imkoniyatlari (layoqatlar) sifatida namoyon bo'ladi.

"Qobiliyat" atamasi, psixologiyada uzoq vaqtdan beri va keng qo'llanilishiga va adabiyotda uning ko'plab ta'riflari mavjudligiga qaramay, haligacha noaniqdir.

Qobiliyatlar insonning turli xil faoliyat turlarini muvaffaqiyatli bajarishini ta'minlaydigan umumiy va maxsus bilim, ko'nikma va ko'nikmalarni rivojlantirishning yuqori darajasini ifodalaydi.

A.V.Petrovskiy ta'kidlaganidek, bilim, ko'nikma va qobiliyatlarga nisbatan qobiliyatlar ma'lum bir imkoniyat sifatida harakat qiladi. Qobiliyatlar faoliyatni o'zlashtirish jarayonida, shaxs, boshqa narsalar teng, uni tashkil etish va amalga oshirish usullarini qanchalik tez va oson, puxta va mustahkam o'zlashtirganligida namoyon bo'ladi.

Har qanday qobiliyatni baholashning asosiy mezonlari:

- o'zlashtirish faoliyatining sur'ati, chuqurligi va puxtaligi;
- samaradorligini oshirish,
- neyropsik xarajatlar va yakuniy natijalar nisbati,
- paydo bo'lgan aqliy fazilatlarni uzatish kengligi,
- ma'lum bir faoliyat turini uzoq vaqt davomida yoki butun umr davomida amalga oshirish tendentsiyasi.

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Oilalarda internetga tobelikning bugungi kundagi axamiyati

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Annotatsiya

Oilani mustahkamlash va rivojlantirish, oilalarda ma’naviy-axloqiy muhitni yaxshilash, jamiyatda eng ibratli oilaviy an’analarni saqlab qolish hamda targ‘ibot qilish masalalari bo‘yicha hududlarda qator fundamental, amaliy va innovatsion tadqiqotlar olib borilayotir.

Kalit so‘zi

Oila , internet, oilalarda ma’naviy-axloqiy muhitni, telefon, telegram, instagram va feysbuk.

Аннотация

В регионах проводится ряд фундаментальных, практических и инновационных исследований по вопросам укрепления и развития семьи, улучшения духовно-нравственного климата в семьях, сохранения и пропаганды в обществе самых поучительных семейных традиций.

Ключевое слово

Семья, интернет, духовно-нравственная атмосфера в семьях, телефон, телеграмма, instagram и Facebook.

Annotation

A number of fundamental, practical and innovative studies are being conducted in the regions on strengthening and developing the family, improving the spiritual and moral climate in families, preserving and promoting the most instructive family traditions in society.

Key word

Facebook instagramming, family, Internet, spiritual and moral atmosphere in families, telephone, telegram, Instagram and Facebook.

Muhtaram Prezidentimiz Shavkat Mirziyoev 2017 yil 15 iyundagi «Ijtimoiy barqarorlikni ta’minlash, muqaddas dinimizning sofligini asrash – davr talabi» mavzusidagi anjumanda so‘zlagan nutqida jamiyatimiz hayotida, xalqimiz orasida uchrab turadigan, ayniqsa oila va nikoh sohasida duch kelinayotgan o‘ta dolzarb, og‘riqli va o‘tkir muammolar to‘g‘risida, xususan, turmush qurgan yoshlar orasida hayotni yengil-yelpi tasavvur qilish, oila muqaddas ekanini tushunib yetmaslik

holatlarining uchrab turganligi, yosh oilalar orasida arziyas sabablar bilan ajralishlar ko‘payib borayotganligi, begunoh bolalar yetim bo‘lib, mehr va e‘tiborga eng tashna vaqtida ota-ona tarbiyasidan chetda qolayotganligi haqida gapirib, “... oilalarda nosog‘lom munosabatlar, qaynona-kelin, er xotin o‘rtasidagi janjallar, xotin-qizlarimiz orasida o‘z joniga qasd qilish holatlari borligi shaxsan meni qattiq iztirobga solmoqda”, degan edilar. Darhaqiqat, jamiyat va davlat uchun oila, nikoh, onalik, otalik va bolalik ijtimoiy jihatdan muhim ahamiyatga egadir, zero ushbu tushunchalar jamiyat va davlat shakllanishini ta‘minlovchi muhim omillar hisoblanadi. Shu sababli oila va nikoh masalalariga, uchrayotgan muammolarga ijtimoiy-siyosiy, ilmiy va oddiy turmush nuqtai nazaridan yondoshish, mazkur munosabatlarni qonun doirasida tartibga solish, bu boradagi qonun hujjatlarini real voqelikdan kelib chiqqan holda takomillashtirib borish, ularning mazmunmohiyatini keng xalq ommasiga tushuntirish, oilaning har bir a‘zosi, nikohga kiruvchi shaxslarning haq-huquqlarini qat‘iy himoya qilish talab etiladi. Oila qo‘rg‘onining poydevori, uning mustahkam qal‘asi, er-xotinni mahkam bog‘lovchi rishtasi nikohdir. Oila rivojiga nafaqat oilada yashovchi shaxslarning ro‘li balkim unga t‘sir ko‘rsatuvchi ijtimoiy omillari mavjud. Bulardan biri internet xisoblanadi. Bu virtual olam orqali insonlar boshqa bir shaxs bilan tanishib do‘stona munosabat o‘rnatishi oqibatida o‘z oliasidan kechishi, sovuq munosabatlar shakllanishi aksincha mukkasidan berilib ketishi oqibatida ajrimlarning ko‘payishini ko‘rishimiz mumkin. Bu virtual olamda tanishining psixologiyasi shuki ko‘rinmagan shaxs bilan muloqotga kirishishi xar xil mavzularida suxbatlashishi yashirish xolatdagi muloqotning qiziqarli kechishi va bu munosabat qisqa yoki uzoq davom etishi mumkin. Bu muammolar jamiyatimizning xar uchdan bir oilalar bilan yuz bermoqda. Ajrimlarining bosh negizi xam internet ya‘ni telefon xisoblanib “telegram instagram va feysbuk” orqali tanishgan yoki oldaidan tanish bo‘lagan virtual olamdagi shaxs bilan munosabat o‘rnatishining yuzasidan kelib chiqmoqda. Bu esa oiladagi munosabatlarinig buzilishi er-xotin farzandlar o‘rtasida nizolarning ko‘payishi yuz bermoqda. Bunga sasosiy sabab shuki shaxsda muloqotning yetishmasligi yoki oilada shaxslararo komunikativ muloqotning kamligi sabab bulmoqda. Shu muammoning bolalarda uchrashi yoki o‘smirlik o‘spirinlik davrlari bilan bog‘liqligini ko‘rishimiz mumkin mukkasidan ketishning negiza farzandlarimizning qarovsiz qolishi, qiziqarli virtual o‘yinlarga berilishi, bola yoshida asosiy o‘rin elektron o‘yin ekanligi bo‘lib qolmoqda. Biz muammoni internet bilan bog‘lab uni yechimini topishga xarakat qilmoqchimiz. Muammoni negizi internetga tobeligini aniqlash va shaxsda sog‘lom turmush tarzini shakllantirishdan iborat. Oilada farzand tarbiyasi oila a‘zolarining o‘zaro

munosabati va turmushning chiroyli va mazmunli kechishi xar birimizning qo‘limizda. Xususan, oilani mustahkamlash va rivojlantirish, oilalarda ma‘naviy-axloqiy muhitni yaxshilash, jamiyatda eng ibratli oilaviy an‘analarni saqlab qolish hamda targ‘ibot qilish masalalari bo‘yicha hududlarda qator fundamental, amaliy va innovatsion tadqiqotlar olib borilayotir. Misol uchun, zamonaviy muvaffaqiyatli oila mezonlari qanday bo‘lishi kerak, degan mavzuda respublikamizning turli viloyatlarida 800 dan ortiq oilalarda ijtimoiy so‘rovlar o‘tkazilib, yakuniy natijalar bo‘yicha zamonaviy oilaning modeli ishlab chiqildi. Tadqiqot o‘tkazilgan oilalar vakillarining fikrlariga ko‘ra, oiladagi sog‘lom va barqaror, osoyishta psixologik muhit; yuksak ma‘naviy-axloqiy tarbiya; yetarli darajadagi iqtisodiy va maishiy sharoitlar; oila a‘zolarining ta‘lim yo‘nalishida oliy ma‘lumotlilik darajasi; sihat-salomatlikka alohida e‘tibor qaratish zamonaviy namunali oilaning asosiy mezonlari qatoriga kiradi. Shu o‘rinda har qancha achchiq bo‘lmasin, ochiq aytish kerak, tadqiqotlarimizning ko‘rsatishicha, keyingi paytlarda xalqimizga xos bo‘lmagan ayrim illatlar — oilaviy ajrashishlar, internet tobelligi, turli nizoli vaziyatlar, ishsizlik, oiladagi nosog‘lom muhit, ma‘naviy tushkunlik, ehtiyojmandlik, jinoyatga qo‘l urish holatlari kabi omillar notinch, noqobil, kemptik oilalar va qator ijtimoiy-ma‘naviy muammolarni paydo qilmoqda. Ayniqsa, ajrashishlar sonining kamaymayotgani kishida jiddiy tashvish uyg‘otadi. Respublikamizning uchta viloyatida olib borgan tadqiqotlarimizdan ma‘lum bo‘ldiki, oilalar barbod bo‘lishiga quyidagi omillar asosiy sabab bo‘lmoqda: Psixologik omil — oiladagi og‘ir psixologik muhit, o‘zaro tushunishning yo‘qligi, oiladagi doimiy nizolar, ota-onalarning yosh er-xotin hayotiga aralashishlari, yosh er-xotinlarni begonalashtirib qo‘yish, bir-biriga befarqlik; Ijtimoiy omil — ichkilikbozlik, farzandsizlik, er yoki xotinning salomatligi yaxshi emasligi; internet tobeyligi; Ma‘naviy-axloqiy omil — er-xotindan birining uzoq vaqt davomidagi nikohdan tashqari aloqalari; Iqtisodiy omil — turarjoysharoitlariningqoniqarliemasligi, moddiyetishmovchilik, ishsizlik, erningoilanita‘minlamasligi, mehnatmigranti sifatida chet elgaketgan er-xotindan birining oilasi bilan aloqasi uzilgani, qarzlarniuzolmaslik E’tirofetishlozim, hozirgi kunga qadar 11800 dan ortiqnizolioilalarningishisudgaetibbormasdan, FHDYo organivasudgaajrashishuchunarizabergan 3100 dan ziyod oilalarni esa ham kortashkilotlar bilan birgalikda yarashtirishgaerishildi. Umuman, buzilib ketish arafasida turgan 14645 ta oila saqlab qolindi. Olib borilgan tadqiqotlarimiz xulosalariga tayanib, ajrashishlarning oldini olish, oilalarni mustahkamlashga qaratilgan qator takliflar ishlab chiqdik. Bizningcha, engavvalo, mahallafuqarolar yig‘inlari huzuridagi Yarashtirish komissiyalari va “Ota-onalaruniversiteti”

tuzilmalari uchun malakali kadr lartayyorlashni yo'lg'a qo'yish zarur. Oila qurayotgan fuqarolarni tegishli qonunchilika sosida er-xotinning huquq va majburiyatlari, xususan, nikohshartnomasini tuzish tartiblari, shart-sharoitlari, oqibatlari yuzasidan huquqiy savod xonligini oshirish lozim. Bu borada kengqamrovli targ'ibot ishlarini yuritish, tegishli uslubiy qo'llanmalar yaratish, metodik tavsiyalar ishlab chiqish maqsad gamuvofiq. Umumta'lim maktablaridan tortib, oliy o'quv yurtlarining dasturlarigacha oila saboqlarini o'rgatuvchi darsmashg'ulotlarini kiritish foydadan xoli bo'lmaydi

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Нейрофидбек – инновационная терапия неврологических заболеваний

Нейрофидбек – инновационная терапия неврологических заболеваний

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Актуальность темы: В настоящее время рост заболеваемости, инвалидности и смертности от неврологических заболеваний с каждым годом увеличивается, что делает проблему особенно актуальной. По данным литературы, инвалидизация в Узбекистане вследствие цереброваскулярных заболеваний составляет 3,2 на 10 000 населения. Распространенность рассеянного склероза составляет 0,8 на 100 000 населения, болезнь Альцгеймера – 0,9. Для предотвращения различных нарушений, в том числе когнитивных расстройств, возникающих после инсульта, необходимо проводить эффективные и адекватные лечебные мероприятия. В последние годы появляются новые современные методы улучшения когнитивной функции. Одним из таких методов является нейрофидбек, который представляет собой новейшее оборудование, недавно внедренное в Узбекистане. Его эффективность при лечении неврологических заболеваний пока недостаточно изучена в нашей стране. Учитывая вышеизложенное, изучение данной темы представляется целесообразным.

Цель исследования: изучение эффективности нейрофидбека при когнитивных нарушениях у пациентов с цереброваскулярными заболеваниями.

Материалы и методы исследования: Пациенты с цереброваскулярными заболеваниями были разделены на 2 группы.

1. Клиническое неврологическое обследование.
2. Исследование гемодинамики сосудов головного мозга с помощью доплерографии.
3. Оценка когнитивных функций по шкалам Бека, Шульте и Лурии.

Результаты и обсуждение: Исследование охватило 50 пациентов с цереброваскулярными заболеваниями (у некоторых из них также был диагностирован рассеянный склероз). Лечение проводилось в частной клинике «Нейромед Сервис» и в Центральной клинической больнице АО «Узбекистон темир йуллари». Пациенты были разделены на две группы: первая группа (25 пациентов) получала традиционную медикаментозную терапию, вторая

группа (25 пациентов) — дополнительно проходила курс нейрофидбека. На основе клинического обследования и оценки по шкалам Бека, Шульте и Лурии были определены спектры когнитивных нарушений. Пациенты жаловались на головокружение, головную боль, ухудшение памяти, внимания и мыслительной деятельности, асимметрию лица, нарушения чувствительности и двигательной функции конечностей.

После 10-дневного лечения у пациентов второй группы, прошедших нейрофидбек, наблюдалось значительное улучшение когнитивных функций. Интенсивность головной боли по шкале ВАШ снизилась с 5 до 2 баллов (в первой группе — до 3 баллов). Также наблюдалось улучшение симметрии лица, уменьшение головокружений и онемения конечностей.

Вывод: Продолжительное применение нейрофидбека позволяет значительно улучшить когнитивные функции у пациентов с цереброваскулярными заболеваниями. Данный метод следует широко внедрять в неврологическую практику Узбекистана как одно из современных достижений медицины.

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OO‘K – 664.8:635.62

QOVOQ QOQISI VA KUKUNINI OLIISH UCHUN TAVSIYA ETILGAN NAVLARNING BIOLOGIK VA TEXNIK JIHLTLARI.

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Annotatsiya: Qovoq mevalarni quritish bo‘yicha ilmiy tadqiqot ishlari Toshkent viloyatining Keles tumanidagi fermer xo‘jaliklarining va Sabzavot, poliz ekinlari va kartoshkachilik institutining ilmiy tajriba maydonlarida 2023-2024-yillar davomida olib borildi. Dala tajribalarida O‘zbekiston hududiga moslashtirilgan va introduksiya qilingan qovoqning “Batler F1”, “Ispanskaya-73”, “Shirintoy”, “Ferro F1” va “Kashgarskaya-268” navlarining biologik jihatlari keltirib o‘tilgan.

Kalit so‘zlar: qovoq, nav, qoqi, kukun, harorat, namlik, qurish tezligi, shakl, қанд, қуруқ модда,

Kirish Tajriba davomida o‘rganilgan qovoq navlarining asosiy agrobiologik xususiyatlari, ya‘ni quritishga yaroqliligini aniqlash maqsadida, xom ashyoning gullash bosqichidan to to‘liq pishguniga qadar bo‘lgan jarayonlar kuzatildi. Natijalarga ko‘ra, Palov Kadi-268 navining pishish muddati 114-116 kuni tashkil etdi. Shirintoy navida esa pishish eng uzoq davom etib, 135 kunda to‘liq yetilishi kuzatildi. Garchi bu nav uzoq muddatda pishsa-da, uning mevasi kichik o‘lchamda bo‘lishi aniqlandi. Quritishga eng mos navlardan biri bo‘lgan Ferro F1 esa eng qisqa – 108 kunda pishib yetilishi bilan ajralib turdi. Ispanskaya-73 navining pishish muddati esa o‘rtacha bo‘lib, 117-130 kun oralig‘ida kechdi.

Tadqiqot natijalari: Quritish uchun mos qovoq navlarini aniqlash jarayonida, navlarning bir gektardan olinadigan xom ashyo hosildorligi yillar kesimida tahlil qilindi. O‘rtacha ko‘rsatkichlarga ko‘ra, eng yuqori xom ashyo hosildorligi o‘suvi davri eng qisqa bo‘lishiga qaramay, **Ferro F1** navida kuzatildi va u bir gektardan o‘rtacha **35,5 tonna** xom mahsulot berdi. Boshqa navlardan **Shirintoy** navida **25-27 tonna**, **Palov Kadi-268** va **Ispanskaya-73** navlarida esa o‘rtacha **25-30 tonna** xom ashyo hosildorligi qayd etildi.

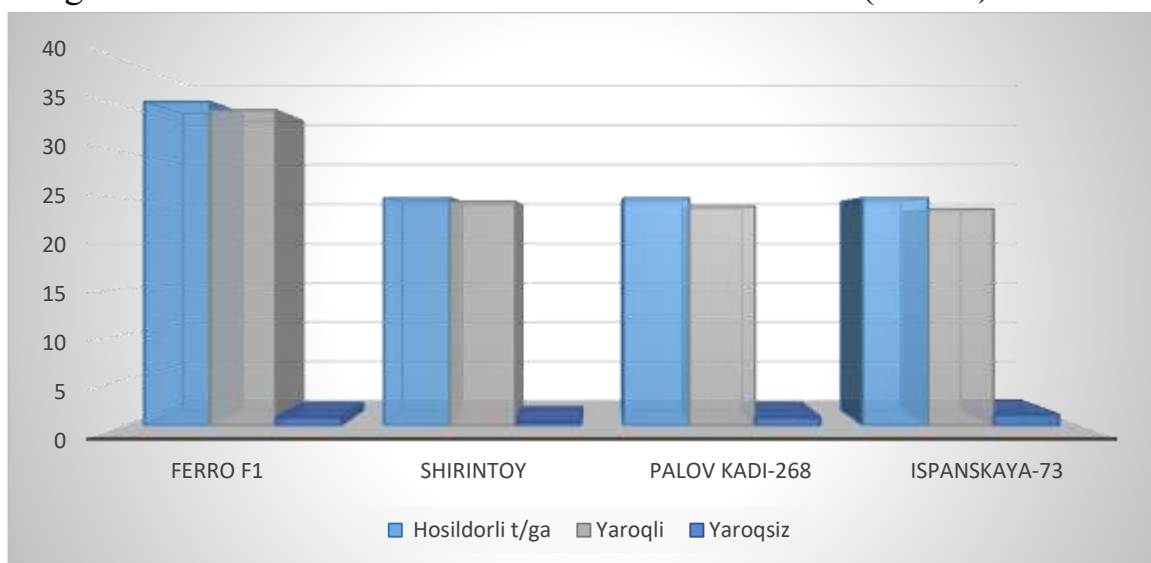
1-jadval

Qovoq navlarining agrobiologik xususiyatlari (2022-2024 y.)

Qovoq navlari nomi	Gullashdan pishguniga qadar, kun	Xom ashyo mahsuldorligi	
		ga/t	shundan, quritishga ...
			yaroqli

			t	%	t	%
Ferro F1	108	35,5	34,6	97,5	0,9	2,5
Shirintoy	135	25-27	24,6-26,6	98,4	0,4	1,4
Palov Kadi-268	114-116	25-30	24,1-29,1	96,4	0,9	3,6
Ispanskaya-73	117-130	25-30	23,8-29	95,2	1,2	4,8

Kuzatuvlardan shu ma'lum bo'ldiki qovoqning Shirintoy navi o'rtacha hosildorlikka ega bo'lsada, yaroqli xomashyo mahsuldorligi bilan boshqa navlardan yuqori ko'rsatkichlarni qayd etdi. 1 maydon birligiga Shirintoy navining 25 t hosildan 98,4 % yaroqli maxsulot deb topildi. Shu sababli bu navni quritish uchun mos bo'lgan navlardan biri sifatida olishimiz mumkin bo'ladi (1-rasm).



1-rasm. Qovoq mevalarini quritishga yaroqli va yaroqsiz xomashyo mahsuldorligi, t/ga

Sanoat miqyosida qovoq mevalarni qayta ishlash jarayonida uning texnologik xususiyatlari ya'ni tarkibidagi quruq modda miqdori, qand miqdori va to'qima strukturasi muhim ahamiyatga ega hisoblanadi. Bu kabi va boshqa xususiyatlar tayyor maxsulotning biologik, organoleptik va kimyoviy tarkibi kabi ko'rsatkichlariga o'z tasirini o'tkazadi.

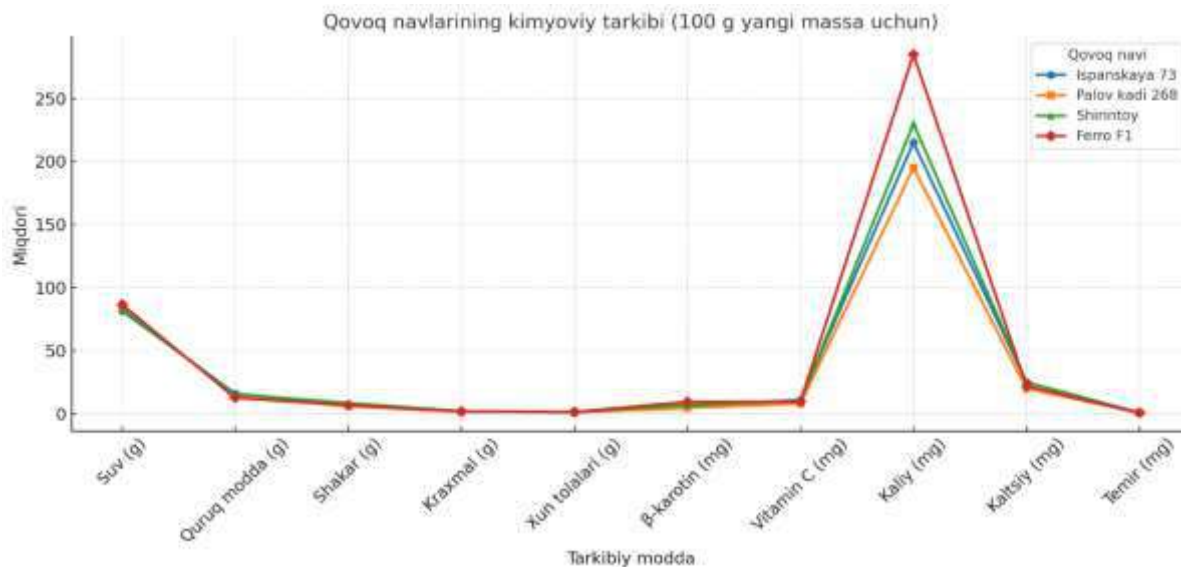
Biz hududlarda yetishtirilgan qovoq mevalarining kimyoviy tarkibini o'rganish ishlari olib bordik. O'rganishlarimizdan shu narsa ma'lum bo'ldiki tadqiqotlarning birinchi yilgi maxsulotlar va ikkinchi yilgi maxsulotlar o'tkazilgan laboratoriya kuztuvlarida ikki hosil yilida olingan xomashyoning kimyoviy tarkibi o'rganilib ular solishtirilganda ko'p tafovut mavjud emasligi aniqlandi. Quyida o'rganilayotgan har bir navning kimyoviy tarkibi keltirilgan (100 g yangi meva massasiga nisbatan):

2-jadval

Qovoq navlarining kimyoviy tarkibi 2022-2024-y (o'rtacha)

Tarkibiy modda	Ispanskaya 73	Palov kadi 268	Shirintoy	Ferro F1
Suv (g)	81.5	84.5	82.5	86.5
Quruq modda (g)	16.0	13.5	15.5	12.5
Kraxmal (g)	2.0	1.6	2.1	1.8
Xun tolalari (g)	1.2	1.0	1.1	1.4
β-karotin (mg)	6.0	4.5	7.0	9.5
Vitamin C (mg)	11.0	8.0	10.0	9.5
Kaliy (mg)	215.0	195.0	230.0	285.0
Kaltsiy (mg)	25.0	20.0	25.0	22.0
Temir (mg)	0.8	0.6	0.7	0.65

Qovoq mevalarda quruq modda miqdori — bu o'simlikdagi umumiy og'irlikdan suv tarkibini chiqarib tashlagandan keyingi qismdir. Ya'ni, quruq modda — bu o'simlikdagi suv bo'lmagan barcha organik va noorganik elementlarning yig'indisidir. Quruq modda tarkibiga uglevodlar (masalan, shakar va kraxmal), yog'lar, oqsillar, minerallar hamda tolalar kiradi. Qovoq mevalarda quruq modda miqdori o'simlikning namligiga, yetilganlik darajasiga va saqlash sharoitlariga bog'liq holda o'zgaradi. Masalan, yangi yig'ilgan poliz ekinlari namligi yuqori bo'lib, shuning uchun quruq modda foizi odatda 10-30% atrofida bo'ladi. Quruq modda ko'p bo'lsa, o'simlikda suv kamroq ekanligini anglatadi. Quruq modda miqdori yuqori bolgan navlarda quruq maxsulot chiqish foizi yuqori bo'ladi va bu iqtisodiy samaradorlikka olib keladi.



2-rasm. Qovoq navlarining kimyoviy tarkibi

Yuqoridagi grafikda siz **Ispanskaya 73**, **Palov kadi 268**, **Shirintoy** va **Ferro F1** qovoq navlarining har bir asosiy kimyoviy modda bo'yicha o'zaro taqqoslanishini ko'rishingiz mumkin:

Ferro F1 – β -karotin va kaliy miqdori bo'yicha yetakchi.
Shirintoy – shakar miqdori bo'yicha eng shirin nav.
Ispanskaya 73 – quruq modda va temir miqdori bo'yicha yuqori.
Palov kadi 268 – suvga boy, palovga mos, o'rtacha shirinlikda.

Shuningdek xomashyo tarkibidagi qand miqdori ham quritilgan maxsulotlarning sifat ko'rsatkichlariga ijobiy ta'sir ko'rsatadi. Qovoq tarkibidagi **qand miqdori** – bu qovoq ichidagi shakarlarning umumiy miqdorini bildiradi. Qandlar — bu qovoqda tabiiy ravishda mavjud bo'lgan shakar turlari, masalan, glyukoza, fruktoza va sukroza.

Xulosa: Qovoqdagi qand miqdori uning turiga, yetilganlik darajasiga va o'sish sharoitlariga qarab farq qilishi mumkin. Odatda, qovoqda qand miqdori nisbatan past bo'ladi, chunki u asosan kraxmal va tolalarga boy sabzavot hisoblanadi, lekin qovoqning shirin navlarida qand miqdori yuqoriroq bo'lishi mumkin.

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TEST METHODS USED TO DETECT BREAST CANCER IN THE EARLY STAGES

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Relevance:

When breast cancer is suspected, smearing, palpation, examination of both mammary glands by ultrasound and mammography methods, cytological examination of the punctate obtained from the tumor, and histological examinations with sectoral resection, if necessary, are carried out. Examination is of great importance for diagnosis. Factors that cause cancer can be determined by the presence of diseases in the genital organs from a young age, the time when menstruation starts and stops, the number of pregnancies and abortions, breastfeeding, the use of hormonal drugs, and other questions. Mammography is performed using special x-ray diagnostic equipment without any contrast agents. The method of fluoromammography is rarely used in recent years. X-rays are taken in bottom and side projections. Usually, mammography is performed in such projections for comparison. Examination of young women is performed between menstruation. In mastopathies, it is possible to see diffuse and fibrous changes in the structure of the mammary gland, and between them small lights (cysts) have appeared. While the mammography method has a high level of diagnostic value in the examination of the mammary gland, one should not forget its carcinogenicity (cancer formation in the gland). Therefore, this method can be used only 1-2 times in young people. This method should be used mainly in women over 50 years of age. Ultrasound examination method (sonography). In recent years, this method has been widely used in the examination of mammary glands. It clearly identifies cystic and nodular changes. Since this method is harmless to the mammary gland, it can also be used in young patients. Other special examinations (thermography, ductography, transillumination, xeromammography, contrast mammography, arteriography, radioisotope diagnostics) are not widely used for some reasons. Radioisotope examination is mainly used to detect bone metastases. When changes in the mammary gland are examined by all available methods, the diagnosis of cancer is made only after pathomorphological, cytological and histological examinations. For cytological examination, the skin of the mammary gland is pierced with a special needle, and the contents of the nodule or lesion are drawn into a syringe (puncture biopsy) and microscopic examination is performed. In this case, abnormal (atypical) and cancerous cells can be found in the mammary gland.

Objective: To provide clinical and morphological justification for modern complex treatment methods for breast cancer.

Materials and Methods: Study Types and Objects: 150 patients with breast cancer treated between 2018 and 2023 were clinically and morphologically studied. Patients were divided into groups according to their molecular type and stage of disease

Result, Two semi-circumcised skin incisions are made in the radial direction, 2 cm away from the border of the tumor. One of the incisions goes deep to the pectoralis major muscle. The left ash fingers are inserted into the resulting bush, and the sector to be removed is waiting.

Conclusion, an incision on the opposite side of the carapace with connective tissue is deepened, and the damaged sector is cut. In a technically correct resection, the bottom of the wound is the fascia of the pectoral muscle. The removed tumor is surrounded by mammary tissue from all sides. When nodular mastopathy, fibroadenoma and cancer are suspected, sectoral resection is performed in the same way, without any technical difference.

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STEAM TA'LIM TEXNOLOGIYASINI TADBIQ ETISHDA LOYIHALARDAN FOYDALANISH

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Annotatsiya: Ushbu maqolada STEAM texnologiyasining ta'lim jarayonidagi o'rni, amaliyot bilan bog'liqligi, STEAM texnologiyasini tadbiq etishda loyihalardan foydalanish, tajriba o'tkazish xonalarining tashkil etilishi va ko'zlangan maqsad, texnologiyaning bola hayotidagi ahamiyati va uning xususiyatlari haqida umumiy ma'lumot berilgan.

Kalit so'zlar: STEAM, texnologiya, innovatsion metodlar, loyihalash, laboratoriya, intellekt, salohiyat, tafakkur, axborot kommunikatsiya.

Qaysi sohani olmaylik muvofaqiyat qozonish uchun bilimlarni talab etadi va aynan STEAM texnologiyasi bu maqsadga erishishda yordam bera oladi. Bu metod aynan nazariya va amaliyotni birga olib borish imkonini beradi va bilimlarga asoslanish, bilimlardan o'rinli foydalanish, mustaqil muvoffaqiyatga erishish, o'z imkoniyatlaridan zavqlanish imkonini beradi. STEAM texnologiyasi barcha ta'lim tashkilotlarida faoliyatni amalga oshirish imkoniyatini beruvchi innovatsion texnologiyadir.

STEAM ta'limi - bu real dunyodagi haqiqiy muammolarni hal qilishning keng qamrovli, tadqiqotga asoslangan usuli. Fridrix Ferebel “Bolaning atrofida shaxsning rivojlanishiga xizmat qiladigan obyektiv muhitni yaratish, atrofdagi voqelikni idrok etishga undash kerak.”¹-degan edi. STEAM ta'lim faoliyatini boshlashdan oldin biz faoliyatning maqsadlarini aniqlab olishimiz kerak. Faoliyat jarayonida bolalar tashabbuskorlikning o'quv sifatini, jiddiy e'tiborni, qiyinchiliklardan qo'rqmasligini, kashf qilish va sinab ko'rishga jur'at etishi, tasavvur qilish va yaratishga tayyor bo'lishi kerak. Faoliyatdan so'ng o'qituvchilar faoliyat sharoitlarining o'zgarishiga qarab tegishli aralashuv va yo'l-yo'riq berishlari hamda ideal bo'lgan STEAM kursi bilimlarini chuqurroq tushuntirishlari mumkin bo'ladi.

STEAM texnologiyalari va loyihalashtirish. Birinchi ish loyiha mavzusini aniqlash. Tadqiqot faoliyatini amalga oshirishdan oldin tarbiyachilar loyiha

¹ Т. В. Волосовец, В. А. Маркова, С. А. Аверин. STEM -образование детей дошкольного и младшего школьного возраста. Москва БИНОМ. Лаборатория знаний 2019. -108 с.

mavzusini, o'qitish maqsadlari, bolalarning xususiyatlari, o'qitish mazmuni va boshqa jihatlari bilan birgalikda aniqlashlari kerak. O'qitish maqsadlari turli bosqichlarda bolalarning xilma-xilligiga qarab bilim va ko'nikmalar, jarayon va usullar, munosabat va hissiyotlarning uch o'lchovli maqsadlariga javob berishi kerak. "Bilim tizimining o'ziga xosligi - bu bolalarning kuzatishi, vizual-majoziy fikrlash orqali bilishi mumkin bo'lgan aniq, cheklangan hajmli materialni anglatadi"² Shu bilan birga, ishlab chiqilgan tadbirlar bolalarning yoshi xususiyatlariga mos kelishi kerak. Ta'lim mazmuni nuqtai nazaridan, matematika, muhandislik, texnologiya, fan va san'at fanlararo sohalarning integratsiyasini aks ettirish uchun birlashtirilishi kerak. STEAM faoliyatini loyihalash bo'yicha ko'rsatmalar:

1. Atrof-muhitni yaratish. Atrof-muhitni yaratish bolalar uchun jismoniy va psixologik muhitni ta'minlashni o'z ichiga oladi. Jismoniy muhit tarbiyachilarning bolalar faoliyati uchun tegishli joylar va jihozlarni ta'minlashini anglatadi. Psixologik muhit - bu bolalarga bo'shashgan va erkin psixologik muhitni, shu jumladan tarbiyachilar va tengdoshlar tomonidan taqdim etilgan psixologik iliqlikni ta'minlaydi. Masalan, tarbiyachilarning bolalarga nisbatan ijobiy munosabati, tengdoshlar guruhlarida barkamol o'quv jamoasi, yashash muhitida tartib va qoidalarga ixtiyoriy rioya qilish va boshqalar. Ko'rinib turibdiki, ijobiy muhit bolalarning faol o'rganishi va izlanishlari uchun asosiy kafolatdir.

2. Qiziqish uyg'otish. Tarbiyachilar ko'rgazmali qurollarni so'rash yoki ko'rsatish orqali bolalarning e'tiborini, qiziqishini tortadi. Bolalarning qiziqishini jalb qilish asosida tarbiyachilar tegishli modelni namoyish qilish, rasm ko'rsatish, video va boshqa usullar orqali bolalarning loyiha mavzusi haqidagi tushunchalarini kengaytiradilar. Bu bolalarning faol izlanishlarini rivojlantirish uchun STEAM ta'limining asosidir.

3. Guruh hamkorlik tekshiruvi. STEAM ta'limining mohiyati muammolarni hal qilishga yordam beradi, shu bilan birga haqiqiy muammolar ko'pincha murakkab va xilma-xil bo'lib, bolalardan aniq maqsad va sohalarda o'zaro bilimlar zaxirasiga ega bo'lishni va o'rganishdagi turli muammolarni hal qilish uchun bir-biri bilan hamkorlik qilishni talab qiladi. Shu sababli, maktabgacha ta'limda STEAM ta'limini loyihalashda "hamkorlik" va "muloqot" o'z aksini topishi kerak, ya'ni bolalar o'quv vazifalarini guruh hamkorligi orqali bajaradilar, bu esa bolalarning o'rganish va hamkorlik ongini oshirishda yordam beradi.

² Quchqorova N.M., Avazmetova I.R., Ikramova D.U. Bolalami tabiat bilan tanishtirish [Matn] : darslik /N.M. Quchqorova, I.R. Avazmetova, D.U. Ikramova. - Toshkent: Bookmany print, 2023. -214b.

4. Aqliy hujum. Bolalar vazifa muammosini aniqlagandan so‘ng, guruhdagi hamkorlik jarayonida o‘qituvchilar bolalarni muammo bo‘yicha aqliy hujumga o‘tkazishlari mumkin, ammo bolalarning g‘oyalariga chek qo‘ymasligi kerak, balki ulardan faqat o‘zlarining barcha g‘oyalarini ifoda etishlarini so‘rashi kerak. Ba‘zi g‘oyalar imkonsiz bo‘lib tuyulsa-da, bolalarning ifodalash jarayoni fikrlash va turli xil dunyoqarash jarayoni bo‘lib, bu bolalarning muammolarni tushunishini va muammolarni hal qilishni yaxshilashning asosiy bosqichidir. Shuning uchun guruh a‘zolaridan o‘z fikrlarini bildirish uchun jasorat talab qilinadi va muammoni hal qilishga yanada ko‘maklashish uchun o‘z qarashlariga e‘tibor qaratiladi.

STEAM ta‘limining mohiyati muammolarni hal qilishni osonlashtirishdan iborat bo‘lib, real muammolar ko‘pincha murakkab va xilma-xil bu bolalardan maqsadni aniq his qilish va ko‘plab sohalarda bilim zahiralari ega bo‘lishni hamda o‘rganishdagi turli muammolarni hal qilish uchun bir-biri bilan hamkorlik qilishni talab qiladi.

5. Amaliy faoliyat. Guruh hamkorligi asosida bolalar aqliy hujum natijasiga ko‘ra materiallarni tanlaydilar va oldindan belgilangan bosqichlar bo‘yicha ishlashga harakat qiladilar va nihoyat natijani shakllantiradilar. Bolalarning amaliy izlanish jarayoni aslida muammolarni hal qilishga doimo harakat qilish jarayonidir. Bu jarayonda bolalar to‘satdan muammolarga duch kelishadi. Bu vaqtda pedagoglar bolalarni tashabbus ko‘rsatishga undashlari, muammolarni tengdoshlari bilan o‘rganish va hamkorlik qilish orqali hal qilishga harakat qilishlari kerak. Agar kerak bo‘lsa, pedagoglar bolalarni yutuqlarni shakllantirishga yo‘naltirish uchun mavzu bilan ta‘minlashlari kerak.

6. Interaktiv almashish. Interaktiv almashish muhim qadamdir. Bir tomondan, o‘z ishlarini ko‘rsatish orqali bolalar o‘zlarining dizayn g‘oyalarini boshqa guruhlar bilan o‘rtoqlashadilar, bu esa ularning tilni ifodalash va muloqot qilish qobiliyatini rivojlantiradi. Boshqa tomondan, bolalar boshqa guruh ishlarining g‘oyalari, tashabbuslari, dizaynlarini tinglash va o‘rganish orqali muammolarni hal qilish uchun o‘zlarining yangi g‘oyalarini kengaytiradilar.

7. Fikrlash va takomillashtirish. Tarbiyachilar erishilishi kerak bo‘lgan maqsadlarni aniq ko‘rsatishadi, lekin ular bolalar uchun muammolarni hal qilish jarayoniga aniq talablarga ega emaslar. Ayniqsa, har bir guruh bilan baham ko‘rgandan so‘ng, har bir guruhdagi bolalar o‘zlarining faoliyat rejasini yaxshilash uchun amaliyot va tengdoshlarning tajribasi orqali mavjud muammolarni tushunishlari mumkin. Boshqa tomondan, tarbiyachilar ushbu STEAM faoliyati mavzusini optimallashtirish uchun faoliyat rejasini yanada takomillashtirishda bolalardan qimmatli fikr-mulohazalar, ma‘lumotlarini kuzatadilar va to‘playdilar.

Xulosa qilib aytganda, STEAM ta'limi bolalarni tajribalar o'tkazishga, modellar tuzishga, mustaqil ravishda loyihalar yaratishga, o'z g'oyalarini haqiqatga aylantirishga va bolaning o'ziga mahsulotni yaratishga undaydi. Ushbu ta'lim yondashuvi bolalarga nazariy olgan bilimlarini amaliyot bilan samarali tarzda birlashtirishga imkon beradi va butun umri davomida qo'llay olish imkonini beradi.

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IJTIMOYIY USTANOVKALAR SHAKLLANISHINING KOMPONENTLARI

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ANNOTATSIYA

Ijtimoiy ustanovkalarni shakllantirish shaxsning muhim jihati bo'lib, insonga o'z xulq-atvorini boshqarish imkonini beradi. Ijtimoiy ustanovkalarni adekvat shakllantiruvchi shaxs o'z hislarini aql izmiga bo'ysundirish, turli ko'rinishdagi vaziyatlarda aniq qaror qabul qilish kabi xususiyatlarga ega bo'ladi. Bundan tashqari, ijtimoiy ustanovkalarni shakllantirish orqali sub'yekt ijtimoiy- emotsional holatini nazorat qilib turadi.

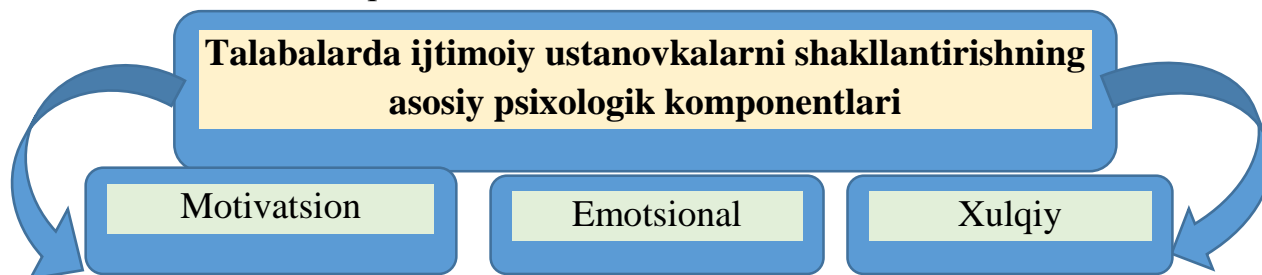
Kalit so'zlar: Ijtimoiy ustanovka,Shakllanish jarayoni,Kognitiv komponent
Emotsional component,Behavoral component,Shaxslararo munosabat,
Sotsializatsiya.

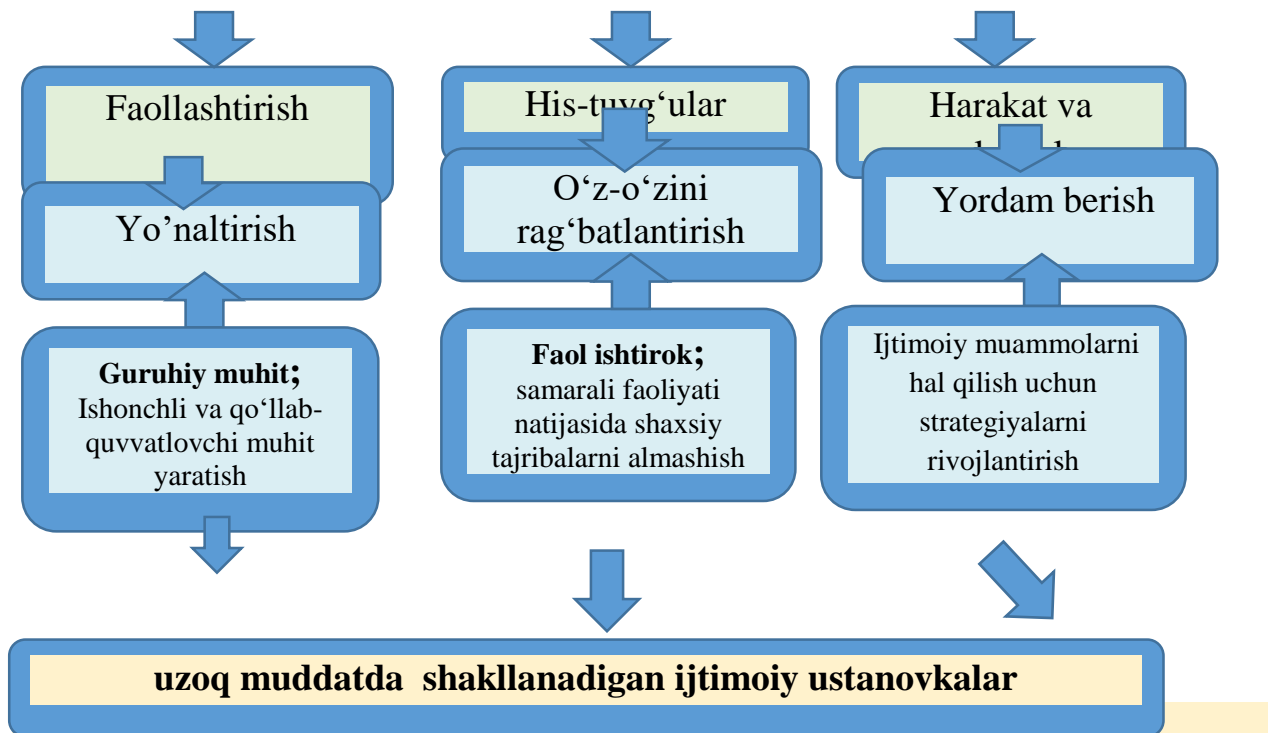
Kirish

O'rganilgan ilmiy manbalar asosida talaba-yoshlarda quyidagi xususiyatlarning ustunlik qilinishi tadqiqotimizning psixokorreksion dasturini yaratishda quyidagi mezonlar asos sifatida xizmat qildi:

- bilimlar, ko'nikmalar va malakalarni egallashdagi individuallik;
- faoliyatda individual uslubning namoyon etilishi;
- kasbiy motivatsiyaning ustuvorligi;
- ma'naviy ehtiyojning, barqaror qiziqishning qat'iy yetakchiligi;
- ijtimoiy-psixologik munosabatlarning shaxsiy pozitsiyaga bo'ysunganligi;
- oliy ta'lim muhitining talaba shaxsiyatida ifodalanishi;
- amaliyotga va muhitga moslashishning ijtimoiy-psixologik omillari.

Talaba-yoshlardagi ushbu xususiyatlar orqali biz olingan dastlabki empirik ma'lumotlar asosida psixokorreksion ishlarni olib bordik.





3.2.2-rasm. Talabalarda ijtimoiy ustanovkalarni shakllantirishning asosiy psixologik komponentlari

Xulosa

Talabalarda olib borilgan psixokorreksion ishlar davomida to'plangan ma'lumotlarga asoslanib, quyidagi xulosalarga kelish mumkin:

1. Shaxsning emotsional holatlarda ijtimoiy ustanovkalarni shakllantirish imkoniyatlarini kuchaytirish bevosita individual-psixologik xususiyatlarning rivojlantirilishi bilan bog'liq bo'ladi.

2. Faoliyat jarayonida ijtimoiy ustanovkalarni shakllantirish ijtimoiylashuv jarayonida ijtimoiy ustanovkalarni rivojlantirish bilan uzviy aloqadorlikka ega, chunki muayyan darajadagi ijtimoiylashuv jarayonida ijtimoiy ustanovkalarni shakllantirish imkoniyati kuchayadi yoki aksincha, pasayish holati kuzatiladi.

3. Emotsional holatlarda ijtimoiy ustanovkalarni shakllantirish metodikasi bo'yicha tajriba va nazorat guruhlaridan olingan empirik natijalar orasida ishonchlilik darajasi mavjud ekanligi aniqlandi. Jumladan, trening natijalaridan so'ng talaba-yoshlarda ijtimoiylashuv jarayonida ijtimoiy ustanovkalarni shakllantirish jarayoni nisbatan yuqori ekanligi kuzatildi.

4. Talaba-yoshlarda ijtimoiy ustanovkalarni rivojlantirishga qaratilgan motivatsion tizimga alohida e'tibor qaratish zarur bo'ladi. Ijtimoiy ustanovkalarniga xos tarzda shakllanuvchi ijtimoiy-psixologik omillarni tizimli tarzda tahlil qilish va o'rganish asosida tegishli tavsiyalarni ishlab chiqish muhim ahamiyatga egadir.

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Architectural Ecology as a Scientific Direction in the History and Theory of Architecture

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Introduction

The intersection of architecture and ecology represents a transformative paradigm within the field, serving as both a theoretical framework and a practical approach to design. As societies increasingly confront environmental challenges, the principles of architectural ecology emerge as crucial in re-evaluating historical practices while informing contemporary methodologies. By analyzing traditional structures such as the Suzhou classical gardens, which exemplify the interaction of human creativity and natural landscapes, one can discern fundamental principles that have sustained aesthetic and functional relevance through time (Xu Z et al.). Moreover, exploring the architectural and urban planning features of railway stations, such as those along the Trans-Siberian Railway, illustrates the adaptability of architectural designs to specific environmental contexts, emphasizing a need for ecologically sensitive urban development (E Glatolenkova). Thus, the study of architectural ecology provides an essential lens for understanding the evolution and future trajectory of architectural practices in response to ecological imperatives.

Definition of Architectural Ecology

Architectural ecology can be defined as the interdisciplinary study that examines the connections between built environments and their natural surroundings, fostering a more sustainable approach to architectural design. This field advocates for an understanding of ecological principles when crafting architectural solutions, promoting harmony between human activity and environmental health. The relationship between architectural gestures and the experiences they generate underscores the importance of sensitivity towards local contexts, as evidenced by studies that emphasize indigenous architectures. For example, the education of architects in Papua New Guinea illustrates how responsiveness to local environments can yield more appropriate and culturally relevant structures (Menin et al.). Additionally, integrating sound and acoustic considerations within architectural design aligns with the broader ecological framework, recognizing the diverse affordances of a site's acoustic properties. Such multifaceted approaches ultimately enhance the conceptual foundation of architectural ecology as a significant scientific direction within the history and theory of architecture (Arias P et al.).

Importance of studying Architectural Ecology in the context of architecture

The study of Architectural Ecology has become paramount in guiding sustainable practices within the architectural field, particularly as contemporary society grapples with pressing environmental challenges. As climate change intensifies, architectural design must transcend traditional aesthetic and functional paradigms, embracing ecological principles that foster environmental stewardship. This intersection is not merely theoretical; it has practical implications for communities, especially in regions with limited environmental awareness. For instance, the integration of sustainable design within architectural education is critical, as argued in recent studies that highlight its necessity in shaping practitioners who are attuned to their environmental context (Elnokaly et al.). Furthermore, by examining the organizational structures and creative networks within urban environments, we can better understand the role that architecture plays in fostering resilience and sustainability in urban development (Roodhouse et al.). Thus, Architectural Ecology serves as a vital framework for developing architecture that not only meets human needs but also nurtures the environment.

Historical Context of Architectural Ecology

The historical context of architectural ecology is rooted in the recognition of architecture as not just a built form but an integral part of ecological systems. This paradigm shift occurred as architects began to understand the impact of their designs on the environment, prompting a dialogue between ecological principles and architectural practices. Early 20th-century movements like modernism gave rise to the idea that buildings could harmonize with their natural surroundings, a theme that continues to evolve today. The intersection of infrastructure studies and platform studies further elucidates this relationship, highlighting how digital systems shape both ecological and architectural landscapes. For instance, (Jean-Plantin C et al., p. 293-310) emphasizes the necessity to investigate how infrastructure underpins architectural practices, while (Ostertag R et al., p. 805-809) discusses the implications of species selection and functional traits in ecosystem restoration, aligning restoration objectives with ecological realities. This evolving discourse underscores the need for architectural approaches that not only address aesthetic and functional demands but also prioritize ecological integrity within the built environment.

Evolution of ecological considerations in architectural practices

The evolution of ecological considerations in architectural practices reflects a growing awareness of the interdependent relationship between built environments and natural ecosystems. Early architectural designs tended to prioritize functionality

and aesthetics, often at the expense of environmental sustainability. However, as the impacts of urbanization and climate change became more pronounced, architects began integrating ecological principles into their work. This shift has led to the development of innovative design strategies that address issues such as resource conservation and biodiversity. For instance, landscape architects now utilize land surface models (LSMs) to predict how design choices affect ecological dynamics, emphasizing the importance of managing process complexity and representing land surface heterogeneity, which are crucial for sustainable development (Rosie A Fisher et al.). Furthermore, the recognition of the microbiota-gut-brain axis in health demonstrates how integral ecological factors are becoming in shaping environments conducive to human well-being, underscoring the necessity for a holistic approach in architecture (John F Cryan et al., p. 1877-2013).

Key historical figures and movements that influenced Architectural Ecology

The evolution of Architectural Ecology has been profoundly shaped by key historical figures and movements that intertwined ecological consciousness with architectural practices. Pioneers such as Frank Lloyd Wright, with his philosophy of organic architecture, emphasized harmony between the built environment and nature, laying foundational concepts for sustainable design. Moreover, the rise of the ecological movement in the latter half of the 20th century, as highlighted in contemporary urban studies, reframed architecture to consider broader regional dynamics and the functionality of urban spaces (Bailey D et al., p. 1163-1174). This shift prompted practitioners to view architecture not merely as a response to aesthetic demands but as a catalyst for social and political mobilization within urban environments (Peter W Rose). Consequently, the integration of these historical perspectives has established Architectural Ecology as a pivotal scientific direction, fostering a multidisciplinary approach that bridges design with ecological integrity.

Theoretical Frameworks in Architectural Ecology

Architectural ecology, as an interdisciplinary field, necessitates robust theoretical frameworks that bridge the gap between environmental science and architecture. By integrating concepts from infrastructure studies, the discipline underscores the complex interdependencies that characterize built environments and their ecological contexts. The examination of architectural practices through this lens reveals how infrastructures—much like natural ecosystems—evolve over time, adapting to societal needs while often straining ecological balance (Jean-Plantin C et al., p. 293-310). Furthermore, the impact of hybridization in design processes can lead to innovative architectural solutions responsive to climate change and biodiversity loss. In this respect, the exploration of gene flow and adaptation

parallels the adaptive nature of architectural elements, suggesting that buildings themselves can act as hybrid entities that facilitate ecological resilience (Richard J Abbott et al., p. 229-246). Ultimately, these theoretical frameworks provide a crucial basis for understanding the dynamic relationships between humanity and nature within the architectural realm, guiding future practices toward sustainability.

Interdisciplinary approaches combining ecology and architecture

The convergence of ecology and architecture exemplifies a rich, interdisciplinary approach that enhances sustainable design practices. By integrating ecological principles into architectural frameworks, architects can create buildings that are not only functional but also harmoniously aligned with their natural environments. This synergy fosters the development of structures that minimize ecological footprints and promote biodiversity, turning urban landscapes into thriving ecosystems. Innovative methodologies, such as network analysis, have emerged to identify complex associations between environmental variables and architectural elements, revealing patterns that can inform design strategies and improve resilience against climate change (Borsboom D et al.). Moreover, the pursuit of architectural solutions that address pressing ecological challenges holds vast potential for transformative breakthroughs, emphasizing the importance of this interdisciplinary focus over the next decade (Guang-Yang Z et al.). Consequently, architectural ecology stands as a vital scientific direction, intertwining the realms of design and environmental stewardship in a manner that redefines contemporary architectural discourse.

The role of sustainability in shaping architectural theories

The integration of sustainability into architectural theories has evolved as a fundamental principle guiding modern design practices, emphasizing the interdependence of the built environment and ecological systems. As cities grapple with the consequences of rapid urbanization and climate change, frameworks such as Biourbanism stress the importance of creating urban fabrics that prioritize human well-being and environmental integrity. These theories advocate for a reexamination of traditional design principles, aiming to restore balance in urban planning by reinforcing human-oriented values and fostering healthy social interactions. Moreover, the discourse surrounding sustainability in architecture increasingly draws upon established scientific laws, such as Constructal Law, which underscores the dynamic nature of urban life and the necessity for sustainable systems that support community growth ((Caperna et al.)). Ultimately, as cities evolve, architectural theories centered on sustainability will play a pivotal role in shaping

resilient and adaptive urban environments that respond effectively to contemporary challenges ((Caperna et al.)).

Contemporary Applications of Architectural Ecology

The contemporary applications of architectural ecology reveal an intricate interplay among technology, sustainability, and societal dynamics, fostering innovative design practices. As architecture increasingly integrates simulation models derived from computational technologies, the discipline shifts focus towards embracing ecosystems rather than merely preserving them. This transition is characterized by a reassessment of the relationship between design and society, challenging traditional assumptions and advocating for a more critical dialogue in architectural practice. By incorporating diverse methodologies—including interpretative case studies and energy awareness programs—architects are redefined as stakeholders in ecological and social systems. This holistic approach aligns with the argument that sustainability must consider not only environmental impact but also the technological and ideological frameworks that shape design processes. Ultimately, the fusion of these elements within architectural ecology underscores its relevance as a scientific direction, affirming its role in addressing contemporary challenges in the built environment (Varenne et al.)(Mazé et al.).

Case studies of modern architectural projects that embody ecological principles

The exploration of case studies in modern architectural projects reveals a growing commitment to ecological principles as central to design. One notable example is the Arcosanti Project, which serves as a practical embodiment of arcology — the merging of architecture and ecology. This innovative initiative not only addresses sustainability challenges but also exemplifies the theoretical underpinnings of architectural ecology as a discipline. The intricate relationship between planning, design, and management is critical in these projects, highlighting the necessity for a coherent theoretical framework that distinguishes and connects these elements to effectively manage built landscapes (Koh et al.). As theorists and practitioners alike navigate the complexities of sustainable environments, the success of projects like Arcosanti underscores the importance of a scientific direction in architectural ecology, illustrating how architectural practices can evolve to meet ecological imperatives (Grierson et al.).

Technological advancements that support ecological architecture

The integration of technological advancements into ecological architecture marks a significant evolution in both design strategies and sustainable practices, reflecting a proactive response to environmental challenges. Innovations such as advanced modeling software and materials with reduced ecological footprints

facilitate enhanced collaboration among designers and stakeholders, leading to more efficient and thoughtful architectural solutions. For instance, the application of Building Information Modeling (BIM) allows architects to visualize the ecological impact of their designs, fostering an environment where sustainability is a priority from the outset. Complementing these technologies, principles of ecological stewardship highlight the importance of creating spaces that resonate with local culture and identity, as evidenced by the enduring connections people have to the land and their environment (Schroeder et al.). Through a commitment to sustainable practices and the integration of advanced technologies, ecological architecture emerges as a vital scientific direction within architectural history and theory, paving the way for resilient and responsible built environments (Heylen et al.).

Conclusion

In conclusion, the evolving discourse surrounding architectural ecology highlights the necessity for a deeper understanding of the intricate relationships between built environments and natural ecosystems. As urban landscapes increasingly confront challenges such as climate change and biodiversity loss, the principles stemming from architectural ecology emphasize a paradigm shift towards sustainability and resilience. The historical investigation into human impacts on environments, exemplified by the Błędowska Desert and its lessons about ecological degradation, underscores the importance of integrating scientific inquiry within architectural practices (Shea BS et al.). Furthermore, re-examining aspects previously considered as filth reveals their potential benefits, advocating for a more holistic approach to urban health and design (Lorimer J et al.). Ultimately, by fostering interdisciplinary collaboration among architects, scientists, and educators, architectural ecology paves the way for innovative strategies that not only address ecological crises but also enrich human experiences in the natural world, shaping a more sustainable future.

Summary of the significance of Architectural Ecology in architecture

The significance of Architectural Ecology in the field of architecture cannot be overstated, as it merges ecological principles with architectural design, fostering a harmonious relationship between built environments and natural ecosystems. This interdisciplinary approach transcends traditional architectural practices by emphasizing sustainability and resource efficiency, which are crucial in addressing contemporary environmental challenges. By analyzing spatial characteristics and integrating ecological systems, architects can create structures that not only minimize their ecological footprint but also enhance the aesthetic and cultural value of their surroundings. The examination of classical gardens, such as those in Suzhou,

reveals how historical practices can inform modern ecologically-centered design, promoting a deeper understanding of spatial proportions and aesthetic harmony (Xu Z et al.). Moreover, architectural ecology serves as a bridge between technological advancement and environmental stewardship, illustrating how design processes can foster cultural and ecological progress (Y Hula et al., p. 8-22). Ultimately, it positions architecture as a critical player in the pursuit of sustainable futures.

Future directions and potential impact on architectural practices and theory

As architectural practices continue to evolve, the integration of interdisciplinary approaches will significantly influence both theory and application within the field. The focus on emotional well-being, particularly in the context of designing spaces for the elderly, underscores the necessity for architectural ecology to address complex human needs. Research suggests that current interior architectural designs often overlook emotional aspects, emphasizing the importance of the Three-Level Theory of Emotional Design (TTED) to create environments that resonate with users' emotional experiences (Li L et al.). Furthermore, the application of emerging theoretical frameworks, such as Singular Identifiability Theory (SITh), opens new avenues for understanding architectural representation and its implications for design (Reizinger P et al.). By harmonizing insights from emotional design and advanced theoretical constructs, architectural practitioners can foster environments that not only meet functional requirements but also enhance the psychological and emotional experiences of inhabitants, ultimately redefining the relationship between architecture and its users.

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Study of Approaches to Designing Public Buildings for People with Limited Mobility

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Introduction

Designing public buildings that cater to the needs of individuals with limited mobility is a critical issue that transcends mere architectural considerations, encompassing principles of inclusivity and accessibility. As urban environments evolve, the urgency for effective design strategies intensifies, particularly in identifying and addressing the impediments faced by these populations. A substantial body of research has uncovered various barriers, such as inadequate parking, unsuitable surface conditions, and inefficient public transport waiting areas, which significantly hinder mobility in public spaces (Berrett et al.). Furthermore, the need for improved ramps and clear information provision remains paramount, indicating that a multi-faceted approach is essential for creating environments that are genuinely accessible for all (Berrett et al.). The findings from ongoing discussions and literature reviews underscore the importance of integrating diverse perspectives in design processes, aiming to foster greater awareness and responsiveness to the requirements of people with limited mobility .

Definition of limited mobility and its implications

Limited mobility is defined as a condition that hinders an individual's ability to move freely and independently, often resulting from physical disabilities, injuries, or age-related decline. This condition encompasses a wide spectrum of challenges, such as difficulty in walking, climbing stairs, or navigating uneven surfaces. The implications of limited mobility in public building design can be profound. Inadequate consideration for these challenges can lead to barriers that exclude individuals from accessing essential services and social experiences. Consequently, a well-designed environment must incorporate features such as ramps, elevators, and clear signage to facilitate movement and promote independence for those with limited mobility. Addressing these needs aligns with universal design principles, ensuring that public spaces foster inclusivity and equality. This commitment is crucial, as highlighted in recent studies, which assert the necessity of integrating accessibility into the architectural framework of public buildings to accommodate diverse populations (Edgerton et al.)(Anable et al.).

Importance of inclusive design in public buildings

The significance of inclusive design in public buildings cannot be overstated, particularly in fostering accessibility for individuals with limited mobility. Such design principles not only enhance the convenience and safety of these spaces but also reflect a society's commitment to equity and inclusion. For instance, innovative research methodologies, such as immersive, auto-ethnographic methods, underscore the need for empathetic understanding of mobility challenges faced by users in public environments (Dalton et al.). Additionally, integrating inclusive design helps ensure that all community members, especially those from marginalized backgrounds, can benefit from public infrastructure. The call for intentionality in design is echoed in discussions surrounding urban planning, which highlight that equitable solutions must address the diverse needs of all citizens (Institute BU for Energy S et al.). Ultimately, prioritizing inclusive design in public buildings is essential for creating environments that are not only functional but also socially just and accessible to everyone.

Historical Context of Accessibility in Architecture

The historical context of accessibility in architecture reveals a gradual evolution influenced by social, political, and cultural dynamics. Initially, buildings were designed with little regard for individuals with disabilities, leading to widespread physical barriers that marginalized this demographic. As awareness grew, so did the advocacy for inclusive design principles, notably embodied in the concept of universal design, which promotes solutions accessible to all, irrespective of ability (Aslaksen et al.). This ideological shift not only enhances the quality of life for individuals with limited mobility but also contributes to broader social inclusion by fostering an environment where all citizens can engage with cultural heritage sites. Recent evaluations, such as those exploring the accessibility of pedestrian infrastructures, underscore the need for systematic urban renovations to create accessible environments that uplift the community as a whole (Landim et al.). Such advancements in architectural design reflect a critical movement towards equity in public space accessibility.

Evolution of building codes and regulations for accessibility

The evolution of building codes and regulations for accessibility has significantly shaped the design of public buildings, leading to improved mobility for individuals with disabilities. Initially, accessibility considerations were minimal, often resulting in environments that were inadvertently disinclusive. However, growing advocacy and awareness, particularly regarding the societal discrimination faced by people with disabilities, have driven legislative changes that mandate accessible features in public infrastructure. Key regulations, including the

Americans with Disabilities Act (ADA), have established foundational standards—such as wheelchair ramps, accessible bathrooms, and designated parking spaces—that prioritize inclusivity. This ongoing evolution reflects not only a moral imperative but also a recognition of accessibility as vital for economic participation and social equity. Additionally, the call for improved transport access, as highlighted by efforts to reduce poverty among disabled populations, underscores the need for comprehensive guidelines to ensure that citizens can navigate urban landscapes effectively (Bogopane et al.). Progressive adaptation in codes continues to pave the way for more inclusive public spaces (Fox-Penner et al.).

Key milestones in the advocacy for accessible public spaces

The advocacy for accessible public spaces has witnessed several key milestones that have significantly shaped public policy and architectural practices aimed at accommodating individuals with limited mobility. One pivotal moment was the enactment of the Americans with Disabilities Act (ADA) in 1990, which served as a comprehensive legal framework for ensuring accessibility in public buildings. This legislation prompted a shift in the architectural landscape, requiring the incorporation of universal design principles to foster inclusivity. Moreover, the integration of feminist principles into architectural practice, as discussed in (Ylinen et al.), has further enhanced the advocacy for equitable public environments. This intersectional approach not only challenges traditional biases within urban planning but also emphasizes the importance of creating spaces that cater to diverse needs, including those of women and other marginalized groups. Additionally, the growing discourse on sustainable design reflected in (Fox-Penner et al.) underscores the necessity of adapting public spaces to meet both accessibility and environmental standards, marking a progressive evolution in advocacy efforts.

Universal Design Principles

The implementation of Universal Design Principles is pivotal in creating public buildings that effectively accommodate individuals with limited mobility. These principles advocate for inclusivity by ensuring that environments are accessible and user-friendly for everyone, regardless of physical ability. Central to this ideology is the belief that design should foster equal treatment and reduce the need for specialized solutions that may inadvertently stigmatize certain groups, aligning with the core values outlined in (Aslaksen et al.). Furthermore, the collaboration between various professional fields, such as engineering and rehabilitation, enhances the development of innovative solutions aimed at improving the quality of life for individuals with disabilities, as emphasized in the findings regarding the Rehabilitation Engineering Research Centers (RERCs) in (A Arnoldussen et al.).

Therefore, integrating Universal Design Principles not only promotes physical accessibility but also reinforces a broader societal commitment to equality and inclusiveness in public spaces, ultimately benefiting the entire community.

Overview of universal design and its relevance to public buildings

Universal design plays a crucial role in shaping public buildings to accommodate individuals with varied mobility needs, thereby fostering inclusivity. The principle of universal design advocates for environments that are inherently accessible to everyone, transcending traditional disability accommodations. This approach ensures that public spaces, such as transit stations and civic buildings, are designed to facilitate easy access, thus enhancing independence and mobility for all users. For instance, as highlighted in research focusing on transport systems, people with disabilities experience significant societal discrimination and isolation, underscoring the urgency of addressing accessibility challenges in public infrastructures ((Bogopane et al.)). Additionally, employing innovative methodologies, such as immersive research techniques, allows for a deeper understanding of user experiences and requirements in public spaces ((Dalton et al.)). By implementing universal design principles, public buildings can transform into supportive environments that empower individuals with limited mobility, ultimately promoting social equity and improving quality of life.

Examples of successful implementation of universal design in architecture

The successful implementation of universal design in architecture can be exemplified through various public buildings that prioritize accessibility for individuals with limited mobility. One notable instance is the incorporation of ramps and wide doorways in municipal buildings, which facilitates entry for wheelchair users while also accommodating parents with strollers and the elderly. Furthermore, the design of outdoor public spaces, such as parks and cultural heritage sites, reflects a commitment to inclusivity; for example, a well-planned accessible pedestrian infrastructure not only meets legal requirements but also enhances the overall urban quality and experience for all users ((Landim et al.)). This approach aligns with the core tenets of universal design, which advocate for solutions that serve everyone without stigmatizing particular groups ((Aslaksen et al.)). By embracing these principles, architects can create environments that foster social inclusion and universally accessible experiences within the public sphere.

Technological Innovations in Accessibility

In recent years, technological innovations have significantly enhanced accessibility in public buildings, enabling more inclusive environments for individuals with limited mobility. These advancements encompass a range of

solutions, from augmented reality applications that guide users through complex spaces to automated systems that facilitate navigation and communication. For example, the development of interactive storytelling techniques, as showcased in the Narrating the Past project, illustrates how technology can transform visitor experiences by providing diverse perspectives on historical contexts while promoting engagement and interaction in cultural spaces (Kuksa et al.). Moreover, conferences such as Include accentuate the importance of design innovation aimed at improving accessibility, attracting a global audience committed to this cause (Bichard et al.). By integrating these technologies into public building designs, architects and planners can create environments that not only meet regulatory standards but also foster a sense of belonging and empowerment for all individuals.

Role of assistive technologies in enhancing mobility

The integration of assistive technologies plays a pivotal role in enhancing mobility for individuals with disabilities, significantly influencing the design of public buildings. These technologies, including mobility aids such as wheelchairs, scooters, and smart navigation systems, empower users by facilitating greater independence and accessibility. As emphasized in the efforts of the Rehabilitation Engineering Research Centers (RERCs), a multidisciplinary approach has emerged, combining medicine, engineering, and user-centered design to create innovative solutions that address a wide range of mobility challenges (A Arnoldussen et al.). Additionally, initiatives such as the biennial conference hosted by the Helen Hamlyn Centre for Design highlight the importance of collaboration among designers, engineers, and individuals with disabilities to foster advancements in this field (Bichard et al.). Such collective efforts ensure that public spaces are not only compliant with accessibility standards but also promote a more inclusive environment, effectively enhancing the quality of life for users with limited mobility.

Case studies of buildings that incorporate advanced accessibility features

Exploring case studies of buildings that incorporate advanced accessibility features reveals significant insights into innovative design approaches for public spaces catering to individuals with limited mobility. For instance, buildings like the Adaptive Reuse of the Mies van der Rohe-designed National Gallery of Canada exemplify how thoughtful modifications can enhance navigation and engagement for all users. Features such as wide pathways, tactile guide systems, and strategically placed seating areas contribute to an inclusive environment. Furthermore, initiatives like the Rehabilitation Engineering Research Centers (RERCs) underscore the importance of multidisciplinary collaboration in developing accessible technologies that enhance everyday experiences for people with disabilities, as noted in their

comprehensive projects (A Arnoldussen et al.). Additionally, the integration of telecommunication technologies, as discussed in the context of Ubiquitous Eco Cities, showcases the potential for enhancing urban management and accessibility systems that benefit diverse populations (Yigitcanlar et al.). These case studies collectively illustrate the importance of continuous innovation in design.

Conclusion

In conclusion, the study of approaches to designing public buildings for people with limited mobility underscores the critical necessity of integrating accessibility into architectural practices. The findings from extensive literature reviews and consultations reveal a range of impediments that hinder mobility for elderly and disabled individuals, spanning issues such as parking, surface conditions, and public transport accessibility (Berrett et al.). This highlights the importance of revisiting existing guidelines to ensure they adequately address these challenges while accommodating diverse user needs. Furthermore, the insights gained from international conferences, such as the biennial event hosted by the Helen Hamlyn Centre for Design, emphasize the need for collaborative discourse among architects, planners, and advocacy groups (Bichard et al.). Ultimately, fostering an inclusive built environment not only enhances the quality of life for individuals with limited mobility but also promotes a society that values equality and accessibility for all.

Summary of the importance of designing for limited mobility

The significance of designing for individuals with limited mobility cannot be overstated, especially within the context of public buildings. Such design is not merely an accommodation but a fundamental aspect of creating inclusive spaces that reflect the diversity of the community. By prioritizing accessibility, architects and urban planners contribute to a barrier-free environment, enhancing usability for everyone, including those with physical disabilities, the elderly, and caregivers. The urgency for inclusive design is underscored by global trends, such as urbanization and an aging population, which demand immediate action in urban design practices. Engaging with concepts presented at forums like (Bichard et al.) can foster innovative solutions, effectively bridging theoretical knowledge with practical application. Furthermore, as described in (Bannert et al.), addressing the complexities of societal and spatial dynamics through well-informed design promotes equity and reduces segregation, ultimately enriching the built environment for all users.

Future directions for research and practice in accessible architecture

As the field of accessible architecture continues to evolve, future research and practice must prioritize innovative design strategies that effectively address the

diverse needs of individuals with limited mobility. One promising direction involves enhancing collaboration among architects, local authorities, and advocacy groups to establish comprehensive guidelines tailored to specific environments, such as pedestrian areas and public transport facilities. This is underscored by the findings from the Transport and Road Research Laboratory, which identified multiple impediments faced by disabled and elderly individuals, including inadequate surface conditions and insufficient information provision (Berrett et al.). Additionally, inclusive design conferences, such as those organized by the Helen Hamlyn Centre for Design, play a crucial role in fostering international dialogue on accessibility issues, offering a platform for sharing best practices and emerging solutions (Bichard et al.). Ultimately, a concerted focus on user-centered design will enhance the functionality and inclusivity of public buildings.

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**MAKTABGACHA TA'LIMDA RAQAMLI VOSITALAR
YORDAMIDA TA'LIM-TARBIYA JARAYONINI
TAKOMILLASHTIRISH**

Navoiy viloyati Karmana tumani MMTB tasarrufidagi
13-DMTT direktori

Normurodova Gavhar Shoyimovna

Annotatsiya: Mazkur maqolada raqamlashtirish jarayoni sharoitida maktabgacha ta'lim tizimida kechayotgan o'zgarishlar, bu tizimni modernizatsiya qilishdagi nazariy yondashuvlar va amaliy chora-tadbirlar tahlil qilingan. Maktabgacha yoshdagi bolalarni raqamli texnologiyalarga mos ravishda o'qitish va tarbiyalash bo'yicha ilg'or xorijiy tajriba va milliy model asosida takliflar ilgari surilgan.

Kalit so'zlar: raqamlashtirish, maktabgacha ta'lim, transformatsiya, innovatsiya, zamonaviy texnologiyalar, raqamli pedagogika

Zamonaviy axborot texnologiyalarining keskin rivojlanishi barcha sohalarda, xususan, ta'lim tizimida tub o'zgarishlarni keltirib chiqarmoqda. Ayniqsa, maktabgacha ta'limda raqamli vositalar yordamida ta'lim-tarbiya jarayonini takomillashtirish bugungi kunda dolzarb masalaga aylangan. Bu jarayon, bir tomondan, pedagogik yondashuvlarni qayta ko'rib chiqishni, ikkinchi tomondan, bolalarning raqamli savodxonligini shakllantirishni talab etmoqda.

1. Raqamlashtirish va maktabgacha ta'lim: nazariy asoslar

Maktabgacha ta'limda raqamlashtirish — bu bolalar bog'chalarida o'qitish va tarbiyalash jarayonlarini raqamli texnologiyalar yordamida tashkil etishdir. Bu jarayonning asosida quyidagi nazariy tamoyillar yotadi:

Konstruktivistik yondashuv – bola bilimni o'z tajribasi orqali o'zlashtiradi;

Ko'rgazmalilik va interaktivlik – raqamli resurslar orqali bilim berish yanada ta'sirchan bo'ladi;

Differensial yondashuv – har bir bolaning individual xususiyatlariga mos tarzda raqamli metodlarni qo'llash.

Bu tamoyillar zamonaviy pedagogikada, ayniqsa, bolalarning psixologik rivojlanishiga mos ravishda ishlab chiqilmoqda.

2. Amaliy transformatsiya: raqamli vositalarning o'rni

Amaliy jihatdan maktabgacha ta'limda quyidagi raqamli vositalar keng qo'llanilmoqda:

Interaktiv doskalar va planshetlar – bolalarning qiziqishini oshiradi, ko'rgazmalilikni ta'minlaydi;

Multimedia resurslari – o'yin orqali o'qitish imkonini beradi;

Maxsus ilovalar (apps) – harf va sonlarni o'rgatuvchi dasturlar yordamida individual o'rganish ta'minlanadi.

Shuningdek, o'qituvchilar uchun mo'ljallangan onlayn platformalar (masalan, EduPage, Zoom, Google Classroom) orqali darslar tashkil etilishi mumkin. Uzoq hududlarda raqamli ta'lim vositalarining joriy qilinishi ayniqsa muhim hisoblanadi.

3. O'zbekiston tajribasi va xorijiy amaliyot

O'zbekistonda "Raqamli maktabgacha ta'lim" dasturi bosqichma-bosqich joriy qilinmoqda. YUNESKO, UNICEF kabi xalqaro tashkilotlar ko'magida bolalar bog'chalariga texnik uskunalar ajratilmoqda. Shuningdek, pedagoglarni raqamli savodxonlik bo'yicha qayta tayyorlash ishlari yo'lga qo'yilgan.

Xorijda, masalan, Finlyandiya, Janubiy Koreya va Estoniyada maktabgacha ta'limda raqamli vositalardan keng foydalanish natijasida bolalarda mustaqil fikrlash, muammo yechish va yaratuvchanlik ko'nikmalari rivojlanmoqda. Bu tajriba O'zbekiston uchun foydali andoza bo'lib xizmat qilmoqda.

4. Transformatsiyalashdagi muammolar va yechimlar

Muammolar:

Texnik vositalarning yetishmasligi;

O'qituvchilarning raqamli savodxonlik darajasining pastligi;

Metodik materiallarning kamligi.

Yechimlar:

Davlat budjeti va xalqaro grantlar hisobidan bog'chalarni texnik jihozlash;

Pedagoglar uchun qisqa muddatli raqamli malaka oshirish kurslarini tashkil qilish;

Zamonaviy raqamli o'quv materiallarini yaratish va tarqatish.

Xulosa o'rnida: Raqamlashtirish sharoitida maktabgacha ta'lim tizimini transformatsiyalash – bu zamon talabi. Bola yoshligidanoq raqamli muhitda o'sib, axborotni qabul qilishga o'rganadi. Shu bois, raqamli texnologiyalarni maktabgacha ta'lim tizimiga joriy qilish bir yo'la pedagogik, texnologik va metodik yondashuvlarni uyg'unlashtirishni talab etadi. Bu jarayon, albatta, bosqichma-bosqich, ilmiy asoslangan va tizimli tarzda amalga oshirilishi lozim.

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ТЕХНОЛОГИЯ ОБУЧЕНИЯ РУССКОМУ ЯЗЫКУ СТУДЕНТОВ В ВЫСШЕМ ОБРАЗОВАТЕЛЬНОМ УЧРЕЖДЕНИИ

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Кардинальные изменения, произошедшие в мировом образовании, коснулись преподавания всех учебных дисциплин, в том числе и русского языка. Сегодня знание русского или другого языка межнационального или международного значения является не только показателем образованности, но и жизненной необходимостью. Данный показатель поможет определить положение студенческой молодёжи в республике.

Уникальность образования и преподавания русского языка в высшем образовательном учреждении состоит в том, что оно не ограничивается обучением в одноязычной системе, а выполняет услугу знакомства с культурой, историей, литературой, национальными особенностями (менталитетом) изучаемого народа.

В условиях интенсивного развития образовательной системы стремление общества к новым, инновационным методам позволяет усовершенствовать методику преподавания русского языка в высшем образовательном учреждении.

Основная задача использования интенсивного метода обучения русскому языку студентов заключается в способности студентов общаться на русском языке, научить их искать информацию в источниках на этом языке и использовать ее в реальной жизни.

Данную методику разрабатывают многие учёные, большинство из них в качестве основных направлений считают следующие:

1. Обучить наиболее важным аспектам общения за короткий период времени и улучшить свои коммуникативные навыки.
2. Необходимо активизировать возможности преподавателя на самом высоком уровне, используя коммуникативный метод.

Данный метод позволяет более интенсивно организовать процесс обучения студентов с разработкой подходящего механизма для поддержания общения, коллекции заданий и технологий обучения, способствующих общению.

Понятие «технология обучения» в документах ЮНЕСКО рассматривается как системный метод создания, применения и определения всего процесса преподавания и усвоения знаний с учётом технических и

человеческих ресурсов и их взаимодействия, который ставит своей задачей оптимизацию форм образования. С одной стороны, технология обучения – это совокупность методов и средств обработки, представления, изменения и предъявления учебной информации, с другой стороны, – это наука о способах воздействия преподавателя на студентов в процессе обучения с использованием необходимых технических или информационных средств. В технологии обучения содержание, методы и средства обучения находятся во взаимосвязи и взаимообусловленности. Педагогическое мастерство преподавателя состоит в том, чтобы отобрать нужное содержание, применить оптимальные методы и средства обучения в соответствии с программой и поставленными задачами.

Технология обучения – системная категория, структурными составляющими которой являются: цели обучения, содержание обучения, средства педагогического взаимодействия, организация учебного процесса, система «студент – преподаватель».

Учёными выделяются различные компоненты педагогической технологии, являющиеся критериями изучения студентами русского языка:

- 1) постановка целей обучения, воспитания (компонент целеполагания);
- 2) структурирование в соответствии с целями содержания, подлежащего усвоению (компонент содержания);
- 3) комплексное применение средств и методов обучения;
- 4) усиление диагностических функций обучения и воспитания (диагностический компонент моторики);
- 5) высокий уровень качества обучения (проектируемый компонент).

Педагогическая технология – это система проектирования и практического применения адекватно данной технологии педагогических закономерностей, целей, принципов, содержания, форм, методов и средств обучения и воспитания, гарантирующих достаточно высокий уровень их эффективности, в том числе при последующем воспроизведении и тиражировании. Обучение с помощью традиционных технологий не позволяет развить ключевые, базовые компетентности по конкретной учебной дисциплине, поэтому нужна решительная перестройка учебного процесса.

Интенсивные интерактивные технологии обучения: игры, тренинги, кейсы, игровое проектирование, креативные техники развивают базовые компетентности и метакомпетентности студентов. Интернет-ресурсы при этом рассматриваются как одно из важнейших на сегодняшний день средств обучения студентов, которое позволяет оптимизировать подготовку студентов

в современных образовательных учреждениях, в частности, позволяет достигать цели обучения, в целом совершенствует образовательную подготовку в высших образовательных учреждениях. Технология веб-квеста в обучении применяется с целью организации проектной деятельности, часто в условиях ролевой игры с использованием интернет-ресурсов. При внедрении интенсивных технологий важно определить прогресс, достигнутый участниками игрового занятия к концу обучения и соотнести успехи с целями дисциплины.

Обучение студентов русскому языку – это сложный и многогранный процесс, требующий индивидуального подхода. Существует множество способов обучения, начиная от традиционных методов, таких как чтение и письмо, и заканчивая использованием современных технологий, таких как онлайн-курсы и мобильные приложения.

Вот некоторые важные аспекты обучения студентов русскому языку:

Методы обучения: традиционные методы: чтение, письмо, диктанты, грамматические упражнения; современные методы: онлайн-занятия, мобильные приложения, видеоуроки, интерактивные диктанты; индивидуальный подход: обучение может быть адаптировано к потребностям и уровню каждого студента; учебные материалы: учебники, рабочие тетради, словари, художественная литература; онлайн-занятия и платформы для изучения русского языка; мобильные приложения для изучения русского языка; практика: регулярные занятия, домашние задания, самостоятельная практика; общение на русском языке; использование языка в повседневной жизни; поддержка и ресурсы: преподаватели, ресурсы и сообщества для изучения русского языка; мотивация: помогает студентам поддерживать интерес к обучению и достигать успеха; может быть достигнута через интересные задания, игровые методы и достижение целей.

Для успешного обучения студентов русскому языку студентам важно установить конкретные цели: определить, чего они хотят достичь в изучении русского языка; быть последовательными, поскольку только регулярные занятия помогут им достичь прогресса; использовать различные ресурсы: чтение, письмо, общение и другие ресурсы помогут им разнообразить свой опыт обучения; не бояться делать ошибки; мотивировать себя: поддерживать интерес к изучению русского языка; не стесняясь обращаться за помощью к преподавателям.

В целом, успешное обучение студентов русскому языку требует сочетания различных методов, ресурсов и мотивации. Индивидуальный

подход, регулярная практика и поддержка со стороны преподавателей и ресурсов помогут студентам достичь поставленных целей и успешно освоить русский язык.

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**A VIRTUAL SPACE INFLUENCING THE ACTIVE LIFESTYLE OF
MODERN YOUTH. HISTORY OF SOCIAL NETWORKS AND THEIR
ORIGIN**

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Abstract: In general, one of the global issues that affects not only young people, but also young people around the world, is the social network, its use, benefits and harms, effects and consequences. This article describes both the proper way of life of the youth and their rational use of social networks as a guide. The article presents a number of controversial views on the history, timing and popularity of social media.

Keywords: Youth, social network, world, news, news, anti-immunity, telegram, instagram, news reading, education, upbringing, time, discussion, internet.

Today, people use Facebook, Telegram, Odnoklassiki, Instagram, Twitter, V Kontakte and various other social networks for various purposes and tasks. Facebook, telegrams, Twitter, and Instagram have become very popular for conversations and discussions, as well as for personal advertising and information exchange. In fact, social networks first appeared in 1995. A person named Randy Conrad launches Classmates.com. The site was created so that young people studying in different parts of the world can get to know each other, find each other and ask about each other. At that time, this site was eagerly awaited by students and young people. Today, along with social networks, the number of users is growing. Today, two-thirds of Internet users use these networks. Of course, these branches There are advantages and disadvantages. We cite the following. Benefits:



I Table

- Social networks are the easiest and most convenient source of information. He helps journalists a lot.
- It has been very helpful to students, researchers and other stakeholders. Asking for the material they need from a government manuscript fund or museum, copying a picture, talking to an expert in the field, and making scientific conclusions make it easier.
- Demonstrates journalistic skills of citizens. A person takes a picture of an event in his city and posts it on his page with a comment. He will send this article to others. Among the senders may be news sites. Where professional journalists can't go, locals go and take pictures or videos of the event and publish it online. This is what journalists can do.
- Social networks have become one of the means of calling people to the religion of Allah. The official websites of mosques, madrassas, research centers and shrines of the religious administration and its system open their pages in social networks, through which they can provide religious and educational information to our people and Uzbek-speaking Muslims around the world. In addition, many of

our imams are making a significant contribution to the purity of our religion by creating their own pages in the network, providing information that serves to raise the morale of our people.

- Social networks play an important role in announcing the need to provide financial assistance to the poor, the bereaved, the sick, to organize charity events, to organize youth, to involve people with opportunities in this work. An example of this is the Sakhovat aid group.
- Ask for advice area. Representatives of various professions seek advice from users of the network on relevant topics and receive the necessary advice and ideas.
- Making friends. Many people make friends through these networks. Later, they even met those friends in real life and continued their friendship.
- Restoration of memory. Social networks are also a great way to relive memories. Many users share their school-age pictures with each other, remembering their youth, classmates with their classmates. It is even possible to meet relatives who have stopped here and there and live in other countries.



Table II

Harmful aspects:

- ❖ Sites and sites that promote immorality, prostitution, and immorality are widespread.
- ❖ Rumors, lies, fabrications, destructive ideas, fabrications, bias. Some users post fake pictures on their pages, falsify information, spread baseless, false news.
- ❖ Some of the published articles do not contain reliable sources, do not contain information about which book or site it was taken from, who wrote it, infringe on the rights of others, their Violation of moral and intellectual rights by assimilating his articles.
- ❖ In these areas, human relations weaken, mutual love decreases due to the lack of face-to-face contact, there is a separation from reality, which has a negative impact on family harmony and marital harmony. By focusing on social media, not being able to spend time with family, wives, parents, and children can lead to coldness.
- ❖ Misuse of networks is a waste of time, and overuse is a waste of time. Then, like people addicted to tobacco, alcohol, nasvai and drugs, they will not be able to live without the Internet and social networks.
- ❖ It is important to pray hard, remember Allah, have mercy, do good to one's neighbor, raise children, treat one's wife well, do good to one's parents, take care of one's teachers and patients, and attend funerals.
- ❖ The spread of pride. As a result of the fact that network users wear clothes and post food on their pages, pride, the desire to be the center of attention, and the feelings of the poor and needy are felt.
- ❖ Different currents use social media extensively to inculcate their ideology in young people. This also leads young people, in general, to deviate from the pure faith of those who are not well versed in religion and religious enlightenment, and to have misconceptions and misconceptions about the schools of jurisprudence Addiction to social networks is one of the signs of addiction to the Internet.

Researchers have repeatedly described the phenomenon of Internet addiction. At the same time, scientists divide dependence on social networks into a separate group - dependence on "cyber-relationships": chatting, teleconferencing, communication, which can eventually lead to the replacement of real friends and families. Researchers point out that searching, meeting, virtual flirting, as well as

old acquaintances, former classmates and classmates can look at photos of their lives. the time spent often exceeds the time required for employees to perform their duties. As a result, some organizations prohibit employees from accessing social networks during working hours. But who would have thought that such a meeting would take place at home ?! Therefore, the problem cannot be completely eliminated. Theoretically, they can be divided into three main groups: Independent people. Representatives of this group rarely appear in social networks - once a day, weekly or even monthly. At the same time, they do not put much information about themselves on the pages, and sometimes hide it altogether. They enter the network only when necessary - to search for someone's address or phone number, to respond to an important message. If he didn't need to go to his page, he wouldn't go there; People in transition. This group of users frequently logs into their accounts more than once a day. They don't need a clear reason - just a desire to "browse" the pages of groups or friends: this way they get bored. At the transition stage, people usually "stand" for about two or three months, and then "jump" to the third type. Rarely does he return from this stage to the "independent" stage; Submissive people. Unfortunately, this type of social network users is the most common. Such people do not forget to update their pages every 10-20 minutes - after all, someone can write! The resulting "nothing" can last up to an hour and completely separate the "master" from reality. If he doesn't know, he starts to feel useless - that's why no one writes to me! Representatives of this type spend at least 6-8 hours a day on social media and spend their lives "online". It is very difficult to live for a day or two without the branches he likes.

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ИССЛЕДОВАНИЕ ТЕРМИЧЕСКИХ СВОЙСТВ ВЫСОКОНАПОЛНЕННЫХ АКРИЛОВЫХ КОМПОЗИЦИЙ

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АННОТАЦИЯ

В данном исследовании термостойкая композиция вермикулитов была экспериментально синтезирована в двух образцах в лабораторных условиях. Для изучения термоокисления и деградации полученной композиции анализировали показатели ДТА, ТГ и ДТГ. По результатам установлено, что состав вермикулита устойчив к высоким температурам.

Введение. Анализ в литературных данных показывает, эластичность структуры вермикулита даёт ему существенные преимущества перед аналогичными материалами. Так, используемый для теплоизоляции перлит крайне хрупок и разрушается даже при транспортировке [1].

Вермикулит лишён этого недостатка, что позволяет производить из него тепло- и огнезащитные материалы методом прессования. Вермикулит используется в составе огнезащитных покрытий, а также как термоизоляционный наполнитель огнестойких дверей, наполнитель тепло- и звукоизоляционных строительных смесей [2-3].

В ходе практических исследований были получены термостойкие композиции вермикулита в различном массовом соотношении вермикулита, жидкого стекла, акриловой эмульсии, оксида магния и портландцемента.

С целью изучения окисления и деструкции полученного состава при высокой температуре были проанализированы дериватографических показатели образцов. **Экспериментальная часть.**

При синтезе термостойкой композиции вермикулита получены различные массовые соотношения жидкого стекла, акриловой эмульсии, оксида магния, портландцемента и вермикулита. В ходе экспериментов состав был получен в двух разных образцах.

Было проведено двух эксперимента по получению композиций вермикулита в лабораторных условиях. В экспериментальных процессах

жидкое стекло и мочевины сначала смешивались в механическом автоклаве до получения однородной дисперсии.

В полученную массу при постоянном перемешивании добавляли оксид магния, затем вермикулит, акриловую эмульсию (777), портландцемент, воды и перемешивали при 70°C в течение 1 часа.

Результаты и обсуждение.

Также для анализа термостойких свойств композиции вермикулита, полученных в двух разных экспериментах, были изучены их дериватографические показатели. Для сравнения приведены некоторые данные по полученным результатам [4]. Исследован термический анализ вермикулитовых композиций, полученных в двух экспериментах, в интервале температур 20-1000°C.

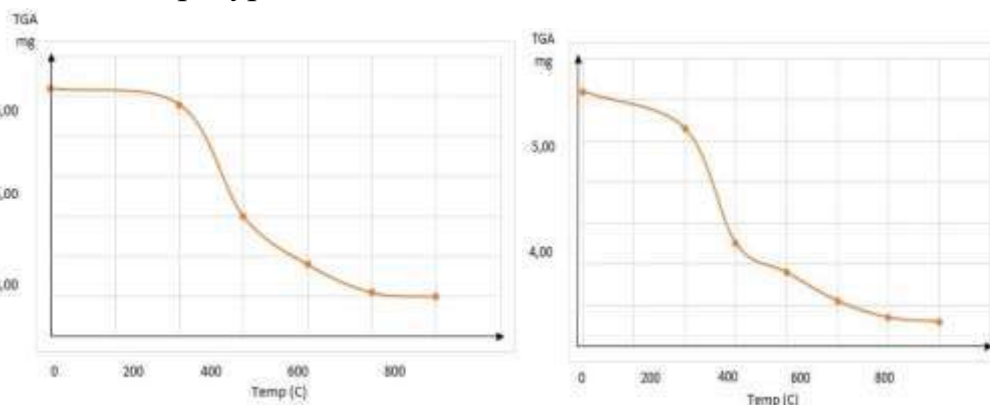


Рис. 1. Дериватография композиции Рисю 2. Дериватография вермикулита полученного в первом эксперименте вермикулита полученного в втором эксперименте.

Результаты термического анализа состава вермикулита, полученные в первом эксперименте, состоят из кривых ТГ и ДТА (рис. 1). Термический анализ синтезированной композиции методом ТГ показал два экзотермических эффекта: снижение массы при температурах 25,19, 258,56, 431,06°C и ДТГ при температурах 38,39, 281,34°C. В интервале температур 25-901°C общее снижение массы составило 37,91%.

Также, уменьшение массы композиции началось при температуре 25 190°C и продолжалось 24,47 минут до 258,860°C. При этом происходило испарение воды, содержащейся в композите, при этом уменьшение массы на 0,540 мг составило 8,182%. Второе уменьшение массы начинается при температуре 258,86 °C и заканчивается потерей массы в 1410 мг в обмен на распад 21,364% вещества, продолжающийся 41,92 минуты до температуры 431,060°C. Третье уменьшение массы начинается при температуре 431,06 °C и продолжается до температуры 901,70 °C, заканчиваясь потерей массы

0,552 мг в обмен на высвобождение 8,364% х вещества. Здесь на графике ДТА между температурами 38 390°C и 281 340°C имеются 2 точки экзо эффекта, которые обусловлены перегруппировкой функциональных групп в композите и образованием H₂S в композите.

Кинетика потери массы двух видов вермикулитовой композиции в зависимости от температуры нагрева представлена на (рис. 1 и 2). Как видно из рисунка, в рассматриваемом интервале температур 20-1000°C наблюдались различные процессы, связанные с потерей массы, окислением состава, выделением летучих веществ, деструкцией и т.д. Потеря массы на кривой ТГА при повышении температуры обусловлена непрерывным удалением двух соединений. Эта часть процесса сопровождается экзотермическим эффектом.

На основании результатов, полученных методами ДТА и ТГА анализа, определили кинетические параметры для различных температурных интервалов процесса. Его преимуществом является возможность вычисления кинетических характеристик во всем температурном диапазоне реакций по одной серии измерений и одному образцу [5].

Также, в композиции вермикулита, полученной в первом эксперименте, при достижении температуры 901°C наблюдалась потеря массы 8,36% (0,552 мг). при этой температуре потеря массы композиции, полученной во втором эксперименте составила 7,65% (0,447 мг).

Результаты исследований зависимости потери массы композиции вермикулита от температуры представлены в табл. 2. Полученные данные показывают, что в начальных периодах процесса происходит, в основном, прямое окисление композиции со сравнительно небольшой потерей массы.

Таблица 2.

Анализ результатов дериватографических исследований акриловых сополимеров

Температурный интервал, °C	Потеря массы, мг	Потери массы, (%)
Вермекулитного композиция первой образец		
25-190	0,54	8,12
191-258	1,410	21,3
259-431	0,55	8,36
Вермекулитного композиция второй образец		
28-255	0,28	4,86

256-498	1,40	23,9
499-901	0,47	7,65

Таким образом, по результатам дериватографического анализа композиции вермикулита, полученных в первом и втором экспериментах исследования, сделан вывод о том, что образец композиции, полученный в первом эксперименте является термически стабильным по сравнению с образцом полученным в втором эксперименте.

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MAKTAB O'QUVCHILARIDA BIOLOGIK SAVODXONLIKNI RIVOJLANTIRISH METODIKASI

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Annotatsiya: O'rta maktab o'quvchilarining yoshga bog'liq bo'lgan ehtiyojlari, ular o'qitishda tayanishi mumkin: muloqotga bo'lgan ehtiyoj, mustaqillik, ijtimoiy muammolar va jamiyat ehtiyojlari to'g'risida o'z g'oyalarini ifoda etish, yordam berishi mumkin bo'lgan narsaga intilish, maqsadni belgilash, semantik assosiativ qatorlarni shakllantirish metod, semantik assosiasiyalarni shakllantirish va boshqalar haqida fikr yuritilgan.

Аннотация: Возрастные потребности учащихся средних школ, на которые они могут опираться в обучении: потребность в общении, самостоятельности, выражении своих представлений о социальных проблемах и потребностях общества, поддержка. Думается о стремлении к чему-то, что может дать, установлении цель, способ образования смысловых ассоциативных линий, формирования смысловых ассоциаций и т. д.

Abstract: Age-related needs of secondary school students, which they can rely on in teaching: the need for communication, independence, expressing their ideas about social problems and the needs of society, support It is thought about striving for something that can give, setting a goal, the method of forming semantic associative lines, forming semantic associations, etc.

Kalit so'zlar: integrativ yondashuv, o'qituvchi, o'quvchi, maktab, biologik savodxonlik.

Ключевые слова: интегративный подход, учитель, ученик, школа, биологическая грамотность.

Keywords: integrative approach, teacher, student, school, biological literacy.

Insonning dunyo bilan o'zaro munosabati, jamiyat taraqqiyotida inson ehtiyojlarining o'rni va tabiiy muhitdagi o'zgarishlarga bag'ishlangan vazifalarda o'quvchilar strategik xususiyatga ega bo'lgan shaxsiy ehtiyojlarni aniqlaydilar.

Ehtiyojlar - bu shaxsning asosiy xususiyatlari bo'lib, uning biror narsaga bo'lgan ehtiyojini ifodalaydi va insonning turli xil faoliyat turlarida, shu jumladan tarbiyaviy faoliyatda aqliy kuchi va faolligining manbai hisoblanadi. Ehtiyojlarning ko'plab tasniflari mavjud bo'lib, ular orasida ko'pincha moddiy, ma'naviy,

fiziologik va ijtimoiyga bo'linadi. Odatda ular ta'lim va hayot yutuqlari bilan bog'liq: "...Men biolog bo'laman va hayvonlar uchun boshpana quraman", "Men insoniyatning paydo bo'lishidan tug'ilishigacha bo'lgan rivojlanishga bag'ishlangan film yaratmoqchiman"; ma'naviy qadriyatlar: "Men do'stona oilaga ega bo'lishni xohlayman", "Men odamlar urushlar kerak emasligini tushunishlarini xohlayman", "Men ota-onam bilan munosabatlarni yaxshilashni xohlayman". Kelajakda ushbu ehtiyojlar faoliyat turlarini, dars mavzusining mazmunini tanlashda, individual va guruh topshiriqlarini yaratishda, muayyan ta'lim holatini, o'qitish metodlari va shakllarini tanlashda, loyiha faoliyatiga muhim shaxslarni jalb qilishda hisobga olinadi. Qiziqishlar, shuningdek, shaxsning harakatlariga turtki beruvchi sababdir. Qiziqish shaxsga yo'naltirilganlik shakllaridan biridir.

Didaktik o'qitish namunaviy dasturining mazmunini shakllantirishda biz maktab o'quvchilarining iqtisodiy va huquqiy ixtisoslikka yo'naltirilgan manfaatlarini hisobga oldik. Shu sababli, ba'zi topshiriqlarning mavzulari tushunchalarni o'z ichiga oladi: "atrof-muhitni boshqarish va qonun", "loyihaga ustunlik koeffisienti", "atrof-muhitni baholash", "atrof-muhitni boshqarish va qonunlar", "tizimning ishonchliligi" va boshqalar. Xavfsiz hayotni ta'minlash uchun o'quvchilar va biologik bo'lmagan mutaxassislar yetishmayotgan bilimlarga bo'lgan ehtiyojlar, shuningdek, o'rta maktab o'quvchilari o'rtasida o'tkazilgan so'rovlar davomida va ular o'z-o'zini anglashda aniqlangan qiziqish va ehtiyojlar to'g'risida olingan ma'lumotlar olindi. O'quvchilarning ehtiyojlari, qiziqishlari, hayotiy tajribasi, fikrlash uslublari, o'quv jarayonida ma'lumotni eslab qolish qonuniyatlarini hisobga olish o'quv jarayonida muvaffaqiyatga erishish holatlarini yaratadi va sinergetik yondashuvga ko'ra, rezonans tamoyilini amalga oshirishga yordam beradi¹.

Darsda o'qitishning asosiy tashkiliy shakli binar dars. Bundan tashqari, boshqa shakllardan ham foydalanildi: - uy vazifasi, ekskursiyalar, loyiha ishi, konferensiyalar, laboratoriya ishlari. Darsni tashkil etish shakli ikki qismdan (nazariy va amaliy) iborat bo'lib, unda fikrlash va bilimlarni qo'llash tajribasini tushunish, harakat qilish usullari, semantik aks ettirish jarayoni o'z vaqtida ajratilmaydi va o'quvchilarning hissiy sohasi mavjud bo'lganda sodir bo'ladi. Bunday murakkab mashg'ulotlar kognitiv qiziqishni oshirishga yordam beradi,

¹ Sh.A.Abduraxmonova "PROBLEMS OF DEVELOPING BIOLOGICAL LITERACY IN SCHOOL STUDENTS BASED ON AN INTEGRATIVE APPROACH" // Galaxy international interdisciplinary research journal (giirj). Vol. 11, Issue 12, December (2023).

chunki o'quvchilar bilimlarni o'zlashtirgan holda amaliy foydalanish imkoniyatidan qoniqish hosil qiladi.

Intellectual mashg'ulot dars mavzusiga mos keladi, mazmuni, turi va axborotni taqdim etish shaklidagi yangilik elementlarini o'z ichiga oladi; kutilmagan hodisalar; paradoksallik va boshqalar. Rivojlanayotgan kognitiv qiziqish kognitiv faollikni rag'batlantiradi³. Mashg'ulotda biz semantik assosiativ qatorlarni shakllantirish metodidan foydalandik.

- Semantik assosiasiyalarni shakllantirish bo'yicha vazifalar. Semantik assosiativ bog'lanishlarning turli darajalarda (predmet ichidagi, predmetlararo, meta-subyekt)

paydo bo'lishi natijasida jarayon va hodisalarning yangi, yaxlit tasavvuri vujudga keladi.

- Tizimli va prognostik fikrlash qobiliyatini shakllantiradigan sabab-natija, tizim-tarmoq aloqalarini o'rnatish vazifalari bilan birgalikda bu semantic assosiasiyalar muammolarni hal qilishda yangi g'oyalarni generasiya qilishni, tizim-tarmoq biologik hodisalarini rivojlantirishni boshlaydi.

Shunday qilib, mashg'ulotlar biologiya o'qitish modelida quyidagi funksiyalarni bajaradi: 1) o'quvchini dars mavzusining dolzarbligiga yo'naltirish; 2) ijodiy faoliyatni faollashtirish va o'quvchilar tomonidan ta'lim natijalarini yaratishning boshlanishi, bu qobiliyatlarga adekvat fikrlash rivojlanishini aks ettiradi; 3) kognitiv qiziqishni shakllantiradi.

Tayanch so'zlar o'quvchilar tomonidan mustaqil ravishda aniqlanadi. Ular dars oxirida o'quvchilardan biri tomonidan o'qiladi va sinf a'zolari tomonidan to'ldiriladi. Ba'zan bu ish uy vazifasida bajariladi. Kalit so'zlarni ajratib olish quyidagi funksiyalarni bajaradi: 1) o'zlashtirilayotgan axborotlar massividagi asosiy ma'nolarni ajratib ko'rsatish qobiliyatini shakllantirish; 2) kalit so'zlar mos yozuvlar so'zlari sifatida ishlatilgan hollarda ma'lumotni strukturalash va sintez qilish; 3) tayanch so'zlarni muhokama qilishda ba'zi o'quvchilarning ma'nolari boshqalarning ma'nolari bilan to'ldiriladi.

Biologik savodxonlikni rivojlantirish bo'yicha barcha vazifalarning tuzilishi biologik savodxonlikni rivojlantirish maqsadi va mezonlariga muvofiq ishlab chiqildi. Biologik savodli shaxsni rivojlantirish bilan bog'liq muammolarni hal qiladigan mashg'ulotlarning didaktik tuzilishini taqdim etamiz.

Dars mavzusi: "Gen modifikasiyalangan o'simliklar: eksperimental ishlab chiqarish va amaliy foydalanish". Maktab o'quvchilari deyarli tanish bo'lmagan

³ BECK, C.; KOSNIK, C. Components of a good practicum placement: Student Teacher Perceptions. Teacher Education Quarterly, v. 29, n. 2, p. 81–98, 2002.

so'nggi biologik kashfiyotlar va texnologiyalarga bag'ishlangan darslarda nafaqat biologiya fanining yutuqlari va o'quvchilarning bilim darajasi o'rtasidagi tafovut yo'q qilinadi, balki kognitiv qiziqish shakllanadi va ma'lum qobiliyatlar rivojlanadi. Hali ishlab chiqilayotgan texnologiyalardan (masalan, klonlash) farqli o'laroq, genetik jihatdan o'zgartirilgan organizmlar va ularning oziq-ovqat mahsulotlari bizning hayotimizga allaqachon kirib kelgan, garchi ba'zi olimlarning fikriga ko'ra, ular qo'shimcha klinik sinovlarga muhtoj.

Darsning maqsadi quyidagilarga qaratilgan: tizimli fikrlashni rivojlantirish (hodisalar, biologik tizimlarda va ular bilan biologik bo'lmaganlar o'rtasida sodir bo'ladigan jarayonlarni ko'rish); semantik to'siqlarni engib o'tish; bilim, ko'nikmalarni qo'llash va bir-biriga zid bo'lgan ilmiy ma'lumotlarni tushunish qobiliyati; tanlagan vaziyatda bioxavfsizlik bilan bog'liq mas'uliyatli qarorlar qabul qilish qobiliyatini rivojlantirish; fuqarolik; kognitiv qiziqish; o'z hayotiy qadriyatlarini umuminsoniy qadriyatlar bilan boyitish; ilmiy bilimlarning cheksizligi haqidagi tasavvurni yaratish.

Darsning tuzilmasi. Darsning 1-qismi:

- Maqsadni belgilash, mavzuni muloqot qilish, dars rejasi.
- Intellektual mashg'ulotlar.
- Uy vazifasini tushunishga qaratilgan reflektiv harakat.
- Yangi o'quv materialini o'zlashtirish (masalan, genetik modifikatsiyalangan o'simliklarni eksperimental ishlab chiqarishga bag'ishlangan) va bir vaqtning o'zida ilgari olingan bilimlarni yangilash.

Foydalaniladigan metodlar: evristik suhbat, retro-dialog metodikasi, grafik mashqlar. Shakllar - frontal, individual.

Darsning 2-qismi:

Foydalaniladigan usullar: "Gen modifikatsiyalangan o'simliklar: eksperimental ishlab chiqarish va amaliy foydalanish" imitatsiya o'yini; ish shakli - guruhli, individual. O'yin ishtirokchilari qonun loyihasini tayyorlaydilar.

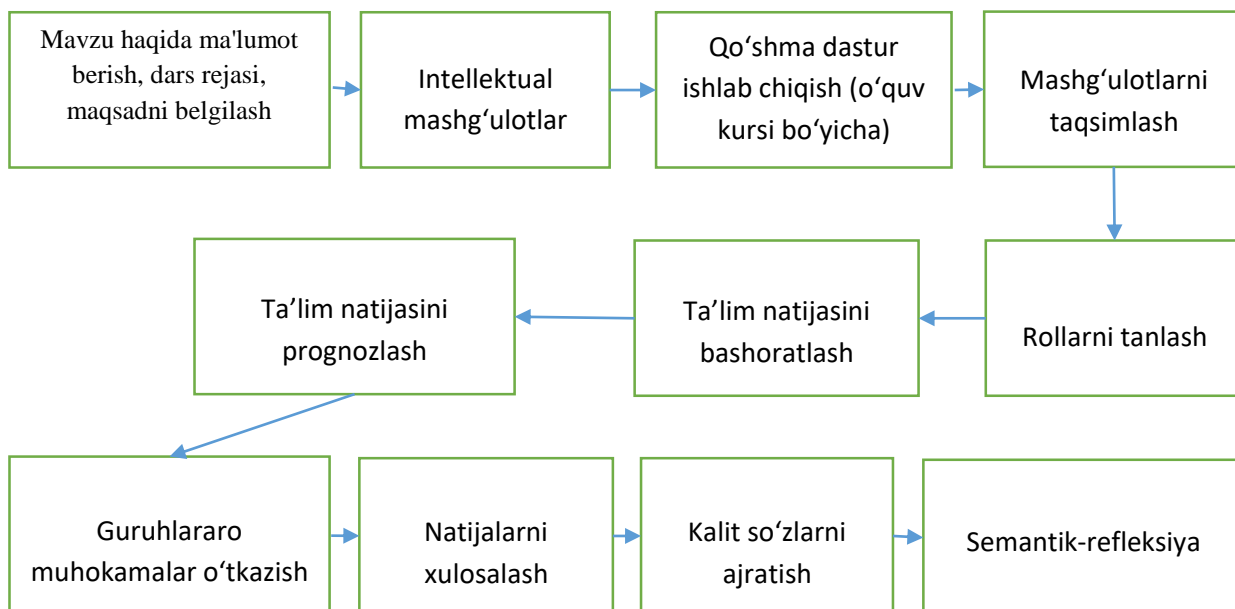
Darsning maqsadi tizimli fikrlashni, tabiatga va o'z sog'lig'iga qadriyatlarga asoslangan munosabatni, tanlov va noaniq vaziyatlarda mas'uliyatli qarorlar qabul qilish qobiliyatini rivojlantirishdir.

O'yin davomida muammoli vaziyat yaratiladi, muammo, gipoteza tuziladi va yechim izlanadi. O'yinga kiritilgan metodlar: muhokama qilish, muqobil variantlarni tanlash ("+"/"-" metodikasi). Muammoli topshiriq va uni o'quvchilar tomonidan yechish. Mustaqil individual ish:

- guruh topshirig'ini bajarish uchun fanlararo qo'shimcha ma'lumotlar manbalarini o'rganish. Fanlararo bilimlardan foydalanishi: molekulyar biologiya,

molekulyar genetika, o'simliklar fiziologiyasi. Fanlararo bilimlar: iqtisodiyot, qishloq xo'jaligi, tibbiyot, siyosat, bioetika.

- Dars mavzusi uchun kalit so'zlarni tanlash (individual, jamoaviy ish shakli).
- Refleksiya. • Ishni sarhisob qilish.



1-rasm. Dars tuzilmasining grafik tasviri

Shunday qilib, hal qilinishi kerak bo'lgan vazifalar soni bo'yicha didaktik tizimdagi vazifalarni ko'p funktsiyali deb atash mumkin, ular faoliyatning davriy o'zgarishi bilan tavsiflanadi. O'rta maktab o'quvchilari uchun bunday mashg'ulotlar qiziqish, qabul qilish qobiliyatini oshiradi va darsdan tashqari mavzularni muhokama qilishni davom ettirish istagini uyg'otadi.

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Экологическая проблема и пути её решения в XXI веке

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Аннотация: В XXI веке экологические проблемы стали одной из самых острых глобальных угроз для человечества. Загрязнение воздуха, воды и почвы, изменение климата, вымирание видов и чрезмерное потребление природных ресурсов оказывают негативное воздействие на окружающую среду и здоровье людей. В данной работе рассматриваются основные причины возникновения экологических кризисов, а также предлагаются эффективные пути их решения, включая развитие «зелёных» технологий, международное сотрудничество, экологическое образование и устойчивое потребление. Особое внимание уделено роли государства, бизнеса и каждого человека в сохранении природного баланса и обеспечении экологической безопасности будущих поколений.

Ключевые слова: экологическая проблема, охрана окружающей среды, устойчивое развитие, изменение климата, «зелёные» технологии

Введение

Введение в исследование экологических проблем XXI века подразумевает глубокое понимание связи между человеческой деятельностью и состоянием окружающей среды. Негативные изменения, которые мы наблюдаем сегодня, явились результатом эгоистичного подхода к природным ресурсам, когда человек манипулирует природой для достижения собственных целей, игнорируя при этом потенциальные последствия. Таким образом, изменения климата становятся проявлением долгосрочных трансформаций, охватывающих океаны, земную поверхность и ледяные щиты (Vecchia D et al., 2016). Эта тема требует комплексного подхода, учитывающего не только научные, но и философские аспекты. На основании этого анализа, предложения по решению экологических проблем должны быть многосторонними и целостными, интегрируя разнообразные взгляды и практики для достижения справедливого сосуществования между всеми живыми существами и окружающей средой (Vecchia D et al., 2016).

Определение экологических проблем

В условиях стремительных изменений, вызванных глобализацией и научными революциями, важно четко определить экологические проблемы, с

которыми сталкивается человечество в XXI веке. К числу ключевых факторов, влияющих на экологическую устойчивость, относятся изменение климата, сокращение природных ресурсов и загрязнение окружающей среды. Эти вопросы не только угрожают экосистемам, но и непосредственно затрагивают социальную и экономическую безопасность государств, что подчеркивается в исследовании, акцентирующем внимание на взаимосвязи климатических изменений, миграций и конфликтов в различных регионах мира (Conley L et al., 2012). Особую значимость имеет необходимость разработки интегрированных решений, которые учитывали бы эти взаимосвязи, как описано в контексте социальной инновативности и устойчивого развития (Serrat et al., 2010). Эффективные стратегии должны включать меры по смягчению и адаптации к экосистемным изменениям, что требует слаженных усилий на международном уровне.

Важность решения экологических вопросов

В современном обществе важность решения экологических вопросов становится все более актуальной, особенно на фоне глобальных изменений климата и их воздействия на устойчивое развитие. Ученые в области информационных систем (IS) должны активно участвовать в разработке стратегий, направленных на смягчение последствий изменения климата, поскольку именно такие технологии способны предоставить необходимые данные для оценки состояния окружающей среды и принятия грамотных решений (Bjorn-Andersen et al., 2016). Как показывает практика, вовлечение общественности в процесс принятия экологических решений также является ключевым элементом для достижения устойчивых результатов. Сообщество должно учитывать знания и предпочтения разных заинтересованных сторон, что подчеркивает важность участия граждан в процессах оценки и управления рисками (Sexton et al., 2013). Таким образом, сотрудничество между учеными, профессионалами и обществом может значительно повысить эффективность борьбы с экологическими угрозами, обеспечивая более сбалансированные и устойчивые решения для будущих поколений.

Обзор структуры эссе

В процессе написания эссе важным аспектом является четкая структура, которая позволяет организовать мыслительный процесс и облегчает восприятие материала читателем. Эссе, посвященное экологическим проблемам и их решениям в XXI веке, может быть организовано в несколько ключевых разделов, каждый из которых играет свою уникальную роль. Введение должно обозначить актуальность темы и ее

значимость для современного общества, в то время как основная часть исследует конкретные экологические проблемы, такие как загрязнение окружающей среды химикатами, включая PFAS, которые могут вызвать репродуктивные дефекты и раковые заболевания. Исследования показывают, что эффективные стратегии борьбы с данными проблемами требуют креативных решений, выходящих за рамки традиционных регуляций (McDonald et al., 2020). Заключение должно подводить итоги и предлагать целостные подходы, учитывающие различные интересы и неопределенности, с которыми сталкиваются при принятии решений по управлению рисками, связанными с изменением уровня моря (Forest et al., 2017).

Изменение климата

Изменение климата представляет собой одну из наиболее острых экологических проблем XXI века, требующую комплексного подхода к решению. Глобальное потепление приводит к изменению климатических условий, что в свою очередь вызывает экстраординарные природные явления, такие как засухи и наводнения. Важность международных соглашений, таких как Киотский протокол, состоит в их способности устанавливать обязательные цели по сокращению выбросов парниковых газов, что является критически важным для обеспечения устойчивого будущего (Zubkova et al., 2015). Вместе с тем, в области сельского хозяйства возникли инновационные подходы к улучшению генетической устойчивости культур к климатическим изменениям. Это демонстрируют исследования IFVCNS, которые сосредоточены на создании tolerant генотипов для повышения продуктивности растений в условиях изменяющегося климата (Bekavac et al., 2021). Таким образом, только сочетание международных усилий и научных разработок может способствовать эффективному решению проблемы изменения климата.

Причины изменения климата

Изменение климата представляет собой сложное явление, вызванное множеством факторов, главным образом связанным с человеческой деятельностью. В течение последних столетий индустриализация, урбанизация и неконтролируемое использование природных ресурсов значительно обострили экологические проблемы. Человеческая эгоцентричность и стремление к экономическому росту привели к чрезмерному извлечению углеводородов, вырубке лесов и загрязнению океанов, что, в свою очередь, спровоцировало ощутимые изменения в климатической системе. Эти процессы определяются как изменения в океанах, земной поверхности и ледниках, происходящие на протяжении десятилетий

или даже более длительных периодов (David et al., 2019). Важно отметить, что последствия климатических изменений затрагивают не только экологию, но и экономику, социальную сферу и безопасность, превращая эту проблему в глобальный вызов XXI века, особенно в контексте миграции и конфликтов (Conley L et al., 2012).

Влияние изменения климата на экосистемы и человеческую жизнь

Изменение климата оказывает значительное влияние на экосистемы и, в конечном итоге, на человеческую жизнь. Увеличение температуры воздуха, вызванное антропогенными факторами, ведет к ухудшению состояния природных ресурсов, что, в свою очередь, сказывается на биоразнообразии и устойчивости экосистем. Экосистемы, такие как океаны, столкнулись с угрозами, включая загрязнение и снижение рыбных запасов, что подчеркивает необходимость устойчивого управления ресурсами, как это делает Монтерейский аквариум, который интегрирует научные исследования с океанической политикой для защиты морских экосистем (Spring et al., 2018). Кроме того, необходимо обратить внимание на взаимодействие между экосистемами, здоровьем и условиями жизни населения, так как эти элементы взаимосвязаны, формируя общую картину благополучия в условиях изменения климата (Long J et al., 2013). Таким образом, решение этих проблем требует комплексного подхода и инновационных решений.

Стратегии смягчения последствий изменения климата

Изменение климата требует разработки стратегий смягчения его последствий, особенно в контексте повышения устойчивости наиболее уязвимых групп населения. Исследования показывают, что акцент на снижение уязвимости к климатическим угрозам может существенно снизить смертность от связанных с климатом проблем, таких как голод и наводнения, на 50-75 процентов при значительно меньших затратах, чем на снижение выбросов парниковых газов (Goklany I, 2008). Эти стратегии, направленные на развитие экономических, социальных и экологических систем, созданы для улучшения благосостояния населения, особенно в развивающихся странах, которые наиболее подвержены климатическим рискам (Conley L et al., 2012). Следовательно, эффективное реагирование на изменение климата должно сочетать в себе меры по адаптации к текущим вызовам и долгосрочные усилия по минимизации воздействия на окружающую среду, создавая тем самым более устойчивую и справедливую среду для будущих поколений.

Загрязнение

Загрязнение окружающей среды остается одной из самых серьезных проблем XXI века, требующей комплексных решений. Стремительное развитие промышленности и рост населения приводят к чрезмерному использованию ресурсов и, как следствие, к загрязнению водоемов и атмосферного воздуха. В частности, усиливающаяся зависимость от фосфорных удобрений создает серьезные экологические проблемы, включая избыток фосфора в водах, что подтверждается материалами (Craswell et al., 2010). Исторически, человеческая деятельность, направленная на удовлетворение экономических потребностей, превратила первоначально гармоничную природу в источник проблем, таких как изменение климата и деградация экосистем, как отмечается в (David et al., 2019). Для решения этих вызовов необходимо внедрение более устойчивых методов ведения сельского хозяйства и стратегии по переработке ресурсов, что позволит не только уменьшить загрязнение, но и повысить эффективность использования ограниченных природных запасов.

Виды загрязнения (воздуха, воды, почвы)

Загрязнение окружающей среды, включая воздух, воду и почву, представляет собой серьезную проблему 21 века, требующую комплексного подхода к решению. Воздушное загрязнение, вызванное выбросами крупных промышленных и транспортных источников, негативно сказывается на здоровье человека и экосистемах, способствуя глобальному потеплению и ухудшению качества жизни (Aytur et al., 2014). Важно отметить, что вода, как жизненно важный ресурс, также подвержена загрязнению, в частности в результате сельскохозяйственных практик и сброса сточных вод, что угрожает экосистемам и качеству питьевой воды (Albrechtova et al., 2017). Наконец, почва попадает под угрозу из-за применения химических удобрений и промышленных отходов, что приводит к неустойчивому земледелию и потере биологического разнообразия. Эффективное решение этих проблем требует междисциплинарного подхода, основанного на научных исследованиях и сотрудничестве между различными секторами общества, чтобы минимизировать негативные последствия для здоровья человека и окружающей среды.

Влияние загрязнения на здоровье и окружающую среду

Загрязнение окружающей среды представляет собой одну из наиболее острых проблем XXI века, имеющую значительное влияние на здоровье человека и экосистемы. Систематическое накопление загрязняющих веществ, вызванное человеческой деятельностью, приводит к ухудшению качества

воздуха и воды, что является непосредственной угрозой для здоровья населения. По данным (Aytur et al., 2014), климатические изменения, спровоцированные загрязнением, уже оказывают негативное воздействие на здоровье людей, увеличивая частоту различных заболеваний и опасных условий. Данный процесс можно рассматривать как ответ природы на эгоистичные действия человека, описанные в (David et al., 2019), которые привели к взаимной деградации окружающей среды и человеческого благополучия. Это подчеркивает необходимость комплексного подхода к решению экологических проблем, включающего адаптацию стратегий устойчивого развития и уменьшение экологического следа, чтобы обеспечить здоровье будущих поколений и сохранить баланс экологических систем.

Решения для снижения уровней загрязнения

Одной из основных задач XXI века является снижение уровней загрязнения, что требует комплексного и системного подхода. Прежде всего, необходимо проанализировать, как человеческая деятельность, включая промышленное производство и городской транспорт, способствует ухудшению качества окружающей среды, что, в свою очередь, ведет к изменениям климата и другим экологическим проблемам, описанным в исследованиях (David et al., 2019). В ответ на эти вызовы важно разработать стратегии адаптации, которые будут не только прекращать состояние экосистем, но и укреплять здоровье населения. Например, применение принятых стратегий, таких как рамка BRACE от CDC, может помогать сообществам более эффективно справляться со последствиями климатических изменений, что поддерживает устойчивость и улучшает общественное здоровье в условиях глобальной тревоги (Aytur et al., 2014). Это подчеркивает необходимость в создании коллаборационных инициатив, которые бы объединяли различные сектора для достижения устойчивых результатов в борьбе с загрязнением.

Утрата биоразнообразия

Утрата биоразнообразия представляет собой одну из наиболее серьезных экологических проблем XXI века, которая угрожает не только экосистемам, но и человеческому благосостоянию в целом. Снижение численности видов приводит к нарушению естественных экосистем и уменьшению их устойчивости, что негативно сказывается на таких важных аспектах, как здоровье, средства существования и городская среда (Long J et al., 2013). Новые теоретические и концептуальные рамки, как подчеркивается в современных исследованиях, необходимы для эффективного использования

данных о геномах и фенотипах различных организмов, что может помочь в разработке решений по сохранению биоразнообразия (Arnold et al., 2013). Важно понимать, что устойчивое развитие и необходимость инновационных подходов играют ключевую роль в преодолении этой проблемы, способствуя как защите экосистем, так и улучшение качества жизни людей, особенно наиболее уязвимых слоев населения.

Факторы, способствующие утрате биоразнообразия

Утрата биоразнообразия представляет собой одну из наиболее острых экологических проблем нашего времени, обусловленную множеством факторов. Важнейшими из них являются изменение климата, разрушение естественных сред обитания и чрезмерная эксплуатация природных ресурсов. Согласно современным исследованиям, эффективные теоретические и концептуальные рамки необходимы для того, чтобы биология эволюции могла использовать обширные данные, которые поступают из изучения геномов и организмов в их естественной среде обитания (Arnold et al., 2013). К тому же необходимо сосредоточиться на углубленном анализе различных экосистем, чтобы выявить проблемные области как в развивающихся, так и в развитых странах, что позволит лучше понять динамику изменений и определить стратегии для повышения устойчивости экосистем и повышения жизненных стандартов для уязвимых групп (Long J et al., 2013). В результате, обширное понимание этих факторов возможно только через комплексный подход к их изучению и разработке решений.

Последствия снижения биоразнообразия

Снижение биоразнообразия представляет собой одну из самых серьезных экологических проблем XXI века, с далеко идущими последствиями для здоровья экосистем и благосостояния человечества. Установлено, что потеря видов ведет к ухудшению жизненных условий для самых уязвимых слоев населения, так как биоразнообразие играет ключевую роль в поддержании необходимых услуг экосистем, включая очистку воды, опыление культур и поддержание продовольственной безопасности. Более того, исследование указывает на необходимость инноваций и изменения парадигм в таких областях, как здоровье, средства к существованию и городская среда, чтобы сократить последствия этого кризиса (Long J et al., 2013). Важно учитывать, что нехватка долгосрочного планирования и сосредоточение внимания на сиюминутных проблемах также затрудняет решение текущих экологических вызовов (N/A). Следовательно, активные действия по сохранению

биоразнообразия необходимы для обеспечения устойчивого будущего для всех.

У efforts и стратегии по охране биоразнообразия

Сохранение биоразнообразия становится всё более актуальной задачей в условиях глобальных экологических вызовов XXI века. Эффективные стратегии охраны живых организмов и их местообитаний требуют новых теоретических и концептуальных рамок, чтобы использовать богатство данных, получаемых из изучения геномов и фенотипов организмов в их естественной среде обитания (Arnold et al., 2013). Вместе с тем, человеческая деятельность, такая как истощение натуральных ресурсов и загрязнение окружающей среды, значительно усугубляет проблему утраты биоразнообразия (Heng L et al., 2012). Важность устойчивого управления окружающей средой, включая интеграцию экосистемных подходов в городское планирование и политику, становится очевидной для обеспечения качественной жизни для населения и сохранения природных ресурсов. Применение эффективных экологических норм и систем управления может способствовать созданию более устойчивых экосистем и защите биоразнообразия на глобальном уровне.

Заключение

В заключение, необходимо отметить, что преодоление экологических проблем XXI века требует комплексного подхода, включающего как технические инновации, так и изменение общественного сознания. Трансформация существующих инфраструктурных проектов, таких как предложенный коридор I-11, может стать примером нового мышления, которое ставит устойчивость в центр проектирования транспортной сети. Этот проект, который стремится преодолеть традиционные модели, потенциально может обеспечить экологически чистую и социально ориентированную транспортировку между ключевыми регионами (Samuels et al., 2015). Кроме того, рассмотрение взаимосвязей изменения климата, миграции и конфликтов иллюстрирует необходимость интегрированных политик, которые обеспечивают развитие на основе устойчивости и безопасности (Conley L et al., 2012). Таким образом, ответ на глобальные вызовы лежит в синергии методов, технологий и совместных усилий для достижения устойчивого будущего.

Резюме основных обсуждаемых моментов

В качестве резюме основных обсуждаемых моментов, можно отметить, что комплексные подходы к решению экологических проблем XXI века

требуют интеграции различных стратегий и инструментов. Современные инициативы в области коллаборативного управления, согласно (Henton D et al., 2005), позволяют объединить усилия различных заинтересованных сторон, что способствует более эффективному принятию решений на локальном и глобальном уровнях. Однако, несмотря на наличие медиаплатформ, поддержка общественного интереса в медиасфере остается скромной и, как следствие, неэффективной. Исследование, проведенное фондом, указывает на необходимость прозрачности в использовании филантропических средств и раскрытия информации путем технологий, что позволит понять, как можно повысить влияние этих средств на развитие медиа (Albon M et al., 2010). Эти аспекты подчеркивают важность синергии между различными секторами для достижения устойчивых экологических решений.

Роль индивидов и сообществ в экологических решениях

В современном мире, где экологические проблемы становятся всё более актуальными, роль индивидов и сообществ в поиске решений приобретает особое значение. Каждый человек и группа могут внести свой уникальный вклад в устойчивое развитие и защиту окружающей среды. Используя инновационные подходы и методы, сообщества становятся катализаторами социальных изменений, стимулируя распространение идей устойчивого образа жизни и активизма. Актуальные вызовы, такие как изменение климата и истощение природных ресурсов, требуют коллективных усилий, что подчеркивается идеей о том, что инновации, возникающие на уровне сообществ, могут способствовать умному и устойчивому глобализационному процессу (Serrat et al., 2010). Кроме того, применение принципов совместного управления в экологических инициативах показывает, как взаимодействие различных субъектов может привести к эффективным и действенным решениям, подтверждая важность общественного участия в этом процессе (Henton D et al., 2005).

Призыв к действиям для устойчивых практик в 21 веке

В условиях rapidly изменяющегося 21 века необходимость устойчивых практик становится не только актуальной, но и критически важной. Современные вызовы, такие как изменение климата и истощение природных ресурсов, требуют от человечества активного подхода к решению экологических проблем. Призыв к действиям включает в себя внедрение инновационных социальных решений, которые могут способствовать устойчивому развитию и улучшению качества жизни, что хорошо подчеркивается утверждением о том, что необходимость является матерью

изобретений (Serrat et al., 2010). Кроме того, коллаборативное управление предлагает инструменты для более эффективного взаимодействия между различными заинтересованными сторонами, тем самым открывая новые горизонты для устойчивого развития (Henton D et al., 2005). Важно помнить, что только совместными усилиями можно создать эффективные экологические стратегии, способствующие улучшению состояния нашей планеты в долгосрочной перспективе.

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CHALLENGES OF TRANSLATING IDIOMS AND FIXED EXPRESSIONS

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Abstract

Translating idioms and fixed expressions is widely recognized as one of the most demanding aspects of cross-linguistic and intercultural communication. Idioms are expressions whose meanings cannot be deduced from the literal definitions of the individual words they contain; they are deeply embedded in the culture, history, humor, and worldview of a speech community. Fixed expressions, while often more syntactically regular, also present significant challenges when they do not follow the same grammatical or semantic patterns in the target language. These linguistic units frequently carry metaphorical or symbolic meanings that are context-dependent and culturally bound, making their accurate translation a complex task that goes beyond word for word equivalence.

This article provides an in-depth analysis of the multifaceted challenges that translators face when rendering idiomatic and formulaic language into another tongue. It highlights the cognitive demands of identifying idiomatic language in context, the need for cultural competence to understand and convey intended meanings, and the translator's role as a cultural mediator. Particular attention is given to the risks of literal translation, such as semantic distortion, cultural miscommunication, or unintended humor, and the strategies required to achieve dynamic equivalence ensuring that both the meaning and function of the original expression are preserved.

The study draws upon examples from English, Russian, Uzbek, and other languages to demonstrate typical pitfalls and successful translation approaches. It also explores how idioms reflect unique cultural narratives and why their misinterpretation may affect not only the clarity but also the emotional impact of a text. Furthermore, the abstract examines the limitations of machine translation tools in dealing with figurative language and underscores the importance of human judgment and creative adaptation in translation. Ultimately, this article emphasizes that idiom and fixed expression translation is not merely a linguistic exercise but an

act of intercultural negotiation requiring linguistic precision, cultural awareness, and artistic sensitivity.

Keywords: idioms, fixed expressions, figurative language, translation strategies, cultural competence, linguistic equivalence, cross-cultural communication.

ТРУДНОСТИ ПЕРЕВОДА ИДИОМ И УСТОЙЧИВЫХ ВЫРАЖЕНИЙ

Абстракт

Перевод идиом и устойчивых выражений является одной из наиболее сложных задач в межкультурной коммуникации. Идиомы обладают переносным значением, не выводимым из значений отдельных слов, и часто отражают культурные особенности народа. Устойчивые выражения также могут отличаться по структуре и употреблению в разных языках, что создаёт дополнительные трудности при переводе. Буквальный перевод таких единиц нередко приводит к искажению смысла, культурным недоразумениям или потере выразительности.

В данной статье рассматриваются основные лингвистические и культурные барьеры, возникающие при переводе идиоматических выражений, а также предлагаются стратегии их адекватной передачи: от подбора функциональных эквивалентов до перефразирования и культурной адаптации. Примеры из английского, русского и узбекского языков иллюстрируют необходимость творческого подхода и глубокого понимания контекста. Особое внимание уделяется тому, как переводчик может сохранить как смысл, так и эмоциональную окраску оригинального выражения.

Ключевые слова: идиомы, устойчивые выражения, перевод, культурная адаптация, переводческие стратегии, межкультурная коммуникация.

IDIOMALAR VA BARQAROR IBORALARNING TARJIMASIDAGI QIYINCHILIKLAR

Abstrakt

Idioma va barqaror iboralarni tarjima qilish bu tilshunoslik va madaniyatlararo muloqotdagi eng murakkab jarayonlardan biridir. Idiomalar o'z tarkibidagi so'zlarning bevosita ma'nosidan farqli, ko'pincha obrazli yoki ramziy ma'noni anglatadi va ular muayyan xalqning madaniyati, tarixiy tajribasi hamda mentaliteti bilan chambarchas bog'liqdir. Ustuvor iboralar esa grammatik jihatdan qat'iy

shaklga ega bo'lsa-da, boshqa tillarda ularning mos keladigan shakli yoki funksiyasi bo'lmasligi mumkin.

Mazkur maqolada idiomatik va barqaror iboralarni tarjima qilishda yuzaga keladigan asosiy til, madaniyat va kontekst bilan bog'liq qiyinchiliklar yoritiladi. Tarjimada mazmunni, uslubni va konnotatsiyani to'liq yetkazish uchun qanday strategiyalar funksional ekvivalent topish, kontekstual moslashtirish va ba'zan izohli ifodalar qo'llanishi kerakligi muhokama qilinadi. Ingliz, rus va o'zbek tillaridan olingan misollar orqali tarjimon uchun nafaqat til bilimlari, balki madaniy savodxonlik va ijodiy yondashuv zarur ekani ta'kidlanadi.

Kalit so'zlar: idioma, barqaror ibora, tarjima strategiyalari, madaniy moslashtirish, til to'siqlari, funksional tarjima.

Introduction. Language is not merely a tool for communication; it is a cultural artifact that encapsulates the values, history, worldview, and shared experiences of a speech community. Among the many linguistic features that reflect this deep cultural embeddedness, idioms and fixed expressions stand out as particularly complex and culturally loaded. Idioms, by their very nature, are expressions whose meanings cannot be deduced from the literal interpretation of their individual components. For example, the English idiom *“kick the bucket”* literally suggests a physical action, but its actual meaning is *“to die”*. Such expressions are not only figurative but often bound to specific cultural, historical, or societal contexts.

Fixed expressions, though generally more predictable in form, also present challenges in translation due to differences in usage, frequency, and stylistic function across languages. These expressions include collocations, phrasal verbs, proverbs, and culturally specific sayings that do not always have direct equivalents in other languages. When encountered in a text, especially in literary or colloquial discourse, idioms and fixed expressions demand that the translator possess not only linguistic proficiency but also a deep understanding of both source and target cultures.

The act of translating these expressions often goes beyond the transfer of semantic meaning; it requires the preservation of tone, function, and emotional nuance. A literal translation may lead to confusion, distortion, or even unintentional humor, while an overly free translation may risk losing the original expression's stylistic or cultural resonance. This section of the paper explores the multifaceted challenges involved in translating idioms and fixed expressions, emphasizing the importance of cultural awareness, contextual analysis, and creative problem-solving in achieving accurate and effective translation.

Linguistic and Cultural Barriers. One of the primary challenges in translating idioms and fixed expressions arises from the structural and semantic

differences between languages. Idioms are often non-compositional and metaphorical: their meanings cannot be directly inferred from the meanings of the individual words that comprise them. This unique characteristic makes idioms particularly resistant to literal translation and requires the translator to engage in a process of interpretation and cultural transposition.

For instance, take the English idiom “*barking up the wrong tree*”, which figuratively means accusing the wrong person or pursuing a mistaken course of action. A literal translation of this phrase into many other languages would produce confusion, as the image of a dog barking at a tree does not inherently suggest error or misjudgment in cultures unfamiliar with hunting metaphors. In the same way, the Japanese idiom “*猿も木から落ちる*” (*even monkeys fall from trees*) conveys the idea that even experts can make mistakes a concept that is universal, but the metaphor may not translate effectively unless adapted with an equivalent expression in the target language. Cultural specificity plays an equally significant role. Many idiomatic expressions are tied to the customs, social norms, geography, religion, and even climate of the source culture. For example, English idioms such as “*a snowball’s chance in hell*” or “*throw in the towel*” rely on cultural knowledge related to climate and Western boxing, respectively. These references may be obscure or meaningless to speakers of languages from different geographical or cultural backgrounds. Similarly, idioms in Uzbek like “*qulog‘iga qum solmoq*” (literally “to pour sand into someone’s ear”) or “*it og‘zidan olib qo‘ymoq*” (literally “to take something from a dog’s mouth”) cannot be directly translated into English without significant explanation or transformation. Fixed expressions, including collocations, proverbs, and phrasal verbs, also pose serious linguistic challenges. While fixed expressions may seem more transparent than idioms, their specific word combinations are often language-dependent. For example, in English, one “*makes a decision*”, but in Russian, the equivalent expression is “*принимать решение*” (“to take a decision”), and in French it is “*prendre une décision*”. A literal translation of “make a decision” into these languages would sound unnatural or grammatically incorrect.

Another layer of complexity arises from the emotional tone and stylistic register of idioms. Some expressions are humorous or ironic, while others are formal, solemn, or even poetic. Preserving these nuances in translation is essential to retain the original intent and communicative impact of the message. For example, the phrase “*bite the bullet*”, which means to endure pain or hardship without complaining, has a somewhat stoic and historical undertone in English. Finding a

target-language equivalent that mirrors both the meaning and emotional resonance can be extremely challenging. Additionally, idioms may carry connotative meanings or reflect historical or political contexts that are not immediately visible to non-native speakers. Failing to recognize these dimensions can lead to inaccurate or even offensive translations. In such cases, the translator must possess a high level of cultural competence and historical awareness.

To navigate these linguistic and cultural barriers effectively, translators must act not only as language experts but also as cultural mediators. They must decide whether to:

- retain the original idiom with footnotes or explanations,
- replace it with a culturally and functionally equivalent idiom in the target language,
- paraphrase the expression to preserve the meaning while sacrificing form,
- or, in some cases, omit the idiom if it adds confusion without contributing meaningfully to the text.

Ultimately, idioms and fixed expressions test the translator's creativity, sensitivity, and intercultural literacy. A successful translation does not merely replicate words it conveys meaning, emotion, style, and cultural identity in a new linguistic framework.

Equivalence and Function. When translating idiomatic expressions, functional and dynamic equivalence often take precedence over literal accuracy. For example, the English idiom “*when pigs fly*” is used to express impossibility. Its Russian counterpart is “*когда рак на горе свистнет*” (“when the crayfish whistles on the mountain”), and in Uzbek, one might use “*qushlar suvda suzsa*” (“if birds swim in water”). While the imagery varies, the intended meaning—*never or highly unlikely* is preserved. This illustrates how idioms can have **functional equivalence** despite having no linguistic similarity.

In cases where no equivalent idiom exists in the target language, the translator may employ a **paraphrase**, aiming to explain the underlying meaning rather than preserving the idiomatic form. For example, the phrase “*spill the beans*”, meaning to reveal a secret, might be translated simply as “*to reveal a secret*” in languages where no colorful idiomatic equivalent exists. Though this strategy loses the imagery and informality of the original, it maintains clarity and avoids confusion especially in legal, academic, or journalistic contexts where precision is prioritized. **Register and tone** are also crucial components of functional equivalence. Idioms are often tied to informal, humorous, sarcastic, or even poetic registers. The translator must identify the **stylistic level** of the idiom and choose an equivalent that matches it in

the target language. For instance, the French idiom “*avoir le cafard*” (literally, “to have the cockroach”) means to feel down or depressed. Translating this idiom literally would confuse English speakers. The closest English equivalent in both meaning and tone might be “*to feel blue*” or “*to be in a funk*”, depending on the context.

Fixed expressions such as **collocations**, **greetings**, **idiomatic phrasal verbs**, or **formulaic responses** pose different but equally nuanced challenges. For instance, English uses the phrase “*make a mistake*”, while Spanish uses “*cometer un error*” (to commit an error). Using “*hacer un error*” (a literal translation of “make a mistake”) would sound unnatural in Spanish. These fixed combinations often defy logical rules and must be **memorized and internalized** in each language, making their translation highly dependent on native-level familiarity.

The issue of **cultural connotation** also arises in expressions with layered symbolic meaning. Take, for example, the phrase “*to cross the Rubicon*” an idiom referring to a point of no return, rooted in Roman history. If the historical reference is unfamiliar to the target audience, a translator must decide whether to preserve it, adapt it, or replace it with a more culturally accessible metaphor. Ultimately, the pursuit of equivalence in idiom translation is less about exactness and more about **impact**. What matters most is that the target reader experiences the same effect whether it be amusement, irony, emphasis, or clarity that the original intended. Achieving this requires the translator to balance fidelity to the original with intelligibility, fluency, and naturalness in the target language.

Cognitive Load and Translator Competence. Translating idioms and fixed expressions is not only a linguistic and cultural challenge it is also a cognitively demanding task that requires advanced processing skills and expert-level language awareness. The difficulty begins with identifying idiomatic language in the source text. Many idioms appear deceptively literal and are only recognizable through contextual cues or cultural familiarity. For inexperienced or non-native translators, such expressions may go unnoticed or be misinterpreted, leading to inaccurate or awkward renderings in the target language.

From a **cognitive perspective**, idiom translation places a significant burden on **working memory**, **semantic processing**, and **decision-making mechanisms**. The translator must:

- detect that the phrase is idiomatic or fixed,
- suppress its literal meaning,
- retrieve the figurative or functional meaning from long-term memory,
- evaluate whether an equivalent exists in the target language, and

- make a strategic choice about how to render the expression.

This decision-making process is influenced by various factors, including the **translator's linguistic competence, cultural knowledge, subject matter familiarity, translation brief, and target audience expectations**. Professional translators with specialized training are more likely to navigate these factors successfully, while novice or untrained translators may rely too heavily on literal renderings or automated tools, resulting in translation errors.

A major issue in contemporary translation practices is the overreliance on **machine translation** tools such as Google Translate or AI-based systems. While these tools have improved in recent years, they still struggle with idiomatic language. Many idioms are rendered word-for-word, producing nonsensical or misleading translations. For example, translating the English idiom “*hit the books*” (to study hard) literally into another language might suggest physical violence against actual books. This illustrates the importance of **human interpretative ability**, especially when dealing with figurative or culturally embedded expressions.

Even for skilled translators, idioms demand more than linguistic knowledge they require **pragmatic sensitivity and stylistic judgment**. Translators must consider:

- What is the function of this idiom in the text? (humor, sarcasm, emphasis?)
- What register or tone does it convey? (formal, informal, poetic?)
- Can the target audience understand or appreciate the original metaphor?
- Should the idiom be replaced, adapted, paraphrased, or explained?

The answers to these questions are rarely obvious and often depend on the **text type, genre, and purpose** of the translation. In literary translation, for instance, a creative or poetic rendering may be appropriate, whereas in technical or legal documents, clarity and precision take precedence. Furthermore, bilingual competence alone does not guarantee successful idiomatic translation. **Intercultural competence**—the ability to navigate and mediate between cultural systems is equally critical. A translator must understand not only the denotative meaning of an expression but also its connotative implications, historical context, and potential emotional impact. This is especially important when translating texts for multilingual, multicultural, or international audiences. Finally, the process of translating idioms can lead to **translator fatigue**, especially when multiple figurative expressions appear in close succession. This increases the risk of **inconsistency, stylistic dissonance, or even mistranslation**. For this reason, professional translators often engage in multiple drafts, peer reviews, and consultations with native speakers or subject matter experts when working with

idiomatic-heavy content. In summary, the successful translation of idioms and fixed expressions relies heavily on the translator's **cognitive capacity**, **linguistic intuition**, and **cultural sensitivity**. It is a dynamic process of interpretation, adaptation, and judgment that goes far beyond simple language substitution. High-quality idiomatic translation, therefore, is a hallmark of professional competence in the field of translation studies.

Conclusion. Translating idioms and fixed expressions remains one of the most intellectually and creatively demanding aspects of professional translation. These linguistic elements, deeply rooted in cultural, historical, and social contexts, resist literal transfer and instead require a nuanced and context sensitive approach. Their successful translation hinges not only on the translator's linguistic proficiency but also on their cultural awareness, stylistic flexibility, and interpretive judgment.

Throughout this paper, we have examined the multiple layers of complexity that idiomatic language presents. Linguistic and cultural barriers, non-compositional meanings, and differences in figurative logic across languages all contribute to the difficulty of rendering idioms and fixed expressions accurately. Moreover, we have seen that functional and dynamic equivalence are often more important than formal similarity, particularly when preserving tone, register, and communicative effect.

We also explored the cognitive demands placed on translators recognizing idioms in context, interpreting their meaning, and selecting the most appropriate translation strategy whether it be functional substitution, paraphrasing, cultural adaptation, or omission. This process highlights the translator's dual role as both language expert and cultural mediator.

In a globalized world, where cross-cultural communication is increasingly vital, idiomatic expressions pose both a challenge and an opportunity. They test the depth of a translator's competence and invite a deeper engagement with the source and target cultures. While machine translation tools continue to evolve, they remain inadequate in handling idiomatic content, reaffirming the importance of human insight in translation tasks. Ultimately, translating idioms and fixed expressions is not simply about achieving accuracy it is about conveying meaning in its fullest sense: linguistic, emotional, and cultural. It is in these moments of figurative translation that the translator's skill is most visible, and their creative decisions most impactful. By embracing flexible, culturally sensitive approaches, translators can bridge the expressive gaps between languages and ensure that idiomatic meaning is not lost, but transformed faithfully and artfully into another linguistic world.

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Ikkinchi til sifatida nemis tilini o‘qitishda qo‘llaniladigan leksik mashqlar turlari va ularning ta’siri

Виды лексических упражнений и их влияние при обучении немецкому языку как второму иностранному

Types of Lexical Exercises and Their Impact in Teaching German as a Second Language

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Annotatsiya

Ushbu maqolada ikkinchi til sifatida nemis tilini o‘rganishda qo‘llaniladigan leksik mashq turlari va ularning ta’siri tahlil qilinadi. Leksik mashqlar o‘quvchilarning so‘z boyligini oshirish, so‘zlarni kontekstda tushunish va to‘g‘ri ishlatishga xizmat qiladi. Maqolada bu mashqlarning sinf sharoitida qo‘llanishi, samaradorligi va ularni tanlashdagi didaktik mezonlar yoritilgan.

Kalit so‘zlar : nemis tili, leksik mashq, so‘z boyligi, til o‘rgatish, ikkinchi til

Аннотация

В статье рассматриваются виды лексических упражнений, применяемых при обучении немецкому языку как второму иностранному, и их влияние на процесс усвоения лексики. Описываются методы, направленные на активизацию словарного запаса учащихся, формирование навыков правильного употребления слов в контексте, а также повышение мотивации к изучению языка.

Ключевые слова: немецкий язык, лексические упражнения, словарный запас, преподавание, второй иностранный язык

Abstract

This article examines types of lexical exercises used in teaching German as a second foreign language and their impact on vocabulary acquisition. It describes methods aimed at developing students’ lexical skills, contextual understanding, and motivation to use new vocabulary actively and correctly.

Keywords : German language, lexical exercises, vocabulary, language teaching, second foreign language

Kirish

Bugungi kunda chet tilini o‘rganish global ehtiyojga aylangan bo‘lib, ayniqsa ikkinchi til sifatida nemis tiliga bo‘lgan talab ortib bormoqda. Chet tilini

samarali o'rganish esa ko'p jihatdan lug'aviy boylikni puxta o'zlashtirish bilan bog'liq. Chunki so'z bilmasdan grammatikani, fonetikani yoki muloqotni to'liq o'zlashtirish mushkul. Shu sababli lug'aviy mashqlar chet tili o'rgatishning asosiy unsurlaridan biridir.

Nemis tilining leksikasini o'rganishda mashqlarning turlari, ularning mantiqiy tuzilishi, takroriyliigi va kontekstga bog'liq ishlatilishi жуда муҳим. Ushbu maqolada aynan nemis tilini ikkinchi til sifatida o'rgatishda qanday leksik mashq turlari samarali bo'lishi va ularning o'quvchilarga ta'siri tahlil qilinadi.

Lexik mashqlarni quyidagi asosiy turlarga ajratish mumkin: Tanlash mashqlari (Receptive Übungen) O'quvchiga bir nechta so'zlar yoki iboralar beriladi va u keraklisini tanlaydi. Bu mashq passiv so'z boyligini faollashtirishga xizmat qiladi.

Masalan: „Welche Wörter gehören zur Familie?“ (Mutter, Tisch, Vater, Stuhl, Schwester) To'ldirish mashqlari (Lückentexte), Matn yoki gap ichidagi bo'sh joylar to'ldiriladi. Bu mashq kontekst asosida lug'atni tanlashga o'rgatadi.

Masalan: „Ich __ jeden Tag zur Schule.“ (gehe)

Sinonim va antonimlarni topish. Bu mashq semantik tafakkurni rivojlantirib, so'z ma'nolarini aniqlik bilan o'zlashtirishga yordam beradi.

Masalan: „Was ist das Gegenteil von 'kalt'?“

Matching mashqlari. So'z va ularning tarjimalari yoki rasmiy ifodalari moslashtiriladi. Masalan: „Haus“ — „uy“, „Auto“ — „машина“, „Buch“ — „китоб“.

Gap tuzish mashqlari. Yangi o'rganilgan so'zlar yordamida mustaqil gaplar yoki kichik matnlar yozish. Masalan: „Schreibe einen Satz mit dem Wort 'lernen'.“

Rolli suhbatlar. O'quvchilar ikki kishilik vaziyatlarda yangi o'rganilgan so'zlarni muloqotda qo'llaydi. Masalan: „Kunde und Verkäufer im Geschäft“ — xaridor va sotuvchi o'rtasidagi suhbat.

Rasm asosida hikoya tuzish. O'quvchilar rasmga qarab, so'zlar tanlaydi va hikoya yaratadi. Bu mashq nutqni rivojlantirish bilan birga, so'zlarni amaliy ishlatish ko'nikmasini shakllantiradi.

Xulosa

Nemis tilini ikkinchi til sifatida o'rganishda leksik mashqlar alohida ahamiyatga ega. Mazkur mashqlar o'quvchilarning lug'aviy boyligini oshiradi, tilni kontekstda anglash va uni erkin qo'llash ko'nikmalarini rivojlantiradi. Samarali leksik mashq turlari nafaqat yodlashni osonlashtiradi, balki o'rgangan so'zlarni faol nutqda qo'llash imkonini ham yaratadi. Shunday ekan, leksik mashqlarni to'g'ri

tanlash, ularni bosqichma-bosqich va tizimli tarzda o‘tkazish til o‘rgatishdagi muhim pedagogik vazifadir.

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Die Rolle von Spielmethoden bei der Entwicklung der Sprachkompetenz von Schulkindern im Fremdsprachenunterricht

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Zusammenfassung

In der vorliegenden Arbeit wird die Bedeutung von spielerischen Methoden im Fremdsprachenunterricht von Schulkindern analysiert. Spielmethoden fördern nicht nur die Motivation der Lernenden, sondern ermöglichen auch eine natürliche und kommunikative Anwendung der Zielsprache. Die Studie untersucht verschiedene Spielformen, ihre didaktischen Vorteile sowie ihre praktische Umsetzung im Unterricht. Es wird aufgezeigt, wie spielbasierte Ansätze die Entwicklung der sprachlichen Kompetenz – insbesondere Hörverstehen, Sprechen und grammatikalische Strukturen – nachhaltig unterstützen können.

Schlüsselwörter: Sprachkompetenz, Fremdsprachenunterricht, Spielmethoden, Motivation, Schulkind

Einleitung

Die sprachliche Kompetenz gilt als zentrales Ziel im modernen Fremdsprachenunterricht. Gerade bei Schulkindern ist es entscheidend, motivierende und kindgerechte Methoden einzusetzen, um Interesse und aktive Teilnahme zu fördern. Traditionelle Lehrmethoden stoßen bei jüngeren Lernenden oft an ihre Grenzen – sie verlangen viel Konzentration und Wiederholung, während Kinder von Natur aus spielerisch lernen.

In diesem Zusammenhang gewinnen Spielmethoden immer mehr an Bedeutung. Durch Spiele können Lernende Sprache in authentischen Situationen erleben, ohne sich dem klassischen Leistungsdruck auszusetzen. Das Lernen erfolgt dabei beiläufig, kreativ und kooperativ. Diese Methoden unterstützen insbesondere die Entwicklung von kommunikativen Fähigkeiten, die in der heutigen globalisierten Welt essenziell sind.

Vorteile von Spielmethoden im Fremdsprachenunterricht. Motivation und Interesse: Spiele schaffen eine positive Lernatmosphäre und erhöhen die Bereitschaft der Kinder, sich mit der Zielsprache auseinanderzusetzen.

Förderung der Kommunikation: Sprachspiele bieten authentische Sprechkanäle, in denen die Schüler spontan sprechen und reagieren müssen. Vielfalt und Abwechslung: Durch verschiedene Spielformen (Wortspiele,

Rollenspiele, Bewegungsspiele) wird der Unterricht lebendig und interaktiv. Fehlerfreies Lernen: Spiele ermöglichen eine angstfreie Umgebung, in der Fehler als Teil des Lernprozesses akzeptiert werden. Soziale Kompetenzen: Gruppen- und Partnerspiele fördern Zusammenarbeit, gegenseitige Hilfe und respektvollen Umgang.

Beispiele für bewährte Spielmethoden. Memory-Spiele: Fördern Wortschatzwiederholung und Konzentration. Bingo: Dient der auditiven Wahrnehmung und Worterkennung. Rollenspiele: Trainieren authentische Gesprächssituationen wie Einkaufen, Begrüßung, Wegbeschreibung. Wortschatzrennen: Kinder bilden in Gruppen Wörter zu bestimmten Themenfeldern. Bildergeschichten: Schüler erzählen eine Geschichte anhand von Bildkarten, wobei grammatikalische Strukturen unbewusst geübt werden.

Kettenspiele: Ein Kind sagt einen Satz, das nächste wiederholt und ergänzt ihn – das fördert Grammatik und Gedächtnis.

Praktische Umsetzung im Unterricht. Für einen erfolgreichen Einsatz spielerischer Methoden im Unterricht ist eine sorgfältige Planung notwendig. Die Spiele sollten klar strukturiert, altersgerecht und sprachlich angepasst sein. Lehrkräfte sollten zudem gezielt reflektieren, welche sprachlichen Ziele durch das Spiel erreicht werden sollen – sei es die Festigung von Vokabular, das Trainieren von Satzstrukturen oder die Förderung des Hörverstehens. Die Integration von digitalen Spielen und Apps bietet weitere Möglichkeiten, insbesondere in heterogenen Lerngruppen. Wichtig ist dabei, die Balance zwischen Spiel und Lerneffekt zu halten, um ein nachhaltiges Sprachlernen zu ermöglichen.

Schluss

Spielmethoden nehmen eine zentrale Rolle im kindgerechten Fremdsprachenunterricht ein. Sie ermöglichen ein natürliches, motiviertes und nachhaltiges Sprachenlernen, das alle Kompetenzbereiche einschließt. Durch gezielten Einsatz von Spielen können Lehrkräfte das Interesse der Schüler aufrechterhalten und gleichzeitig die sprachliche Ausdrucksfähigkeit systematisch aufbauen. Daher sollte der spielerische Zugang als integraler Bestandteil in der Methodik des Fremdsprachenunterrichts verankert werden.

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NEMIS TILI DARSLARIDA YOZISHNING O‘ZIGA XOS XUSUSIYATLARI

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Аннотация

Mazkur maqolada nemis tili darslarida yozish ko‘nikmasini tutgan o‘rni va uning o‘ziga xos xususiyatlari haqida fikr yuritiladi.

Kalit so‘zlar: yozish ko‘nikmasi, xorijiy til, nusxalash, tahrirlash, yozish faoliyati.

Аннотация

В данной статье идет речь о роли навыков писания на уроках немецкого языка и их свойствах

Ключевые слова: навыки письма, иностранный язык, редактирование, писательская деятельность.

Annotation

In this article the role of writing skills in German language lessons and its specific features are discussed.

Keywords: writing skills, foreign language, copywriting, editing, writing activity.

Yozish asosiy madaniy texnika va asosiy ko‘nikmalardan biridir. Yozish tilni grafik belgilarda ifodalaydi. Yozish faktlarni, fikrlarni, his-tuyg‘ularni va hokazolarni yozma ravishda qo‘lga kiritish uchun xizmat qiladi. Aloqa sherigi mavjud emas va ko‘pincha noma‘lum. Chet tilini o‘rgatish uchun yozish notanish tuzilma bilan bog‘lanish uchun muhim imkoniyatdir.

• Nemis tilida xorijiy til sifatida yozish darslari

Nemis tilida chet tili darslari sifatida yozish turli funksiyalarga ega.

1. Maqsadli ko‘nikma: O‘quvchi chet tili va madaniyatida umumiy qoidalarga rioya qilgan holda muloqot sherigiga (o‘quvchiga) qimmatli ma‘lumotlarni yetkaza olishi kerak.

2. Tilni o'zlashtirish jarayonini qo'llab-quvvatlash (til o'rganish): so'z boyligi va grammatikasini mashq qilish va mustahkamlash, matnlarni nusxalash va tahrirlash, muhim ma'lumotlarni yozma ravishda yozib olish va h.k. [1, 37 b.]

- Maqsad va vosita sifatida yozish

Nemis tilida chet tili darslari sifatida ikki xil yozish faoliyati mavjud:

1. Maqsad sifatida yozish: masalan, xat yozayotganda, harakatning maqsadi kimgadir yubormoqchi bo'lgan xatdir.

2. Maqsadga erishish vositasi sifatida yozish: masalan, yozma grammatik mashqlarda ma'lum bir tuzilish mashq qilinadi.

- oraliq malaka sifatida yozish

Yozish, masalan, yozma grammatik mashq grammatik shakllarni mustahkamlash uchun xizmat qilganda yoki ma'lum bir lug'at bilan shug'ullansa, maqsadga erishish vositasi bo'lib xizmat qiladi.

- Grammatik mashqlar

Umumta'lim maktablarining 9-10-sinflari uchun yaratilgan ushbu darslikda o'quvchilar aniqlovchi, grammatik jihatdan to'g'ri keladigan birlik sifatlar, grammatik jihatdan to'g'ri keladigan egalik olmoshlarini mashq qiladilar. Bu mashqlar orqali o'quvchilar yozish jarayonida nafaqat mashq qiladilar, balki grammatik bilimlarini ham tekshiradilar. [2, 106 b.]

Quyidagi mashqlarda boshlang'ich sinf o'quvchilari bir-birlariga savol berib, sifatlarni ot va sifatlar bilan bog'lash orqali taniydilar. Masalan:

Das scharfe Messer, die spitze Nadel, der leckere Pudding, der klebrige Honig, die fleißige Biene, das schlaue Kind.

Durch die Wortschatzübung entwickeln die Schüler beim Schreiben der Blumennamen gut erkennen. z.B.:

Im Frühling erblühen viele Frühblüher in unserem Garten.

Lernausgangstest Grammatik



Was kannst du schon und wo hast du noch Übungsbedarf?

1. Ergänze bei folgenden Wörtern den bestimmten Artikel.

_____ Hündchen, _____ Belastbarkeit, _____ Männlein, _____ Überlegung,
 _____ Wohnzimmertisch, _____ Klavierhocker, _____ Fernsehgerät,
 _____ Telefonanlage, _____ Briefzustellung, _____ Abstellkammerchen,
 _____ Fußballmannschaft, _____ Akkuschauber

von 12 Punkten

2. Ergänze den fehlenden bestimmten Artikel und das in Klammern stehende Adjektiv im Singular in der grammatisch passenden Form.

- Die Augen _____ (*klein*) Mädchens leuchten.
- Sie schickt _____ (*einsam*) Frau eine Karte.
- Er läuft _____ (*verdächtig*) Mann hinterher.
- Die Hände _____ (*wütend*) Jungen ballen sich zu Fäusten.
- Sie liest _____ (*umfangreich*) Bedienungsanleitung.
- Er fragt nach _____ (*neu*) Sekretärin.
- _____ (*ängstlich*) Kätzchen flieht unter den Schrank.
- Er findet _____ (*mollige*) Sekretärin attraktiv.

von 8 Punkten

3. Ergänze die in Klammern stehenden Possessivpronomen und Adjektive in der grammatisch passenden Form.

- _____ (*mein/klein*) Schwester zieht nach Berlin.
- Der Reißverschluss _____ (*dein/blau*) Jacke ist kaputt.
- Ich überreiche _____ (*sein/erfreut*) Mutter das Geschenk.
- Ich benutze _____ (*dein/alt*) Handy.
- Er findet _____ (*ihr/golden*) Kette am Boden.
- _____ (*unser/neu*) Sonnenschirm ist schon kaputt.
- Die Augen _____ (*dein/jünger*) Tochter sind braun.
- Ich habe _____ (*sein/neugierig*) Tante eine Lügenschichte aufgetischt.

von 8 Punkten

Xulosa qilib shuni aytish mumkinki, yozuv grammatik mashqlar, faktlar, fikrlar, his-tuyg'ularni rivojlantirishga xizmat qiladi.

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KIMYO FANINI STEAM YONDASHUVI ASOSIDA O‘QITISHNING INNOVATSION IMKONIYATLARI

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Annotatsiya: Ushbu tezisda kimyo fanini o‘qitishda STEAM (Science, Technology, Engineering, Art, Mathematics) yondashuvining afzalliklari, ta’lim jarayoniga integratsiyalash imkoniyatlari va o‘quvchilarning kreativ, tanqidiy hamda tizimli fikrlash kompetensiyalarini rivojlantirishdagi roli yoritilgan. Tahlillar shuni ko‘rsatadiki, muammo asosida o‘qitish, loyiha asosidagi yondashuv va TPACK modeli asosidagi darslar kimyo o‘qituvchisining zamonaviy malakasini belgilaydi.

Kalit so‘zlar: *STEAM, kimyo ta’limi, TPACK, innovatsion metodika, o‘quv jarayoni.*

Kirish. Prezidentimiz tomonidan “Umumiy o‘rta va maktabdan tashqari ta’limni tizimli isloh qilishning ustuvor yo‘nalishlarini belgilash, o‘sib kelayotgan yosh avlodni ma’naviy – axloqiy va intellektual rivojlantirishni sifat jihatidan yangi darajaga ko‘tarish, o‘quv-tarbiya jarayoniga ta’limning innovatsion shakllari va usullarini joriy etish”l kabi vazifalar belgilab berildi. Kundan kunga texnologiyalar rivojlangan hozirgi davrda yoshlarning texnik, madaniy savodxon bo‘lishi robotatexnika fanlarni yaxshi o‘zlashtirishi doimgidan ham muhimroqdir. Shunga muvofiq, O‘zbekiston Respublikasi Prezidentining 2019 yil 29 a’reldagi F-5712-sonli Farmoni asosida qabul qilingan “O‘zbekiston Respublikasi Xalq ta’limi tizimini 2030 yilgacha rivojlantirish kontsepsiyasi”da hamda O‘zbekiston Respublikasi Prezidentining 2020 yil 24 yanvardagi Oliy Majlisga Murojaatnomasida STEAM ta’limni joriy qilish yuzasidan alohida vazifalari belgilandi.[1].

Bugungi kunda ta’lim tizimida innovatsion yondashuvlar, xususan, STEAM konsepsiyasi o‘zining dolzarbligi va samaradorligi bilan ajralib turibdi. Bu yondashuv STEMga san’atni qo‘shib, ta’lim jarayonini kreativ va multidisiplinar asosda tashkil etishga imkon beradi. Kimyo fani esa bu integratsiya uchun eng mos fanlardan biridir.

Asosiy g'oya: Kimyo darslarida STEAM yondashuvini qo'llash o'quvchilarning nazariy bilimlarini real hayotdagi muammolarni hal qilish ko'nikmalari bilan bog'laydi. An'anaviy bilimlarni yodlashga asoslangan yondashuvlardan farqli o'laroq, STEAM yondashuvi o'quvchilarni tahlil qilish, izlanish va dizaynerlik fikrlashga undaydi. Bu yondashuv orqali har bir dars muammo asosida tashkil qilinib, o'quvchilar sabab–natija aloqalarini aniqlash, mavjud bilimlarni amaliy vaziyatlarga tatbiq etish va guruhda ishlash ko'nikmalarini rivojlantiradi [2].

Masalan, atmosfera ifloslanishi, plastmassa chiqindilarining parchalanmasligi, yoki energiya manbalarining barqarorligi kabi ekologik muammolarni kimyoviy jarayonlar asosida tahlil qilish orqali o'quvchilar ekologik ong, barqaror rivojlanish va kimyoning ijtimoiy ahamiyati haqida chuqurroq tushunchaga ega bo'ladilar. Bunday darslarda o'quvchilar tajriba asosida loyiha ishlab chiqish, ilmiy-ijodiy echimlar taklif etish, hamda dizayn asosida model yaratish orqali o'z bilimlarini mustahkamlab boradilar.

Loyiha asosida o'qitish (Project-Based Learning, PjBL). PjBL modeli asosida tashkil etilgan kimyo darslari o'quvchilarning mustaqil fikrlash va ijodiy yondashuvini kuchaytiradi. Masalan, "Yashil kimyo laboratoriyasi" loyihasi orqali o'quvchilar ekologik xavfsiz reaktivlardan foydalanib, atrof-muhitga zarar keltirmaydigan kimyoviy jarayonlarni o'rganadilar. Bu jarayonda ular laboratoriya sharoitida tajriba o'tkazadi, natijalarni tahlil qiladi va loyiha hisobotini tayyorlaydi — bu esa nafaqat kimyo bilimlarini, balki ilmiy yozuv, texnologik savodxonlik va taqdimot qilish ko'nikmalarini ham rivojlantiradi.

TPACK kompetensiyasi. Bunday yondashuvni amalga oshirishda o'qituvchining roli juda muhim. U nafaqat kimyoviy bilimlarga ega bo'lishi, balki Technological Pedagogical Content Knowledge (TPACK) — ya'ni texnologik, pedagogik va mazmuniy bilimlarni integratsiyalash qobiliyatiga ega bo'lishi lozim. Bu model o'qituvchidan quyidagilarni talab qiladi:

-texnologik bilim (TK) – zamonaviy laboratoriya asboblari, simulyatsiyalar, ta'limiy dasturlar va interaktiv vositalardan foydalana olish;

-pedagogik bilim (PK) – ta'lim metodikasi, motivatsiya yaratish, muammoli o'qitish, differensial yondashuvni qo'llash;

-mazmuniy bilim (CK) – kimyo fanining nazariy asoslari, qonun va hodisalarni mukammal tushunish.

TPACK yondashuvi asosida faoliyat yuritadigan o'qituvchi STEAM metodikalarini to'g'ri tanlab, ularni zamonaviy dars rejalariga integratsiyalash orqali yuqori samaradorlikka erishadi.

Xulosa: STEAM o'quvchilarni tajribalar o'tkazish, modellarni konstruksiyalash, o'zlari qo'l bilan yasash, o'z g'oyalarini amalga oshirish, ijodiy fikrlashga, jamoa va yakka tartibda ishlashga, olib keladi. Kimyo darslarida PISA, STEAM, interaktiv o'yinlar bilan, qiziqarli tajribalar bilan darslarni olib borish o'quvchilarda mavzuni yaxshi tushunishga, darsga nisbatan qiziqishga olib keladi.

STEAM yondashuvi asosidagi kimyo darslari o'quvchilarning bilim olishga qiziqishini oshirib, ularni amaliyotga yo'naltirilgan, ijodkor va tanqidiy fikrlovchi shaxs sifatida shakllantirishga xizmat qiladi.

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2. KIMYO FANINI INTERFAOL METODLAR ASOSIDA O'QITISH
D.Toshpo'latova ,O . Saydiyev , K.X. Rashidova. “Journal of Natural Science” №4

**GEOGRAFIYA TA'LIMIDA GEOGRAFIK BILIM-KO'NIKMALARNI
SHAKLLANTIRISHDA INTERFAOL METODLARDAN FOYDALANISHNING
SAMARADORLIGI
(MATERIKLAR VA OKEANLAR TABIIY GEOGRAFIYASI KURSI MISOLIDA)**

**Abu Rayhon Beruniy nomidagi UrDU Akademik litseyi
geografiya fani o'qituvchisi Rustamova Maftuna Anvarjon qizi**

Uchinchi ming yillik insoniyatning intellektual rivojlanish davridir. Shu sababli hozirgi zamon yoshlari davr talabiga javob beradigan, mustaqil fikrlovchi hamda umuminsoniy ta'lim-tarbiya shakl-shamoyili bilan hamohang bo'lishlari zarur. Bunday intellektual shakllangan shaxslarning o'quv-bilish faoliyatlarini ma'naviy-ma'rifiy va milliy qadriyatlar, huquqiy, psixologik bilimlar, kasbiy, ijtimoiy madaniyat, o'z-o'zini boshqarish va baholash kabi omillar bilan faollashtirish, boyitib borish lozim. Ma'lumki, o'qitish jarayoni didaktik maqsadlarga erishishga yo'naltirilgan o'qituvchining pedagogik va talabalarning o'quv-bilish faoliyati birligi sanaladi. O'qituvchi o'zining maqsadga muvofiq tashkil etilgan pedagogik faoliyati orqali talaba-o'quvchilarni o'quv-bilish faoliyatini tashkil etadi va boshqaradi. O'qituvchi pedagogik faoliyatini o'rganiladigan mavzu mazmunidan kelib chiqqan holda o'qitish vositalari va metodlari orqali tashkil etadi hamda talaba-o'quvchilarning o'quv-bilish faoliyatiga bilvosita ta'sir ko'rsatadi. Mavzu mazmunidan kelib chiqqan holda o'qituvchi tomonidan mashg'ulotda foydalanadigan o'qitish vositalari va metodlari talaba-o'quvchilarning o'quv-bilish faoliyatini tashkil etish xarakterini belgilaydi. Ta'lim muassasalarida tashkil etiladigan ta'lim-tarbiya jaraenida aksari holatda talaba-o'quvchilarning o'quv-bilish faoliyati passiv tinglovchi, ya'ni tayyor holdagi o'quv materialini o'zlashtirishga qaratiladi. Mazkur jarayonda pedagogik munosabatlarning sub'ekt-ob'yekt shakli vujudga keladi. Geografiya asoslarini puxta o'zlashtirish, talaba-o'quvchilarning bilim olish qobiliyatlarini rivojlantirish va ularni hayotga tayirlash, bilish faolligini oshirishning o'rganish usullari va imkoniyatlari ko'p jihatdan o'qitish metodlariga bog'liq. O'qitish metodlari o'qituvchi tomonidan talaba-o'quvchilar faoliyatini belgilaydigan ish usullari majmuasidir. O'qitish metodlari talaba-o'quvchilarga bilim, ko'nikma va malakalarni berish bilan birga, ularning ijodiy faoliyatlarini rivojlantirishga, bilimlarni mustaqil o'zlashtirishga o'rgatadi, ilmiy bilimlarga asoslangan holda to'g'ri dunyoqarash va e'tiqodni tarbiyalashga yo'naltiradi. Ular darsning maqsad va mazmuniga bog'liq bo'lib, fan-texnika va ijtimoiy taraqqiyot natijasida o'zgaradi.

O'zbekiston Respublikasi "Harakatlar strategiyasi" da ta'lim sifatini yaxshilash va pedagoglar salohiyatini takomillashtirish muhim ahamiyat kasb etadi. Aqlni uyg'otuvchi ma'naviy olam rivojida har bir pedagog turli qiyinchiliklar va muammolarga duch kelishi tabiiy hol. O'z ustida muntazam ishlaydigan va yetuk bilimga ega kadrlargina zamon talabiga mos holda faoliyat olib borish layoqadiga egadirlar. Izlanish va kreativlik yo'lidagi har qanday pedagog kasbiy faoliyati uchun yordam va yo'nalish ko'rsatuvchi metodik qo'llanmalarga ehtiyoj sezadi. Texnologiya shiddat bilan butun olamimizni, hattoki, qalblarimiznida egallab olayotgan davrda yoshlar miyasi ham innovatsion usulda ishlamoqda. Biz pedagoglar doimiy o'qitish uslublaridan foydalanishimiz talabga javob bermaydigan, zerikarli dars egasiga aylanib qolishimizga sabab bo'lishi mumkin.

Atrofimizdagi dunyoda biz doimo bo'lamiz fan va texnika yutuqlarini hayotga tatbiq etish sur'atlari tobora ortib borayotganiga guvoh bo'lmoqdamiz zamonaviy insonning kundalik hayoti va faoliyatiga. Global Kompyuterlashtirish jarayoni jamiyat hayotining barcha sohalarini qamrab oldi. Bularning ta'siri ostida Bu jarayonda ta'lim tizimi ham o'zini topdi. Texnik ishlar olib borilmoqda ta'lim muassasalarini qayta jihozlash, eskirgan kinematograflar almashtirildi televizorlar va videoregistratorlar, faol joriy etish va mavjud o'quv jarayonida kompyuter va axborot texnologiyalaridan foydalanish texnologiyalar. O'qitishning texnik vositalarini ishlab chiqish, ularning metodikadagi roli va o'rni Geografiya o'qitishga doimo katta e'tibor berilgan. Bu muammo edi Y.G'.ning asarlari bag'ishlangan Barysheva, M.B. Vestitskiy, V.P. Bosh, I.I. Drighi, G.I. Pax.

Geografiya o'qitish vositasida tabiiy va maxsus tayyorlangan ob'ektlar va atrof-muhit ob'ektlari hal qilish maqsadida ta'lim jarayoniga kiritilgan haqiqat ta'lim vazifalari, geografik bilim, ko'nikma, malakalarni shakllantirish (L. Golovda). Texnik vositalar treningning ajralmas qismidir o'quv qurollari. "O'qitishning texnik vositalari" tushunchasi o'z ichiga oladi ta'lim axborot tashuvchilari (filmlar, filmlar, slaydlar, ovozli yozuvlar, talabalar bilimni nazorat qilish dasturlari va boshqalar), shuningdek ushbu ma'lumotni ishlatadigan asbob-uskunalar yoki texnik qurilmalar qayta ishlab chiqarilgan (I.I. Driga, G.I. Pax). Axborot tashuvchilar, uskunalar axborotni taqdim etish audiovizual vositalar deb ataladi (I.I. Driga, G.I. Pax, N.A. Sitnikova). Biroq, nisbatan yaqinda "interfaol o'qitish vositasi" tushunchasi paydo bo'ldi. "Interaktiv" Ingliz tilidan tarjima qilingan "o'zaro ta'sir" degan ma'noni anglatadi. Interaktiv vosita o'rganish - o'qituvchi va talabaga imkoniyat beradigan vosita barcha sub'ektlar bilan samarali hamkorlikni tashkil etish ta'lim jarayoni, o'quv ma'lumotlari oqimini boshqarish; o'quv jarayonini ijodiy va tarbiyaviy jarayonga aylantirish hamkorlik. Kompyuterning paydo bo'lishi tufayli bu mumkin

bo'ldi bu ikki tushunchani - interaktiv audiovizual vositalarni bog'lang trening. Zamonaviy kompyuter; — murakkab texnik qurilma hisoblanadi. U turli xil vizual tasvirlarni (chizmalar, fotosuratlar, diagrammalar, jadvallar, videolar) va eshitish seriyasi, o'qituvchi va talabaga imkon beradi o'rganilayotgan ma'lumotlarni boshqarish.

Audiovizual o'qitish vositalari (AVTA) o'qitish vositalaridir audiovizual ma'lumotlarni taqdim etish vositalarini o'z ichiga oladi (kompyuter, LCD panel, media proyektor, interaktiv Smart doska) va audiovizual axborot tashuvchilar (elektron nashrlar va resurslar), bu o'qituvchi va talabaga ta'lim jarayonini boshqarish imkonini beradi ma'lumot. Buni tasdiqlovchi aniqlanishi mumkin bo'lgan bir qator belgilar mavjud o'quv jarayonida kompyuter interaktiv audiovizual vazifasini bajaradi o'quv yordami:

1. Buning uchun ishlab chiqilgan ta'lim axborot tashuvchilari eshitish va vizual ma'lumotlarni birlashtiradi va o'quv jarayonida qo'llaniladi jarayon bilim manbai sifatida.

2. Dasturiy ta'minot o'quv jarayonida muammolarni hal qilish imkonini beradi turli amaliy vazifalarni bajarish, birlashtirish, nazorat qilish, o'quv materialini tizimlashtirish. Kompyuterni o'quv jarayoniga kiritish muammosiga umumiy yondashuvlar interfaol audiovizual o'quv qurollari ko'rsatilgan tadqiqoti E.I. Mashbitsa, B.S. Gershunskiy, I.V. Robert, N.F. Talyzina, E.S. Po'lat, V.P. Bepalko, N.V. Apatova, G.K. Selevko. Bu ishlarda Kompyuter texnologiyalaridan foydalanishning keng pedagogik imkoniyatlari qayd etilgan texnologiya, uning xususiyatlari va o'qitish vositasi sifatidagi ahamiyati va ta'lim faoliyati.

Interaktiv audiovizualning muhim pedagogik salohiyati mablag'lar bilan geografiya o'qitishda foydalanish imkonini berdi fanni o'qitishning etakchi tamoyillaridan birini amalga oshirish maqsadi - aniqlik. N.N. Baranskiy maktab fanining o'ziga xos xususiyatlarini qayd etgan holda yozgan geografiya, "boshqa hech bir fan bunday darajani talab qilmaydi geografiya kabi aniq va qiziqarli va ayni paytda hech biri ob'ektlar qo'llash uchun qulayroq maydonni taqdim etmaydi geografiya kabi o'qitishning ko'rgazmali va qiziqarli usullari. Va bu tomonidan oddiy sababga ko'ra, geografiya o'rganadigan hamma narsa ... bularning barchasi tushuncha emas mavhum, ammo aniq, bizning bevosita foydalanishimiz mumkin "taqdimot." Geografiya o'qitish metodikasida ma'lum tajriba to'plangan zamonaviy interaktiv audiovizual vositalarni qo'llash (Yu.G. Barysheva, V.B. Pyatunin, G.V. Volodina, N.B. Filatova, N.N. Petrova, D.V. Novenko, E.A. Bojxona, A.G. Baranov). Elektronlari ishlab chiqilgan qo'llanmalar va o'quv dasturlari (N.N. Petrova - multimedia darsligi "Geografiya. Asosiy kurs, 2000; A.A. Letyagin, E. Yu.

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Global Internet tarmog'ining rivojlanishi va tashkil etilishi imkoniyatlarni oshirdi geografiya o'qitish jarayonida kompyuterdan foydalanish (A.M. Sheinis, N.N. Petrova, D.V. Novenko). "Maktab geografik axborot tizimi"ni yaratish va turli elektron atlaslar bilan ishlashning mavjud metodologiyasiga ta'sir ko'rsatdi geografik xarita, xaritalarning o'zi o'zgargan (A.M. Berlyant). Biroq, ta'lim jarayoniga faol kirishiga qaramasdan zamonaviy interaktiv audiovizual vositalar (kompyuter), uchun turli xil elektron ta'lim vositalarini ishlab chiqish geografiyani o'qitishda etarli sonning yo'qligini ta'kidlash kerak

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Неврологические изменения при хронической ишемией мозга

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Целью исследования явилась оценка когнитивной и психоэмоциональной сферы у больных с хронической ишемией мозга.

Материалы и методы исследования: В исследование были включены 60 больных с ХИМ 1,2,3 стадии. Критериями включения в исследование были возраст больных от 55 до 75 лет, установленный диагноз ХИМ 1,2,3 стадии. Состояние когнитивной сферы изучалось с помощью краткого теста оценки психической сферы – Mini Mental State Examination (MMSE), позволяющего количественно оценить общий когнитивный дефицит. Для оценки выраженности психоэмоциональных нарушений применялись шкала тревоги Бека (ШТБ).

Результаты исследования:

Из жалоб пациентов всех групп исследования преобладали психоэмоциональные нарушения, признаки астенизации в виде слабости у 20(95%)больных с ХИМ 2 ст., у 17(89%)с ХИМ 1 ст и снижение работоспособности, которые преобладали у больных с ХИМ 3 ст.- у 19(95%), быстрой утомляемости у 17(85%). 13(62%)пациентов с ХИМ 2ст. жаловались на головную боль, соответственно при ХИМ 1 ст-10(53%) и 8(40%) с ХИМ 3 ст., головокружение у 16(80%)больных с ХИМ 3 ст., 12(57%)больных с ХИМ 2ст и 4(21%) с ХИМ 1ст., нарушение ночного сна соответственно- 16(80%); 15(71%); 10(53%), шум в ушах имел место у 17(85%); 13(62%); 7(37%) больных соответственно, излишнюю раздражительность и нервозность в поведении у 14(70%); 13(62%); 8(42%), больных с ХИМ. Необходимо отметить, что из все групп исследования жалобы преобладали у больных с ХИМ 3 и 2 ст., тогда как при ХИМ 1ст менее выраженными.

Анализ очаговой неврологической симптоматики показал: центральный парез VII пары черепно-мозговых нервов выявлен у 3(16%)с ХИМ 1ст, 5(24%) пациентов с ХИМ 2ст и 12(60%) пациентов с ХИМ 3ст; центральный парез XII пары черепно-мозговых нервов имел место соответственно у 1(5%), 2(10%), 7(35%) обследованных в группах. Рефлексы орального автоматизма встречались соответственно у 8(38%) с ХИМ 2 ст., 16(80%) с

ХИМ 3ст; анизорефлексия диагностирована у 5(26 %) с ХИМ 1ст, 9(47 %)больных с ХИМ 2ст и 12(60 %)больных с ХИМ 3 ст; атаксия - 4(21%), 11(52%), 18(90%), соответственно;шаткость в позе Ромберга у 4(21%),12(57%),16(80%) соответственно, интенция при выполнении пальценосовой пробы 4(21%),10(58%), 15(75 %) соответственно, больных с ХИМ; интенция при выполнении пяточно-коленной 4(21%),12(57%), 16(80%), соответственно, дизартрия 1(5%), 6(29 %), 7(35 %) соответственно; когнитивные нарушения 7(37 %), 16(76%), 18(90 %).

В контрольной группе показатели умственного состояния по шкале MMSE выявило сумму баллов равной $29,8 \pm 0,1$, что приближалось к показателям нормы (30 баллов). У всех больных пациентов с ХИМ 1ст сумма баллов равнялась $28,6 \pm 0,2$, что соответствовало приближенности к норме и легким когнитивным расстройствам; у больных с ХИМ 2 ст- $26,5 \pm 0,1$, что соответствует умеренным когнитивным расстройствам; у больных с ХИМ 3 ст $24,3 \pm 0,1$ ($P < 0,001$), что соответствовало предметным когнитивным нарушениям.

Исследование психо-эмоционального состояния с помощью Шкалы тревоги Бека показал средний балл тревожных расстройств в группе пациентов с ХИМ 1ст составил $9,1 \pm 1,6$, что соответствует незначительной тревожности, тогда как у больных с ХИМ 2ст. средний балл по шкале Бека составил $14,1 \pm 0,33$, что соответствует легкой депрессии, у пациентов с 3ст ХИМ отмечались предметные когнитивные нарушения и умеренная депрессия, составила $21,1 \pm 0,2$ бала по шкале депрессии Бека.

Выводы: при ХИМ нарастание неврологической симптоматики сочетается с углублением когнитивных и депрессивных расстройств. Формирование когнитивных и депрессивных расстройств соотносится с более обширным очаговым поражением головного мозга и более выраженными сосудистыми нарушениями.

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Restricting Profit Concealment Through Foreign Structures: Institutional Measures for Tax Transparency in Uzbekistan

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Abstract. This article examines institutional and legal mechanisms for preventing tax base erosion caused by undisclosed profits through foreign legal structures controlled by domestic taxpayers. It analyzes global experiences with anti-avoidance measures—especially the regulation of foreign-controlled entities—and assesses how such frameworks can be adapted to Uzbekistan. Particular attention is given to the role of digital oversight, international data exchange systems, and beneficial ownership declarations. The study proposes regulatory steps for Uzbekistan to strengthen its fiscal transparency infrastructure and integrate CFC-related tax controls with global standards.

Keywords: foreign-controlled entity, tax evasion, profit concealment, tax transparency, beneficial ownership, CFC regulations, Uzbekistan tax reforms, OECD BEPS, AEOI, institutional tax oversight

Introduction. The increasing internationalization of business and capital flows has intensified the use of offshore and foreign corporate structures for profit shifting and tax avoidance. In many jurisdictions, especially those with low tax rates and minimal disclosure requirements, taxpayers can establish foreign entities that accumulate profits while remaining effectively controlled from the resident country. This practice leads to base erosion, budget losses, and growing inequality in tax burdens.

For Uzbekistan, where fiscal reforms aim to improve transparency and taxpayer trust, unregulated foreign profit concealment poses a significant institutional challenge. While the Tax Code mandates the declaration of worldwide income by residents, it lacks mechanisms to detect, verify, and tax profits held in foreign-controlled legal structures. This article investigates how countries address this issue and how Uzbekistan can adapt institutional practices for identifying, monitoring, and taxing controlled foreign companies.

Review of Relevant Literature. Academic and policy literature emphasizes the link between international transparency and equitable taxation. Musgrave (1989) and Stiglitz (2000) argue that tax systems must evolve to match the economic reality of taxpayer behavior. OECD reports, especially BEPS Action 3 and 12, stress the

need for legal definitions of control, minimum ownership thresholds, and mandatory reporting mechanisms. Other studies underline the role of beneficial ownership identification and the implementation of information exchange agreements (e.g., CRS, FATCA).

Uzbek scholars such as Kurbanov (2020) and Ruzmetova (2022) have highlighted the limited scope of cross-border tax disclosure in national legislation. They emphasize the need for legal reform and institutional modernization to prevent tax evasion through foreign entities.

Analysis and Current Conditions:

1. Legal Gaps in Ownership Disclosure.

While Uzbekistan's Tax Code is built on the principle of global income taxation for resident individuals and entities, it does not explicitly define what constitutes a Controlled Foreign Company (CFC). The absence of a legal definition leads to uncertainty in determining tax obligations for profits held abroad. Furthermore, the law does not require residents to disclose ownership stakes, voting rights, or control over foreign companies unless those profits are repatriated or voluntarily declared. This loophole creates a significant challenge for tax enforcement bodies.

2. Institutional Weaknesses in Monitoring.

The institutional framework in Uzbekistan lacks a specialized unit or department within the tax authority dedicated to monitoring international corporate ownership structures. Tax inspectors typically focus on domestic income verification, leaving foreign-source income largely unexamined. The absence of training, resources, and inter-agency cooperation restricts the government's ability to identify and trace hidden foreign entities. In comparison, countries with effective CFC regimes have established central registries and risk-assessment units that focus on identifying high-risk taxpayers engaged in cross-border activities.

3. Digital Platform Limitations.

Despite the development of digital tax platforms such as SoliqMa'lumot and my.soliq.uz, there is no integration of modules that capture foreign corporate ownership or control data. These systems primarily cater to domestic income, VAT, and social tax declarations. There is no requirement for taxpayers to input information about foreign company registration numbers, jurisdictions, asset values, or shareholder agreements. Without automated matching against global data standards (e.g., Legal Entity Identifiers or Tax Identification Numbers), the risk of underreporting and misreporting remains high.

4. Absence from Global Exchange Networks.

Uzbekistan is not yet a participant in the OECD's Common Reporting Standard (CRS) or a signatory to the Multilateral Competent Authority Agreement (MCAA). This absence restricts the country's access to valuable information regarding financial accounts, dividends, and interest held abroad by its tax residents. Consequently, even when tax authorities suspect offshore holdings, they lack the means to obtain verified documentation from foreign jurisdictions. Integrating into such frameworks would allow automatic exchange of information (AEOI), strengthening compliance and audit capabilities.

5. Administrative Challenges in Enforcement.

Even when foreign income is voluntarily declared or detected, Uzbekistan's current legal and administrative tools are insufficient to ensure effective taxation. There is no established procedure for retroactive tax assessment, income reclassification, or profit adjustment related to CFC structures. Furthermore, there are no anti-deferral rules to prevent taxpayers from indefinitely postponing taxation of passive foreign income. Many countries have introduced minimum taxation thresholds, substance requirements, and penalty regimes to discourage the use of artificial foreign entities—tools currently absent in Uzbekistan's tax framework.

Conclusions and Recommendations:

To address the risk of foreign profit concealment, Uzbekistan must introduce a combination of legal, institutional, and technological reforms. These include:

- Defining “controlled foreign company” (CFC) in the Tax Code: A precise legal definition should cover ownership thresholds, control indicators, and passive income categories. This will reduce ambiguity for both taxpayers and regulators.
- Establishing CFC reporting thresholds and disclosure obligations: Taxpayers who directly or indirectly control foreign legal entities must be required to disclose ownership, governance structures, and financial results, even if profits are not repatriated.
- Integrating CFC monitoring tools into digital platforms: Tax declarations should include dedicated CFC reporting sections with validation against external data. Advanced analytics and AI-driven risk scoring can help flag suspicious patterns of cross-border ownership and income.
- Expanding participation in international agreements (CRS, AEOI, MCAA): Uzbekistan must commit to tax information exchange standards. This includes creating technical infrastructure for data exchange and legal safeguards for confidentiality and enforcement.

- Enhancing inter-agency coordination and training: Close cooperation between the Tax Committee, Ministry of Finance, Central Bank, and anti-money laundering units is essential. Staff must be trained in international tax law, digital audits, and financial forensics.

- Launching public awareness and voluntary compliance programs: Taxpayers need guidance on foreign reporting requirements. Transitional amnesties or voluntary disclosure schemes can encourage early compliance and help build a transparent reporting culture.

- Establishing anti-deferral rules and minimum tax requirements: Passive foreign income should be taxed currently if it exceeds certain thresholds or if the foreign entity lacks substantial business activity.

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НЕЙРОФИБРОМАТОЗ У ДЕТЕЙ: АЛГОРИТМ ОБСЛЕДОВАНИЯ

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Введение: Нейрофиброматозы – группа наследственных заболеваний с аутосомно-доминантным типом наследования и полной пенетрантностью. Общим клиническим проявлением нейрофиброматозов является формирование множественных опухолей в тканях нейроэктодермального происхождения. В настоящее время группа объединяет три типа нозологий, имеющих различную генетическую природу: нейрофиброматоз 1 типа (НФ1), нейрофиброматоз 2 типа и шванноматоз(1).

Нейрофиброматоз 1 типа (болезнь фон Реклингхаузена) – заболевание, наследуемое аутосомно-доминантно, характеризующееся множественными пигментированными пятнами на коже цвета «кофе с молоком», пигментацией по типу «веснушек» на кожных складках (лентигозными пятнами, которые возникают в местах, не подвергающихся воздействию солнца), доброкачественными новообразованиями (нейрофибромами, опухолями центральной нервной системы), костными аномалиями, изменениями радужной оболочки глаза (узелки Лиша) и целого ряда других симптомов (2). Заболевание обусловлено мутацией гена NF1 на длинном плече 17 хромосомы (17q11.2) и кодирует синтез нейрофибромина.

Нейрофиброматоз 2 типа – аутосомно-доминантное наследственное заболевание, которое наследуется или возникает спонтанно, характеризующееся образованием множественных доброкачественных опухолей, преимущественно шванном и менингиом, локализующихся в центральной нервной системе и по ходу периферических нервов. Заболевание обусловлено мутацией гена NF2 на длинном плече 22 хромосомы (22q12), кодирующего синтез белка мерлина который на клеточном уровне тормозит опухолевый рост клеточных мембран(3).

Шванноматоз – редкая форма нейрофиброматоза, характеризующаяся развитием множественных шванном (опухоли нервных оболочек) в спинном мозге и на периферических нервах, но несоответствующая критериям нейрофиброматоза 2 типа (4). Заболевание обусловлено мутацией гена LZTR1,

SMARCB1 – гене-супрессоре опухолевого роста, который локализуется на длинном плече 22 хромосомы (22q11.23).

Алгоритм обследования: При наличии клинических признаков илиотягощенного семейного анамнеза пациент направляется к генетику, который уточняет диагноз, проводит генетическое тестирование (по показаниям) и формирует первичный план обследования.

Следующим обязательным этапом является осмотр у офтальмолога для выявления узелков Лиша, хориоидальных аномалий и оценки состояния зрительных нервов. При необходимости проводится оптическая когерентная томография (ОКТ) и МРТ орбит. Параллельно пациент проходит консультацию невролога, который оценивает неврологический статус, когнитивное развитие и при необходимости назначает МРТ головного мозга, особенно при подозрении на оптическую глиому или другие центральные поражения. При наличии деформаций костей, сколиоза или жалоб на боли в конечностях, консультацию продолжает ортопед, который проводит клиническую и рентгенологическую оценку, а при подозрении на псевдоартрозы или плексиформные нейрофибромы в глубине мягких тканей – назначает МРТ позвоночника и скелета. При выявлении объемных образований или признаков их роста пациента дополнительно направляют к онкологу или нейрохирургу для решения вопроса о биопсии, хирургическом лечении или динамическом наблюдении. В случае когнитивных нарушений, трудностей в обучении или социально-психологических проблем, к ведению подключаются нейропсихолог, логопед и психолог. Если у пациента выявляется артериальная гипертензия, подозрение на феохромоцитому или врожденный порок сердца, подключаются кардиолог и эндокринолог с проведением соответствующих обследований (УЗИ почек, доплерография сосудов, КТ надпочечников). При планировании беременности или рождении следующего ребенка проводится консультация медицинского генетика, включая разбор рисков и возможности проведения пренатальной диагностики или преимплантационного генетического тестирования (ПГТ) при ЭКО.

Выводы: Таким образом, маршрут пациента с НФ представляет собой замкнутую систему мультидисциплинарного наблюдения, где каждый специалист не просто решает свою задачу, но и передает результаты коллегам для формирования единой стратегии ведения пациента.

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“DOYRA YAKKANAVOZLIGI VA JO‘RNAVOZLIKNING MAQOM IJROCHILIGIDAGI MUHIM AHMIYATI”

Yunus Rajabiy nomidagi O‘zMMSSI “Maqom cholg‘u ijrochiligi” kafedrası
dotsenti **Samadov Rahmatulla Sunattullayevich**

Annotatsiya: Ushbu maqolada sharq allomalarining musiqa haqidagi fikrlari va g‘arb olimlarining tadqiqot kuzatuvlari haqida yozilgan. Maqom usullariga misollar keltirilgan va unda takt-ritm o‘lchovlari namunalarini ham ko‘rishimiz mumkin. Shuningdek mazkur maqolada bolalarga yoshlikdanoq yaxshi musiqalarni eshittirish orqali ularni kelgusida yetuk ijodkor, nozik did sohibi bo‘lishini ta‘minlashga oid ko‘rsatmalar atroflicha aytib o‘tilgan.

Kalit so‘zlar: ritm, usul, kuy, manbalar, Zarbul qadim, maqom, doyra, jo‘rnavozlik, musiqa san‘ati;

Аннотация: В данной статье рассматриваются взгляды восточных ученых на музыку и исследовательские наблюдения западных ученых. Приведены примеры методов макамов, а также можно наблюдать образцы ритмико-метрических структур. Кроме того, в статье кратко изложены рекомендации, как прослушивание хорошей музыки с раннего возраста способствует воспитанию будущих творцов с утонченным вкусом.

Ключевые слова: ритм, метод, мелодия, источники, Зарбул Кадим, макам, дойра, концертмейстер, школа наставников, искусство музыки.

Abstract: This article discusses the views of Eastern scholars on music and the research observations of Western scientists. Examples of maqom methods are provided, and we can also observe samples of rhythmic-metric patterns. Additionally, the article briefly touches upon guidelines on how listening to good music from an early age can help children become mature creators and possess a refined sense of taste in the future. The role of "jo‘rnavozlik" as a concertmaster or music conductor is also mentioned.

Keywords: method, rhythm, melody, sources, Zarbul Qadim, maqom, doyra, concertmaster, teacher’s school, music Art.

O‘tmishda musiqaviy, ritm o‘lchovlari turlicha ma’noda ishlatilganligi ma’lumdir. Masalan doira va nog‘ora usullari tarzida bo‘ladigan bo‘lsa “bum-baka-bum” yoki “tan, tana, tanan” deb ifodalanadi.

Ritm o‘lchovidagi kirish ruknlar kuylarning ritmik asosini ifodalashda ham ishlatilgan. Har qanday kuyni ritm o‘lchovi ruknlari asosida xirgoyi qilib kuylash mumkin. Shu ruknlar bilan ashulalarga aytiladigan she’r matnlari tanlab olinadi.

Mavzuga oid adabiyotlar tahlili davomida shuni guvohi bo‘ldikki, manbalarda qayd etilishicha, Navoiy davrida doira va nog‘ora usullari juda ko‘p yaratilgan ekan. Hatto nog‘orachilar bir-birlariga o‘z fikrlarini shu soz orqali anglata olgan ekanlar va savol javob o‘yinlari ham qilgan ekanlar. Bugungi kunda mana shu an’ana zarbli cholg‘u ijrochilari tomonidan ham amaliyotda keng qo‘llanilmoqda. Yosh sozandalar o‘z texnik imkoniyati va mahoratini oshirishda turli to‘y-tadbir shodiyona yoki biror davrada to‘planib, “Doira bazm” deb nomlanuvchi kechalarning bo‘lib o‘tishi buning dalilidir.

Yozma manbalarda ko‘rsatilishicha, birinchi yaratilgan musiqa ritmi “Zarbul qadim” (Qadimiy zarb) deb ataladi. Bu ritm go‘yo inson tanasidagi tomir urishidan olingan bo‘lib, juda soda “tan-tan”shaklida bo‘lgan ekan. So‘ngra murakkabroq shakllari yuzaga kela boshlaydi. Keyinchalik bu ritmlar mustaqil doira usullari tarzida ajrab chiqqan. Demak, musiqa asarlari, sodda usuldan, sekin astalik bilan murakkablashib, ularning diapazoni kengaya boshlagan ekan.

Tadqiqot metodologiyasi bo‘lgan usul haqida to‘xtalar ekanmiz, asli u nima ekanligiga ta’rif berishimiz zarur. Arab tilida “usul” (birligi “asl”) asos poydevor degani. Darxaqiqat, usul parda bilan bir qatorda kuy, musiqaning asosiy poydevori, maqom tafakkurining boshlang‘ich nuqtalaridan biridir. Kuy navlarini belgilashda, ularni toifalarga ajratishda aynan usul hal qiluvchi omil bo‘lib xizmat etadi. Demak, usul nafaqat kuy harakatini belgilovchi, balki uni tartib hamda nizomga keltiruvchi jihat bo‘lib maydonga chiqadi.

Sarahborni misol qilib oladigan bo‘lsak, zarbul qadim usulida bu kuy aytilganda og‘ir, saltobatli ulug‘vorlik tusini oladi. Xuddi shuning soqiynoma va uforisida esa usulning ta’sirida shod va ko‘tarinkilik kayfiyati baxsh uradi. Tarona usullariga olinganda yengil, vaziyatni tez-tez almashtirib turish kayfiyati hukm surganini ko‘ramiz.

Musiqashunos olim Otanazar Matyoqubov “Maqomot” kitobida usul haqida to‘xtalar ekan: “Doyra usullari, eng avvalo, jo‘rnavozlik vazifasini bajaradi. Kuy

harakatining erkin oqimida, uning tarkibida doyra jo'rligidagi vazn qolipining saqlanib turishi muhim ahamiyatga ega. Chunki bunda doyra usuli-mezon (qolip, andoza, ulgi), uning zaminidagi zarblar oqimi (iyqo izmi) esa erkinlik timsoli. Har qanday ijod turi ma'lum ehtiyoj, (ya'ni qoida, tartib, andoza, qolip) va erkinlikning uyg'unlashuvini nazarda tutadi. Shu tariqa kuyning vazn asosida ijod doirasiga undovchi mushtarak qarama-qarshilik yuzaga keladi. ” deya ta'rif berganini ko'rishimiz mumkin. Aslida ham ustoz sozanda yoki hofiz uchun uning yonida usul chaladigan hamnavoz ishonchli tayanchi bo'lishi zarur. Ana shundagina kuy erkin ijodiy parvoz etib, mezonni tartib bilan qat'iy ushlab turuvchi hamnafas sozi doyra bo'ladi.

Usul atamaları mnematik belgilar shaklida ifodalanishi odat tusiga kirgani bejiz emas. Masalan, Buxoro uslubida “bum-taq”, “ta-qa”, “ta-qo”, deb yuritilsa, Xorazmda esa “gul”-“taq”, “ta-qa”, “ta-qo” deb aytiladi. Bizga ma'lumki, “bum”-doyraning o'rtasiga urilsa, “bak”- chekkarog'iga uriladi. Zarbning birinchisi biroz quyuproq tovush bersa, ikkinchi tovush esa unga nisbatan jarangliroq sadolanadi. Pauza (to'xtash) belgisi Buxoroda “ist” deyiladi.

Tahlil va natijalar davomida Buxoro Shashmaqomiga usul jihatdan nazar salsak, maqomlarning turkumlarini yaratilishida ularning cholg'u qismlari va sho'balarida usullar dastlab soddaroq bo'lib, keyinchalik ijro etiladigan qismlarda murakkab tus olganini ko'rishimiz mumkin. Bunga misol qilib oladigan bo'lsak, Tasnif va Tarjelarda ancha soddaroq bo'lsa, Muxammas va Saqillarda murakkabroq, ya'ni 16, 24 takti o'z ichiga oladi. Shu qatorida Gardun yo'llari ham juda murakkab doyra usuli qatoriga kiradi desak mubolag'a bo'lmaydi. O'tmishda XIII-XVII asrlarda yozilgan manbalarda aytilishicha, Garduniya, yoki Gardoniya nomlari bilan ham atalgan maqom sho'balari haqida mulohazalar bor. Quyida mazkur Gardunning usul va takt ritm o'lchovini ko'rishimiz mumkin:

Gardun



Ko'rishimiz mumkinki, Gardunning takt-ritm o'lchovi 8/4 (2/4+3/4+3/4) doyra usuli. Maqom asoslariga xos ratsionalizmning yana bir ko'rinishi oddiy usullar birikmasida tuzilgan murakkab usullarning yuzaga kelishidir. Uning raqamli ramzlari- “du” (ikki), “se” (uch), “chor” (to'rt), “muhammas (besh) usul deb ham yuritilar ekan. Bunga misol tariqasida Shashmaqom cholg'u bo'limidagi Gardun misolida ya'ni “**Se usul**” ni ko'rdik.

Buyuk mutafakkir Alisher Navoiy: “Shodlik oshiruvchi xonanda, g'amni tarqatuvchi sozanda - ularning har ikkisi hissiyotga berilgan kishilar va ahli

dardlarga jon fido qiladilar. Modomiki, ular muloyim tarona bilan kuylar ekanlar, tinglovchining hayoti unga fido bo'lsa, nima qilibdi? Axir, ko'ngil xush oxangdan quvvat, rux, esa xush ovozdan oziq, oladi. Yoqimli ovoz, mayorat bilan kuylagan xonandadan rux, olgan dard ahlining o'ti chekinadi. Sozandaning kuyi dardlirok, ijro etilsa, uning xonishi g'amboda yuraklarga taskin bo'ladi", deb yozgan edi.

Siz-u bizning zamondoshimiz bo'lgan Yunus Rajabiy "Men o'zimizning o'zbek xalq ohanglaridan hech qaysi millat ohanglarini ustun qo'ya olmayman", deb

yozganida ming bora haq edi. Musiqamizdagi joziba, ta'sirchanlik, sehrni hech bir musiqaga almashtirgich kelmaydi.

Xulosa va takliflarim haqida so'z yuritadigan bo'lsak, men o'zinning ijodiy tajribalarimdan kelib chiqib, bir qat'iy xulosaga kelganman. Mana shu umrim davomida qanchadan-qancha muxlislar bilan, maqom tinglovchilari bilan yuzma yuz bo'lganman. Ana shunday yuzma-yuz bo'lgan damlar, qarshimda kayfiyatsiz, qovog'idan qor yog'ib turgan odamlarni doira sadosidan ta'sirlanib, yuzlaridan nur yog'ilib, ko'zlaridan olov uchqunlari sachrab xursand bo'lganlarini ko'rganman. Shu tajribalar orqali doirada har qanday inson psixikasiga kuchli ta'sir qilish qobiliyati borligini sezganman.

Barmoqlarning ko'z ilg'amas tezlikdagi harakatiga mahliyo bo'lib qolgan tomoshabin o'z ixtiyoridan tashqarida sozanda tomon siljib kelayotganligini yuzlab

marotaba uchratganman. O'zga har qanday kuchli ta'sirlardan musiqaning ta'sir

kuchi qudratlidir. Bir vaqtlar Yaponiyada shunday tajriba o'tkazilgan edi. Tajribaga

asosan, emizikli ayollarning 120 nafari ikki guruhga bo'linib, ikki hafta davomida musiqa terapiyasi seansida ishtirok etdi. Birinchi guruhga klassik musiqa eshittiriladi. Ikkinchi guruhdagi ayollarga pop musiqasi. Natijada, birinchi guruhdagi ayollarda ona suti yigirma foizga oshadi. Ikkinchi guruhdagi emizikli ayollarning suti esa ellik foizga kamayganligi ma'lum bo'ladi. Bugungi kunda musiqani nafaqat insonga, balki jamiki borliqqa ta'sir qilishi fanda o'z isbotini topgan. Yaponiyada yana bir tajriba o'tkazilgan. Yaponiyalik olim Emoto Leasoro suvning musiqiy taassurotini suratga olishga erishgan. U suvga musiqa quyib berdi va musiqa tugashi ila zudlik bilan suvni muzlatib mikroskop orqali suvdagi kristallarni tekshirdi. Ro'k musiqasi eshittirilgan suvda hosil bo'lgan kristallar go'zallikdan butkul mahrum edi...

Har qanday ilm tajriba mahsulidir. Ko‘pchiligimizda odam ongi, ruhiga, qalbi,

jismiga, kayfiyatiga musiqaning ta’sir kuchini his qilish, xulosalar chiqarishga yetarlicha bilim-ko‘nikma yo‘q. Lo‘nda qilib aytganda, ilm ahlida tajriba, tajribalilarida bu ilmga qaytishga xohish-iroda yo‘q. Shu sabab ummon bo‘lib yotgan ilm xazinasini chetlab o‘tishlar hamon davom etmoqda. Markaziy Osiyo, Afg‘oniston, Pokiston kabi Sharq mamlakatlaridagi har o‘n xonadondan birining uyida, albatta, uchratishingiz mumkin. Umuman, musiqa san’ati, odam iymone’tiqodining mustahkam, aqliy barkamollikning poydevori, nozik didning shakllanishi, o‘z zamini, millatiga sodiq o‘z oilasiga, qarindosh-urug‘lariga, yon atrofida qilarga mehr-muhabbatli qilib tarbiyalashda muhim rol o‘ynovchi sohadir. Bog‘cha bolalariga ovqatlanish, o‘ynash vaqtlarida ularning asabiga tegmaydigan tarzda milliy musiqa kuylar eshittirib borilsa, nur ustiga a’lo nur bo‘lar edi. Chunki bolalarda xodisalarni tez o‘zlashtirish qobiliyati mujassam bo‘lib, ular o‘ta ziyrak “ijodkor”lardir.

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MAQOM SAN'ATI VA ZAMONAVIY MUSIQIY TA'LIMNING YANGI YUZLARI

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Annotatsiya: Maqolada maqom san'ati va uning zamonaviy musiqiy ta'limdagi o'rni, an'anaviy va innovatsion yondashuvlarning uyg'unlashuvi, pedagogik metodlar va zamon talablariga javob beruvchi ta'lim tizimining ahamiyati muhokama qilinadi. Maqolada musiqiy pedagogikaning innovatsion yondashuvlari, o'qituvchilarning pedagogik kompetensiyasi va maqom san'ati sohasidagi o'zgarishlar tahlil etiladi.

Kalit so'zlar: Maqom san'ati, Musiqiy ta'lim, Innovatsion yondashuvlar, Musiqiy pedagogika, Maqomni o'rgatish, Musiqiy texnologiyalar, Ijodiy rivojlanish

Аннотация: В статье рассматривается роль искусства макама в современной музыкальной педагогике, гармония традиционных и инновационных подходов, важность применения педагогических методов и системы образования, соответствующей требованиям времени. В статье анализируются инновационные подходы в музыкальной педагогике, педагогическая компетенция преподавателей и изменения в области искусства макама.

Ключевые слова: Искусство макама, Музыкальное образование, Педагогическая компетенция, Система «учитель-ученик», Музыкальная педагогика, Преподавание макама, Музыкальные технологии, Творческое развитие

Annotation: The article discusses the role of maqom art in modern music education, the integration of traditional and innovative approaches, the importance of applying pedagogical methods, and the education system that meets the demands of the time. The article analyzes innovative approaches in music pedagogy, pedagogical competence of educators, and changes in the field of maqom art.

Keywords: Maqam art, Music education, Innovative approaches, Traditional and modern methods, Teaching maqom, Music technologies, Creative development

KIRISH

An'anaviy sozandalikni kasb etish niyatida bo'lgan har bir cholg'u sohibi albatta bir ustozni etagini tutib, ustozdan ijrochilik, sozandalik sirlari va tajribalarini o'zlashtirishga intilgan. Xalqimizda bu amaliyot, albatta, o'zining qat'iy qoidalariga ega bo'lib, o'ziga xos an'analarga asoslanadi. Qadimdan bizga ma'lumki, musiqiy qobiliyat, cholg'u imkoniyatiga ega bo'lmaganlar bu kasbga murojaat etishmagan, aksincha, bunday qobiliyatga ega bo'lganlar esa o'z ustozlariga hurmat va mehr ko'rsatib, barcha qiyinchiliklarga bardosh berib, sohaga oid bilimlarni o'rganishga

va unga sadoqatli bo'lishga intilishgan. Sozandalikda eng muhim xususiyatlardan biri ham shu deyish mumkin.

Dunyodagi barcha xalqlar kabi o'zbek xalqining ham o'ziga xos milliy qadriyatlari, o'tmishi, tarixi davomida shakllanib, rivojlanib kelgan musiqiy, ma'naviy va adabiy merosi bor. O'zbek musiqasi merosining har tomonlama mukammalligi va ma'naviy boyligi hamma uchun ayon. Ma'lumki, har qanday milliy meros avlodlardan-avlodlarga o'tib kelgan. Bu, albatta, og'zaki tarzda asrlar davomida xalqimizning ma'naviyatini shakllantirgan va amaliyot rivojiga xizmat qilgan. Milliy qadriyatlar zamon talabiga mos ravishda, urf-odatlar, mehnat va hayot jarayonlari o'zgara- o'zgara, an'anaga aylanib boraveradi. Milliy musiqamizning shakllanish jarayonida xalq an'analari muhim ahamiyat kasb etgan. Xususan, mavjud an'analarni bir-birini to'ldiruvchi va alohida o'ziga xos xususiyatlarga ega bo'lib kelgan.

Musiqiy ta'limning asosiy tamoyillaridan biri bu — “ustoz-shogird” tizimi. Bu uslub, qadimdan boshlanib, musiqiy bilimlarni avlodlarga o'rgatishda eng samarali usul bo'lib kelgan. Ustoz san'atini o'rgatish jarayonida shogird nafaqat musiqaning texnik tomonlarini, balki uning chuqur ma'naviy va estetik qirralarini ham o'zlashtiradi. Maqom san'atining o'rgatish usuli o'ziga xos bo'lib, bu san'atga oid qoidalar, nafaqat musiqiy ijro, balki badiiy talqin, janr va uslubni ham talab etadi.

Bugungi kunda musiqiy ta'limning ta'siri nafaqat san'atning texnik jihatlarini o'zlashtirish bilan cheklanadi. U zamonaviy pedagogik uslublar bilan boyitilishi zarur. An'anaviy metodlarni zamonaviy o'qitish texnologiyalari bilan uyg'unlashtirish, musiqiy ta'lim o'qituvchilarini kasbiy tayyorgarlik va ijodiy salohiyatini oshirish zarurati tobora dolzarb bo'lmoqda. Bu borada ta'lim tizimini yangilash, o'quv jarayonida mustahkam nazariy asoslarni yaratish, shuningdek, amaliy mashg'ulotlarni kengaytirish muhim ahamiyatga ega.

ADABIYOTLAR TAHLILI: Bugungi kunda jahon madaniyati bilan integratsiya va zamonaviy pedagogik metodlarni qo'llash orqali, maqom san'atini yangi avlodga o'rgatish masalasi dolzarb bo'lib, musiqiy ta'lim tizimida o'zgarishlar va takomillashtirishni talab etadi. Yangi avlodni zamonaviy talablar va ilg'or usullar asosida tarbiyalash, milliy musiqani yanada rivojlantirish, ayniqsa maqom san'atini saqlab qolish va uni kelajak avlodlarga yetkazish borasida kuchli talab mavjud. Bu borada Prezidentimizning maqom san'atini takomillashtirishga oid qabul qilgan qaror va farmonlari muhim ahamiyatga ega.

Ayniqsa, azaliy ijro an'analari asnosida yangi ijodiy yo'nalishlar yaratish va mumtoz musiqani rivojlantirish masalalariga alohida e'tibor qaratilgan. Bu qarorlar sohada yangicha munosabatni shakllantirib, maqom san'ati va musiqiy ijrochilikni kelajakda yanada yuqori darajaga olib chiqish uchun asos yaratmoqda. Davlatimizning "Ta'lim to'g'risida"gi qonuni va "Kadrlar tayyorlash milliy dasturi"da yosh avlodni hozirgi zamon talablariga javob beradigan, yetuk mutaxassislar sifatida tarbiyalash masalasi aniq belgilangan. Bu dasturlar orqali

musiqiy ta'lim tizimi modernizatsiya qilinib, yuqori malakali musiqachilarni tayyorlash uchun barcha sharoitlar yaratilmoqda.

Hozirda, musiqiy ta'limda zamonaviy pedagogik uslublar va texnologiyalarni joriy etish zarurati ortib bormoqda. Bu esa nafaqat musiqa ijrochiligining texnik jihatlarini o'zlashtirish, balki uning badiiy va estetik qirralarini ham mukammal darajada rivojlantirishga yordam beradi. Musiqa ijrochiligi, xalq musiqasi ijodiyoti va uning janrlari asosida rivojlanadi. Ijro an'analarni saqlash va kengaytirish, yangi ijro uslublarini shakllantirish, musiqiy san'atni yanada boyitish ijrochilik amaliyoti jarayonida muhim o'rin tutadi. Ijro an'analari va yo'llari, tarixan, og'zaki tarzda avlodlardan-avlodlarga o'tib kelgan. Ushbu jarayon, asosan, "ustoz-shogird" an'analari negizida rivojlanib, kelajak avlodlarga yetib kelgan. Bu an'ana musiqiy ijrochilikda o'ziga xos o'rinni egallab, nafaqat ijro usullarini, balki musiqaning badiiy qirralarini ham o'rgatgan. Maqom cholg'u ijrochilik ta'limi bizga o'ziga xos ustoz-shogirdlik maktablari orqali yetib kelgan. Bu an'analarda o'ziga xos tarzda rivojlanib, ijrochilik san'atining eng muhim poydevoriga aylangan.

Adabiyotlarda ham maqom san'ati va "ustoz-shogird" an'anasining rivojlanishi haqida ko'plab ma'lumotlar mavjud. Bu an'analarda, milliy musiqaning saqlanishi va rivojlanishi uchun beqiyos ahamiyatga ega bo'lib, bugungi kunda musiqiy ta'lim va ijrochilikda mustahkam o'rin egallagan. Shunday qilib, maqom san'atini o'rgatishda va rivojlantirishda, an'analarga tayanish, zamonaviy pedagogik metodlarni qo'llash, musiqa ta'limini yangicha usulda olib borish zarurati tobora kuchayib bormoqda. Zamonaviy musiqiy ta'lim o'qituvchisi yuqori darajadagi ijodiy salohiyatga ega bo'lishi zarur.

TADQIQOT METODOLOGIYASI Musiqiy kompyuter texnologiyalari ning tez rivojlanishi, musiqiy pedagogikaga integratsiya qilish va yangi metodologiyalarni qo'llash o'qituvchilarning kasbiy tayyorgarligini oshirishga yordam beradi. O'qituvchilarni zamonaviy musiqiy vositalardan samarali foydalanishga o'rgatish, ularda ijodiy fikrlashni rivojlantirish va yangi musiqiy shakllarni yaratish uchun undash muhimdir. Bu, o'z navbatida, nafaqat musiqaning texnik jihatlarini o'rgatish, balki uning estetik va hissiy tomonlarini ham o'zlashtirishga imkon yaratadi.

Maqom san'ati o'zining tarixiy ahamiyatiga ega bo'lib, ko'plab asrlar davomida shakllanib, yuksak badiiy darajaga yetgan. Shunday bo'lsa-da, zamonaviy ijrochilikda maqomni o'rgatishda yangi usullarni qo'llash zarur. Ushbu jarayonda san'atning an'anaviy shakllarini saqlab qolish, lekin ularga zamon talablariga mos ravishda texnologik imkoniyatlar bilan boyitish muhimdir. Bu esa nafaqat musiqaning texnik, balki uning estetik va badiiy qirralarini rivojlantirishga xizmat qiladi. Maqom san'ati ustozlari, yosh shogirdlarini faqat musiqiy texnikaga o'rgatib qolmasdan, balki ularning estetik didini rivojlantirish, xalq musiqasining falsafiy, ma'naviy va estetik jihatlarini anglatishga ham alohida e'tibor qaratishlari zarur. Shogirdlar musiqiy ijodning sirlari bilan tanishib, ijodiy mustaqillikka erishishga intilishlari kerak. Zamonaviy musiqiy ta'lim o'qituvchilarining eng muhim

xususiyatlaridan biri bu pedagogik kompetensiyadir. O'qituvchining nafaqat musiqiy bilimlari, balki pedagogik mahorati, yosh avlodni ma'naviy va estetik jihatdan shakllantirish qobiliyati ham katta ahamiyatga ega. Har bir musiqiy ta'lim o'qituvchisi, ayniqsa maqom san'ati kabi murakkab va o'ziga xos san'atni o'rgatish uchun innovatsion yondashuvlarni ishlab chiqishi kerak.

MUHOKAMA VA NATIJALAR: Kelajak musiqiy o'qituvchilari nafaqat musiqaning nazariyasini, balki ijro san'ati va uning badiiy talqinlarini ham o'zlashtirishi lozim. Ular musiqaning nafaqat texnik, balki hissiy va estetik tomonlarini o'rgatib, shogirdlarni har tomonlama rivojlantirishlari kerak. Shuningdek, o'quv jarayonida texnologiyalardan samarali foydalanish, musiqiy mashqlarni diversifikatsiyalash, jamoaviy ijroni rivojlantirish kabi jihatlar ham alohida ahamiyatga ega. Zamonaviy musiqiy ta'lim o'qituvchilari yangi texnologiyalarni qo'llash, ijodiy yondashuvlarni rivojlantirish va o'quvchilarga zamon talablariga mos musiqa o'rgatish borasida keng imkoniyatlarga ega. Buning uchun ta'lim tizimini yangilash, yangi pedagogik metodlarni ishlab chiqish va ularni amaliyotga tadbiiq etish zarurati tobora oshib bormoqda.

Maqom san'ati, o'zining chuqur tarixiy, estetik va badiiy ahamiyati bilan nafaqat o'zbek xalqining, balki butun jahon musiqiy merosining ajralmas qismidir. Uning kelib chiqishi, rivojlanishi va bugungi kunga qadar o'zgarish an'analarga asoslanishi xalqimizning madaniy xazinasini yanada boyitgan. Maqomni o'rgatish jarayonida esa zamonaviy pedagogik metodlarni qo'llash, texnologik yutuqlardan foydalanish va ijodiy fikrlashni rivojlantirish zarurati dolzarb ahamiyatga ega bo'lib bormoqda. Maqom san'ati bo'yicha ta'lim berish, an'analarga hurmat bilan qarab, zamon talablariga mos tarzda yangilanayotgan yondashuvlar orqali amalga oshirilishi lozim.

Bugungi zamonaviy musiqiy ta'lim tizimi, ayniqsa maqomni o'rgatishda, yangi texnologiyalar va metodologiyalarni o'z ichiga olgan pedagogik yangilanishlarni talab etadi. Musiqiy kompyuter texnologiyalarining rivojlanishi, o'qituvchilarning malakasini oshirishda muhim vositaga aylangan.

XULOSA: Musiqiy pedagogika sohasida integratsiya qilish va yangicha metodlarni qo'llash o'qituvchilarning kasbiy tayyorgarligini oshirishda katta yordam beradi. Bu, o'z navbatida, o'quvchilarga zamonaviy musiqiy vositalardan samarali foydalanish, ijodiy fikrlashni rivojlantirish, yangi musiqiy shakllar yaratish imkoniyatini beradi. O'quvchilarning nafaqat texnik, balki estetik va hissiy jihatlarni ham o'zlashtirishlari zarur bo'ladi.

Maqom san'ati o'rganishda esa an'anaviy usullarni saqlab qolish va ularni zamonaviy texnologik imkoniyatlar bilan boyitish, musiqaning barcha qirralarini rivojlantirishda muhim o'rin tutadi. Maqomni o'rgatishda, ustozlar nafaqat musiqaning texnik tomonlarini o'rgatib, balki ularning estetik didini rivojlantirish, musiqaning falsafiy va ma'naviy jihatlarni ham tushuntirishga katta e'tibor qaratishlari kerak. Bu nafaqat maqom san'ati, balki xalq musiqasining

umumbashariy ahamiyatini chuqurroq anglashga yordam beradi. Shogirdlar musiqiy ijodning sirlari bilan tanishib, ijodiy mustaqillikka erishishga intilishlari kerak.

Zamonaviy musiqiy ta'limda o'qituvchilarning pedagogik kompetensiyasi, innovatsion yondashuvlarga ochiqligi, texnologiyalardan samarali foydalanish va ijodiy fikrlashni rivojlantirish kabi jihatlar muhim o'rin tutadi. O'qituvchilar o'z malakalarini doimiy ravishda yangilab borishlari, o'quvchilarga nafaqat musiqaning texnik, balki hissiy va estetik tomonlarini ham o'rgatishlari zarur. Bu nafaqat musiqiy texnika va nazariyani, balki musiqaning ruhini, uning badiiy kuchini va xalqning ma'naviy dunyosini anglashni ham o'rgatadi.

Shunday qilib, maqom san'ati va musiqiy ta'lim tizimining rivojlanishi an'anaviy va zamonaviy metodlarni uyg'unlashtirish orqali yanada boyib, o'quvchilarga o'z ijodiy salohiyatlarini to'liq namoyon etish imkoniyatini yaratadi. Maqomni o'rgatish jarayonida zamonaviy pedagogik metodlarni qo'llash, texnologik imkoniyatlar va estetik, hissiy talqinlarni muvofiqlashtirish musiqiy ta'limning sifatini yanada oshiradi va o'quvchilarning musiqaga bo'lgan e'tiborini yanada chuqurlashtiradi. Bu jarayon xalqimizning musiqiy merosini yangi avlodlarga yetkazishda, uning yaxlitligini saqlashda va rivojlantirishda muhim o'rin tutadi.

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INTERTEXTUAL APPROACH IN LITERARY TEXT ANALYSIS THEORETICAL FOUNDATIONS AND PRACTICAL EXAMPLES

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Annotation: This thesis explores the intertextual approach to analyzing literary texts, focusing on its theoretical foundations and application within Uzbek literature. Intertextuality reveals how texts interact with past literary traditions, cultural narratives, and ideological discourses. Through case studies of works by Abdulla Qodiriy, Erkin Vohidov, and Hamid Ismailov, the paper illustrates how Uzbek writers incorporate classical references and reframe historical narratives to engage with modern themes. The study underscores the dialogic nature of literature and the value of intertextual analysis in understanding textual depth, cultural continuity, and evolving literary identity in Uzbekistan.

Keywords: intertextuality, Uzbek literature, literary analysis, cultural memory, classical references.

In the field of literary criticism, intertextuality has emerged as a powerful and insightful analytical tool, offering a deeper understanding of how texts relate to one another and to broader cultural narratives. The term “intertextuality,” introduced by Julia Kristeva in the late 1960s and influenced by the works of Mikhail Bakhtin, suggests that no text exists in isolation. Instead, every literary work is part of a network of texts, borrowing from, responding to, or echoing earlier works. This perspective shifts the focus from a purely author-centered view of literature to a dialogic model, where texts interact and meaning is shaped by a web of references, allusions, and reworkings. In the context of Uzbek literature, which is rich in historical continuity, oral traditions, and evolving literary norms, the intertextual approach proves especially useful. It not only illuminates the connections between classical and modern literature but also reveals how Uzbek authors engage in dialogue with cultural memory, ideology, and literary conventions.

At the core of intertextuality is the recognition that literature is not created in a vacuum. When a reader engages with a novel, poem, or short story, they inevitably bring with them prior knowledge of other texts, cultural archetypes, and narrative traditions. Writers, too, consciously or unconsciously incorporate elements from pre-existing works—myths, folk tales, religious texts, political discourse, or literary classics—into their creations. In this sense, a text is both original and derivative,

simultaneously innovating and echoing the past. This idea is particularly resonant in Uzbek literature, where writers have long drawn upon the deep reservoir of Eastern poetic tradition, including the works of Alisher Navoi, Firdavsi, and the oral epic heritage of dastans. The intertextual approach allows scholars and readers to trace these connections and better understand the layers of meaning embedded in contemporary Uzbek texts.

The theoretical basis of intertextuality lies in structuralist and poststructuralist thought. Roland Barthes's idea of "the death of the author" suggests that the meaning of a text does not reside solely in the intentions of its creator but is instead shaped by the reader's interaction with the network of texts and references the work evokes. Thus, intertextual analysis often focuses on how meaning is generated through citation, transformation, and rewriting. This is not limited to direct quotation or allusion; it also includes thematic resemblance, stylistic imitation, genre blending, and symbolic echoing. In the Uzbek context, this opens up possibilities for analyzing how Soviet-era writers reinterpreted pre-Soviet literary forms or how post-independence authors critically engage with the ideological narratives of the past through literary reconfiguration.

A compelling example of intertextuality in Uzbek literature can be found in the novel *O'tkan Kunlar* by Abdulla Qodiriy. Though the work is widely regarded as the first Uzbek historical novel, it is deeply interwoven with classical poetic references and the narrative techniques of traditional storytelling. Qodiriy does not merely recount a historical love story; he constructs a narrative that dialogues with the moral universe of classical literature while recontextualizing it in light of modernist reformist ideals. His use of poetic language, quotations from Navoi's ghazals, and structural parallels with epic tales reflect a conscious blending of old and new. An intertextual analysis of *O'tkan Kunlar* thus reveals how Qodiriy simultaneously preserves and transforms tradition, offering a nuanced commentary on societal stagnation and the need for progress.

Another instructive case is the poetry of Erkin Vohidov, particularly his poem "Tilga e'tibor – elga e'tibor." On the surface, the poem addresses the importance of preserving the native language, but through intertextual references to Navoi and other classical thinkers, it engages in a broader cultural and ideological dialogue. Vohidov invokes the authority of literary giants not merely as decoration, but as a strategy to assert the continuity of Uzbek cultural identity in the face of linguistic Russification during the Soviet era. In this sense, intertextuality becomes a form of resistance and cultural reaffirmation. The reader's recognition of these intertextual

signals adds depth to the poem's message and positions it within a longer historical conversation about language, identity, and sovereignty.

In conclusion, the intertextual approach to literary analysis offers a rich and versatile framework for exploring Uzbek literature. By examining how texts echo, transform, and respond to one another, readers gain deeper insight into the cultural, historical, and ideological layers of meaning embedded in literary works. Whether through poetic allusion, thematic resonance, or narrative borrowing, intertextuality reveals the dialogic nature of literature and its capacity to engage with past and present. In the context of Uzbek literature, this approach not only enhances textual analysis but also reinforces the importance of cultural continuity and intellectual dialogue across generations. As Uzbek writers continue to navigate a complex literary and social landscape, intertextuality will remain a vital tool for both creation and interpretation, linking the voices of the past with the questions of the present.

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Abdulla Qodiriyning "O'tgan kunlar" romanidagi arabiy kishi nomlarining leksik-semantik tahlili

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Annotatsiya: Ushbu maqolada Abdulla Qodiriyning "O'tgan kunlar" romani tahlil qilingan bo'lib, undagi arabiy kishi nomlarning leksik-semantik xususiyatlari o'rganilgan. Maqola asarda ishlatilgan arabiy kishi nomlarning etimologik kelib chiqishi va semantik ma'nolari, ularning o'zbek tilidagi grammatik moslashuvi hamda asardagi badiiy-estetik funktsiyalari bilan bog'liq jihatlarni yoritadi. Tadqiqot davomida Qodiriyning kishi nomlardan qahramon xarakterlarini ochish, davr koloritini yaratish va ijtimoiy mavqe belgilarini ifodalashda foydalangani tahlil qilingan.

Kalit so'zlar: "O'tgan kunlar", Abdulla Qodiriy, arabiy kishi nomlar semantikasi, kishi nomlar etimologiyasi, badiiy uslub xususiyatlari, tarixiy kolorit.

KIRISH

Abdulla Qodiriyning "O'tgan kunlar" romani o'zbek adabiyotining eng muhim asarlaridan biri bo'lib, unda qo'llanilgan arabiy kishi nomlarning leksik-semantik xususiyatlari alohida e'tiborga molik. Ushbu masalani o'rganish orqali biz asarning til xususiyatlarini yanada chuqurroq tushunish imkoniyatiga ega bo'lamiz [1].

Romandagi arabiy kishi nomlarning etimologik asoslari va semantik tahlili muhim ahamiyat kasb etadi. "O'tgan kunlar"da uchraydigan arabiy kishi nomlarning aksariyati islom madaniyati ta'sirida o'zbek tiliga kirib kelgan bo'lib, ular ma'lum bir ma'no va etimologik asosga ega. Masalan, Otabek kishi nomining tarkibidagi "bek" so'zi turkiy bo'lsa-da, "Ota" komponenti arab tilidagi "ato" (in'om, hadya) so'zidan kelib chiqqan. Shuningdek, Yusufbek hoji kishi nomidagi "Yusuf" arabcha kishi nom bo'lib, payg'ambar nomi bilan bog'liq [2].

Qodiriy asarda arabiy kishi nomlardan personajlarning xarakter xususiyatlarini ochib berishda mohirona foydalangan. Masalan, Homid kishi nomining ma'nosi "maqtovchi, hamdu sano aytuvchi" bo'lsa-da, asar qahramoni salbiy obraz sifatida gavdalantirilgan. Bu esa kishi nomning semantik ma'nosi bilan personaj xarakteri o'rtasidagi kontrastni yaratishga xizmat qilgan. Bu kabi badiiy usul orqali yozuvchi o'z qahramonlarining ichki dunyosini yanada yorqinroq ochib bergan [3].

Romanda qo'llanilgan arabiy kishi nomlar o'zbek tili grammatik qoidalariga moslashgan holda ishlatilgan. Ko'pgina hollarda turkiy qo'shimchalar (masalan, -bek, -xon, -bibi) arabiy kishi nomlarga qo'shib, yangi antroponimlarni hosil qilgan. Bu esa o'zbek tilining so'z yasash imkoniyatlarini yanada kengaytirgan. Bunday kishi nomlar tizimi asarning badiiy-estetik qiymatini oshirishga xizmat qilgan [4].

"O'tgan kunlar" romanida arabiy kishi nomlar bir qator muhim funktsiyalarni bajargan. Ular orqali nafaqat personajlarning shaxsiy xususiyatlari, balki ularning ijtimoiy mavqei, diniy e'tiqodi va dunyoqarashi ham aks ettirilgan. Shuningdek, bu kishi nomlar asarning tarixiy koloritini yaratishda ham muhim rol o'ynagan [5].

Asarda qo'llanilgan arabiy kishi nomlarni semantik jihatdan bir necha guruhlarga ajratish mumkin. Birinchi guruhga diniy tushunchalar bilan bog'liq kishi nomlar (Muhammad, Yusuf, Zaynab) kirsa, ikkinchi guruhni ijobiy fazilatlarni ifodalovchi kishi nomlar (Karim, Jamila, Rahim) tashkil etadi. Uchinchi guruhga esa tabiat hodisalari bilan bog'liq kishi nomlar (Badr, Najm, Anvar) kiradi.

Arabiy kishi nomlarning stilistik xususiyatlari ham diqqatga sazovor. Qodiriy bu kishi nomlardan turli uslubiy maqsadlarda foydalangan. Jumladan, personajlarning ijtimoiy mavqeini ko'rsatish ("hoji" unvoni orqali), ularning diniy e'tiqodini ifodalash va davrning tarixiy koloritini yaratish kabi maqsadlarda qo'llagan.

Romanda arabiy kishi nomlar nominativ, xarakterlovchi va milliy-madaniy funktsiyalarni bajargan. Nominativ funktsiya personajlarni nomlashda, xarakterlovchi funktsiya qahramonlar xarakterini ochib berishda, milliy-madaniy funktsiya esa davrning ijtimoiy-madaniy muhitini aks ettirishda namoyon bo'lgan.

Xulosa qilib aytganda, "O'tgan kunlar" romanida qo'llanilgan arabiy kishi nomlarning leksik-semantik tahlili asarning til xususiyatlarini yanada chuqurroq anglash imkonini beradi. Bu kishi nomlar nafaqat nominativ vazifani, balki personajlarning xarakter xususiyatlarini ochib berish, davr ruhini aks ettirish kabi qator muhim badiiy-estetik funktsiyalarni ham bajargan. Qodiriy arabiy kishi nomlardan mohirona foydalanib, asar personajlarining individual xususiyatlarini, ularning ijtimoiy mavqei va diniy e'tiqodini ko'rsatib bergan.

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XALQARO INVESTITSIYA SHARTNOMALARIDA ARBITRAJ MEXANIZMINING HUQUQIY ASOSLARI

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Annotatsiya: Mazkur ilmiy ish xalqaro investitsiya shartnomalari doirasida investorlar va davlatlar o'rtasida yuzaga keladigan nizolarni hal qilishda arbitraj mexanizmining huquqiy asoslarini tahlil qilishga bag'ishlangan. Tadqiqotda ICSID, UNCITRAL va boshqa xalqaro arbitraj institutlarining normativ asoslari, protsessual tamoyillari va ularning investitsiya nizolarini hal qilishdagi o'rni keng yoritilgan, hamda mazkur institutlar faoliyatini takomillashtirish yuzasidan takliflar ishlab chiqilgan.

Kalit so'zlar: Xalqaro investitsiya arbitraji, ICSID, UNCITRAL, arbitraj mexanizmi, xalqaro investitsiya shartnomalari

Annotation: This scientific work is devoted to the analysis of the legal foundations of the arbitration mechanism in resolving disputes between investors and states under international investment agreements. The research provides a comprehensive overview of the normative framework and procedural principles of ICSID (International Centre for Settlement of Investment Disputes), UNCITRAL (United Nations Commission on International Trade Law) arbitration rules, and other international arbitration institutions, and proposes recommendations for improving their functioning.

Keywords: International investment arbitration, ICSID, UNCITRAL, arbitration mechanism, international investment agreements.

Аннотация: Данное исследование посвящено анализу правовых основ арбитражного механизма разрешения споров между инвесторами и государствами в рамках международных инвестиционных соглашений. Рассматриваются нормативные и процессуальные основы ICSID, UNCITRAL и других международных арбитражных институтов, а также их практическая роль в разрешении инвестиционных споров. Представлены предложения по совершенствованию их деятельности.

Ключевые слова: международный инвестиционный арбитраж, ICSID, UNCITRAL, арбитражный механизм, инвестиционные соглашения

An'anaviy xalqaro huquq amaliyotida faqat suveren davlatlar o'rtasidagi nizolar hal etilgan bo'lsa, vaqt o'tishi bilan ushbu yondashuv sezilarli darajada kengaydi. Xususan, xalqaro investitsiya huquqining shakllanishi va rivojlanishi natijasida endilikda nizolar nafaqat davlatlar o'rtasida, balki davlat va investitsiya faoliyatini yuritayotgan jismoniy yoki yuridik shaxslar o'rtasida ham vujudga kelmoqda. Bu holat investitsion munosabatlarning va xususiy investorlarning xalqaro maydondagi faolligining ortishi, shuningdek ularning huquqiy maqomini mustahkamlash zaruriyati bilan bog'liq bo'lib, investorlar tomonidan mezbon davlatlarga nisbatan bevosita da'vo qo'zg'atish masalasini xalqaro huquq doirasida dolzarb muammo sifatida ko'rsatmoqda. Odatdagi xalqaro huquqqa ko'ra, xorijiy investor nizo yuzaga kelganda, avvalo mezbon davlatning sudlariga murojaat qilishi shart. Agar mezbon davlat sudlari nizoni hal qilishda muvaffaqiyatsiz bo'lsa yoki samarasiz deb topilsa — ularning mazmunan asosli huquqiy himoya choralarga, samarali ijro mexanizmlariga ega yoki ega emasligidan qat'i nazar, yoxud bu holat “refusal of justice” natijasi bo'lsa ya'ni xorijiy investor mezbon davlatning sudlarida adolatli, xolis va samarali huquqiy himoyaga ega bo'lmasa— unda investor o'zining fuqaroligi bo'yicha tegishli bo'lgan davlatdan diplomatik himoya so'rashi mumkin¹. Investitsiya nizolarini hal qilish amaliyoti tahlil qilinganda, bu sohadagi huquqiy mexanizmlar o'z mohiyatiga ko'ra aralash xarakterga ega ekanligini ko'rishimiz mumkin. Ya'ni, ular xalqaro huquq normalari bilan milliy huquq normalari o'rtasida joylashgan murakkab tizimni ifodalaydi. Bunday holatda mezbon davlat xalqaro huquq asosida majburiyatlarga ega bo'lgan subyekt sifatida maydonga chiqadi, shu bilan birga u milliy huquq doirasida faoliyat yuritayotgan va o'z davlati qonunlariga bo'ysunuvchi xususiy investor bilan huquqiy munosabatga kiradi. Investitsiyaviy nizolarni hal etish tarixiga nazar tashlasak, qadim zamonlardan oq mojarolarni tinch yo'l bilan bartaraf etish usullari mavjud bo'lgan. Xususan, qadimgi Yunonistonda shahar-davlatlar o'rtasidagi nizolarni arbitraj yo'li bilan hal qilish amaliyoti keng qo'llanilgan. Vaqt o'tishi bilan nizolarni tinch yo'l bilan hal etish masalasi rivojlandi, ayniqsa investitsiya sohasida bu yo'nalish o'ziga xos xususiyatlarga ega bo'lib, nizo ishtirokchilarining tabiati va huquqiy maqomiga bog'liq bo'ldi. Mazkur yondashuvning asosida esa xalqaro huquqda urf-odat normalaridan kelib chiqqan “nizolarni tinch yo'l bilan hal qilish prinsipi” yotadi. Bu prinsipning asosiy vazifasi xalqaro nizolarni zo'ravonliksiz, huquqiy tartibda, tinch yo'l bilan hal etish

¹ I. Braunli, Principles of Public International Law, Klarendon Press, 1998-yil, XXII-bob; keltirilgan: Investor-davlat nizolarini hal qilish, UNCTADning “Xalqaro investitsiya shartnomalari bo'yicha masalalar” turkumidagi nashri, 4-bet.

tartiblarini belgilashdan iboratdir². Vaqt o'tishi bilan investitsion nizolarni hal etishga doir institutsional mexanizm sezilarli darajada rivojlandi, bu sohada maxsus huquqiy normalar shakllanib, ma'lum darajada sud amaliyoti ham vujudga keldi. So'nggi yillarda xalqaro investitsiya arbitrajari doirasida qabul qilingan qarorlar o'ziga xos murakkab tuzilishga ega bo'lib, ular yuzlab, ba'zan minglab bandlardan tashkil topgan. Bunday arbitraj ishlari bo'yicha da'volar miqdori ham sezilarli darajada oshib bormoqda. Bunga yorqin misol sifatida 2014-yil 18-iyulda UNCITRAL qoidalari asosida, Gagadagi Doimiy Arbitraj Sudi (PCA) tomonidan ko'rilgan Hulley Enterprises Ltd, Yukos Universal Ltd va Veteran Petroleum Ltd v. Rossiya Federatsiyasi ishi keltiriladi. Bu ishda Rossiya Federatsiyasi tomonidan Energetika Xartiyasi shartlari buzilgan deb topilgan va Yukos kompaniyasi aksiyadorlariga 50 milliard AQSh dollaridan ortiq miqdorda tovon puli to'lash majburiyati yuklatilgan³.

Xalqaro investitsiya nizolarini hal etish markazi (ICSID): Xalqaro investitsiya nizolarini hal etish markazi (ICSID) 1965-yil 18-mart kuni Vashingtonda imzolangan "Davlatlar va boshqa davlatlarning fuqarolari o'rtasidagi investitsiya nizolarini hal etish to'g'risida"gi konvensiya asosida tashkil etilgan bo'lib, 1966-yil 14-oktabrda kuchga kirgan⁴. Ushbu konvensiya Jahon bankining tashabbusi bilan ishlab chiqilgan va ICSID hozirda Jahon banki guruhining beshta tashkilotidan biri sifatida faoliyat yuritmoqda:

- Xalqaro tiklanish va taraqqiyot banki (IBRD),
- Xalqaro taraqqiyot assotsiatsiyasi (IDA),
- Xalqaro moliyaviy korporatsiya (IFC),
- Ko'p tomonlama investitsiyalarni kafolatlash agentligi (MIGA)⁵.

ICSIDning asosiy maqsadi — xorijiy investorlar bilan investitsiya qabul qiluvchi davlatlar o'rtasida yuzaga keladigan investitsiya nizolarini xolis, tezkor va huquqiy asosda hal etish uchun arbitraj va murosaga keltirish (conciliation) mexanizmlarini taqdim etishdan iborat. ICSID o'z faoliyatini quyidagi asosiy organlar orqali amalga oshiradi:

Bosh direktorlar kengashi – barcha ishtirokchi davlatlar tomonidan vakil tarzida shakllantiriladi;

² Lungu, M., Xalqaro mojarolarni tinch yo'l bilan hal etishda xalqaro tashkilotlarning roli, Universal Juridic nashriyoti, Buxarest, 2010, 12–13-betlar.

³ PCA (Permanent Court of Arbitration). Decision of 18 July 2014 in the Yukos Case. Accessed May 12, 2018. <https://www.pcacases.com/web/sendAttach/418>

⁴ ICSID Convention, 1965. Article 1. URL: <https://icsid.worldbank.org/resources/rules-and-regulations/convention>

⁵ World Bank Group. "Who We Are." URL: <https://www.worldbank.org/en/who-we-are>

Kotibiyat – ICSIDning kundalik ishlarini boshqaruvchi ijro organi bo‘lib, unga Bosh kotib va uning ikki o‘rinbosari rahbarlik qiladi⁶.

ICSID arbitrajiga murojaat qilish tartibi bir necha bosqichda amalga oshiriladi:

1. Yozma so‘rov yuborish (Request for Arbitration) – investor markaz Kotibiyatiga da’vo mazmunini bayon etgan holda murojaat qiladi.

2. Vakolatni tekshirish – ICSID Konvensiyasining 25-moddasiga asosan, nizo ICSID yurisdiksiyasiga kirish yoki kirmasligi aniqlanadi.

3. Tribunalni shakllantirish – har bir taraf tomonidan bittadan arbitr, uchinchi arbitr (rais) esa tomonlarning kelishuviga binoan tayinlanadi.

4. Sud jarayoni – yozma bayonotlar, eshituvlar, bahslar bosqichi.

5. Qaror chiqarish – ICSID qarori majburiy hisoblanadi va konvensiya asosida faqat ayrim hollarda qayta ko‘rib chiqilishi mumkin⁷.

ICSID faqat quyidagi shartlar asosida ish yuritadi:

- Nizo ishtirokchilari (investor va davlat) turli ishtirokchi davlatlarga tegishli bo‘lishi kerak;

- Nizo investitsiya faoliyati bilan bog‘liq bo‘lishi lozim;

- Har ikki tomon ICSID yurisdiksiyasiga yozma rozilik bildirgan bo‘lishi zarur⁸.

ICSID nafaqat o‘zining qoidalari asosida, balki UNCITRAL arbitraj qoidalari yoki ad hoc arbitraj shaklida bo‘ladigan nizolarni ham ko‘rib chiqadi. Shuningdek, markaz investitsiya nizolari bo‘yicha vositachilik (mediation) xizmatlarini ham taklif etadi. Hozirda ICSID konvensiyasiga 163 ta a‘zo hisoblanadi, ularning 154 tasi to‘laqonli ishtirokchi davlat (Contracting state) maqomiga ega⁹. Boshqacha aytganda mazkur 154 ta davlat ICSID konvensiyasini ratifikatsiya qilgan va ICSD arbitraj yurisdiksiyasini tan olgan. ICSID faoliyatini Kotibiyat (Secretariat) boshqaradi. ICSID konvensiyasining 9–11-moddalariga muvofiq, Kotibiyatga Bosh kotib rahbarlik qiladi va unga ikki nafar o‘rinbosar yordam beradi, ular markazning kundalik ishlari, jumladan, arbitraj jarayonlari, ish yuritish, taraflar bilan aloqalar va moliyaviy nazoratni amalga oshiradi. Arbitraj Bosh kotibga yozma so‘rov (Request for arbitration) yuborish orqali boshlanadi. Unda asosiy faktlar va huquqiy asoslar keltiriladi. So‘rov markaz vakolat doirasiga kirsam, 3 hafta ichida ko‘rib chiqiladi. Keyingi bosqich — arbitraj tribunalini tuzishdir. Tribunal odatda:

⁶ ICSID Convention, 1965. Articles 6–11.

⁷ ICSID Rules of Procedure for Arbitration Proceedings. URL: <https://icsid.worldbank.org/resources/rules-and-regulations>

⁸ ICSID Convention, 1965. Article 25.

⁹ ICSID. “Database of Member States.” International Centre for Settlement of Investment Disputes (ICSID). URL: <https://icsid.worldbank.org/en/Pages/about/Database-of-Member-States.aspx>

- da'vogar tomonidan tayinlangan bitta arbitr,
- javobgar tomonidan tayinlangan bitta arbitr,
- tomonlar o'zaro kelishib tayinlangan yoki markaz tomonidan tayinlangan rais arbitrdan iborat bo'ladi¹⁰. ICSID arbitrajining muhim jihati — uning qarori majburiy hisoblanadi va faqat Konvensiyada ko'rsatilgan hollarda bekor qilish, izoh berish yoki tuzatish uchun qayta ko'rib chiqilishi mumkin (ICSID Konvensiyasi, modda 52). Shuningdek, ICSID faqat ishtirokchi davlat (yoki davlatga tegishli organ) bilan boshqa ishtirokchi davlat fuqarosi (yoki yuridik shaxs) o'rtasida har ikki tomon yozma rozilik bergan bo'lsa, nizoni ko'rib chiqishi mumkin.

ICSID har yili Bosh direktorlar kengashiga o'z faoliyati bo'yicha yillik hisobot taqdim etadi.

2017-yilgi hisoboti asosida:

- ICSID umumjahon miqyosida investor-davlat arbitrajining yetakchi instituti sifatida tan olingan;
- Barcha xalqaro investitsiya ishlarining 70% dan ortig'i ICSID tomonidan ko'rib chiqilgan;
- 2017-yilda ICSID 343 ishni yuritgan — bu markaz tarixidagi eng yuqori ko'rsatkich edi¹¹.

Birlashgan Millatlar Tashkilotining Xalqaro Savdo huquqi bo'yicha komissiyasi (UNCITRAL) : UNCITRAL Birlashgan Millatlar Tashkilotining xalqaro savdo huquqi bo'yicha asosiy huquqiy organidir. Agar nizolashayotgan tomonlar arbitraj instituti doirasidan tashqarida, ad hoc arbitraj orqali ya'ni muayyan arbitraj instituti yoki doimiy arbitraj sudi tarkibiga kirmagan, balki nizolashayotgan tomonlar o'zaro kelishuv asosida, vaqtincha tashkil qilinadigan arbitraj orqali nizoni hal qilishga kelishsa, bu holatda ular protsessual qoidalarni o'zlari belgilash huquqiga ega bo'ladi. Bunday qoidalar odatda UNCITRAL tomonidan ishlab chiqilgan bo'ladi. Aynan shu tamoyil – tomonlar irodasining mustaqilligi – xalqaro arbitrajdagi asosiy prinsiplardan biri hisoblanadi. UNCITRAL tomonidan ishlab chiqilgan qoidalar bir nechta xalqaro arbitraj tribunalari tomonidan qabul qilinib, ularning qoidalari bilan muvofiqlashtirilgan. Shuning uchun ko'plab arbitraj institutlari investitsiya nizolarini o'z protseduralari asosida hal qilgan bo'lsa-da, tomonlar talabiga binoan UNCITRALning Arbitraj yoki Murosaga keltirish (Conciliation) qoidalari ham qo'llaniladi¹². 1976-yilda UNCITRAL Arbitraj qoidalarini (Rules of Procedure) qabul qilgan, 1985-yilda esa xalqaro investitsiya

¹⁰ ICSID Rules of Procedure for Arbitration Proceedings. Rule 5.

¹¹ ICSID Annual Report 2017. URL: <https://icsid.worldbank.org/resources/publications/annual-reports>

¹² UNCITRAL. UNCITRAL Arbitration Rules (1976). Revised edition 2010. URL: <https://uncitral.un.org/en/texts/arbitration>

arbitraji uchun namunaviy qoidalarni ishlab chiqilgan va mazkur qonun 2006-yilda muhim o'zgartirishlar bilan yangilanga¹³. UNCITRAL arbitraj qoidalariga binoan, arbitrajga rozilik yozma shaklda bildirilishi shart. Bu esa 1958-yilda qabul qilingan Nyu-York konvensiyasi asosida arbitraj qarorlarini tan olish va ijro etishni kafolatlash uchun zarurdir. UNCITRAL Kotibiyati o'z faoliyati natijasida ishlab chiqilgan konvensiyalar va namunaviy qonunlar asosida xalqaro sud qarorlari va arbitraj qarorlarini to'plash va tarqatish tizimini yo'lga qo'ygan. Bu tizimning maqsadi – UNCITRAL tomonidan ishlab chiqilgan huquqiy matnlarning xalqaro darajada tan olinishi, izchil talqin qilinishi va bir xilda qo'llanilishini ta'minlashdan iborat.

Xalqaro investitsiya arbitrajidagi eng jiddiy huquqiy muammolardan biri – bu rasmiy precedents (ya'ni stare decisis) tizimining mavjud emasligidir. Bu jihat milliy huquqiy tizimlar (ayniqsa, anglo-sakson huquqi) yoki doimiy xalqaro sudlar (masalan, International court of justice yoki the European Court of Human Rights) faoliyatidan keskin farq qiladi. Investitsiya arbitraj tribunallari ad hoc tarzda shakllantiriladi va faqat aniq bir nizo bo'yicha tegishli shartnoma yoki bitimni sharhlash bilan cheklanadi. Natijada, tribunal bir xil yoki o'xshash shartnoma normalarini har xil talqin qilishi mumkin va bu hol arbitraj amaliyotining izchil emasligiga olib kelmoqda. Masalan,

1) Adolatli va teng munosabat (FET – Fair and Equitable Treatment)

FET bandi ikki tomonlama investitsiya bitimlarida eng ko'p tortishuvlarga sabab bo'luvchi norma hisoblanadi. Tecmed v. Mexico (ICSID, 2003) ishida tribunal FETni keng talqin qilib, unga shaffoflik, qonuniy kutishlar (legitimate expectations) tamoyillarini kiritgan¹⁴. Biroq Glamis Gold v. USA (UNCITRAL, 2009) ishida tribunal bu tamoyilni ancha tor doirada, faqat "shafqatsiz" yoki "g'ayriinsoniy" harakatlarga qarshi qo'llaniladigan xalqaro odat huquqi me'yorlari asosida sharhlagan¹⁵.

2) Eng ko'p qulaylik tug'diruvchi rejim (MFN – Most-Favoured-Nation)

Maffezini v. Spain (ICSID, 2000)¹⁶ ishida tribunal MFN bandi orqali investorning boshqa bitimlardagi qulay protsessual huquqlarni talab qilishini tan oldi. Plama v. Bulgaria (ICSID, 2005)¹⁷ ishida esa tribunal bunday yondashuvni rad

¹³ UNCITRAL. UNCITRAL Arbitration Rules (1976). Revised edition 2010. URL:

<https://uncitral.un.org/en/texts/arbitration>

¹⁴ Tecnicas Medioambientales Tecmed S.A. v. The United Mexican States, ICSID Case No. ARB(AF)/00/2, Award, 29 May 2003.

¹⁵ Glamis Gold, Ltd. v. The United States of America, UNCITRAL, Award, 8 June 2009

¹⁶ Emilio Agustín Maffezini v. The Kingdom of Spain, ICSID Case No. ARB/97/7, Decision on Jurisdiction, 25 January 2000.

¹⁷ Plama Consortium Limited v. Republic of Bulgaria, ICSID Case No. ARB/03/24, Decision on Jurisdiction, 8 February 2005.

etib, MFN bandi protsessual normalarga nisbatan faqat aniq belgilangan bo'lsa, qo'llanilishi mumkinligini ta'kidladi.

3) Investitsiya tushunchasining ta'rifi

ICSID tizimi doirasida (Salini v. Morocco, 2001) ishida xalqaro arbitraj tribunalari investitsiya sifatida tan olinishi uchun to'rt mezonni shakllantirgan bo'lib, bu mezonlar keyinchalik "Salini testi" deb nom oldi. Ushbu to'rt mezon quyidagilardan iborat:

- Moliyaviy yoki moddiy hissaning mavjudligi

Investor mezbon davlatda ma'lum miqdorda kapital, texnologiya yoki boshqa resurslar bilan ishtirok etgan bo'lishi kerak. Masalan, Germaniyalik investor O'zbekiston hududida 10 million dollarlik zavod qurishga investitsiya kiritgan, zamonaviy texnologiyalar, mutaxassislarni olib kirgan, bu esa moliyaviy hissani ifodalaydi.

- Ma'lum vaqt davomida amalga oshirilishi

Investitsiya bir martalik emas, balki uzluksiz yoki uzoq muddatli loyihani o'z ichiga olishi lozim. ICSID arbitraj amaliyotida odatda kamida 2–5 yil yoki undan ortiq muddatda davom etuvchi faoliyat investitsiya sifatida tan olinadi. Masalan, Fransuz kompaniyasi 10 yil davomida Toshkent shahrida avtomobil yig'ish liniyasini ishlab chiqadi va boshqaradi, ya'ni mazkur loyiha davomiy hisoblanadi.

- Xavf (risk) elementining mavjudligi

Investor o'z kapitalini yo'qotish xavfi ostida bo'ladi, ya'ni uning daromadlari kafolatlanmagan bo'ladi. Xavf – siyosiy, iqtisodiy yoki huquqiy noaniqliklardan kelib chiqishi mumkin. Kanadaning "First Quantum Minerals" kompaniyasi Kongo Demokratik Respublikasida mis koni qazib olish loyhasini boshlaydi. Kutilmaganda hukumat tomonidan litsenziya bekor qilinadi. Kompaniya o'z sarmoyasini yo'qotadi va ICSIDga murojaat qiladi. Bu holat Metalclad v. Mexico ishida ham uchragan¹⁸: investor ruxsat olishiga qaramay, mahalliy hokimiyat tomonidan loyihaning bekor qilinishi katta xavf sifatida baholangan.

- Davlatning iqtisodiy rivojlanishiga hissa qo'shish

Investitsiya mezbon davlatga foyda olib kelishi, xususan, ish o'rinlari yaratishi, texnologiyalarni joriy etishi yoki infratuzilmani yaxshilashi kerak. Bu iqtisodiy va ijtimoiy hissa mezonini qanoatlantiradi. Ba'zi tribunallar yuqoridagi mezonlarni (Salini testini) qat'iy emas, balki moslashuvchan mezonlar sifatida qabul qilgan. Ular, ayniqsa, rivojlanayotgan davlatlar bilan bog'liq nizolarda bu yondashuvni

¹⁸ Tecmed v. Mexico, ICSID Case No. ARB(AF)/00/2, Award, 29 May 2003.

qo‘llagan. Masalan, *Biwater Gauff v. Tanzania* (ICSID, 2008) ¹⁹ishida tribunal shunday xulosa qilgan: investitsiyaning davlat rivojiga qo‘shgan hissasini alohida isbotlash shart emas, chunki bu hissa odatda har qanday yirik infratuzilmaviy loyihada mavjud bo‘ladi. *Romak v. Uzbekistan* (PCA, 2009)²⁰ ishidagi tribunal esa Salini mezonlarini ICSID Konvensiyasi doirasida zarur emas, deb hisoblab, uning o‘rniga boshqa huquqiy mezonlarga tayangan. Mazkur holatlar shuni ko‘rsatadiki, arbitraj tribunallari Salini testini universallikdan ko‘ra ko‘proq vaziyatga moslashtirib ko‘rib chiqmoqda. Turli tribunal qarorlarida bu testning ijodiy talqinlari mavjud: ba’zilar to‘rt mezonni birgalikda talab qilsa, boshqalari xolis va mantiqiy baholashga asoslangan yondashuvni afzal biladi. Bu yondashuv esa, investitsiya arbitrajida huquqiy noaniqlikni kuchaytirmoqda. Buning natijasida, investorlarda ham, davlatlarda ham tribunal muayyan normalarni qanday talqin qilishi haqida oldindan aniq tasavvur bo‘lmaydi va o‘z navbatida arbitraj tizimining ishonchliligiga putur yetkazadi. Yuqoridagilardan kelib chiqib, xulosa qiladigan bo‘lsak, mazkur holat yuzasidan vujudga kelayotgan muammolarni hal qilish uchun quyidagi taklifni ilgari surishimiz mumkin:

ICSID Konvensiyasiga qo‘shimcha o‘zgartirish kiritish (konvensiya darajasida islohot):

ICSID Konvensiyasining 52–53-moddalarini qayta ko‘rib chiqish va mazkur moddaga quyidagicha o‘zgartirish kiritish taklif etiladi. Yangi moddada:

- faqat protsessual xatolarga emas, balki huquqiy talqin xatolariga ham taalluqli bo‘ladi;
- ishtirokchi davlatlar bu protokolga alohida qo‘shilishi orqali o‘z investorlari uchun bu imtiyozni kafolatlay oladi. 2022-yilgi ICSID islohoti doirasida bu fikr bir necha ekspertlar tomonidan ilgari surilgan bo‘lsa-da, hali amaliyotga tatbiq etilmagan.

ICSID Konvensiyasi, 52-moddasida arbitraj qarorini bekor qilish uchun murojaat qilish tartibi belgilab qo‘yilgan bo‘lib, unga ko‘ra:

1. Har qanday tomon quyidagi asoslardan biriga yoki bir nechtasiga tayanib, yozma ariza orqali Bosh kotibga murojaat etish yo‘li bilan arbitraj qarorini bekor qilishni so‘rashi mumkin:

- a) Tribunal to‘g‘ri tashkil etilmagan bo‘lsa;
- b) Tribunal o‘z vakolatlarini oshirib yuborgan bo‘lsa;
- c) Tribunal a‘zolaridan biri tomonidan korrupsiya sodir etilgan bo‘lsa;

¹⁹ *Biwater Gauff (Tanzania) Ltd. v. United Republic of Tanzania*, ICSID Case No. ARB/05/22, Award, 24 July 2008, paras. 312–318.

²⁰ *Romak S.A. v. Republic of Uzbekistan*, PCA Case No. AA280, Award, 26 November 2009.

d) Muhim protsessual qoida jiddiy ravishda buzilgan bo'lsa;

e) Qarorda asoslantiruvchi sabablar ko'rsatilmagan bo'lsa.

Bu esa, faqat protsessual va institutsional xatolarni qamrab oladi, lekin huquqiy talqin xatolarini qamrab olmaydi. Mazkur moddaga qarorni bekor qilish asoslariga "huquqning notog'ri talqin qilinishi yoki qo'llanishi" kabi jummalarni kiritishimiz mumkin. Bu orqali investorlar yoki davlat agar tribunal chiqargan yakuniy qaror (award) dan norozi bo'lsalar, unda huquqning noto'g'ri qo'llanishi yuzasidan bosh kotibga yozma ariza orqali murojaat qilishga huquqiga ega bo'ladilar. Mazkur islohot orqali xorijiy investorlarning va davlatlarning arbitraj institutiga bo'lgan ishonchini oshirishimiz mumkin bo'ladi.

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1. I. Braunli, Principles of Public International Law, Klarendon Press, 1998-yil, XXII-bob; keltirilgan: Investor-davlat nizolarini hal qilish, UNCTADning "Xalqaro investitsiya shartnomalari bo'yicha masalalar" turkumidagi nashri, 4-bet.
2. Lungu, M., Xalqaro mojarolarni tinch yo'l bilan hal etishda xalqaro tashkilotlarning roli, Universal Juridic nashriyoti, Buxarest, 2010, 12–13-betlar.
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**YANGI KONSTITUTSIYADA O‘ZBEKISTON RESPUBLIKASI VA
O‘QTUVCHILARGA E‘TIBOR**

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Annotatsiya: Yangi Konstitsiya kiritilgan o‘zgarishlardan O‘zbekiston— huquqiy, ijtimoiy va dunyoviy davlat va o‘qituvchilarga e‘tibor qaratilgan. Ushbu maqolada shu mavzu yuzasidan ma‘lumotlar keltiriladi.

Kalit so‘zlar: Konstitutsiya, O‘zbekiston Respublikasi, davlat, modda, o‘qituvchi, ta‘lim, ta‘sir.

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Аннотация: Изменения, внесенные новой Конституцией, фокусируются на Узбекистане как правовом, социальном и светском государстве и учителях. В этой статье представлена информация по этой теме.

Ключевые слова: Конституция, Республика Узбекистан, государство, статья, учитель.

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Abstract: The changes introduced by the new Constitution focus on Uzbekistan as a legal, social and secular state and teachers. This article provides information on this topic.

Key words: Constitution, Republic of Uzbekistan, state, article, teacher

O‘zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev “O‘zbekiston Respublikasining Konstitutsiyasi xalqimiz siyosiy-huquqiy tafakkurining yuksak namunasidir”,- deb ta‘kidlagan edi. Darhaqiqat, suveren Respublikamiz Konstitutsiyasi - inson va fuqaro huquqlarining demokratik xartiyasi bo‘lib, u

huquqiy va insonparvar davlatni shakllantirishning strategik dasturi vazifasini o‘tab kelmoqda. Konstitutsiya - davlatimiz mustaqilligining huquqiy zamini, xalq xohish-irodasining oliy ifodasi sifatida maydonga chiqdi. U eng taraqqiy topgan, rivojlangan davlatlarning konstitutsiyaviy tajribalariga tayanish bilan birga, tarixda sinalgan umuminsoniy, umumbashariy qadriyatlarni o‘zida mujassam etgan huquqiy hujjat. Bugun yurtimiz haqida fikr yuritilganda “Yangi O‘zbekiston”, “Taraqqiyotning yangi bosqichiga kirib borayotgan mamlakat” kabi sharafbaxsh iboralar ishlatilyapti. Bu qo‘lga kiritayotgan ulkan muvaffaqiyatlarimizning amaliy samarasi, desak mubolag‘a bo‘lmaydi. Demak, milliy tiklanishdan milliy yuksalish sari dadil harakatdamiz. Yuksalish esa raqamli iqtisodiyotga o‘tish, ishlab chiqarishni bosqichma-bosqich modernizatsiya qilish, avtomatlashtirish, innovatsion g‘oyalar va texnologiyalar bilan boyitish, shu bilan birga o‘zligimizni, ma’naviyatimizni, milliy qadriyatlarimizni rivojlantirishni taqozo etadi. Shunday ekan, har bir yurtdoshimiz bugun mamlakatimizda barq urib turgan bebaho ne‘mat - tinchlik, totuvlik, barqarorlikning qadriga yetib, Uchinchi Renessans davri poydevoriga g‘isht qo‘yish, ya’ni yurtimiz taraqqiyotiga munosib hissa qo‘shish uchun astoydil harakat qilmog‘i lozim [1].

O‘zbekiston Respublikasi Konstitutsiyasining yangi tahriri 2023-yil 1-maydan e‘tiboran kuchga kirdi. Bunga 30-aprel kuni bo‘lib o‘tgan referendum natijasiga ko‘ra 11 ta moddadan iborat tegishli qonunning qabul qilinishi asos bo‘ldi. Bu qonunning 1-moddasiga Konstitutsiyaning yangi tahriri ilova qilingan [4].

Bunga qadar 1992-yildan buyon konstitutsiyaga jami 15 marta o‘zgartish kiritilgan edi. Bu safar esa o‘zgarishlar ko‘lami kattaligi sabab hujjatning yangi tahriri qabul qilindi. Yangilanish natijasida, bosh qomusdagi moddalar soni 128 tadan 155 taga, undagi normalar esa 275 tadan 434 taga oshdi. Umuman, rasmiylarga ko‘ra, konstitutsiya 65 foizga yangilangan [3].

Quyida eng muhim o‘zgarishlar hujjatdagi ba’zi ma’lumotlar keltirib o‘tiladi.

1. O‘zbekiston - huquqiy, ijtimoiy va dunyoviy davlat

Konstitutsiyaning 1-moddasidagi “O‘zbekiston suveren demokratik respublika” jumlasini quyidagicha o‘zgartirilmoqda:

O‘zbekiston - boshqaruvning respublika shakliga ega bo‘lgan suveren, demokratik, huquqiy, ijtimoiy va dunyoviy davlat.

Boshqaruvning respublika shakli - davlat hokimiyatining oliy organlari xalq tomonidan muayyan muddatga saylanishini anglatadi. (Konstitutsiya normalariga rasmiy sharhlar hozircha yo‘q, shu sababli undagi norma va tushunchalarga tahririyat umumqabul qilingan doirada, mustaqil izoh berib o‘tmoqda).

Suveren davlat - o'z hududida to'la-to'kis mustaqil hukmronlik va mutlaq yurisdiksiyaga ega bo'lish demakdir. Demokratiya esa xalq hokimiyatini ifoda etib, ishtiroki ta'minlanishini ko'zda tutadi.

Huquqiy davlatda barcha jarayonlar qonuniy asoslar ustiga quriladi, davlat xizmatchilaridan huquq doirasida fikrlash, barcha masalalarga huquqiy ko'z bilan qarash talab etiladi. Qolaversa, huquqiy davlatda barcha fuqarolar qonun oldida teng bo'ladi, davlat hokimiyatining oliy organlari ham qonunlarga bo'ysunadi va qonunlarning muqarrar ijrosini ta'minlaydi.

O'zbekiston o'zini ijtimoiy davlat deb e'lon qilishi bilan, har bir fuqarosiga munosib turmush kechirishi uchun shart-sharoit yaratish majburiyatini olmoqda. Bu - mavjud resurslarni ijtimoiy adolat tamoyillari asosida taqsimlash, jamiyatda kuchli tabaqalanish avj olishiga yo'l qo'ymaslik, eng zaif qatlamlar uchun ham sifatli ta'lim va tibbiyot kafolatlanishi, samarali ijtimoiy himoya dasturlari ishlashi, imkoniyati cheklangan va qo'llovga muhtoj fuqarolarni qo'llab- quvvatlash, adolatli mehnat qonunchiligi va jozibador pensiya tizimi kabilarni anglatadi. Oddiyroq aytganda, eng kambag'al oilaning bolalarida ham sog'-salomat o'sib-ulg'ayib, yaxshi ta'lim olib, farovonlikka erishish imkoniyati bo'lishi kerak.

Dunyoviy davlatda davlat va din bir-biridan ajratilgan bo'ladi. Davlat diniy e'tiqodidan qat'i nazar barchaga bir xil munosabatda bo'ladi, dinga oid masalalarda neytral pozitsiyani egallaydi.

Yangi konstitutsiyaning 154-moddasi bilan, 1- moddadagi qoidalarni qayta ko'rib chiqish mumkin emas, deb belgilandi. Xuddi shuningdek, 154-moddaning o'zidagi aynan shu qoidadan iborat band ham qayta ko'rib chiqilishi mumkin emas.

Boshqacha aytganda, bu norma hech qachon demokratiyadan voz O'zbekiston kechmasligi, huquqiy davlatchilikka sodiqligi, monarxiyaga yoki islomiy respublikaga aylanmasligini nazarda tutadi [4].

2. Konstitutsiya to'g'ridan to'g'ri amal qiladi.

15-moddaga quyidagicha qo'shimcha qo'shildi:

O'zbekiston Respublikasi Konstitutsiyasi mamlakatning butun hududida oliy yuridik kuchga ega, to'g'ridan to'g'ri amal qiladi va yagona huquqiy makonning asosini tashkil etadi.

O'qituvchilar alohida e'tirofda

Konstitutsiyaga o'qituvchilar haqida modda qo'shildi. U ikki banddan iborat.

O'zbekiston Respublikasida o'qituvchining mehnati jamiyat va davlatni rivojlantirish, sog'lom, barkamol avlodni shakllantirish hamda tarbiyalash, xalqning ma'naviy va madaniy salohiyatini saqlash hamda boyitishning asosi sifatida e'tirof etiladi.

Davlat o'qituvchilarning sha'ni va qadr-qimmatini himoya qilish, ularning ijtimoiy va moddiy farovonligi, kasbiy jihatdan o'sishi to'g'risida g'amxo'rlik qiladi.

Shu tariqa, ustozlar huquq sohasi vakili bo'lmagan, lekin oliy qonunda alohida tilga olingan yagona kasb egalariga aylandi. Konstitutsiyada nomi keltirilgan o'qituvchilardan boshqa kasb egalarining barchasi - huquq sohasi vakillari (sudyalar, prokurorlar va advokatlar). Boshqa holatlarda kasb egalari emas, sohalar haqida gap ketgan (masalan, ommaviy axborot vositalari, turli jamoat birlashmalari).

Yangilangan konstitutsiyamizda xalqimiz uchun bir qancha yengilliklar yaratildi. Inson qadr-qimmati yuqori o'ringa ko'tarildi. Shuningdek asrlar mobaynida sharaflil kasb hisoblanib kelgan - o'qituvchilarning huquqlari yangilangan qomusimizda belgilab qo'yildi. Yillar mobaynida majburiy mehnatga jalb qilingan, o'z kasbi bo'lmish barkamol avlodni yetishtirish qolib dalada paxta tergan o'qituvchilarning qadr - qimmati adolatli tarzda o'z o'rniga qo'yildi.

Shu jumladan yangilangan qomusimizda inson ilmiy salohiyatli, o'z aqliy mehnat mahsulini himoyalay olish huquqiga ham ega bo'ldi. Qisqa qilib shuni ayta olamizki, yangilangan konstitutsiyamiz muhtaram prezidentimiz Sh.M.Mirziyoyev aytganlaridek "Xalq davlat idoralariga emas, davlat idoralari xalqqa xizmat qilishi kerak" degan tamoyilga asoslangan ijtimoiy davlat qurishning asosiy kalit bo'lib xizmat qiladi desak mubolag'a qilmagan bo'lamiz.

Xulosa sifatida shuni aytish kerakki, Yangi Konstitutsiyada insoniylik jihatlarni yuksalish uchun insonlar manfaatlarini yuqori qo'yadi, ularni barkamol, yetuk shaxs bo'lishi uchun o'qituvchilarning mavqeyini ko'tarilganligini ko'ramiz. O'qituvchilik kasbi naqadar muqaddas zotligi qonun bilan ham belgilab qo'yildi.

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МИЛЛИЙ ИҚТИСОДИЁТ ТАРАҚҚИЙ ЭТИШИДА КИЧИК БИЗНЕС ВА ТАДБИРКОРЛИК ФАОЛИЯТИНИНГ РОЛИ

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Аннотация: Мазкур мақолада кичик бизнес ва тадбиркорликнинг мамлакат иқтисодий тараққиётини таъминлаш, янги иш ўринларини яратиш, аҳолининг даромадлари ва фаровонлигини оширишдаги роли очиб берилган.

Калит сўзлар: Тадбиркорлик, кичик бизнес, иқтисодий тараққиёт, иш ўринлари, даромад, фаровонлик.

IN THE PROGRESS OF THE NATIONAL ECONOMY ROLE OF SMALL BUSINESS AND ENTREPRENEURIAL ACTIVITY

Annotation: In this state, the role of small business and entrepreneurship in the conditions of economic progress, in the writings of the new formation, in particular, in the messages of incomes and the welfare of the population, are enlightened.

Keywords: entrepreneurship, small business, economic development, jobs, income, prosperity.

Мамлакатимиз иқтисодиётини тараққий эттиришда кичик бизнес ва тадбиркорлик алоҳида аҳамият касб этади ва ҳозирги шароитда унинг роли янада ортиб бормоқда. Шу сабабдан ҳам кичик бизнес ва тадбиркорликни жадал ривожлантириш ҳар қандай мамлакат иқтисодиётининг барқарор ўсишини таъминловчи асосий бўғин ва амалга оширилаётган иқтисодий ислохотларнинг устувор йўналиши ҳисобланади. Иқтисодиётда рўй бераётган турли ижобий ўзгаришлар кўп жихатдан кичик бизнес ва тадбиркорликнинг ривожланиши билан узвий боғлиқдир.

Президентимиз Шавкат Мирзиёев таъкидлаб ўтганларидек: “...жиддий ва кундалик эътиборини талаб қиладиган яна бир муҳим йўналиш бор. Бу - хусусий мулк ва тадбиркорликни янада ривожлантириш ва уларнинг таъсирчан ҳимоясини таъминлашдир”.

Ўзбекистон Республикаси Президентининг 2017-йил 7-февралдаги ПФ-4947-сон Фармони билан тасдиқланган 2017-2021-йилларда Ўзбекистон Республикасини ривожлантиришнинг бешта устувор йўналиши бўйича Ҳаракатлар стратегиясининг «Ижтимоий соҳани ривожлантиришнинг устувор йўналишлари» номли бобида тадбиркорлик ва бизнесни ривожлантириш асосида янги иш ўринларини яратиш ҳамда аҳолининг, энг аввало, таълим муассасалари битирувчиларининг иш билан бандлигини таъминлаш, ишсизлик даражасини камайтириш вазифаси белгиланган.

Кичик бизнес ва тадбиркорликни ривожлантириш асосида бир қатор ижтимоий-иқтисодий вазифалар ҳал этилиши назарда тутилади:

➤ биринчидан, жаҳон тажрибаси шуни кўрсатадики, кичик бизнес ички бозорни зарур товар ва хизматлар билан тўлдирадиган, иқтисодиётнинг таркибий негизини белгилаб берадиган энг муҳим сектор ҳисобланади, шунингдек, аҳолини, айниқса, ёшларни иш билан таъминлашда, уларнинг иқтисодий мустақилликка эришишлари ва ҳаётда ўз ўринларини топиб кетишларида энг асосий омил ва манба бўлиб хизмат қилади;

➤ иккинчидан, ҳозирги шароитда жаҳон ва минтақавий бозорларда рақобат кескинлашиб бораётгани ҳаммага аён. Айнан кичик бизнес ўзининг ҳаракатчанлиги, кам сармоя талаб қилиши ҳисобидан ишлаб чиқаришни енгилроқ ва тез модернизатсия қилиш, ишлаб чиқарилаётган маҳсулот турларини янгилаш имкониятига эга экани ва шу тариқа бозор конъюктурасининг ўзгарувчан талабларига яхши мослаша олиши билан эътиборлидир;

➤ учинчидан, кичик бизнес ва тадбиркорлик ўсиши билан мамлакат таянчи ва суянчи бўлган мулкдорлар ўрта синфини шакллан-тириш вазифаси бевосита ҳал этилади. Умуман айтганда, кичик бизнес ва тадбиркорлик бугунги кунда аҳоли бандлигини таъминлайдиган ва унинг асосий даромад манбаи бўлган муҳим бўғин ҳисобланмоқда.

Кичик бизнес ва хусусий тадбиркорликнинг мамлакат иқтисодий тараққиётини таъминлаш, янги иш ўринларини яратиш, аҳолининг даромадлари ва фаровонлигини оширишдаги ролини инобатга олган ҳолда қуйидаги хулосаларни қилиш мумкин:

- аҳолини иш билан бандлигини таъминлаш, маҳаллий ресурслардан самарали фойдаланиш асосида маҳаллий саноат тармоқларини ривожлантириш, шунингдек мамлакатнинг экспорт салоҳиятини оширишда бу соҳанинг аҳамиятини янада ошириш чора-тадбирларини такомиллаштириш;

- кичик бизнес ва хусусий тадбиркорликни ривожланишини таҳлил қилиш асосида кичик бизнес ва хусусий тадбиркорлик йўналишлари бўйича унинг иқтисодий ўсиш кўрсаткичи ҳудудларда мамлакатнинг ўртача кўрсаткичлари даражасига етишини таъминлашга эришиш орқали ҳудудлар ривожланишини мувофиқлаштиришга интилиш;

- маҳаллий ресурслар асосида ишлаб чиқаришни ташкил этиш кам инвеститсия маблағларини талаб этишини, уларнинг бозор конъюктураси талабларига тез мослаша олишига имкон беришини инобатга олиш.

Келгусида мамлакатимизда кичик бизнес ва хусусий тадбиркорликни янада ривожлантириш учун қуйидагиларни таклиф қиламиз:

- Янги кичик саноат зоналарини ташкил этиш ва фаолият юритаётганларининг самарадорлигини ошириш мақсадида: кичик саноат зоналари иштирокчиларининг зарурий муҳандислик-коммуникация

тармоқларига уланиш ҳолатини танқидий ўрганган ҳолда тегишли чора-тадбирлар режасини тасдиқлаш; кичик саноат зоналарига уларнинг ихтисослашуви, ҳудуднинг ресурс салоҳиятини инобатга олган ҳолда, ишлаб чиқаришнинг тўлиқ сиклини амалга оширувчи тадбиркорлик субъектларини жойлаштириш;

- инвестициявий лойиҳаларни амалга ошириш ва иштирокчиларга юклатилган мажбуриятларнинг ижроси юзасидан тизимли мониторинг олиб бориш;

- кичик саноат зоналари ҳудудида янги инвестициявий лойиҳаларни амалга оширишда тижорат банкларининг иштирокини кенгайтириш. Бу эса ўз навбатида Фойдаланилмаётган давлат мулки объектларидан оқилona ва самарали фойдаланиш, замонавий ва рақобатдош маҳсулотларни ишлаб чиқаришни ташкил этиш, янги иш ўринларини яратиш ва аҳоли даромадларини оширишга хизмат қилади.

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Модель менеджмента развития профессиональной компетентности преподавателей системы высшего педагогического образования: комплексный и системный подход

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Аннотация: в статье рассматривается модель менеджмента развития профессиональной компетентности преподавателей системы высшего педагогического образования как динамичная и открытая система. Модель объединяет два взаимосвязанных аспекта: процесс менеджмента непрерывного профессионального развития педагогов, основанный на принципиальных положениях и стандартах, и процесс развития ключевых структурных компонентов профессиональной компетентности, включающих методический, нормативный, коммуникативный, психолого-педагогический, дидактический и исследовательский элементы. Такой комплексный подход способствует формированию нового системного качества педагога, способного эффективно адаптироваться и развиваться в условиях современного образовательного процесса.

Ключевые слова: модель менеджмента, профессиональная компетентность, преподаватели, высшее педагогическое образование, развитие компетентности, структурные компоненты, непрерывное профессиональное развитие, системное качество.

В современных условиях динамичного развития образовательной сферы и постоянного усложнения педагогической деятельности становится особенно актуальным создание и внедрение эффективных моделей менеджмента, направленных на развитие профессиональной компетентности преподавателей высших педагогических учебных заведений. Модель менеджмента развития профессиональной компетентности представляет собой не просто совокупность отдельных мероприятий или программ, а целостную, динамичную и открытую систему, способную адаптироваться к изменениям внешней и внутренней среды, обеспечивать системный подход к

развитию кадрового потенциала и формированию нового качества педагогической деятельности.

Данная модель включает два взаимосвязанных и взаимодополняющих аспекта, которые в совокупности обеспечивают комплексное развитие профессиональной компетентности преподавателей. Первый аспект — это процесс менеджмента непрерывного профессионального развития педагогов, основанный на принципиальных положениях, государственных и международных стандартах, а также нормативных документах, регламентирующих качество образования и требования к педагогической деятельности. Второй аспект — это процесс развития ключевых структурных компонентов профессиональной компетентности, включающих методический, нормативный, коммуникативный, психолого-педагогический, дидактический и исследовательский компоненты.

Процесс менеджмента непрерывного профессионального развития педагогов

Первый аспект модели акцентирует внимание на системном и планомерном управлении процессом профессионального роста преподавателей. В условиях постоянных изменений в образовательной политике, внедрения новых образовательных технологий, требований к качеству подготовки специалистов и изменяющихся потребностей студентов, непрерывное профессиональное развитие становится необходимым условием сохранения и повышения педагогического мастерства.

Процесс менеджмента включает несколько ключевых этапов:

- **Планирование развития** — формирование индивидуальных и коллективных программ повышения квалификации, определение целей, задач и ожидаемых результатов профессионального роста с учетом актуальных образовательных стандартов и требований работодателей.

- **Организация и реализация мероприятий** — проведение тренингов, семинаров, мастер-классов, участие в научно-методических конференциях, внедрение инновационных педагогических технологий и методов обучения.

- **Мониторинг и оценка эффективности** — систематический анализ результатов профессионального развития, выявление сильных и слабых сторон, корректировка программ и методов обучения, обеспечение обратной связи.

- **Мотивация и поддержка** — создание условий для стимулирования профессионального роста через признание достижений, карьерное продвижение, материальное и моральное поощрение.

Данный процесс строится на принципах открытости, гибкости и адаптивности, что позволяет своевременно реагировать на изменения в образовательной среде и обеспечивать устойчивое развитие педагогического коллектива.

Развитие ключевых структурных компонентов профессиональной компетентности

Второй аспект модели направлен на системное развитие основных компонентов, которые составляют профессиональную компетентность преподавателя. Каждый из этих компонентов играет важную роль в формировании комплексного и многогранного педагогического мастерства.

- **Методический компонент** — включает в себя освоение современных педагогических технологий, методов и приемов преподавания, умение эффективно планировать учебный процесс, разрабатывать учебно-методическую документацию, использовать интерактивные и инновационные формы обучения. Развитие данного компонента способствует повышению качества образовательного процесса и адаптации к различным образовательным ситуациям.

- **Нормативный компонент** — предполагает знание и соблюдение законодательных, этических и профессиональных норм, правил и стандартов, регулирующих деятельность преподавателя. Осознание правовых аспектов профессиональной деятельности обеспечивает ответственность, этичность и профессионализм в работе с обучающимися и коллегами.

- **Коммуникативный компонент** — формирует умения и навыки эффективного взаимодействия с различными субъектами образовательного процесса: студентами, коллегами, администрацией, родителями. Развитие коммуникативной компетентности способствует созданию благоприятного психологического климата, разрешению конфликтных ситуаций и организации совместной деятельности.

- **Психолого-педагогический компонент** — включает знания в области психологии и педагогики, умение учитывать индивидуальные особенности обучающихся, создавать условия для их личностного и профессионального развития, использовать методы мотивации и поддержки. Данный компонент обеспечивает гуманистический подход и ориентированность на развитие личности студента.

- **Дидактический компонент** — предполагает глубокое владение содержанием учебных дисциплин, умение структурировать и систематизировать знания, разрабатывать учебные материалы и программы,

обеспечивать достижение учебных целей. Развитие дидактической компетентности способствует формированию у студентов прочных знаний и навыков.

• **Исследовательский компонент** — направлен на развитие навыков научно-методической деятельности, умение проводить педагогические исследования, анализировать и внедрять инновации, участвовать в разработке и реализации образовательных проектов. Этот компонент стимулирует творческий и инновационный подход в педагогической практике.

Совокупное развитие этих компонентов обеспечивает формирование нового системного качества педагога, характеризующегося интеграцией профессиональных знаний, умений и личностных качеств, способностью к саморазвитию, инновационной деятельности и адаптации к современным требованиям образовательной среды.

Особенности и преимущества модели

Представленная модель менеджмента развития профессиональной компетентности обладает рядом особенностей, которые делают ее эффективным инструментом повышения качества педагогической деятельности:

• **Динамичность и открытость** — модель способна адаптироваться к изменениям внешней образовательной среды, новым вызовам и требованиям, обеспечивая непрерывность и системность профессионального развития.

• **Интегративность** — объединение различных аспектов и компонентов компетентности позволяет рассматривать профессиональное развитие преподавателя как комплексный процесс, учитывающий все стороны педагогической деятельности.

• **Ориентация на стандарты и нормативы** — использование современных стандартов качества образования и нормативных документов обеспечивает соответствие профессионального развития требованиям государства и общества.

• **Акцент на личностный рост** — модель учитывает важность личностных качеств педагога, его мотивации, творческого потенциала и готовности к инновациям.

• **Системность управления** — четкая структура и последовательность этапов менеджмента обеспечивают эффективность планирования, организации и контроля профессионального развития.

Практическая значимость и перспективы внедрения

Внедрение модели менеджмента развития профессиональной компетентности преподавателей в систему высшего педагогического образования способствует решению ряда актуальных задач:

- Повышение качества образовательного процесса и конкурентоспособности выпускников.
- Формирование устойчивого кадрового потенциала, способного эффективно реагировать на вызовы времени.
- Создание условий для инновационного развития образовательных учреждений.
- Повышение мотивации и профессиональной удовлетворенности педагогов.
- Обеспечение системного подхода к развитию кадрового потенциала в соответствии с международными стандартами.

Перспективы дальнейшего развития модели связаны с интеграцией цифровых технологий в процессы менеджмента, развитием дистанционных и смешанных форм обучения, усилением междисциплинарного подхода и международного сотрудничества в области профессионального развития педагогов.

Заключение

Таким образом, модель менеджмента развития профессиональной компетентности преподавателей системы высшего педагогического образования представляет собой комплексную, динамичную и открытую систему, объединяющую процессы непрерывного профессионального развития и целенаправленного формирования ключевых компонентов компетентности. Благодаря системному подходу и ориентации на современные стандарты, данная модель обеспечивает формирование нового системного качества педагога, способного эффективно работать в условиях быстро меняющейся образовательной среды и вносить значимый вклад в развитие высшей школы.

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Javlon Jovliyevning “Qo‘rqma” romani: vaqt, voqelik va talabalarning taqdiri

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Annotatsiya Ushbu maqolada Javlon Jovliyevning “Qo‘rqma” romani zamon va voqelik tizimining o‘ziga xos, istalgan vaqtda buzilishi mumkin bo‘lgan ketma-ketliklari hamda bu holatlarning tabiiy qabul qilinishi masalasi yoritiladi. Asarda Germaniyaga o‘qishga ketgan o‘zbek talabalari taqdiri, ularning Vatan oldidagi mas’uliyati, “Ko‘mak” jurnali va teatr truppasi faoliyati orqali milliy ong va madaniy-ma’rifiy muhit tahlil qilinadi. Romandagi qahramonlarning maktublari va tergov jarayonlari orqali o‘sha davrning siyosiy-ijtimoiy holati tasvirlanadi. Asarda vaqt qatlamlari o‘zaro aralashib ketib, yozuvchining uslubiy mahorati bilan tarixiy haqiqatlar badiiy yoritiladi. Rovi obrazidagi tafakkur, tarixiy izlanish va milliy tanqid ruhiyati romanning markazida turadi. Maqola asar tilidagi badiiy to‘qimalar, obrazlarning ramziy-ma’nolari hamda yozuvchining xayoliy-ijtimoiy tafakkurining o‘ziga xosligi haqida fikr yuritadi.

Kalit so‘zlar

Javlon Jovliyev, “Qo‘rqma” romani, vaqt va voqelik, Germaniyaga ketgan talabalar, milliy ong, madaniy-ma’rifiy muhit, badiiy to‘qima, ramziy obrazlar, tarixiy haqiqat, Rovi, diskurs.

Аннотация

В данной статье рассматривается роман Джавлона Джовлиева «Не бойся» с точки зрения художественной интерпретации времени и реальности, которые в тексте представлены как подвижные и нарушаемые последовательности. Через судьбу узбекских студентов, обучающихся в Германии, автор поднимает темы национального самосознания и ответственности перед Родиной. Деятельность журнала «Ко‘мак» и театральной труппы отражает культурно-просветительскую атмосферу начала XX века. Письма героев и сцены допросов позволяют раскрыть политико-социальную обстановку того времени. Переплетение временных пластов и мастерство автора воссоздают историческую правду в художественной форме. Центральное место в романе занимает образ Ровия — повествователя, чье мышление связано с историческими изысканиями и национальной критикой. В статье анализируются художественные образы, символизм персонажей и особенности социально-философского мировоззрения автора.

Ключевые слова

Джавлон Джовлиев, роман «Не бойся», время и реальность, узбекские студенты в Германии, национальное самосознание, культурно-просветительская среда, художественная фикция, символические образы, историческая правда, Ровий, дискурс

Abstract

This article analyzes Javlon Jovliyev's novel *Do Not Be Afraid (Qo'rqma)* through the lens of time and reality as fluid and potentially disrupted sequences. The novel explores the fate of Uzbek students studying in Germany and examines themes of national consciousness and responsibility to the homeland. The activities of the *Ko'mak* magazine and theater troupe illustrate the cultural and educational environment of the early 20th century. Through the protagonists' letters and interrogation scenes, the socio-political context of the era is depicted. Interwoven layers of time, combined with the author's stylistic mastery, transform historical facts into a compelling literary narrative. At the heart of the novel stands the narrator (Roviy), whose reflections embody historical inquiry and national critique. The article further explores the novel's artistic fabric, symbolic characters, and the unique socio-imaginative perspective of the author.

Keywords

Javlon Jovliyev, *Do Not Be Afraid* novel, time and reality, Uzbek students in Germany, national consciousness, cultural and educational environment, literary fiction, symbolic characters, historical truth, Roviy, discourse

Kirish Javlon Jovliyevning "Qo'rqma" romani XX asr boshlarida Germaniyaga o'qishga ketgan o'zbek talabalari hayoti, ularning siyosiy va madaniy faoliyati hamda milliy ongning shakllanishi jarayonlarini badiiy qalam orqali jonlantiradi. Roman o'ziga xos uslubda vaqt va voqelik tizimining ketma-ketliklari chegaralarining buzilishi, tarix va hozirgi voqealar orasidagi bog'liqlikni ta'kidlaydi. Ushbu maqolada romandagi asosiy qahramonlar, voqealar zanjiri va badiiy ifodalar orqali jamiyat hayotining murakkabligi tahlil qilinadi. Asardagi vaqt va voqelik tizim "Qo'rqma" da vaqt chiziqlari qat'iy ajratilmagan, ular istalgan paytda buzilib, bir-biriga aralashadi. Bu hol yozuvchining o'ziga xos badiiy uslubini tashkil etib, o'quvchini voqealarning murakkab va ko'p qatlamli tabiati bilan yuzmayuz qo'yadi. Masalan, Go'ri Amir maqbarasiga borish sahnasi, Germaniyaga ketgan talabalar qismati va ularning maktublari, tergov jarayonlari o'rtasida o'zaro bog'lanish mavjud. Ushbu yondashuv orqali tarixiy voqealar shaxsiy, ijtimoiy va siyosiy jarayonlar bilan uyg'unlashadi. Germaniyaga ketgan talabalar va milliy faoliyati tasvirlagan .Roman qahramonlari — Sattor Jabbor, Maryam

Sultonmurodova, Ahmad Shukriy, Abduvahob Murodiy va boshqalar Germaniyada nafaqat ilm o‘rganibgina qolmay, balki “Ko‘mak” jurnali va teatr truppasini tashkil etib, o‘zbek milliy madaniyatini rivojlantirishga xizmat qiladilar. Ularning maktublari, tergov jarayonlari orqali o‘sha davr siyosiy bosimlari va milliy mustaqillik uchun kurash ruhiyati badiiy ravishda yoritiladi. Asardagi ramziy obrazlar va badiiy to‘qimalarni uchratdik. Roviyy — so‘zamol yigit romanning markaziy obrazidir. U tarixchi, talaba va milliy tanqidchi sifatida o‘z davrining jamiyatini keskin tahlil qiladi. Roviyyning oilasi, u bilan bog‘liq boshqa obrazlar — qiztaka, Ulug‘ kursdosh, Lola va boshqalar badiiy to‘qima orqali asarning umumiy ma‘nosini oshiradi. Yozuvchi ularni ataylab umumlashtirgan va ba‘zan ism berishdan tiyilgan, bu esa ijtimoiy tabaqalashtirish va tarixiy haqiqatning murakkabligini ifodalaydi. Ziddiyatlar va o‘quvchiga yuklangan mas‘uliyatni to‘g‘ri tasvirlash va tushunish kerak bo‘ladi.

Roman ko‘plab qarama-qarshiliklar asosida qurilgan: tush va xush, muhabbat va nafrat, tarix va hozirgi vaqt, sodiqlik va xiyonat kabi. Roviyyning Lola bilan munosabatlari, talabalar orasidagi ijtimoiy va ma‘naviy ziddiyatlar o‘quvchiga o‘ylash va o‘z xulosasini chiqarish mas‘uliyatini yuklaydi. Bu holat asarning eng qiziqarli va ta‘sirli jihatlaridan biri hisoblanadi.

Javlon Jovliyevning “Qo‘rqma” romani zamon va voqelik qatlamlarini o‘zaro uyg‘unlashtirib, o‘quvchiga o‘tmish va hozirgi davr o‘rtasidagi murakkab aloqalarni his qilish imkonini beradi. Germaniyaga ketgan talabalar hayoti va faoliyati orqali milliy ong va madaniy-ma‘rifiy jarayonlar badiiy tarzda yoritiladi. Asardagi ramziy obrazlar va badiiy to‘qimalar muallifning o‘ziga xos uslubini namoyon qilib, o‘quvchini tarixiy voqealar va shaxsiy tafakkurga chuqurroq kirib borishga chorlaydi. “Qo‘rqma” nafaqat o‘zbek adabiyotida, balki milliy madaniyat va tarixni o‘rganishda ham muhim ahamiyatga ega sanaladi.

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AQLI ZAIF BOLALAR DIQQATI VA XOTIRASINING O'ZIGA XOS XUSUSIYATLARI

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Annotasiya: Aqli zaif bolalar xotirasi oddiy bolalar xotirasidan sezilarli darajada farq qiladi. Ushbu maqolada aqli zaif bolalarning diqqati va xotirasi haqida ma'lumotlar keltirib o'tiladi.

Kalit so'zlar: Aqli zaif bolalar, ichki mantiqiy bog'lanishlar, ixtiyoriy yodlash, taqqoslash, idrok etish, konsentratsiya, inertsia, infantilizm.

Aqliy rivojlanishi turg'un buzilishga ega bo'lgan bolalar aqli zaif bolalar hisoblanadi.

Aqli zaif bolalarda ixtiyoriy yodlash oddiy bolalarga qaraganda kechroq shakllanadi. Xarakterli xususiyat - maqsadli ravishda o'rganish va eslab qolishning mumkin emasligidir.

Xotira - bu inson tomonidan turli xil ma'lumotlarni eslab qolish, saqlash, ko'paytirish va qayta ishlash jarayoni.

Aqli zaif o'quvchilarning xotirasi g'ayritabiiy rivojlanish sharoitida shakllanadi va shuning uchun ham xorijiy, ham sovet psixologlari tomonidan dastlabki tadqiqotlarda qayd etilgan oddiy bolalar xotirasidan sezilarli darajada farq qiladi. L.V tadqiqotlarida. Zankova (1935), M.S. Levitin (1939), I.M. Solovyov (1940) va boshqalar Aqli zaif bolalar xotirasini tavsiflovchi ko'plab sifat xususiyatlarini aniqladilar. Qabul qilinadigan materialni yomon tushunish ular tashqi, tasodifiy belgilarni yaxshiroq eslab qolishlariga olib keladi va ichki mantiqiy bog'lanishlar ajralib turmagani uchun qiyinchilik bilan tan olinadi va esda qoladi. Ular mavhum og'zaki tushuntirishlarni ham yomon tushunadilar va eslashadi. Aqli zaif bolalarda ixtiyoriy yodlash oddiy bolalarga qaraganda kechroq shakllanadi. Xarakterli xususiyat - maqsadli ravishda o'rganish va eslab qolishning mumkin emasligidir.

Hikoya oligofrenlarga ovoz chiqarib o'qilganda, ular alohida iboralarni yod olishga harakat qiladilar, lekin uning mazmuniga chuqur kirib bormaydilar. Yordamchi maktab o'quvchilarining majburiy yod olishi beixtiyor yodlashdan deyarli farq qilmaydi. Buni G.M. Dulnev, B.I. Pinskiy tajribalari. Aqli zaif bolalar ertakni yaxshiroq eslab qolishga harakat qilib, diqqatlarini alohida iboralar va so'zlarga qaratadilar va shuning uchun ularga o'qilgan narsaning ma'nosini yanada yomonroq tushunadilar. Ular o'z e'tiborini hikoyaning syujetini yoki uning asosiy

g'oyasini tushunishga qanday maqsadli yo'naltirishni bilishmaydi. Qabul qilingan ma'lumotni takrorlash hodisalar mantig'ini tushunmaslik tufayli tizimsizdir. Eng katta qiyinchiliklar og'zaki materialni takrorlash bilan bog'liq, chunki vositachi mantiqiy xotira aqli zaif odamlar uchun mavjud emas, ammo ular yaxshi rivojlangan mexanik xotiraga ega bo'lib, ular bir vaqtning o'zida yoki ketma-ket idrok etish natijasida hosil bo'lgan yagona vaqtinchalik aloqalarga asoslangan. Aqli zaif maktab yoshidagi o'quvchilarida mazmunli yodlashni rivojlantirish uchun ularni oqilona yodlash usullaridan foydalanishga o'rgatish kerak, ular quyidagilardan iborat:

- Taqqoslash – ob'ektlar orasidagi o'xshashlik va farqlarni topish.
- muhim narsani ajratib ko'rsatish - muhim ma'lumot va faktlarni ongli va maqsadli eslab qolish qobiliyati.
- materialni alohida mantiqiy qismlarga ajratish.
- o'zlashtirish va yodlash jarayonida materialga qiziqish va ijobiy munosabatni rivojlantirish.

Psixologiyada e'tibor muammosiga juda ko'p tadqiqotlar bag'ishlangan.

Diqqat - bu psixologik konsentratsiya holati, biror narsaga diqqatni jamlash. Psixologlar va defektologlarning ko'plab kuzatuvlari va maxsus tadqiqotlari aqliy zaif bolalarning e'tiborining ishlashida og'ishlarni ko'rsatadi. Oligofrenlarning e'tibori hech qachon normal bo'lmaydi: "u tezda zaiflashadi yoki shunchalik chalg'itadiki, konsentratsiya qilish mumkin emas" (Bumkaga ko'ra). Ixtiyoriy diqqatning yuqori shakllarining rivojlanmaganligi tushunchalarning rivojlanishi bilan bog'liq bo'lgan so'zlarning funktsiyasining buzilishiga va kontseptual tafakkurning rivojlanmaganligiga olib keladi. Ixtiyoriy diqqatning zaifligi, ayniqsa, u ichki jarayonlarni tashkil etishga qaratilgan bo'lsa, yaqqol namoyon bo'ladi. Oligofrenlarning beixtiyor e'tibori ham o'ziga xosdir.

A. N. Grabov aqli zaif bolalarning e'tibor ifodasiga taqlid qilishini tavsiflab, shunday deb yozadi: "O'quvchi topshiriq haqida o'ylayotgandek taassurot qoldiradi, lekin bu uning butun diqqati topshiriqning mazmuniga emas, balki holatning o'zi va ifodaliligiga qaratilgan bo'ladi. Ko'pgina mualliflar, shu jumladan A.R. Luriya, S.S. Korsakov, L.S. Vygotskiyning ta'kidlashicha, aqli zaif bolaning e'tibori oddiy bolalarniki kabi yuqori konsentratsiyaga etib bormaydi. A. R. Luriya, oligofrenlarda doimiy faol konsentratsiyali diqqat mehnatga jalb qilinganidan keyin bir muncha vaqt o'tgach zaiflashadi va butunlay yo'qoladi, degan xulosaga keladi. Ko'pgina mualliflar qo'zg'aluvchan oligofrenlar guruhida ta'kidlagan oligofrenlarning chalg'ituvchanligi kuchayishi vazifani bajarishning mumkin emasligiga olib keladi va mantiqiy fikrlash ketma-ketligini yo'qolishini aniqlaydi. Chalg'itishni yengish ixtiyoriy harakatlar va ma'lum energiya sarflashni talab qiladi, bu esa aqli zaiflar

uchun katta qiyinchiliklarni keltirib chiqaradi. B.V.Zeygarnik oligofrenlarning diqqatni almashtirishdagi qiyinchiliklari va fikrlash inertsiyasi haqida yozadi va bu qiyinchiliklar chalg'itish va umumlashtirish operatsiyalarining pasayishiga olib keladi, deb hisoblaydi. E. A. Gersamiya diqqat almashinuvining buzilishini qat'iy munosabatning o'ziga xos xususiyatlari, ya'ni uning doimiyligi, egiluvchanligi, nurlanishi va barqarorligi bilan izohlaydi, buning natijasida ularning e'tibori bir harakat usuliga "yopishib qoladi" va hatto yangi maqsadga o'tolmaydi. Oligofren bolalarning diqqat doirasining torligi ko'plab tadqiqotlarda qayd etilgan. Shunday qilib, V. M. Bleyxerning yozishicha, diqqat doirasining torligi yodlashning o'ziga xos xususiyatlarida namoyon bo'ladi, taklif qilingan 10 ta so'zdan 4 tasi birinchi bo'lib eslab qolinganda va qayta o'qilgandan so'ng qolgan 4 ta so'z takrorlanadi, ammo oldin tanishtirilgan so'zlarni ayta olmaydi. Ixtiyoriy diqqatni rivojlantirish uchun yordamchi maktabda o'quvchilar oldiga amalga oshirilishi mumkin bo'lgan vazifalarni qo'yish kerak. O'quvchilarga taklif qilinadigan topshiriq dastlab o'yin xarakteriga ega bo'lishi kerak, keyin topshiriqni bajarish asta-sekin o'quv faoliyati xarakteriga almashadi. E.Xaysserman o'z asarlarida: "Aqli zaif bolaning qiziqishi beqarorligini va tez charchashini hisobga olish kerak". Ko'pgina vazifalar kattalarning o'zi qiziqadigan qiziqarli, jozibali va tez-tez o'zgarib turadigan faoliyatga o'xshash tarzda taqdim etilishi kerak.

X.S.Zamskiyning tadqiqotlariga ko'ra, aqli zaif bolalar hamma narsani juda sekin o'zlashtiradilar, faqat ko'p takrorlashdan keyin o'rganganlarini tezda unutadilar va eng muhimi, o'zlashtirilgan bilim va ko'nikmalarni amaliyotda o'z vaqtida qo'llashni bilmaydilar.

Yangi bilim va ko'nikmalarni sekin va yomon analiz va sintez qilish sabablari Rubinshtein S.Ya. fikriga ko'ra, eng avvalo, aqli zaif bolalarning asab jarayonlari xususiyatlarida ko'rinadi. Miya yarim po'stloq qismi yopilish funktsiyasining zaifligi yangi shartli birikmalar shakllanishining kichik hajmi va sekin sur'atini, shuningdek, ularning mo'rtligini belgilaydi. Bundan tashqari, qo'zg'alish o'choqlarining yetarli darajada barqarorligini keltirib chiqaradigan faol ichki tormozlanishining zaiflashishi ko'plab aqli zaif bolalar tomonidan yangi ma'lumotlarni taqdim qilishning noto'g'ri shakllanishiga olib keladi. Masalan, bir nechta qoidalarni yodlab olgan bolalar javob berishda ko'pincha bir qoida o'rniga boshqasini takrorlaydilar. Hikoyaning mazmunini o'zlashtirib, uni takrorlashda ular boshqa hikoyadan ba'zi bir uydirma tafsilotlarni keltirishi mumkin.

Har qanday yangi materialni mustahkam o'zlashtirish uchun aqli zaif bolalar oddiy bolalarga qaraganda sezilarli darajada ko'proq takrorlashlari kerak.

Aqli zaif bolalar takroriy takrorlanmasa, buni juda tez unutishadi, chunki ular egallagan shartli aloqalar oddiy bolalarnikiga qaraganda ancha tez yo'qoladi.

Xotiradagi xatolar ayniqsa aniq namoyon bo'ladigan "unutuvchanlik" namoyon bo'lishi aqliy zaif yoshdagi bolalarda nafaqat o'qituvchilar va o'qituvchilar, balki ularning ota-onalari tomonidan ham tez-tez kuzatiladi.

Xulosa:

Shunday qilib, mavzu bo'yicha adabiyot manbalarining tahlili shuni ko'rsatdiki, aqli zaif bolalardagi nuqson xoxish istakning yetishmasligidir. Bu bolalar tez charchaydi uzoq muddat diqqatini biror nuqtaga ta'limga qaratmaydi. Shuning uchun bu bolalarda dars vaqtida chalg'ib turishlar o'z xoxish istaklari bilan emas balki bosh miyalarida yuz bergan kasallikning natijasidir.

Aqliy zaifligi bo'lgan deyarli barcha bolalarda oddiy bolalarga nisbatan atrof-muhitga qiziqish yo'qligi yoki sezilarli darajada pasayishi, umumiy patologik inertsiya mavjud bo'lib, ular baland ovozda, asabiylashishni istisno qilmaydi.

Bolada tadqiqotchilar idrok etish jarayonining yetarli darajada rivojlanmaganligini qayd etadilar.

Qoidaga ko'ra, aqliy zaif bolalar asosiy nutqni faqat 4-5 yoshda o'zlashtiradilar. Nutqning grammatik tomoni kam rivojlangan.

Aqli zaif bolalarning xususiyatlarini tahlil qilish shuni ko'rsatadiki, ularning rivojlanishi biologik kamolotning kechikishi, aqliy infantilizm fenomeni va moslashuv qobiliyatlarining pasayishi bilan tavsiflanadi.

Ruxiy bilish jarayonlarning xususiyatlari.

Xotira: eslashning sekinligi; unutish tezligi; talqin qilishning noto'g'riligi; vaqti-vaqti bilan unutish; idrok etilgan materialni yuzaki, sayoz qabul qilish.

Diqqat: diqqatni rivojlantirishning past darajasi; aqliy faoliyatdagi tebranishlar; tez aqliy charchash va boshqalar.

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MAIN PROBLEMS IN THE DEVELOPMENT OF HYDROPOWER IN KHOREZM REGION

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Abstract

This article analyzes the main problems in the development of the hydropower sector in Khorezm region. The natural and geographical features of the region, dependence on the Amudarya, outdated infrastructure, distribution of water resources and the negative impact of climate change on hydropower production are considered on a scientific basis. Also, the importance of small and micro-hydropower plants, obstacles to their implementation and proposals for solutions to these problems are given.

Keywords:

hydropower, Khorezm region, Amudarya, small hydropower plant, infrastructure, water resources, climate change, environmental risk, energy source

Relevance of the topic Energy security is one of the main factors of economic and social development of any country. The demand for electricity in the Khorezm region is increasing year by year. This increases the need for renewable energy sources, in particular hydropower, in the region. Hydropower is an environmentally friendly, sustainable and economically viable source of energy. However, there are a number of problems in this area in the Khorezm region, and their in-depth study and development of scientifically based solutions are an urgent issue

Scientific and theoretical significance The article systematically analyzes the factors hindering the development of hydropower. Through a scientific theoretical approach, the natural resource potential of the Khorezm region, the possibilities of using river flows, and the efficiency of existing hydroelectric power plants are studied. This will serve as a theoretical basis for creating a sustainable and environmentally safe hydropower system in this region in the future.

Research methodology The following scientific methods were used in writing this article: Analysis and synthesis - assessment of the state of existing hydropower plants and water infrastructure; Statistical method - comparison of data on water consumption, the amount of energy produced, the level of consumption; Observation and expertise - ecological, economic and technical conditions in the region were studied; Comparison - the conditions of the Khorezm region were compared with the experience of other regions or countries.

Research results. Hydropower production in the Khorezm region depends mainly on the waters of the Amu Darya, and this resource has a transboundary nature. Since the relief of the region is not mountainous, the construction of large hydropower plants is economically inefficient. Water distribution is mainly carried out on the basis of the irrigation network, which limits its use in the energy sector. Outdated infrastructure, lack of sufficient investment, the negative impact of climate change, and a shortage of personnel further exacerbate the problems. The risk of ecological imbalance, especially water shortages in downstream areas, necessitates ecological planning of hydropower infrastructure.

Hydropower statistics for Uzbekistan

There are a total of 40 hydropower plants in the country with a total installed capacity of 1912MW: 307MW large, 512MW run-of-river, and 205MW mini, and 1400MW reservoir hydropower plants. Annual production is approximately 6.5 billion kWh, which is ~8.8% of the country's total electricity

1- table

Hydropower statistics for Uzbekistan

Statistical indicator.	Amount.	. Year or period.
Total installed hydropower capacity in the country:	1912MW (307MW large, 512MW run of river, 205MW mini, 1400MW reservoir)	2023
Annual production in Uzbekistan:	6.5 billion kWh (~8.75% of total production)	2022
Technically usable capacity:	27–27.5 billion kWh/year (active utilization rate ≈23–27%)	2023
Tuyamuyun HPP:	150MW capacity, annual production 571GWh	updated: October2024 (actually active since 1983))

Khorezm region - domestic hydropower production

As the concept of Khorezm has grown, hydropower plants within the region have their own potential: Tuyamuyun hydropower complex (along the Amu Darya) - capacity 150MW, annual production 571GWh. In January-August 2021, the amount of electricity generated by large industrial enterprises in the region amounted to 111.5 million kWh - this is 1.6% of the volume of industrial production.

Irrigation and economic impact of electricity

276,700 hectares of land are irrigated through the Toshsoqa irrigation system, which saves 31.6 million kWh of electricity, depending on the water of the Amu Darya. Out of 607 hydrotechnical structures, 318 were reconstructed, and 279 pumping units were abandoned - this is also a positive result from an ecological point of view.

Numerical analysis of development opportunities and problems

Uzbekistan's technically usable hydropower potential is 27 billion kWh per year, currently only ~23–27% is used. According to data for 2023, the country's hydropower potential has reached 2415 MW, which is an increase of 500 MW compared to 2019. The existing large hydropower plants in the Khorezm region are water-dependent, especially due to climate change - in spring and summer the water level on the Amu Darya River will drop sharply

2- table

Statistical conclusions

Indicator	Quantity
Large HPP production in Khorezm (8 months)	111.5 million kWh
Electricity saved through the Toshsoqa system	31.6 million kWh
Tuyamuyun GP complex production	571 GWh
Installed capacity - total in Uzbekistan	1912 MW
Technical useful potential	27 billion kWh/year
Used share	23–27%
Share of HPP in Khorezm within the industry	1.6%

Analytical commentary

Although the hydropower industry in Khorezm is still developing, this sector demonstrates optimal use of a very small part of the available resources (for example, the economic savings of Tashsoqa). Tuyamuyun GP, as a large

infrastructure, makes a significant contribution to the energy balance of the region. Based on statistical indicators, it is possible to increase the energy potential of the region by strengthening small (mini and micro) HPPs without waste. Acknowledgements I would like to express my deep gratitude to the leadership of the Ministry of Energy of the Republic of Uzbekistan, the Tuyamuyun Hydropower Plant Department, and the Khorezm Regional Water Management Department for their practical and informational assistance in conducting this research work. I also express my gratitude to the scientists and consultants of the Faculty of Geography and Natural Resources of Urgench State University, who provided statistical and technical information.

Conclusions and proposals

The following measures should be taken to develop hydropower in the Khorezm region: Expanding the possibility of obtaining energy from water flows through the introduction of small and micro-hydroelectric power plants; Modernizing infrastructure, reconstructing existing hydropower plants. Strengthening cooperation with local personnel training, research institutes; Implementing investment projects with international financial institutions; Implementing hydropower projects based on environmental expertise, ensuring environmental safety.

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CLINICAL AND LABOATORY CHARACTERISTICS OF PSYCHOEMOTIONAL DISORDERS IN CHILDREN WITH DIABETES MELLITUS

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Abstract.

This review article attempts to analyze and systematize the existing data in contemporary scientific literature on the etiology, pathogenesis, and clinical manifestations of cognitive and emotional deficits in children and adolescents with type 1 diabetes mellitus (T1DM). The publication is aimed at neurologists and pediatricians. Currently, type 1 diabetes in children and adolescents remains one of the most significant medical and social problems of modern society, requiring comprehensive and thorough study, followed by maximum optimization of therapeutic and rehabilitation measures. Chronic hyperglycemia underlies the development of cognitive and psycho-emotional disturbances in T1DM. The prevalence of neurological disorders in T1DM, according to some authors, varies widely—from 10% to 74%—and often depends on factors such as age at disease onset, disease duration, baseline glycemic levels, diagnostic criteria used, and others. Nervous system pathology in diabetes is observed in approximately 50% of pediatric patients with disease duration of 3 years or more, while up to 25-30% of children with recently diagnosed diabetes already exhibit established neurological changes.

Keywords: diabetes mellitus, children, adolescents, cognitive functions, emotions, glycemia, insulin.

Objective: To succinctly present markers of cognitive and emotional disorders in children with type 1 diabetes mellitus.

Diabetes mellitus (DM) is commonly understood as a group of endocrine disorders characterized by persistently elevated blood glucose levels.

As of early 2018, according to the International Diabetes Federation (IDF), diabetes was diagnosed in more than 424.9 million people worldwide, with projections estimating an increase to 628.6 million by 2045. Many countries report

a documented rise in the incidence of T1DM in the pediatric population. In children and adolescents, type 1 diabetes (T1DM), characterized by autoimmune destruction of pancreatic β -cells leading to absolute insulin deficiency, is the most prevalent form. It is noteworthy that, according to many researchers and recent statistical data, there is a steady increase in other types of diabetes among children and adolescents, with type 2 diabetes accounting for up to 15-17%, monogenic diabetes (MODY) for 2-6%, and others [1]. However, these figures should be considered tentative due to varying research capabilities and diagnostic challenges in this patient group [2].

At the 61st session of the United Nations General Assembly, the global significance of diabetes, both in adults and children, was emphasized. Delegates also highlighted the absence of optimal national-level algorithms in some countries for prevention, early diagnosis, and treatment of diabetes [3].

In 1989, according to the long-term goals of the St. Vincent Declaration, comprehensive support was decided for the development and implementation of constructive and effective preventive measures, as well as promotion of research aimed at reducing the number of severe diabetes complications [4].

In the Republic of Uzbekistan, as in other developed countries, there is a steady increase in pediatric and adolescent T1DM. According to statistics from the Republican Medical Scientific Center of Endocrinology of Uzbekistan, over 277,000 patients with diabetes were registered by 2020, including 3,280 under the age of 18.

As noted earlier, the persistently elevated glycemic levels characteristic of diabetes lead to functional and structural abnormalities in various organs and systems. Most notably and severely affected are the eyes, cardiovascular system, kidneys, and especially the nervous system. The impact of hyperglycemia on the formation, frequency, and severity of diabetes complications was identified and confirmed by researchers as early as the mid-20th century.

Previous studies involving repeated systematic assessments of glycemic control repeatedly demonstrated its critical role in reducing the risk of complications at early stages of the disease. For this reason, many authors recommend close monitoring of patients during the early disease stages, since early signs of complications due to inadequate glycemic control tend to progress and do not regress even if glycemic management improves later [5,6].

In recent decades, growing attention has been paid, rightly so, to the adverse effects of diabetes on the central nervous system (CNS). Earlier research highlighted that CNS pathologies stand apart among diabetes complications due to the complexity of innervation, resulting in heterogeneous clinical manifestations, diagnostic difficulties, and challenges in therapeutic and rehabilitative decisions [7].

Diverse nervous system dysfunctions in children and adolescents with T1DM have been repeatedly confirmed by epidemiological studies, emerging as early as 2 to 8 years after disease onset, or even sooner in some patients. The reported prevalence of neurological disorders varies widely from 10% to 74%, often depending on age at diagnosis, disease duration, baseline glycemia, diagnostic criteria, etc. [8,9]. Nervous system pathology in diabetes is noted in approximately 50% of pediatric patients with disease duration of 3 years or more, while up to 25-30% of children with more recent diagnoses already show established neurological changes. It should be emphasized that these figures mainly relate to diabetic neuropathy (DN), as for many years DN—specifically diabetic peripheral neuropathy—was considered the sole and most common nervous system complication in diabetes [10,11]. However, over recent decades, this view has been challenged by research demonstrating both direct and indirect effects of diabetes on structural and functional brain changes, primarily manifesting as cognitive impairments (CI). Furthermore, CI have been identified as the most common nervous system abnormalities in diabetes [12].

In 2002, N.N. Yakhno proposed the following definition of cognitive impairment: "Cognitive impairments are subjective or objective deviations in higher cortical functions, which may be organic or functional brain disorders of various origins, affecting optimal learning processes and the efficiency of professional, social, and daily functioning" [13].

Unfortunately, even with modern advanced medical technology, medicine cannot yet prevent the development of various diabetes complications. Most researchers attribute this to the late detection of brain abnormalities, caused primarily by (1) a blurred subjective clinical picture and (2) the subclinical and hidden nature of the pathology. Compared to peripheral nervous system damage, brain-related complications in diabetes remain a poorly studied aspect of neurodiabetology [14]. Moreover, fundamental questions about the mechanisms underlying cognitive impairments in children and adolescents with T1DM remain insufficiently explored, despite previous studies demonstrating various pathogenetic components of CI in this condition [15].

In summary, complications of diabetes, especially those affecting the brain, are highly prevalent and, moreover, represent an inevitable and predictable phenomenon requiring special monitoring.

Clinical Components of Cognitive and Emotional Impairments in Type 1 Diabetes

The so-called higher cortical or higher brain functions, or cognitive functions, are considered the most complex brain processes that play a key role in the meaningful perception and understanding of the world, as well as in purposeful interaction with it. These complex functions include:

- **Gnosis**, whose mission is the perception of information received from the sensory organs (vision, hearing, smell, touch, taste, and tactile sense);
- **Thinking**, which involves processing and analyzing incoming information, including the ability to synthesize, identify similarities and differences, produce logical conclusions, and form associative connections;
- **Memory**, which is responsible for storing and recalling acquired information;
- **Speech**, which enables the exchange of information;
- **Praxis**, meaning purposeful motor activity.

In children, the most important, or basic, cognitive components are formed by the age of 6–7 years, while the more complex ones develop between ages 12 and 15, continuing to improve throughout life. However, it is essential to take into account individual characteristics and capabilities of each person. It is also important to remember that the ability for social and everyday adaptation in today's rapidly changing world, especially in individuals with diabetes, directly depends on the state of their cognitive abilities.

Cognitive impairments, along with other neurological disorders, are among the most significant and, in many cases, the leading or sole manifestations of organic brain pathology with varying degrees of severity.

Another current issue is that a large number of patients with diabetes continue to live unaware (often due to medical staff's lack of professionalism) and, consequently, with untreated cognitive impairments. This persists despite many studies demonstrating the inevitable presence of cognitive deficits in patients with type 1 diabetes and all related consequences. This pathology's formation is even more significant when it occurs in childhood with type 1 diabetes.

One such study was conducted in 2015 by Duarte J.M.N., showing the consistent presence of cognitive pathology in diabetes, with manifestations in children and adolescents usually mild or moderate, but tending to worsen with age, disease duration, and poor glycemic control.

As noted earlier, cognitive deficit means deterioration compared to individual norms in one or more brain functions such as memory, attention, thinking, etc. In children, these can be caused by intellectual disability, brain underdevelopment, or injury around the time of birth or early postnatal period. In adults, cognitive impairments may develop due to a wide range of neurological diseases. This is

explained by studies showing that approximately 90% of the brain cortex area belongs to secondary and tertiary cortical centers responsible for regulating higher brain functions.

According to the literature, impairments of memory functions are among the earliest and most persistent symptoms of cerebral pathology developed in diabetes; accurate assessment of their nature and severity allows conclusions about the localization and extent of pathological processes in the brain.

Currently, classifications of cognitive deficits in diabetes are based on the severity of their manifestations. According to the most commonly used classifications — DSM-5 and the classification by N.N. Yakhno — cognitive changes can be divided into severe, moderate, and mild.

- **Severe cognitive impairments** are transient or persistent deviations characterized by high severity, significantly interfering with the patient's social, professional, and everyday life. These include intellectual disability, oligophrenia, dementia, as well as pathologies predominantly caused by genetic factors and brain developmental anomalies.

- **Moderate cognitive impairments** are acquired deviations in one or several areas of higher cortical function. Compared to severe impairments, these are less pronounced and do not cause loss of independence in daily life, although they exceed age norms. Difficulties arise only during the performance of the most complex and unfamiliar tasks.

- **Mild cognitive impairments** are neurodynamic manifestations involving impaired rapid switching between tasks, slower information processing, and working memory. Patients with mild impairments do not experience difficulties in professional, social, or daily activities. Such impairments may only be detected through subjective patient reports and detailed neuropsychological testing.

Many authors believe that cognitive dysfunctions as complications of diabetes mainly occur in mild and moderate forms, with severe impairments being rare. The most common manifestations include slowed information processing speed, memory and attention disorders, and executive dysfunction. Additionally, psychomotor response slows, intellectual flexibility decreases, and visual perception is impaired. It should be noted that hyperglycemia and hypoglycemia can have different impacts on cognitive deficit manifestations; for example, elevated glucose levels often affect verbal memory, whereas lowered glucose impairs visual memory.

Cognitive dysfunction in type 1 diabetes, especially in children and adolescents, can be detected at early stages of the disease. Opinions on this matter vary among authors, but there is consensus that cognitive deficit formation in type 1

diabetes is a 100% certainty and that deficits persist and progressively worsen with patient aging and longer disease duration.

In this study, we concluded that cognitive deficit in children and adolescents with type 1 diabetes begins to develop almost simultaneously with the onset of the main disease. This is caused by changes in brain metabolism and energy-producing processes, which in turn lead to impaired oxygen and glucose utilization by brain tissues—both essential for optimal brain function.

In addition to cognitive deficits, significant changes can also develop in the psycho-emotional and behavioral spheres of patients with type 1 diabetes. Clinical manifestations of these disturbances tend to emerge in two phases: the disease debut and the onset of possible complications. Most children exhibit moderately expressed emotional reactions upon diagnosis.

In other cases, reactions to the news of the disease are more pronounced, and examinations reveal initial changes in the psycho-emotional background [31]. Subsequently, approximately within nine months from the onset of the disease, the level of psychological activity returns to baseline [27].

There are quite a few publications on this issue in the literature. For example, some researchers who had the opportunity to observe children with type 1 diabetes almost from the first days of the disease concluded that the onset of type 1 diabetes itself does not have a significant impact on the psycho-emotional functioning of patients [32].

In 2019, it was established that a distinctive feature of the initial period of type 1 diabetes is the activation of pre-morbid personality traits, which are a determining factor in the reaction to the disease. Such reactions include: anxious suspicion; hyperbolic exaggeration of the treatment, or conversely, the formation of a frivolous attitude toward the disease. According to other authors, in individuals suffering from diabetes, the level of personal psycho-emotional changes at the early stages of the disease is much higher than in those who have been ill for a long time; this fact is explained by the organism's adaptive capacity to the disease. This leads to the formation of pathological personality changes — the emergence of asthenic and obsessive-compulsive disorders, increased irritability, and lack of restraint; in some cases, manifestations of depression with dysphoria may also appear.

Regarding the problem of psycho-emotional disorders in type 1 diabetes, it is worth noting that recently, more and more scientific works have been published devoted to the increasing risk among pediatric patients (especially adolescents) of developing psycho-endocrinological syndrome as described by Manfred Bleuler,

which in turn is considered the first stage of the manifestation of psycho-organic syndrome [33].

According to several studies on the psychological adaptation processes in children with type 1 diabetes, there is a steady increase in personal (trait) anxiety and situational or reactive anxiety. Referring to statistical data, it is seen that the overall prevalence of anxiety in children and adolescents with type 1 diabetes ranges from 15 to 42%. High rates of anxiety disorders in children and adolescents are primarily associated with the specific characteristics of diabetes itself, such as the constant need for injections and self-monitoring. Additionally, a connection is observed with parental overprotection, where parents assume controlling functions [34].

According to many authors, and in our opinion as well, the neuropsychological status of pediatric patients with diabetes is of great importance in determining the course and outcomes of the disease. For this reason, parameters of neuropsychological status can be considered additional, auxiliary factors influencing the effectiveness of therapy [35].

Thus, in pediatric patients with type 1 diabetes, there is a high frequency of cognitive impairments, and a direct positive correlation exists between early manifestation and the risk of brain involvement in the pathological process. Moreover, cognitive dysfunctions against the background of concomitant anxiety-depressive disorders can not only negatively affect good and long-term glycemic control but also significantly impact social activity, work capacity, and patients' quality of life.

Neurospecificity Peptides as Markers of Cognitive and Psychoemotional Disorders

Currently, the pathogenesis of cognitive deficit in type 1 diabetes in children and adolescents remains not fully understood [36]. Several studies have found correlations between higher cortical function impairments and the degree of glycemia, leading to the assertion that this metabolic disturbance is the primary cause of cognitive deficit formation in diabetes [37].

It is well known that neuropsychological testing is primarily used to assess the severity of cognitive deficit; however, these test results are subjective and therefore cannot provide a complete picture of the changes occurring in higher cortical brain activity. Because of this, specialists worldwide are continuously searching for specific markers of cerebral disorders in diabetes [38].

More than 25 years ago, research began on biochemical markers with diagnostic significance for various brain changes, but to date, an ideal biomarker has

not been found. Among many studied biomarkers, special attention is given to determining the levels of neurospecific proteins, which can indicate damage occurring in brain tissues in various pathologies, including diabetes, both in adults and children [39].

Many scientists believe that the ideal marker of cerebral disorders should have the following characteristics: high specificity; high sensitivity; should be released during irreversible neuronal damage and provide information about the nature of the damage; detectable in blood and cerebrospinal fluid (CSF) shortly after injury; easy to measure in laboratory conditions; and naturally reflect the dynamics of pathology and treatment effectiveness [40].

In the pathogenesis of diabetic encephalopathy, the authors consider that the main role is played by pathological permeability of the blood-brain barrier (BBB). This fact, i.e., disruption of BBB structural integrity and normal function, has been demonstrated in several clinical and experimental studies. Impaired BBB permeability during cognitive deficit formation leads to the appearance in blood and CSF of certain neurospecific proteins, in particular neuron-specific enolase (NSE) and protein S-100 [41].

According to the authors, deviations found in protein concentrations in various neurological diseases can be detected earlier than any structural changes. The particular interest in analyzing brain-specific proteins lies in the fact that they are assumed to participate in key nervous tissue functions: generation and conduction of nerve impulses, synaptic transmission and cell interactions, and actively participate in learning and memory processes.

Neuron-specific enolase (NSE) is an informative neurospecific protein representing a glycolytic enzyme — 2-phospho-D-glycerate hydrolase. It belongs to the enolase group and participates directly in the terminal stage of glycolysis, catalyzing the conversion of 2-phospho-O-glyceric acid to 2-phosphoenolpyruvate. It was first isolated in the 1970s-1980s. Its isoenzyme is $\gamma\gamma$ -enolase, also called neuron-specific enolase, which is abundantly found in neurons and importantly in neuroendocrine cells. Normal NSE levels in blood are less than 15 $\mu\text{g/L}$ [42].

From available literature sources, it follows that nowadays this brain-specific marker is widely used to diagnose acute conditions such as cerebral ischemia, brain hypoxia, and for studying the pathogenesis of neurological pathologies. Many authors emphasize its great importance in various nervous system diseases, such as epilepsy; Parkinson's disease; senile dementia; Alzheimer's disease; intrauterine brain damage; diabetes mellitus; brain tumors; traumatic brain injury (TBI).

Currently, the most studied biomarker is the neurospecific glial protein S-100. This protein is found in brain tissue complexed with calcium and consists of two subunits: α (10.4 kDa) and β (10.5 kDa). Its normal blood concentration is less than 0.2 $\mu\text{g/L}$. An important feature is that its content in the white matter is higher than in the gray matter, and in the cerebellum its concentration is greater than in all other brain structures [43].

Protein S-100 is found in cerebral cells such as astrocytes, oligodendrocytes, as well as ependymal, choroidal, endothelial, and lymphocytic cells of the brain.

Many authors consider, though presumably, that since this protein is widely present in various cell types, it serves as a marker of widespread blood-brain barrier damage rather than isolated glial damage [44]. When S-100 protein concentration is low, it exerts a neuroprotective effect, acting as a growth factor and differentiating neurons and glia, blocking NMDA receptors. If its concentration is elevated, it stimulates pro-inflammatory cytokines and leads to cell self-destruction (apoptosis or autolysis). At optimal concentrations, S-100 protein in the brain performs trophic functions, serves as a barrier protecting neurons from oxidative stress, and stimulates the growth of nerve processes. It also stimulates the NF-kappa B complex. Numerous studies focus on the clinic-pathogenetic role of S-100 protein and its significance in determining the severity and outcomes of neurological pathologies. For example, increased S-100 protein levels correlate with worsening auditory evoked potentials and unfavorable outcomes after aneurysm surgeries [45]. Also, moderate increases in S-100 concentrations in patients with depression are associated with delayed visual evoked potential peaks, which normalize during treatment, indicating the neurodegenerative significance of S-100.

In the study by Saleh A. et al. (2007), the clinical diagnostic significance of S-100 protein was demonstrated as an indicator of the severity of higher cortical dysfunction in patients with hepatic encephalopathy [46].

In the study by Novoselova M.V. et al. (2014), data were obtained showing statistically significant increases in the levels of the studied neurospecific proteins. Specifically, a positive correlation was demonstrated between these protein levels and glycated hemoglobin as well as fasting hyperglycemia, confirming the impact of carbohydrate metabolism decompensation in patients with type 1 diabetes mellitus [47].

As a result of all these identified disturbances related to the S-100 protein in various neurological pathologies, this protein has been included in the group of brain C-reactive proteins and is used as a neurospecific biomarker of central nervous system damage.

Conclusions. Thus, the development of complications in type 1 diabetes is inevitable, expected, and requires monitoring. The conducted analysis of domestic and foreign literature indicates the existence of various pathogenetic mechanisms underlying cerebral impairments in diabetes, leading to extensive and diverse neuropsychological, psychopathological, and neurological symptomatology.

There is no doubt that diabetes mellitus negatively affects cognitive function. However, the specific pathogenetic mechanisms contributing to the formation and progression of cognitive deficit in patients with diabetes, both adults and children, are not fully understood; the data are fragmented, limited, and sometimes contradictory. Most literature sources highlight the significant contribution of hyperglycemia; at the same time, many authors also point to the more significant influence of hypoglycemia. However, the role of major pathophysiological consequences of hyper/hypoglycemia, such as tissue (neuronal, glial) hypoxia, endothelial dysregulation, and activation of angiogenesis, remains insufficiently studied.

There is a lack of comprehensive studies elucidating the relationship between clinical, biochemical, and neuroimaging changes of the CNS in diabetes. The clinical and diagnostic significance of neuropeptides such as NSE and S-100 is not fully understood, despite their demonstrated informativeness in blood serum in many other CNS diseases. Objective diagnostic criteria for diabetic encephalopathy in childhood, including its earliest and preclinical stages, are absent.

Therefore, in addressing these problems, the issue of studying cerebral disorders in children and adolescents with type 1 diabetes using modern neuroimaging, psychometric, and biochemical methods that cover the main possible links in the pathogenesis of these disorders remains highly relevant. The obtained data could provide a basis for developing a set of measures for prevention, treatment, and rehabilitation of CNS disorders, which would contribute to optimizing current approaches to diabetes management and improving the quality of life for diabetic patients in the long term.

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**Suvli va suvsiz tuproqda sholi urug`larini unib chiqish xususiyatlari.
(laboratoriya sharoitida)**

**G.M.Amanboyeva – Abu Rayhon Beruniy nomidagi Urganch Davlat
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Annotatsiya. Ushbu maqolada laborotriya sharoitida suvli va suvsiz tuproqda sholining Alanga, Navota, Avangard, Lazurniy, Donjin, Diamond, Guliston, Sadaf, Chakvang, Nukus navlari urug`larini unib chiqish muddatlari va maysa hosil qilish xususiyatlarini o`rganish bo`yicha olib borilgan tajriba natijalari haqida ma`lumot berilgan.

Kalit so`zlar: Alanga, Navota, Avangard, Lazurniy, Donjin, Diamond, Guliston, Sadaf, Chakvang, Nukus.

Абстракт. В данной статье представлена информация о результатах экспериментов, проведенных по изучению сроков прорастания семян и особенностей формирования всходов сортов риса Аланга, Навота, Авангард, Лазурный, Донжин, Алмаз, Гулистан, Садаф, Чакванг, Нукус в лабораторных условиях на орошаемых и неорошаемых почвах.

Ключевые слова: Аланга, Навота, Авангард, Лазурный, Донжин, Алмаз, Гулистан, Садаф, Чакванг, Нукус.

Abstract. This article provides information on the results of experiments conducted to study the timing of seed germination and seedling formation characteristics of rice varieties Alanga, Navota, Avangard, Lazurniy, Donjin, Diamond, Guliston, Sadaf, Chakvang, Nukus under laboratory conditions in watered and non-watered soils.

Keywords: Alanga, Navota, Avangard, Lazurniy, Donjin, Diamond, Guliston, Sadaf, Chakvang, Nukus.

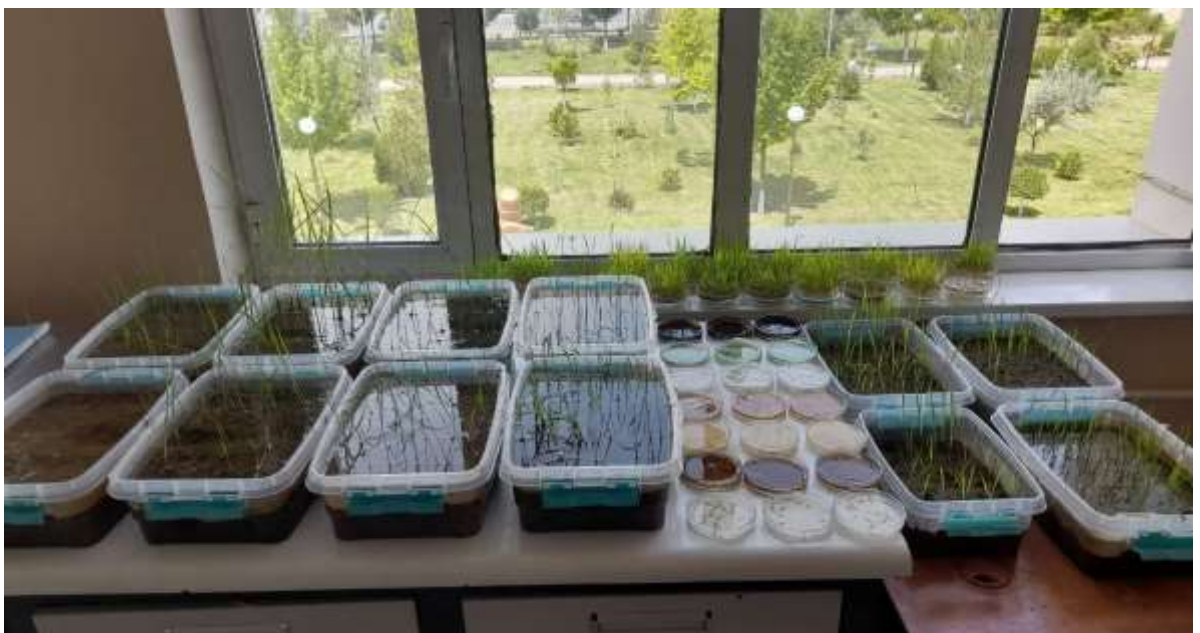
Kirish. Mamlakatimizda sholi hozirgacha sug`oriladigan yerlarda ekilib, iqlim o`zgarishlari uning hosildorligiga deyarli ta`sir ko`rsatmaydi. Qurg`oqchilik sharoitlarida ham talab qilinadigan agrotexnologiyalarni o`z vaqtida qo`llashga rioya qilinsa, undan yuqori hosil olish mumkinligi amaliyotda o`z isbotini topgan. So`nggi yillarda mamlakatimizda qishloq xo`jaligi mahsulotlarini yetishtirish, eksport hajmini oshirish, sohaga zamonaviy texnologiyalarni tadbiiq etish hamda suv resurslaridan oqilona foydalanishga alohida e`tibor qaratilmoqda [3]. Bugungi kunda yer yuzida aholi sonining ortishi, iqtisodiyot rivoji hisobiga tobora kuchayib borayotgan suv taqchilligi barcha ekinlar, shu jumladan, sholini yetishtirishda suv tejovchi texnologiyalarni joriy etishni taqozo etmoqda. Bunday sharoitda qishloq

xo'jaligida suv resurslaridan samarali va tejamli foydalanish, ayniqsa, ekinlarni sug'orishda suvni tejaydigan texnologiyalardan foydalanishni davrning o'zi taqozo etyapti [1].

Jahon tajribasida sholi yetishtirishning bir qancha usullari mavjud. Respublikamizda bu ekin aksariyat holda urug'i qadalgandan keyin uni suvga bostirib qo'yish texnologiyasi asosida yetishtiriladi. Bunda hosil pishib yetilgunga qadar sholipoyalardagi suv sathini 5-7, 10-12, 15-20 santimetr qalinlikda ushlab turish talab etiladi [4]. Bu esa yiliga 18-24 m³ suvni talab qiladi. Sholining rivojlanish davrida suvning belgilangan normadan ko'p sarf qilinishi hosildorlikni oshirmaydi, aksincha, bu holat, ayniqsa, hozirgi vaqtda xo'jaliklarga iqtisodiy jihatdan katta ziyon keltiradi. Shuning uchun sholi etishtirishda suv tejoychi texnologiyalarni takomillashtirish uchun ilmiy tadqiqotlarni olib borish muhim amaliy ahamiyatga ega [2].

Natija va munozara. Suvli va suvsiz tuproq sharoitida sholining turli navlari urug'ini unib chiqishi va maysa hosil qilishini o'rganish maqsadida tadqiqotlar olib borildi. Tadqiqotlarda 10 ta sholi navlari urug'idan foydalanildi. Tajribalar 3 ta variantda Abu Rayxon Beruniy nomidagi Urganch davlat universitetining "Botanika va o'simliklar fiziologiyasi" laboratoriyasida olib borildi. Urug' ekish uchun sig'imi 10 litrlik plastmassa va petri idishlaridan foydalanildi. Bunda 10 ta petri idishi, 10 ta suvli va tuproqli plastmassa idish va 10 ta tuproqli idishlar ishlatildi. Urug'lar har variantdagi idishlarga bir xil vaqtda (23.05.2025) va bir xil temperaturada (o'rtacha 28°C) ekildi.

1-rasm. Sholi navlarini urug'larini unuvchanligini laboratoriya sharoitida o'rganish.



Tajribaning 1-varianti nazorat variant bo`lib bunda har 10 ta nav sholining urug`i suvga 2-soat bo`ktirilib keyin petri chashkasiga ekib qo`yildi, 2-variantda 10 ta nav urug`i suvga 2 soat bo`ktirilib keyin 3-4 sm suv bostirilgan tuproqli idishga ekildi, 3-variantda har 10 ta nav urug`i suvga 2-soat bo`ktirilib keyin suvsiz tuproqli (topga kelgan) idishga ekildi.

Natijalar tahlil qilinganda ,1-variantdagi urug`lar 3 kunda to`liq unib chiqdi, unib chiqishi 94.6 % ni tashkil qildi va 7 kunda 4-5 sm uzunlikdagi maysa hosil qildi,

tajribaning 2-variantida urug`lar 4 kunda to`liq unib chiqdi, unib chiqishi 88.6 % ni tashkil qildi va 7 kunda 7-8 sm uzunlikdagi maysa hosil qildi, tajribaning 3-variantida urug`lar 6 kunda to`liq unib chiqdi, unib chiqishi 98.2 % ni tashkil qildi va 7 kunda 3-4 sm uzunlikdagi maysa hosil qildi.

Xulosa. Yuqoridagi tajribalar natijalari tahlil qilinganda, tuproqqa ekilgan sharoitda ham sholi navlari urug`lari yaxshi unib chiqdi va maysa hosil qildi. Unib chiqish intensivligi barcha navlarda o`rtacha 98.2 % ni tashkil qildi. Bundan ko`rinib turibdiki bu tadqiqot natijalarini dala sharoitiga tadbiq qilish va tajribalarni davom ettirish mumkin.

Foydalanilgan adabiyotlar.

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Sociolinguistic relations in translation process

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I Introduction

Sociolinguistic the study of language the relationship between language and society. It means that Socio means social or related to society and Linguistics means the science of language. They are concerned with identifying the social purposes of language and the means through which it is utilized to express social meaning. They are interested in understanding why we speak differently in various social circumstances. A great deal of knowledge about language functioning, social interactions in a society, and how people express and build parts of their social identity through their language may be learned by observing how people use language in various social circumstances

Sociolinguistics provides a unique insight into the way language is used in society, offering a valuable perspective on how language shapes and is shaped by the social and cultural context in which it is used. However, it is important to note that sociolinguistic research can be limited in its scope, as it does not always take into account the complexities of language use in different contexts. As is the case that language cannot be separately with human society. I can say from human daily activities that almost never stop communicating with their life or their environment, it also becomes primer human society can help their life. Translation is an important tool for understanding the complexity of sociolinguistic relationships between different cultures, but it can also lead to misunderstandings and misrepresentations when used without careful consideration. As well as in researching about relation between language and society, linguistic had support to solve the issues in language social such as creation, renovation or annihilation of language, until they appeared some thesis in linguistic that one of them can we call as sociolinguistics.

Language isn't always best a way of conversation or dialect, it can be assist to identify social groups in addition to ancient and cultural backgrounds of a given community.

Maximum translation studies purpose to acquire two dreams – semantic equivalence and cultural accuracy. But, translating sociolinguistic statistics can go past these boundaries, as it can help enhance the first-class of a translated text in

several ways. First off, through providing an analysis of how the target language capabilities within a particular context, we are able to decorate our knowledge of the way numerous linguistic features paintings. Secondly, reading the ways wherein idiosyncrasies in a single culture have an effect on how phrases are used inside any other way of life provides treasured insights into go-cultural translation. Subsequently, studying the way translators technique unique sociolinguistic problems can assist us to discover excellent exercise with regards to catering for particular language wishes in translations.

The main aims of sociolinguistics in translation are to understand the effect of translation on communique, tradition, and social structure. Via analyzing how translation impacts these areas, we will higher recognize how language operates in society.

II. Literature review

The concept of “ Sociolinguistic” has become popular since the 19th century. The first witnessed use of the word Sociolinguistics it was by Thomas Callan in the heading of his 1939 article was published in Man in India which name article was "Sociolinguistics in India " Along with increased interest in the subject, there appears to be little agreement in the literature on what “Sociolinguistic” actually is and, therefore, there are different definitions and perspectives on this topic. Sociolinguistics is the study of language as it relates to society. Socio means social or related to society, and Linguistics means the science of language.

The significance of Sociolinguistics as a vital element of translation process has long been a subject of debate in the literature. The majority of scholars and students in the field might be arranged to agree that there may be a natural marriage between linguistics and translation despite the many turns and turns of discussions surrounding translation (Şerban 2013: 216).

The idea of the 'audience' for communicative acts worries both sociolinguistics researchers and intercultural language mediators, regardless of the length, complexity, or degree of automation in the development of the source message.

The definition shows that several philosophical differences in positioning to the relative between language and society change and they created a shift in perspective, it happens several European linguistic culture and traditions for instance: Spain, German, France and also Italy.

PREVIOUS STUDIES

Some define Fishman in Wardhaugh (2010:16) says that sociolinguistics should encompass everything from considering “who speaks (or writes) what language (or what language variety) to whom and when and to what end”.

One of the most common definition from Crystal(1985/2009 as cited in FM Federici-20170) Sociolinguistics as a discipline emerged in the late 1960s as a result of considerable work by English-speaking linguists, hence it is necessary to begin with a definition of sociolinguistics. As summary, De Sandor, Hervey &H Higgins (2002, p 165 as cited in Meriem Benlakader) stated that translation can be defined as “The translation will not be smooth and will not sound natural. The second one is translating a sociolect in a strandart language . Another often referred to definition of Nida (2012 as cited in Nida), linguistics and sociolinguistics are helpful perspectives on the many functions of language. While sociolinguistics is more interested in the uses of language and the values connected to those uses, linguistics is made up of the two complementary ways of perceiving language. In light of this, sociolinguistics examines the many levels or registers of language, from highly ritual to intimate, rivalry between dialects and between languages, the emergence and disappearance of languages, the functions of jargon, slang, and verbal innovations, gender disparities, and the misuse of language. According to Nida can be defined of translation and sociolinguistics “A translator or interpreter would be more capable of understanding how sociolinguistic features become relevant to the entire range of communication, such as phonology, lexicon, syntax, and discourse, once they overcome the mistake of thinking language as merely words and grammar and after they recognize the wide range of functions that language performs. (Nida, 2012 as cited in Erika Rose & B. Santos - 2022).

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3.Methods

Collecting date

This research paper shows the systematic review of Sociolinguistic relations in translation process. While sociolinguistic methods have proven to be effective in understanding language use in a social context, they are limited in their ability to capture the full complexity of language use. Furthermore, these methods can be problematic as they can be used to reinforce existing power structures and perpetuate inequality.

Moreover, Semi-structured interview was intended to be conducted using the Sociolinguistic questionnaire (SLQ). In a semi-structured interview, new questions might be added as the interview progresses in response to the interviewee's responses. The benefit of such an interview over a recounting assignment is that the interviewer may steer the conversation toward a subject that the participant is more interested in and familiar with, giving them an opportunity to offer their best effort. People are only allowed to use the terminology that is specified in a tale or film retelling exercise, which they may not be comfortable with.

A spontaneous discussion was also thought to be the most similar to how those participated in the experiment utilized Spanish on social media, which is marked by a lot of oral feedback and practice and little written practice. The main database was Google Scholar and JSTOR

Moreover, There are have also another method which are qualitative research approach in order to define relationships and look at their causes and effects.

In order to press ahead with this investigation, the researchers first compiled a variety of reviews of relevant literature.

Out of the various reviews of related literature that were gathered, the researchers secondly determined the common theme. Third, depending on the overarching subject of the study of relevant material acquired, the researchers came up with potential names for this research piece. Following the title's approval, the researchers collected and studied various articles related to the title in preparation for the final draft of this research article. Through this investigation, the researchers discovered that translating and analyzing are sociolinguistic activities. Language mediations by interpreters and translators take place as a regular element of social norms and are governed by social and linguistic behavioral norms that change over time.

SURVEY

The SLQ, which was done as a semi-structured interview, served as a source of sociolinguistic and oral data. Following that, lexical diversity, hesitation, and pause phenomena were accessed using the oral data. The metrics used in this study were based on earlier attrition research (Schmid & Beer Fägersten, 2010). They concentrated on filler pauses, false beginnings, corrections, repeats, and reformulations as well as their frequency and distribution.

Table 1.1 Oral data measures

Frequency marker	Distribution	Lexical
	disfluency	Diversity
	markers	

Filled Pauses	Art	
	Adj	D
False Starts	Adv	
	Noun	
Corrections	Etc	
Repetitions		
Reformulations		

Disfluency markers' distribution, or whether they tended to appear primarily in front of a certain section of speech element or were evenly dispersed, was also evaluated in addition to their frequency.

It was anticipated that lexical access problems could show up as an increase in the hesitation and disfluency phenomena that occur before lexical elements. Lexical variety was another metric that was determined using the oral data. Lexical diversity gauges a person's vocabulary's diversity or depth. In contrast to someone who expresses herself using a wide variety of words and many synonyms, a speaker with a small vocabulary has low lexical diversity. These metrics have been shown to be particularly pertinent to the investigation of language attrition in earlier studies.

According to a research by Schmid and Beers Fägersten (2010), disfluency phenomena can fluctuate during the course of L1 attrition, and the placement of disfluency markers may indicate issues with certain grammatical characteristics in addition to lexical retrieval issues.

IV. Result and discussion

Speacific result of project

The Sociolinguistics approach to Translation can defines what is translatable or what is acceptable to be translated using ways filtering, selection , and also censorship.

According to sociolinguistics, the translator is merely a by-product of society, and our translations reflect this sociocultural context. The limitations of sociolinguistics in translation were highlighted by this systematic review, which also highlighted the need for additional research on sociolinguistics and cultural approaches in translation and translation studies.

The limits of sociolinguistics in translation were highlighted by this systematic review, which also highlighted the need for more research on sociolinguistics and cultural approaches in translation and translation studies.

Since the Cultural Turn and Sociolinguistics are seen as new viewpoints in the translation field, further research may identify the tactics and gender-related issues. There are many different gender-related criteria to choose from, which may lead to translation. Compared to the selection of expressions that are naturally associated with a particular gender, gender is more vague and complicated. Ideologies must be addressed in order to address gender in translation.

The lexical variety, frequency of hesitation and disfluency markers, and location of these indicators within the phrase were all examined in the oral data. Additionally, word counts of the various word classes generated by each group (for the CS analysis) and for the Local subsample at each period of data collection were investigated. Based on prior studies on first- and second-language attrition, it was anticipated that lexical access problems would emerge in oral output in a variety of ways if attritional processes were occurring. (TABLE 1.1)

1) A decline in lexical variety within subjects will be seen over time in the Local Government statistics. The CS data will fall for all groups; the baseline group will have the greatest result and the lowest result.

2) The disfluency phenomenon in the local government statistics will get worse with time. In the CS data, disfluency and hesitation indicators will be higher in all groups than in the baseline group.

FINDINGS

All of the measures that were investigated showed signs of attritional processes, according to the findings of the studies, including Local Government (LG) and CS. In the LG analysis, attrition signs could be seen in practically every participant's performance.

Even though there was a larger prevalence of Process System terms in the CS data, it was not determined to be significant. However, compared to the baseline group, the group with the longest LoA generated significantly more Foreign Language items per 100 words.

To better comprehend the nature of translation, the future paradigm will necessitate a clearer understanding of the inner interconnections between different techniques, as well as a focus on the translator's conduct. The philosophies of translators are parallel and fall under the same fundamental purpose, which is to know what method best fits when translating a text, which is either to keep the flavor of the foreign or to adapt to the language of the reader.

This category includes all qualitative studies of language as spoken in its social environment, with the ultimate objective of improving linguistic theory and developing our knowledge of the nature of language.

In sociolinguistic fieldwork and field methodologies, the search for the vernacular (naturally generated) speech has mostly focused on survey and ethnographic research (TABLE 1.2)



Table 1. Directions in Language and Society

Discipline	Objectives	Methodology	Method/Technique/Tool/Data	Domains
<i>Ethnomethodology</i>	Sociological	Qualitative	Ethnographic fieldwork Sampling Natural Speech	Practical reasoning, common-sense knowledge
<i>Sociology of Language</i>	Sociological and Linguistic	Qualitative	Survey fieldwork Ethnographic fieldwork	Language planning, bilingualism, diglossia, lingua franca, verbal repertoire, code-switching, multilingualism, language loyalty, linguistic ecology, etc.
<i>Social Psychology of Language</i>	Sociological and Linguistic	Qualitative and Quantitative	Survey fieldwork Matched-guise technique Attitude rating scales Mental map labeling Language boundary/difference perceptions Dialect imitation	Folk Linguistics (Perceptual Dialectology), attitudes and ideologies, Language loyalty, linguistic accommodation, the aesthetics and prestige of dialects, gender differences, dialect distance, nativeness, etc.
<i>Anthropological Linguistics</i>	Sociological and Linguistic	Qualitative	Ethnographic fieldwork Sampling Natural Speech	Kinship systems, linguistic taboo, linguistic relativity, globalisation, nationalism, language commodification, ideology, language and political economy, etc.
<i>Discourse Analysis</i>	Sociological and Linguistic	Qualitative	Ethnographic fieldwork Sampling Natural Speech	Turn-takings, interruptions, silence, communicative competence, discourse markers, etc
<i>Ethnography of Communication</i>	Sociological and Linguistic	Qualitative	Ethnographic fieldwork Sampling Natural Speech	Conversation, communicative competence, writing systems, insults, irony, cross-cultural communication, etc.
<i>Language and Gender</i>	Sociological and Linguistic	Qualitative and Quantitative	Survey fieldwork Ethnographic fieldwork	Androcentrism, sexism, language and equality, etc.
<i>Dialectology</i>	Linguistic	Quantitative	Survey fieldwork Questionnaires Interview Natural Speech	NORMs, idiolects, dialect boundaries, dialect areas, pure dialects, isoglosses, bundles of isoglosses, transition areas, focal areas, relic areas, wedges, dialect continua, Neogrammarian Hypothesis, Family-tree Theory, Wave Theory, dialectometry, etc.

V. Conclusion and recommendation

In the study of translations, sociolinguistics is crucial. Since each person's culture is unique from another's, translating a text from one target language to another becomes a body of work. If the text is translated without taking sociolinguistics into account, social factors become a significant issue.

This disciplinary change has made it necessary to view and treat sociolinguistic components of translation theory critically through the lenses of socially prescribed communicative actions, social translation norms, and the translation process reflecting the social hierarchy of society. The sociology of translation has changed with time, so to speak.

José Lambert (1993) predicts a fundamental shift in the connection between culture and translation with the rise in the requirements of multinational corporations and international organizations. According to him, it is improper to investigate cultural differences within the context of translation studies, limiting them to the issue of translating foods, drinks, dances, different kinds of currency, etc., i.e. realia. He views translation studies as a subset of cultural study, which is the larger notion. The types of documents that international organizations, multinational corporations, and international publishing houses translate and do not translate, as well as the instructions—either explicit or implicit—that they provide to translators, should always be considered as part of the larger network of social-cultural norms.

Sociolects are an integral aspect of daily life; they serve as identification markers since they reveal a speaker's socioeconomic class, ethnicity, age, gender, and occupation. They frequently draw attention to social distinctions, emphasize personal reality, and have the capacity to uphold stereotypes, clichés, and prejudices based on factors such as ethnicity, gender, religion, and socioeconomic status. Sociolect translation is a difficult task since it involves more than just word transfers and substitutions. It necessitates strong linguistic, social, and cultural roots.

I think it would be better create strategies to handle problems with translating linguistic conventions, cultural norms, or social practices.

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ЭПИДЕМИОЛОГИЧЕСКИЕ ПОКАЗАТЕЛИ ИНСУЛЬТА В РЕСПУБЛИКЕ УЗБЕКИСТАН ПО ДАННЫМ ЕВРОПЕЙСКОГО РЕГИСТРА RES-Q

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Аннотация. Работа реестра Res-Q, начавшаяся со сбора данных по инсульту, предоставляет бесплатный и удобный доступ для всех центров по лечению инсульта, что способствует улучшению качества медицинской помощи. Реестр позволяет собирать основные показатели качества, такие как время госпитализации, оценка тяжести инсульта по шкале NIHSS, анамнез применения аспирина и антикоагулянтов, а также информацию о проведенных операциях реканализации. Сбор данных осуществляется в течение одного месяца в году, что минимизирует нагрузку на медицинские учреждения. Основными эпидемиологическими характеристиками инсульта являются заболеваемость, смертность и летальность. Заболеваемость определяется как частота новых случаев инсульта на 1000 жителей за год, смертность — как количество летальных исходов на 1000 жителей, а летальность — как процент случаев, закончившихся смертью, относительно всех зарегистрированных случаев. Для различения первичных и повторных инсультов важна информация о времени их возникновения: первичный инсульт фиксируется в течение 28 дней с момента первого эпизода, после чего случаи считаются повторными.

Ключевыми аспектами для получения качественной информации о инсульте являются полнота и достоверность собранных данных. Информация в регистр поступает из различных источников, включая скорую помощь, поликлиники, стационары, бюро судебно-медицинской экспертизы и ЗАГС. Экспертная оценка медицинской документации, проводимая специалистами, позволяет повысить точность диагностики инсульта. Однако ограничение работы только на основании медицинских документов может негативно сказаться на качестве собранной информации. Таким образом, реестр Res-Q представляет собой важный инструмент для мониторинга и улучшения эпидемиологической ситуации с инсультом в Узбекистане.

Регистрация больных инсультом в Узбекистане по регистру INSULT RES-Q была инициирована с 1 января 2021 года и продолжалась до 31 декабря 2022 года. В ходе исследования было зарегистрировано 2360 случаев

инсульта, из которых 1371 (58,1%) составили мужчины и 989 (41,9%) — женщины, со средним возрастом заболевших $59,6 \pm 6,4$ лет. Среди всех зарегистрированных случаев 3,7% приходилось на молодую возрастную группу (18-44 года), 36,3% — на среднюю (45-59 лет), 38,4% — на пожилую (60-74 года) и 21,6% — на старческую (75-90 лет). Низкий уровень регистрации инсульта в старшей возрастной группе может быть обусловлен гиподиагностикой из-за стертых симптомов.

Среднегодовая заболеваемость инсультом на 1000 населения в 2021 году составила 1,4, что снизилось до 1,02 в 2022 году, однако это снижение не отражает истинной картины заболеваемости, а связано с пандемией COVID-19, из-за которой многие пациенты избегали обращения за медицинской помощью.

Таким образом, реестр INSULT RES-Q представляет собой эффективный инструмент для выявления новых и повторных случаев инсульта, а также для определения ключевых эпидемиологических показателей, таких как заболеваемость, смертность и летальность. Полученные данные могут быть использованы органами здравоохранения для планирования медицинского обслуживания и разработки научно обоснованных прогнозов по профилактике инсульта, учитывающих факторы риска, структуру заболеваний и осведомленность населения.

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КЛИНИКО-НЕВРОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ДИНАМИКИ ПОКАЗАТЕЛЕЙ ЭМОЦИОНАЛЬНОЙ СФЕРЫ У ПАЦИЕНТОВ ПОДРОСТКОВОГО ВОЗРАСТА ПРИ МИГРЕНИ

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Актуальность. Мигрень представляется достаточно тяжелой перманентной патологией, характеризующейся приступами головной боли, которую отличают пульсирующий характер, выраженной степени интенсивность, нарастающая от стресса, усталости, физической нагрузки, и часто сопровождающаяся тошнотой, рвотой, свето- и звукобоязнью [1]. Наряду с изучением эпидемиологических, генетических характеристик мигрени у детей особую актуальность приобретает анализ аспектов, которые связаны с ее клинико-психологическими особенностями, вызывающими наиболее выраженные нарушения адаптации [2].

Цель исследования. Сопоставить данные литературных обзоров о современных понятиях эмоциональных нарушений при мигрени у подростков.

Материал и методы. В данной публикации представлены абстракты, обзоры клинических исследований, научных статей за последние годы.

Результаты и их обсуждения. Дети, также, как и взрослые, очень часто ассоциируют цефалгию со стрессом, при этом подростки, особенно девочки, являются более восприимчивыми к нему. Известно, что стресс и другие триггеры тесно связаны с приступами мигрени у восприимчивых пациентов, а тревога в свою очередь влияет на тяжесть, порог возникновения и частоту головных болей. До 11–13 лет мигрень чаще выявляется у мальчиков, однако в подростковом возрасте нарастает ее представленность у девочек, причем к 15-годам её в три раза чаще обнаруживают в женской популяции [1]. Показано, что плохое психологическое здоровье опосредует связь между наличием хронических соматических заболеваний в детском возрасте и формированием депрессии в более старшем возрасте, это непосредственно указывает на обязательность определения психологических характеристик на ранней стадии заболевания у ребенка. Отмечено, что мигрень с аурой в большей степени ассоциирована с риском формирования депрессии, что

вероятнее всего связано не с патофизиологическими механизмами мигрени, а с более тяжелым эмоциональным отношением к переносимому приступу мигрени с аурой, и именно в подростковом возрасте чаще выявляется мигрень с аурой чем без неё.

Выводы. Результаты представленного исследования доказывают, что мигренозные приступы оказывают весьма существенное влияние на психоэмоциональное состояние пациентов подросткового возраста. Это указывает на необходимость психологической поддержки подростков с мигренью, особенно при наличии депрессивных и тревожных состояний.

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LINGUOCULTURAL CODING OF THE COLOR CONCEPTS 'WHITE' AND 'BLACK' IN THE ENGLISH LANGUAGE: SEMANTIC STRUCTURES AND CULTURAL SYMBOLISM

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Abstract: This article explores the semantic structures and cultural symbolism of the color concepts “white” and “black” within the English language, examining how they function not only as linguistic signifiers of visual phenomena but also as powerful tools for encoding values, beliefs, and social norms. Drawing upon cognitive linguistics and cultural studies, the study illustrates how these seemingly simple color terms reflect complex dichotomies such as good versus evil, purity versus corruption, and life versus death. By analyzing idiomatic expressions, metaphorical frameworks, and historical usage, the article reveals the deep-rooted associations of “white” and “black” in English-speaking cultures and their implications for intercultural communication and social understanding.

Keywords: color symbolism, white, black, linguocultural, metaphor, idioms, English language, semantic oppositions.

The color concepts “white” and “black” in the English language represent more than just descriptive terms for visual perception. They serve as powerful symbols, culturally loaded with meanings that extend into the moral, social, and psychological dimensions of human life. The opposition between white and black is one of the oldest and most enduring binary oppositions in Western culture, rooted in ancient traditions and reinforced through religious texts, literature, and everyday speech. This opposition has developed into a conceptual framework through which speakers of English interpret the world around them, making these colors not just physical phenomena, but cultural codes with strong emotional and ideological charge.

White, in the English linguistic tradition, is frequently associated with purity, innocence, light, and goodness. These connotations are evident in numerous idiomatic expressions and metaphors. A “white lie,” for example, is a harmless or trivial untruth told to avoid hurting someone’s feelings, thus connoting a morally excusable action. Similarly, “white magic” is magic used for benevolent purposes, and a “white knight” is someone who comes to the rescue, typically in a business or romantic context, symbolizing a savior or hero. These expressions demonstrate how the concept of white is embedded in the cultural imagination as a force for good, moral integrity, and virtue. The association between white and cleanliness is also

linguistically represented; phrases like “white as snow” emphasize physical and moral cleanliness, drawing on Biblical and literary allusions to innocence and sinlessness.

Moreover, white carries institutional and professional connotations in English-speaking cultures. The “white coat” worn by medical professionals signals hygiene, trustworthiness, and authority, reinforcing the societal perception of white as a marker of safety and credibility. The term “white-collar worker” denotes individuals employed in office settings, often associated with mental labor, respectability, and economic stability. These uses of white reinforce its role as a symbol of order, structure, and legitimacy. Even in political contexts, “white papers” are official reports issued by governments to explain policy, again suggesting clarity, openness, and trust.

On the other hand, black occupies the opposite end of the cultural and linguistic spectrum. It is often linked with negativity, secrecy, danger, and moral corruption. The term “blackmail” implies coercion and unethical behavior; the “black market” refers to illegal economic activity; and a “blacklist” is a record of individuals or entities deemed undesirable or banned. These expressions not only reflect but also perpetuate cultural associations of blackness with deviance and illegitimacy. Furthermore, the phrase “black sheep” indicates a person who is a disgrace to their family or group, reinforcing black’s connotation with otherness and exclusion.

Black is also commonly associated with death, mourning, and the unknown. In many English-speaking countries, black is traditionally worn at funerals, symbolizing grief and loss. Darkness and night, both characterized by the absence of light, have long been metaphorically aligned with ignorance, fear, and evil in English literature and folklore. Phrases such as “black mood,” “black day,” and “black heart” convey emotional or psychological states that are deeply negative. These metaphors contribute to the conceptual framework in which black represents internal chaos, emotional disturbance, and spiritual peril.

However, the cultural coding of black is not universally negative. In certain contexts, black is re-signified as powerful, elegant, and even prestigious. For instance, formal events are described as “black-tie affairs,” and “the little black dress” is considered a staple of fashion sophistication. The color black in branding and design is often associated with luxury, strength, and modernity. These more recent connotations complicate the traditionally negative semantic structure of black and point to the evolving nature of color symbolism in a globalized and postmodern world.

It is also important to consider the racialized dimensions of the white-black dichotomy in English. The historical use of “white” and “black” to describe people’s racial identities carries deep and often troubling cultural implications. The privileging of white as good, pure, and superior, and black as evil, dirty, or inferior, cannot be divorced from the legacy of colonialism, slavery, and systemic racism. Contemporary discourse around race and identity continues to grapple with these symbolic structures. Movements like “Black Lives Matter” actively seek to challenge and transform the negative connotations historically attached to blackness, advocating for the recognition of black identity as dignified, empowered, and fully human. In this way, language becomes a site of cultural struggle and potential transformation.

In conclusion, the color concepts “white” and “black” in the English language reveal a rich interplay between language, thought, and culture. Far from being neutral descriptors, these colors encode deeply entrenched values, emotions, and social structures. While traditionally functioning as opposites in moral and symbolic systems, recent social and linguistic developments are challenging and reshaping these associations. Understanding the linguocultural coding of color terms is therefore essential not only for linguistic analysis but also for fostering cultural awareness, empathy, and more inclusive forms of communication. As language evolves, so too do the meanings and implications of even the most basic color terms, reminding us of the power of words to reflect and reform our shared realities.

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METHODOLOGICAL FOUNDATIONS OF THE COMPARATIVE STUDY OF CONCEPTS IN LANGUAGES OF DIFFERENT SYSTEMS

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Abstract: This article explores the methodological foundations necessary for the comparative study of concepts in languages that belong to different linguistic and cultural systems. The complexity of conceptual analysis across languages lies in the interconnection between language and culture, where each concept reflects not only a lexical meaning but also a culturally specific worldview. This research underscores the importance of an interdisciplinary approach that integrates linguistics, cognitive science, cultural studies, and translation theory. The aim is to identify principles and tools that allow for accurate comparison of concepts and their semantic fields while recognizing their culturally bound characteristics. The study emphasizes that the success of conceptual comparison depends on a careful balance between linguistic universals and culturally determined semantic uniqueness.

Keywords: comparative linguistics, concepts, methodology, linguistic worldview, cognitive linguistics, cultural specificity, semantics.

The comparative study of concepts in languages of different systems presents a challenging yet fundamentally important area of inquiry within modern linguistics and cognitive science. Concepts, as mental units of knowledge and experience, are not merely lexical items but are deeply embedded in cultural practices, social institutions, historical memory, and the lived realities of speakers. When comparing concepts across languages—especially those that belong to different typological, historical, or cultural traditions—it becomes necessary to develop a rigorous methodological foundation that accounts for both linguistic and extralinguistic factors. This is particularly true when analyzing abstract or culturally loaded concepts, which do not always find direct equivalents across languages.

Concepts, in the context of linguistic analysis, function as cognitive categories that organize our understanding of the world. They are manifested through language via lexical units, idioms, metaphors, and discursive practices. However, the way concepts are structured and verbalized differs significantly depending on the cultural and cognitive background of a language community. For example, the concept of “freedom” may exist across many cultures, but its interpretations—legal, moral, individualistic, or collective—can differ widely depending on socio-political history and cultural norms. This variability makes cross-linguistic conceptual comparison

not only possible but also deeply necessary in understanding how different peoples perceive and articulate their world.

A foundational methodological principle in the comparative study of concepts is the recognition of the cultural embeddedness of language. Language is not simply a neutral vehicle for transmitting universal meanings; rather, it reflects the specific values, experiences, and cognitive frameworks of its speakers. As a result, any attempt to compare concepts across languages must begin with an analysis of the linguistic worldview—or linguistic picture of the world—that each language encodes. This involves examining how a language categorizes reality, which domains it emphasizes or suppresses, and how it structures conceptual oppositions. The Sapir-Whorf hypothesis, although contested, laid the groundwork for appreciating the influence of language on thought, and modern cognitive linguistics continues to explore this relationship through empirical and theoretical models.

In methodological terms, several analytical tools can be employed in the comparative study of concepts. These include componential analysis, which decomposes lexical meaning into semantic features; corpus analysis, which identifies usage patterns in authentic discourse; and metaphor analysis, which reveals how abstract concepts are understood through embodied experience. Conceptual metaphor theory, developed by George Lakoff and Mark Johnson, is particularly useful in cross-linguistic studies, as it shows how different cultures may use different metaphorical schemas to understand the same abstract domain. For instance, while “argument” may be conceptualized as “war” in English (e.g., “He attacked every weak point”), in other cultures it might be structured more as a “dance” or “negotiation,” leading to different linguistic expressions.

Another important methodological approach is the study of associative fields and conceptual frames. Associative fields involve the network of words, phrases, and ideas commonly linked to a concept within a given language. These can be accessed through techniques such as associative experiments, dictionary analysis, and native speaker interviews. Conceptual frames, as introduced by Charles Fillmore, describe the broader scenario or structure in which a concept functions. By comparing the frames associated with a given concept in two languages, researchers can identify both shared and divergent elements of meaning, leading to a more nuanced understanding of conceptual equivalence and difference.

Translation theory also offers valuable insights for the comparative study of concepts. Translation involves more than lexical substitution; it requires a deep understanding of how meaning is constructed and perceived in each language. Concepts that appear similar on the surface may carry different emotional, social, or

ideological weight in their respective cultures. The translator's task, therefore, is not simply to find formal equivalents but to mediate between conceptual systems. The process of translation reveals hidden asymmetries and cultural gaps, making it a rich source of data for conceptual analysis.

When comparing concepts across languages of different systems—such as Indo-European and Turkic, or Sino-Tibetan and Afro-Asiatic—the typological and grammatical differences must also be considered. Languages with highly inflected morphologies, like Russian, may express conceptual nuances through word endings and aspectual distinctions, while isolating languages like Chinese may rely more on word order and context. These structural differences influence how concepts are formed and articulated, requiring methodological sensitivity to both form and function.

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The role of the primary school teacher in society and the lives of students

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Abstract. This article discusses the role of primary school teachers in society, their love for their profession, and their attention, responsibility, and dedication to students during lessons. Information is provided on the management of the education system, the role of the teacher in increasing the effectiveness of education, the issue of upbringing, and the tasks of the teacher in providing knowledge to students.

Keywords: education, upbringing, process, school, teacher, student, knowledge, communication, culture, activity.

The issue of education and upbringing has always been relevant. In the past, people received and provided education, and today, the activities of educational institutions and centers of knowledge are at the forefront of society's attention. In education, it is perhaps most appropriate to first mention the "**learner.**" If there is no need for education, there is no purpose for it. From this perspective, as long as there is a learner, there will be education. Secondly, it is essential to mention the "**educator.**" This is because they are directly responsible for introducing the content of education and helping learners understand it [1]. Learners and educators constantly complement each other and are inseparable parts of the process.

School is a place that embraces children once they reach a certain age, providing them with education and upbringing. Currently, in our society, students receive general secondary education from the first to the eleventh grade. This means students spend eleven years of their lives in this institution. The purpose of coming to school is not merely to obtain a document, but to acquire knowledge, skills, and competencies that will be useful in building their future. Therefore, adequately nurturing every young generation that comes to the school gates in pursuit of knowledge is the most pressing issue of today. From this viewpoint, organizing effective education requires responsibility from every participant in the educational process [1]. In this regard, the role of primary school teachers is particularly significant, as well as challenging and demanding.

The school system implements education in two stages: **primary education** and **upper secondary education**. Primary education encompasses grades 1-4. This period particularly demands teachers to be attentive to their work and approach it

with responsibility. As the proverb "Knowledge acquired in youth is like a carving in stone" suggests, the knowledge and habits a child acquires in their early years will continue to shape their future. Therefore, solid knowledge must first be provided in primary school. After completing the fourth grade, students apply for upper secondary education, specifically specialized and Presidential schools. If their academic potential is sufficient and they achieve adequate scores in examinations, they will study in these schools. At this stage, the subjects students need to master gradually increase and become more complex. Additionally, at this stage of education, specialized teachers teach each subject. In my personal opinion, primary school teachers should adhere to the following principles:

- **Love children.**
- **Have a thorough grasp of their field.**
- **Possess good communication skills.**
- **Not mix personal life with professional activities.**
- **Approach their work with responsibility.**
- **Work not for others (various commissions and inspectors), but solely for the upbringing of a well-rounded generation, understanding that the future of Uzbekistan lies in their hands [1].** Only if teachers possess these qualities will their students grow up to be knowledgeable, educated, and intelligent.

Children's intellectual activity and interest in learning begin to develop during this period. This, in turn, requires teachers to be insightful, knowledgeable, and, of course, masters of their profession. This is clearly demonstrated through their use of modern methods, various motivational games, and innovative activities. This is because all pedagogical ideas are embodied in the teacher, and these ideas are implemented and applied through their activities.

Many countries, teachers, and educators are experimenting with new, innovative teaching strategies to engage students more in lessons. Digital programs help them connect with students' minds. This broadens students' horizons, fosters a healthy competitive environment, and develops their ability to defend others' opinions, listen carefully, focus their attention, and think [5]. For these reasons, such new approaches are proving positive today.

At the core of a teacher's multifaceted and complex work lie crucial tasks such as educating children to be polite and ethical, and equipping them with knowledge. Accomplishing these depends on the teacher's diverse activities: teaching children, organizing and conducting extracurricular educational activities, conducting pedagogical outreach among parents, and so on. All of these demand that teachers possess deep knowledge, love their field, and love children.

Conclusion

In conclusion, the future of our country lies in the hands of the youth. Therefore, the way we educate today will determine the lives of the young generation who receive education from us tomorrow. What they learn in their school life will be the main foundation throughout their entire lives. We must raise true patriots, cultured, and spiritual members of the society we live in.

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**СОВРЕМЕННЫЕ ПОДХОДЫ К ПЕРСОНАЛИЗИРОВАННОЙ
ТЕРАПИИ ГРАНУЛЕЗОКЛЕТОЧНЫХ ОПУХОЛЕЙ ЯИЧНИКОВ**

**СОБИРОВ БОБУР БАХАДИРОВИЧ
ОРИНБЕКОВА ЭЛЬМИРА МУРАТОВНА**

ОБЩЕЕ НАПРАВЛЕНИЕ ОНКОЛОГИИ

**ТАШКЕНТСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ
УНИВЕРСИТЕТ**

АННОТАЦИЯ

Гранулезоклеточные опухоли яичников (ГКО) представляют собой редкую группу гормонально-активных новообразований стромально-клеточного генеза, составляющих 1–2% всех опухолей яичников. Характеризуясь индолентным течением, ГКО отличаются высоким риском поздних рецидивов (30–40% случаев в течение 5–20 лет), что подчеркивает необходимость разработки персонализированных терапевтических стратегий. В данном тезисе систематизированы современные подходы к лечению ГКО, включая таргетную терапию, основанную на молекулярном профилировании (мутации FOXL2, сигнальные пути PI3K/AKT, mTOR), иммунотерапию и жидкостную биопсию для мониторинга рецидивов. Особое внимание уделено соответствию международным стандартам (NCCN, RUSSCO) и перспективам интеграции инновационных технологий, таких как геномное редактирование и комбинированные терапевтические подходы, для улучшения клинических исходов. Анализ ограничений текущих методов подчеркивает актуальность дальнейших исследований в области персонализированной медицины.

Ключевые слова: гранулезоклеточная опухоль, персонализированная медицина, FOXL2, таргетная терапия, иммунотерапия, жидкостная биопсия, онкология яичников, NCCN, RUSSCO, геномное редактирование.

**MODERN APPROACHES TO PERSONALIZED THERAPY OF
GRANULOSA CELL TUMORS OF THE OVARY**

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ABSTRACT

Granulosa cell tumors (GCTs) of the ovary constitute a rare group of hormonally active neoplasms of stromal cell origin, accounting for 1–2% of all ovarian tumors. Characterized by an indolent course, GCTs are associated with a high risk of late recurrence (30–40% of cases within 5–20 years), highlighting the need for personalized therapeutic strategies. This thesis systematizes contemporary approaches to GCT treatment, including targeted therapy based on molecular profiling (FOXL2 mutations, PI3K/AKT, and mTOR signaling pathways), immunotherapy, and liquid biopsy for recurrence monitoring. Particular emphasis is placed on adherence to international standards (NCCN, RUSSCO) and the prospects for integrating innovative technologies, such as genome editing and combined therapeutic approaches, to improve clinical outcomes. Analysis of the limitations of current methods underscores the urgency of further research in personalized medicine.

Keywords: granulosa cell tumor, personalized medicine, FOXL2, targeted therapy, immunotherapy, liquid biopsy, ovarian oncology, NCCN, RUSSCO, genome editing.

ВВЕДЕНИЕ

Гранулезоклеточные опухоли яичников (ГКО) относятся к редким стромально-клеточным новообразованиям, характеризующимся гормональной активностью, преимущественно гиперэстрогенией, которая проявляется аномальными маточными кровотечениями, гиперплазией эндометрия или преждевременным половым созреванием у детей. Несмотря на медленный рост, ГКО имеют высокий риск рецидивирования, что делает их лечение одной из сложных задач онкогинекологии. Достижения молекулярной биологии, включая выявление мутаций в гене FOXL2 и активацию сигнальных путей PI3K/AKT и mTOR, открывают перспективы для таргетной терапии. Внедрение иммунотерапии и жидкостной биопсии, а также потенциал геномного редактирования, таких как CRISPR/Cas9, создают новые возможности для персонализированного подхода, направленного на улучшение прогноза и качества жизни пациенток.

АКТУАЛЬНОСТЬ ИССЛЕДОВАНИЯ

Рак яичников остается одной из ведущих причин онкологической смертности среди женщин, с ежегодной заболеваемостью около 314 000 случаев и смертностью более 200 000 (ВОЗ, 2024). ГКО, составляя лишь 1–2% всех опухолей яичников, представляют уникальную клиническую проблему из-за склонности к поздним рецидивам (до 40% случаев) и ограниченной эффективности стандартных методов лечения, таких как химиотерапия и хирургия, при рецидивирующих формах. Традиционные подходы часто не учитывают молекулярную гетерогенность ГКО, что снижает их терапевтическую эффективность. Внедрение персонализированной медицины, основанной на молекулярном профилировании, позволяет выявлять ключевые биомаркеры, такие как мутации FOXL2, и разрабатывать таргетные стратегии. Жидкостная биопсия, обеспечивающая неинвазивный мониторинг циркулирующей опухолевой ДНК (ctDNA), и иммунотерапия, включая ингибиторы контрольных точек, открывают новые горизонты для раннего выявления рецидивов и оптимизации лечения. Актуальность исследования обусловлена необходимостью интеграции этих инновационных подходов в клиническую практику в соответствии с рекомендациями NCCN и RUSSCO, а также потребностью в стандартизации протоколов для повышения выживаемости пациенток с ГКО.

ЦЕЛЬ ИССЛЕДОВАНИЯ

Целью данного тезиса является анализ современных подходов к персонализированной терапии гранулезоклеточных опухолей яичников, включая молекулярное профилирование, таргетную терапию, иммунотерапию и жидкостную биопсию, с учетом международных стандартов и перспектив внедрения инновационных технологий для улучшения клинических исходов.

МАТЕРИАЛЫ И МЕТОДЫ ИССЛЕДОВАНИЯ

Для подготовки тезиса были проанализированы научные публикации из баз данных PubMed, Scopus, Web of Science и ClinicalTrials.gov за период 2020–2025 годы. Включены рецензируемые статьи на английском и русском языках, посвященные молекулярной биологии, таргетной терапии, иммунотерапии и жидкостной биопсии при ГКО. Основное внимание уделялось исследованиям мутаций FOXL2, сигнальных путей PI3K/AKT и mTOR, а также клиническим испытаниям фаз I–III. Проанализированы клинические рекомендации NCCN (2024) и RUSSCO (2024). Всего рассмотрено 60 источников, из которых отобрано 7 ключевых публикаций. Статистическая обработка данных проводилась с использованием программного обеспечения R v.4.3 и Python (библиотека pandas) для анализа клинических исходов, включая

выживаемость и частоту рецидивов. Для оценки эффективности таргетной терапии и иммунотерапии использовались данные об объективном ответе и стабилизации заболевания.

РЕЗУЛЬТАТЫ И ОБСУЖДЕНИЕ

Персонализированная терапия ГКО опирается на молекулярное профилирование опухоли, которое выявляет ключевые биомаркеры, такие как мутация в гене FOXL2 (с.402С>G), присутствующая в 97% случаев взрослой формы ГКО. Эта мутация служит не только диагностическим маркером, но и потенциальной мишенью для таргетной терапии. Активация сигнальных путей PI3K/АКТ (60% случаев) и mTOR (70%) ассоциирована с прогрессией опухоли, что делает ингибиторы этих путей (эверолимус, алпелисиб) перспективными для лечения рецидивирующих форм. Клинические испытания фаз I–II показывают, что ингибиторы mTOR обеспечивают стабилизацию заболевания у 50% пациенток, хотя объективный ответ остается ограниченным (20%).

Иммунотерапия, включая ингибиторы контрольных точек (пембролизумаб, ниволумаб), демонстрирует ограниченную эффективность из-за низкой экспрессии PD-L1 в ГКО (10–15% случаев). Однако комбинированные подходы, объединяющие ингибиторы mTOR и PD-1/PD-L1, увеличивают объективный ответ до 25%. Жидкостная биопсия, основанная на анализе ctDNA, позволяет выявлять рецидивы с чувствительностью 80% и специфичностью 75%, что делает ее перспективным инструментом для динамического мониторинга. Препреклинические исследования применения CRISPR/Cas9 для коррекции мутаций FOXL2 показывают потенциал, но требуют дальнейшей валидации.

Ограничения текущих подходов включают недостаток крупномасштабных клинических испытаний, высокую стоимость молекулярного профилирования и ограниченную доступность жидкостной биопсии. Международные рекомендации подчеркивают важность интеграции биомаркеров в клиническую практику для оптимизации лечения. Перспективы включают разработку комбинированных терапевтических стратегий, стандартизацию жидкостной биопсии и внедрение геномного редактирования в клиническую онкологию.

ЗАКЛЮЧЕНИЕ

Персонализированная терапия ГКО, основанная на молекулярном профилировании (FOXL2, PI3K/АКТ, mTOR), представляет собой перспективное направление для улучшения клинических исходов. Таргетная

терапия и иммунотерапия демонстрируют потенциал, но требуют дальнейших исследований для повышения эффективности и стандартизации. Жидкостная биопсия может стать ключевым инструментом для неинвазивного мониторинга рецидивов, а геномное редактирование открывает новые горизонты для таргетного лечения. Международные многоцентровые исследования необходимы для разработки стандартизированных протоколов и интеграции инновационных технологий в клиническую практику, что позволит повысить выживаемость и качество жизни пациенток с ГКО.

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OUTLINE

№	Maqola nomi va muallif(lar) F.I.SH.	Betlar
1.	MODDANING MAGNIT XOSSALARINI O'RGANISH TARIXI. Mamanazarov B.Q	5-6
2.	USING PEDAGOGICAL TECHNOLOGIES IN WORKING WITH PARENTS OF PRESCHOOL CHILDREN WHEN TEACHING DRAWING SKILLS Yadgarova A.B.	7-11
3.	ISOTONIC SOLUTIONS: CONCEPTS AND CALCULATION METHODS Raxmatillayeva Indira Anvarovna Oltiyeva Shohista Polvannazirovna Masharipov Doston Shavkatovich	12-15
4.	ПОТЕНЦИАЛ БЛОКЧЕЙН-ТЕХНОЛОГИЙ В БОРЬБЕ С КОРРУПЦИЕЙ И МОШЕННИЧЕСТВОМ В БАНКОВСКОЙ СФЕРЕ УЗБЕКИСТАНА Абдурахимова Дилора Каримовна	16-18
5.	KRIPTOVALYUTALAR: MOHIYATI VA ZAMONAVIY MOLIYA BOZORIDA RIVOJLANISH TENDENSIYALARI Sherkuziyeva N.A.	19-22
6.	UTILIZING ARTIFICIAL INTELLIGENCE TO PREDICT CONSUMER ACTIONS AND MARKET TRENDS IN E-COMMERCE Ismailova Khanifajon,	23-25
7.	АЁЛЛАРДА ЖАРОҲАТДАН КЕЙИНГИ СТРЕСС МУАММОЛАРИНИНГ ЎРГАНИЛИШИ Алимова Умида Рахматиллаевна	26-29
8.	TALABALARINING TADQIQOTCHILIK QOBILYATLARINI RIVOJLANTIRISHNING PEDAGOGIK PSIXOLOGIK XUSUSIYATLARI Saidakbarova Nigora Abdurahim qizi	30-33

9.	Oilalarda internetga tobelikning bugungi kundagi ahamiyati N.I. Kushakova	34-37
10.	Нейрофидбек – инновационная терапия неврологических заболеваний Махсудова Х.Н., Рашидова З.С., Турсунов А.Х.	38-39
11.	QOVOQ QOQISI VA KUKUNINI OLISH UCHUN TAVSIYA ETILGAN NAVLARNING BIOLOGIK VA TEXNIK JIHATLARI. Xidirova Komilaxon Fayzulla qizi	40-44
12.	TEST METHODS USED TO DETECT BREAST CANCER IN THE EARLY STAGES Ruziyeva Shahlo Durdiqulovna	45-47
13.	STEAM TA'LIM TEXNOLOGIYASINI TADBIQ ETISHDA LOYIHALARDAN FOYDALANISH Otayeva Salamat Sabirovna	48-51
14.	IJTIMOIIY USTANOVKALAR SHAKLLANISHINING KOMPONENTLARI Bekbolayev Javlonbek Jumanazar o'g'li	52-54
15.	Architectural Ecology as a Scientific Direction in the History and Theory of Architecture Abbosova Mehribon Sabir kizi	55-64
16.	Study of Approaches to Designing Public Buildings for People with Limited Mobility Kurbanova Maksuda Karshiyevna	65-74
17.	MAKTABGACHA TA'LIMDA RAQAMLI VOSITALAR YORDAMIDA TA'LIM-TARBIYA JARAYONINI TAKOMILLASHTIRISH Normurodova Gavhar Shoyimovna	75-77
18.	ТЕХНОЛОГИЯ ОБУЧЕНИЯ РУССКОМУ ЯЗЫКУ СТУДЕНТОВ В ВЫСШЕМ ОБРАЗОВАТЕЛЬНОМ УЧРЕЖДЕНИИ	78-81

	Махмудова Муборак Фрунзаевна	
19.	A VIRTUAL SPACE INFLUENCING THE ACTIVE LIFESTYLE OF MODERN YOUTH. HISTORY OF SOCIAL NETWORKS AND THEIR ORIGIN Muhiddinova Dilnoza Shavkatovna	82-86
20.	ИССЛЕДОВАНИЕ ТЕРМИЧЕСКИХ СВОЙСТВ ВЫСОКОНАПОЛНЕННЫХ АКРИЛОВЫХ КОМПОЗИЦИЙ Рузиев Руфат Тошбоевич Рахмонкулов Аликул Амиркулович	87-90
21.	MAKTAB O'QUVCHILARIDA BIOLOGIK SAVODXONLIKNI RIVOJLANTIRISH METODIKASI Shoxista Abduqodir qizi Abduraxmanova	91-96
22.	Экологическая проблема и пути её решения в XXI веке Мансурова Рушонгул	97-110
23.	CHALLENGES OF TRANSLATING IDIOMS AND FIXED EXPRESSIONS Tulkinov Abdulaziz Jalolova G.M	111-119
24.	Ikkinchi til sifatida nemis tilini o'qitishda qo'llaniladigan leksik mashqlar turlari va ularning ta'siri Toxirova Madinabonu Abdumo'min qizi	120-122
25.	Die Rolle von Spielmethoden bei der Entwicklung der Sprachkompetenz von Schulkindern im Fremdsprachenunterricht Toxirova Madinabonu Abdumo'min qizi	123-125
26.	NEMIS TILI DARSLARIDA YOZISHNING O'ZIGA XOS XUSUSIYATLARI Astonova Go'zalxon Raxmonaliyevna Boybo'tayev Shohjahon Jo'rabek o'g'li	126-129
27.	KIMYO FANINI STEAM YONDASHUVI ASOSIDA O'QITISHNING INNOVATSION IMKONIYATLARI Ro'zmetova Sevara Oktamboiyevna,	130-132

	Sarsenboyeva Ayjarqin Berdimurat qizi	
28.	GEOGRAFIYA TA'LIMIDA GEOGRAFIK BILIM-KO'NIKMALARNI SHAKLLANTIRISHDA INTERFAOL METODLARDAN FOYDALANISHNING SAMARADORLIGI (MATERIKLAR VA OKEANLAR TABIIY GEOGRAFIYASI KURSI MISOLIDA) Rustamova Maftuna Anvarjon qizi	133-136
29.	Неврологические изменения при хронической ишемией мозга Низамходжаева Ш.Б.	137-138
30.	Restricting Profit Concealment Through Foreign Structures: Institutional Measures for Tax Transparency in Uzbekistan Yuldashev Lazizbek Umarbekovich	139-142
31.	НЕЙРОФИБРОМАТОЗ У ДЕТЕЙ: АЛГОРИТМ ОБСЛЕДОВАНИЯ Омонова У.Т., Хаитбаева Н.Т.	143-145
32.	"DOYRA YAKKANAVOZLIGI VA JO'RNAVOZLIKNING MAQOM IJROCHILIGIDAGI MUHIM AHMIYATI" Samadov Rahmatulla Sunattullayevich	146-151
33.	MAQOM SAN'ATI VA ZAMONAVIY MUSIQIY TA'LIMNING YANGI YUZLARI Utkur Kadirov	152-157
34.	INTERTEXTUAL APPROACH IN LITERARY TEXT ANALYSIS THEORETICAL FOUNDATIONS AND PRACTICAL EXAMPLES Saloxiddinova N.I	158-160
35.	Abdulla Qodiriyning "O'tgan kunlar" romanidagi arabiy kishi nomlarining leksik-semantik tahlili Isxakova Nigora Ibrohimovna	161-162
36.	XALQARO INVESTITSIYA SHARTNOMALARIDA ARBITRAJ MEKANIZMINING HUQUQIY ASOSLARI	163-171

	Nurmuxammedova Farruxa Faxriddin qizi	
37.	YANGI KONSTITUTSIYADA O‘ZBEKISTON RESPUBLIKASI VA O‘QTUVCHILARGA E‘TIBOR Shomurotova Sevinchoy San‘at qizi,	172-175
38.	МИЛЛИЙ ИҚТИСОДИЁТ ТАРАҚҚИЙ ЭТИШИДА КИЧИК БИЗНЕС ВА ТАДБИРКОРЛИК ФАОЛИЯТИНИНГ РОЛИ Расулова Шарифа Ғайбуллаевна Асқаров Азизбек Ашур ўғли	176-178
39.	Модель менеджмента развития профессиональной компетентности преподавателей системы высшего педагогического образования: комплексный и системный подход Кенжебаева Гулнур Маратовна,	179-184
40.	Javlon Jovliyevning “Qo‘rqma” romani: vaqt, voqelik va talabalarning taqdiri Soliyeva Xusnida Hasanboy qizi	185-187
41.	AQLI ZAIF BOLALAR DIQQATI VA XOTIRASINING O‘ZIGA XOS XUSUSIYATLARI Sharapova Xafiza-	188-191
42.	MAIN PROBLEMS IN THE DEVELOPMENT OF HYDROPOWER IN KHOREZM REGION F.O. Matyokubov	192-196
43.	CLINICAL AND LABOATORY CHARACTERISTICS OF PSYCHOEMOTIONAL DISORDERS IN CHILDREN WITH DIABETES MELLITUS Kodirova Nafisa Nizomiddin kizi Alijanova Durдона Abdullajonovna	197-209
44.	Suvli va suvsiz tuproqda sholi urug`larini unib chiqish xususiyatlari. (laboratoriya sharoitida) G.M.Amanboyeva	210-212
45.	Sociolinguistic relations in translation process Authors:Alisher Zakirov, Malika Buribaeva	213-221



46.	TEKNOLOGIK TA'LIM YO'NALISHI TALABALARINI KASBIY KOMPOTENTLIGINI SHAKLLANTIRISH Po'latova Mahliyo Mahammadjon qizi	222-224
47.	КЛИНИКО-НЕВРОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ДИНАМИКИ ПОКАЗАТЕЛЕЙ ЭМОЦИОНАЛЬНОЙ СФЕРЫ У ПАЦИЕНТОВ ПОДРОСТКОВОГО ВОЗРАСТА ПРИ МИГРЕНИ Кадирова Робия Мираббасовна Алиджанова Дурдона Абдуллажоновна	225-226
48.	LINGUOCULTURAL CODING OF THE COLOR CONCEPTS 'WHITE' AND 'BLACK' IN THE ENGLISH LANGUAGE: SEMANTIC STRUCTURES AND CULTURAL SYMBOLISM Djumamuratova Gulbakhar Jenisbaevna	227-229
49.	METHODOLOGICAL FOUNDATIONS OF THE COMPARATIVE STUDY OF CONCEPTS IN LANGUAGES OF DIFFERENT SYSTEMS Tajenova Sayora Bayronovna	230-232
50.	The role of the primary school teacher in society and the lives of students Otabayeva Khusniya Sharofiddin kizi	233-235
51.	СОВРЕМЕННЫЕ ПОДХОДЫ К ПЕРСОНАЛИЗИРОВАННОЙ ТЕРАПИИ ГРАНУЛЕЗОКЛЕТОЧНЫХ ОПУХОЛЕЙ ЯИЧНИКОВ СОБИРОВ БОБУР БАХАДИРОВИЧ ОРЫНБЕКОВА ЭЛЬМИРА МУРАТОВНА	236-240
52.	Mundarija	241-246