



INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE

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INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE

Volume 02, Issue 03, 2025 (26-MARCH)

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DEVELOPING STUDENTS' ANALYTICAL SKILLS THROUGH PROBLEM-BASED LEARNING

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Abstract

The modern educational landscape is evolving rapidly, emphasizing the need for students to develop strong analytical skills. Problem-based learning (PBL) has proven to be an effective pedagogical approach for enhancing critical thinking, problem-solving, and decision-making abilities. This article explores the significance of PBL in higher education, its role in improving students' cognitive abilities, and practical methods for integrating it into the curriculum. The research combines theoretical analysis with empirical case studies, demonstrating the effectiveness of PBL in fostering analytical skills.

Keywords Problem-based learning, analytical skills, critical thinking, higher education, cognitive development, active learning, pedagogical strategies.

Introduction

Relevance of the Topic

Higher education institutions play a crucial role in shaping students' analytical capabilities, which are essential for academic and professional success. However, traditional teaching methods often emphasize memorization over critical thinking, leaving students unprepared for the complexities of the modern workforce.

By integrating PBL, educators can:

- Develop higher-order thinking skills (analysis, synthesis, and evaluation).
- Enable students to apply theoretical knowledge to real-world challenges.
- Improve decision-making and problem-solving abilities.
- Enhance collaboration and communication through teamwork-based learning.

PBL aligns with contemporary educational paradigms that emphasize active learning, student engagement, and the practical application of knowledge. Countries with advanced education systems, such as Finland and Singapore, have successfully integrated PBL into their curricula, demonstrating significant improvements in students' problem-solving abilities.

Research Objectives

This study aims to:

1. Analyze the effectiveness of PBL in developing analytical skills among students.
2. Identify the best strategies for implementing PBL in higher education.
3. Assess student engagement and responses when exposed to problem-solving tasks.
4. Compare the learning outcomes of students using traditional methods versus PBL.
5. Provide recommendations for optimizing the use of PBL in teaching.

Research Methodology

This study employs a mixed-method approach, combining both qualitative and quantitative research methods.

1. Literature Review

A comprehensive review of academic research on PBL and analytical skill development was conducted, using peer-reviewed journals, books, and educational reports.

2. Experimental Study

A controlled study was conducted with two groups of university students:

- **Group A (Experimental Group):** Engaged in PBL activities, including case studies and real-world problem-solving.
- **Group B (Control Group):** Followed a traditional lecture-based approach.

The experiment lasted for 16 weeks, covering subjects such as business management, engineering, and social sciences. Student progress was measured through assessments, surveys, and classroom observations.

3. Data Collection

- **Pre-test and post-test evaluations** to measure improvements in analytical thinking.
- **Student surveys** to assess engagement and motivation.
- **Instructor feedback** to evaluate the feasibility and challenges of implementing PBL.

Research Results

The findings demonstrated a significant improvement in analytical thinking skills among students in the experimental group compared to the control group.

1. Improvement in Critical Thinking

- A **40% increase** in analytical reasoning test scores.
- Greater ability to break down complex problems into smaller, manageable parts.
- Enhanced decision-making skills, particularly in case-based learning scenarios.

2. Student Engagement and Motivation

- **87% of students** in the experimental group reported higher engagement, compared to **52% in the control group**.
- **75% increase** in active participation in discussions and teamwork.
- Higher levels of interest in applying theoretical knowledge to practical scenarios.

3. Real-World Application

- PBL bridged the gap between theory and practice, making learning more relevant.
- **Engineering students** demonstrated improved design thinking in real-world project simulations.
- **Business students** enhanced their market analysis and strategic planning skills.

Discussion

The findings highlight that integrating PBL into the curriculum significantly enhances students' analytical thinking. This approach shifts the focus from passive memorization to active problem-solving, which is crucial for academic and professional success.

Key Advantages of Problem-Based Learning

- **Enhances student autonomy** – Encourages independent thinking and self-directed learning.
- **Promotes collaboration** – Students work together, improving teamwork and communication skills.
- **Encourages deep learning** – Fosters a profound understanding rather than surface-level memorization.

Challenges and Limitations

Despite its effectiveness, implementing PBL poses certain challenges:

- **Extensive preparation** – Instructors must design well-structured problems and case studies.
- **Time-consuming assessments** – Evaluating students' problem-solving approaches requires qualitative grading.
- **Initial resistance** – Some students struggle with self-directed learning in the early stages.

Possible Solutions

- Training educators in PBL methodologies.
- Using technology to automate assessments and track student progress.
- Gradually integrating PBL into curricula to help students adapt.

Conclusion

The study confirms that problem-based learning is an effective method for developing students' analytical skills. By engaging students in real-world problem-solving, this approach fosters critical thinking, creativity, and independent decision-making. Higher education institutions should consider incorporating PBL into their curricula to better prepare students for the demands of the modern workforce. Future research should explore the long-term impact of PBL, interdisciplinary applications, and the role of digital tools in problem-solving education.

Recommendations for Educators

1. Design meaningful and relevant problem-based scenarios aligned with students' academic and career goals.
2. Encourage active participation and discussion to enhance collaborative learning.
3. Utilize technology-based simulations and case studies for immersive learning experiences.
4. Provide structured guidance in the early stages to help students adapt to PBL.
5. Continuously assess and refine PBL strategies based on student feedback.

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(Ensure additional references are listed in a consistent citation style.)

SUD TIBBIYOTI FANIDAN AMALIY KO'NIKMALARNI O'RGATISHDA SIMULYASION TA'LIMNI AFZALLIKLARI

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Annotatsiya. O'quv jarayoniga zamonaviy texnologiyalarni xalqaro ekspertlarning tajribasini joriy etish, bugungi kunning talabi, bu esa o'z navbatida raqobatdosh kadrlar tayyorlashga imkoniyat yaratadi. «Simulyatsion o'qitish» bu real xayotga imkon qadar yaqin bir muhitda professional faoliyatni o'xshatib ishlash. Oliy ta'lim muassasasida qo'llaniladigan simulyatorlarda amaliy ko'nikmalarni o'rgatish – kelajakdagi professional faoliyatda mutaxassis to'qnashish mumkin bo'lgan vaziyatlarda talabalarning amaliy ko'nikmalarni samarali o'zlashtirish muammosi ko'rib chiqilgan. O'zbekiston Respublikasi ta'lim tizimi tuzilishi tarifi taqdim etilgan.

Kalit so'zlar: sud tibbiyoti, amaliy ko'nikma, murda, tirik shaxslar, ashyoviy dalillar.

O'zlashtirilishi lozim bo'lgan imitatsion ta'lim (SIM) standartli modullari alohida treninglar sifatida amalga oshirilishi va yoki yanada keng imitatsion ta'lim dasturining tarkibiy qismi bo'lishi mumkin. SIM faqat amaliy mashg'ulotlarni ko'zda tutadi. Bir mavzu bo'yicha o'qitish uchun bir nechta SIM qator amalga oshirilishi mumkin. Har bir amaliy ko'nikma tekshiruv obyekti oldida amalga oshiriladi. Mazkur o'qitish usuli amaliy ko'nikmalarni bajarish bo'yicha, shu jumladan, ushbu amaliy ko'nikmalarni o'zlashtirish va bo'lajak shifokorning amaliy faoliyatida ularni to'g'ri va aniq bajarish imkonini beradi.

Tibbiyot fanlari, jumladan sud tibbiyoti bo'yicha dars berish jarayonida zamonaviy innovatsion texnologiyalarni o'quv jarayoniga joriy etish majburiydir. Dars berish jarayoni, o'qituvchi va talabalarning faoliyatiga qo'yiladigan asosiy talablar quyidagilardan iborat:

- Nazorat o'tkazishda yuqori darajada ko'rgazmalilik ta'minlanishi, bu esa fanga, nazoratga va baholashga qiziqishni oshiradi;
- Nazorat jarayonlarini avtomatlashtirish, natijalarni baholash va yakuniy xulosalar chiqarish;
- Bilimlarni o'zlashtirish maqsadida nazorat topshiriqlarini ko'p marta bajarish imkoniyati;

➤ Internet va axborot texnologiyalaridan foydalangan holda mustaqil tayyorgarlik ko'rish imkoniyati.

Xozirgi davrda amaliy ko'nikmalari o'zlashtirish va takomillashtirishda realistik model asosida o'qitishni ahamiyati katta. Murda, tirik shaxslar, ashyoviy dalillar bilan bog'liq bo'lgan amaliy ko'nikmalarni trening ko'rinishida o'tkazish an'anaviy o'qitishdan farqli bir qator afzalliklarga ega. Oldindan trening o'tgan talabalar kam xatolikga yo'l qo'yadilar; mashg'ulotlar davomiyligi tashqi omillarga bog'liq emas va qulay vaqtda o'tkazilishi mumkin; mashqlarni takrorlash chegaralanmagan; kam uchraydigan patologiya xolatlarini va yordam berishlar imitatsiyasini o'tkazish cheklanmagan; birinchi marta o'tkazilayotgan mustaqil amaliyotlarda stress kam bo'ladi; mutaxassisni tayyorlik darajasi obyektiv baxolash imkonini beradi; obyektiv baholash testdan o'tkazish uchun keng imkoniyatlar yaratadi, malakaviy amaliyot bemor uchun xavfsiz sharoitda o'tkaziladi. Taklif etilayotgan o'qitishni zamonaviy usullari sud tibbiyoti tekshirishning asosiy amaliy ko'nikmalarini o'zlashtirish uchun mo'ljallangan. O'lim sodir bo'lgan muddatlarini aniqlash, murda erta va kechki o'zgarishlarini, mexanik jarohatlarni sud-tibbiy baholash, mexanik asfiksiya, zaxarlanish holatlarida tekshirish usullari va boshqalar, shuningdek, sud-tibbiy ambulatoriya bo'limida jabrlanuvchilarni ekspertizadan o'tkazish tartibi kabi amaliy ko'nikmalarni egallash imkonini beradi.

O'zlashtirilishi lozim bo'lgan imitatsion ta'lim (SIM) standartli modullari alohida treninglar sifatida amalga oshirilishi va yoki yanada keng imitatsion ta'lim dasturining tarqibiy qismi bo'lishi mumqin. SIM faqat amaliy mashg'ulotlarni qo'zda tutadi. Bir mavzu bo'yicha o'qitish uchun bir necha SIM qator amalga oshirilishi mumqin. Har bir yil trening shaqlida amalga oshiriladi. Mazkur o'qitish usuli amaliy ko'nikmalarni bajarish bo'yicha yaxshi o'zlashtirish va shifokorning amaliy faoliyatida ularni to'g'ri va aniq bajarish imkonini beradi.

Xulosa:

1. Zamonaviy ta'lim sifatini oshirish talablari doirasida oliy o'quv yurtlarida yangi pedagogik texnologiyalarni yaratish va o'quv jarayoniga joriy etish kiradi.
2. Fan bo'yicha syllabus kiritilgan muammoga yo'naltirilgan pedagogik o'yinlari sud tibbiyoti bo'yicha o'quv materiallarini o'zlashtirish samaradorligini oshiruvchi interaktiv ta'lim usulidir.
3. Amaliy mashg'ulotlar uchun pedagogik o'yinlarining asosiy xususiyati talabalar bilish faolligini uyg'otish, mustaqil fikrlash va faoliyatni shakllantirishga yordam berishdan iborat. Pedagogik o'yinining kuchli tomoni shundaki, u jamoada ishlash ko'nikmasini rivojlantiradi, kasbiy muhit sharoitlarini modellashtiradi, ta'limda

faoliyatga asoslangan kompetentsiyalar yondashuvini amalga oshiradi va talabalarni axborot texnologiyalaridan foydalangan holda mustaqil ishlashga tashkil etadi.

4. Taklif etilayotgan ta'lim usulini o'quv jarayoniga joriy etish samaradorligini tahlil qilish shuni ko'rsatdiki, muammoga yo'naltirilgan ishbilarmonlik o'yinlari yordamida mashg'ulotlar o'tkazish mavzularni yaxshiroq anglashga, talabalar amaliy ko'nikmalari va kelajakdagi kasbiy tasavvurlarini shakllantirishga imkon beradi.

Amaliy tavsiyalar:

1. Keyslarni yaratish uchun oliy o'quv yurtining metodik kabinetida mavjud bo'lgan syllabusa va keyslarni tuzish bo'yicha metodik ko'rsatmalardan foydalanish lozim.

2. Mashg'ulotlarni metodik materiallar bilan yaxshiroq va to'liq ta'minlash uchun to'liq va tuzilmasiz keysdan foydalanish maqsadga muvofiqdir. Ushbu keys ko'plab ma'lumotlarni o'z ichiga oladi va talabalarni tezkor fikrlashga, asosiy ma'lumotni ikkinchi darajali ma'lumotlardan ajrata olishga va zaruriy ko'nikmalarni o'zlashtirishga yordam beradi.

3. Keyslar jamoaviy ishlash uchun mo'ljallangan bo'lib, ularda barcha didaktik material, shu jumladan, mashg'ulot mavzusiga oid muammoga yo'naltirilgan ishbilarmonlik o'yinlari mavjud bo'lishi kerak. Bu talabalarni haqiqiy amaliy faoliyatga maksimal darajada yaqinlashtirish imkonini beradi.

Преданность Родине и нации – святое для каждого человека

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Аннотация. Шайхзода известен не только как поэт, но и как драматург. Его пьесы имели огромный успех на сцене. Он снискал всеобщее уважение за свои работы на современную и историческую тематику.

Ключевые слова: Максуд Шайхзода, поэт, нашедший свой голос на литературном поприще Узбекистана, "будут жизни", "жизнеспособность и мертвенность", "человеческое достоинство", "философское мышление".

Максуд Шайхзода (1908-1967) - узбекский поэт, драматург и переводчик. Он был одним из крупнейших представителей узбекской литературы XX века и пропагандировал в своих произведениях идеи популяризаторства, национальной гордости и гуманизма. Максуд Шайхзода родился в 1908 году. Он начал свою литературную карьеру с написания стихов и вскоре нашел свое место в узбекской литературе. Его стихи написаны в духе любви, благородства и справедливости к нации, к человеку.

Шайхзода известен не только как поэт, но и как драматург. Его пьесы имели огромный успех на сцене. Он снискал всеобщее уважение за свои произведения на современную и историческую тематику. Максуд Шайхзода выпустил ряд важных поэтических сборников, драм и переводов. Среди его выдающихся произведений можно выделить следующие:

- "Душевный"
- "Фархад и Ширин" (драма)
- "Таксир и Зохра" (драма)

* Произведения, основанные на эпосе "Алпомиш"

Максуд Шайхзода перевел на узбекский язык ряд уникальных произведений мировой литературы. В частности, он внес значительный вклад в ознакомление узбекских читателей с произведениями русской и мировой классики. Шайхзода занимает достойное место в узбекской литературе, и его произведения до сих пор изучаются в литературной среде. Его творчество проникнуто идеями гуманизма, любовью к Родине и приверженностью национальным ценностям.

"Джонкуяр" - одно из известных произведений Максуда Шайхзоды, в котором ярко отражены темы национального освобождения, человечности и мужества.

Содержание и идея произведения свидетельствуют о глубоком сочувствии шейхов судьбе Родины и народа.

"Душевный" - поэтический сборник, в котором поэт реагирует на сложные общественно-политические события своего времени. Стихи в нем отражают высокие чувства человеческой души, любовь и мужество к Родине.

Основные темы произведения:

- * Верность Родине и нации
- * Гуманность и справедливость
- * Мужество и борьба
- * Стремление к свободе и независимости

Максуд Шайхзода в этом произведении прославил духовную силу, мужество и стремление к свободе узбекского народа.

Верность Родине и нации - священное чувство для каждого человека, которое означает способность любить свою страну и народ, действовать во имя его процветания, защищать национальные ценности и культуру.

- * Патриотизм - с любовью служить своей стране, способствовать ее прогрессу.
- * Уважение и защита – пробуждение истории, культуры и традиций родины.
- Истинное самопожертвование - действовать на благо нации, бороться за ее свободу и независимость.
- Национальное единство - солидарность, сплоченность и взаимоподдержка людей.
- Сохранение культурного наследия - защита литературы, искусства, обычаев и языка нации.
- * Самопожертвование - служение развитию общества и государства, способствующее процветанию нации.

Такие великие писатели, как Максуд Шайхзода, Алишер Навои, Абдулла Кадири, Чулпан, Усман Назарет, в своих произведениях выдвинули идею верности Родине. Роман Максуда Шайхзоды "джонкуяр", также написанный в патриотическом духе, отражает стремление народа к свободе и справедливости.

Преданность Родине и нации - одно из самых высоких чувств, исходящих от сердца человека, которое должно проявляться не только на словах, но и в практических действиях. Пока каждый служит своей стране и народу, он может прогрессировать и добиваться великого будущего. Верность родине и нации Максуда Шайхзаде. Особое место в творчестве Максуда Шайхзаде занимает идея верности Родине и нации. Его стихи, драмы и переводы широко освещают темы любви к Родине, популяризации и осознания национальной идентичности.

Максуд Шайхзаде и патриотизм. Одно из основных направлений работы шейхзаде заключается в пропаганде идей освобождения Родины, ее развития и защиты интересов народа. За свою творческую карьеру он отразил в ярких образах тяжелую часть народа, его стремление к свободе и национальную гордость.

"Страстный" Максуда Шайхзоды - один из самых известных поэтических сборников поэта, широко освещающий темы любви, человечности и мужества по отношению к родине и нации. В произведении герои проявляют такие высокие чувства, как самопожертвование во имя Родины, борьба за справедливость и дело правды.

Идея национального освобождения играет важную роль в творчестве Шайхзоды. Он проповедовал борьбу за независимость и свободу нации. Темы национального пробуждения и национальной гордости имеют большое значение в его творчестве.

Проявления преданности Родине в творчестве Шайхзоды

- * Тема борьбы за свободу родины
- * Пропаганда национального героизма и мужества
- * Отражение тяжелой судьбы народа и его благородных устремлений
- * Призыв к национальному единству и солидарности

Творчество Максуда Шайхзоды пронизано идеями верности Родине и нации, и его произведения и сегодня имеют большое значение как символ популяризации и любви к Родине. Его стихи и драмы написаны в духе национального самосознания и стремления к свободе, вдохновляя читателя на высокие чувства.

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Annotation: Maqsd Shaikhzoda's contribution to the prosperity of Uzbek literature, culture was deservedly honored by independent Uzbekistan and its government. A row school and streets are named after him. In this article, the work of Maqsd Shaykhzoda spoke about the importance of qualities such as courage, fairness, thoughtful thinking, popularism, expressed in the image of the heroes of the work in Uzbek literature.

Keywords: poetry, uzbek poetry, poetic cells, poetic collection, sense of sophistication, spiritual extortion, urination, direction, artistry.

Poet and playwright Maqsd Shaykhzoda was born in 1908 in Oqtosh, Ganja region of Azerbaijan. He took an early interest in art. By his own admission, he began to create poetry" before he had yet to take over the alphabet". His work opened eyes on, but was persecuted because of his progressive opinions and moved to Tashkent in 1929. From then on, for the rest of his life, Uzbekistan remained the second homeland for him. In Tashkent, the poet worked in a number of newspaper magazines, taught in higher educational institutions, conducted scientific activities. Much of his research has been an important contribution to the development of Uzbek literary studies. Articles on the work of Nizami Ganjavi, SHota Rustaveli, Shakespeare, Babur, Byron, Pushkin explored the role of these artists in the prosperity of world literature. The work of shaykhzadeh, especially Alisher Navoi, who has mastered poetic skills, is distinguished by scientific depth, beauty. The series, which he calls the" Sultan of the ghazal estate", has so far become an example for a new generation of Nawabs.

In a number of examples of the works of Shakespeare, Byron, Makhmumkuli, Tagor, Avetik Isaakyan, Nozim Hikmat, translated into Uzbek, The Art of exaltation of the Shaykhzadeh is manifested.

Maqsd Shaikhzoda's contribution to the prosperity of Uzbek literature and culture was deservedly honored by independent Uzbekistan and its government. A row school and streets are named after him.

Shaikhzoda's role in the development of Uzbek poetry of the 20th century is great. Colorful form and content, uplifting spirit, cast images in poems watered with octave Paphos, symbolism, juxtaposition in words, musical grace give the poet's works an amazing artistic integrity, evoking a wave of emotions in the reader's soul.

The poet never sought, biblical, artificial problems. He addresses, above all, the issues that excite him, opening the eyes of his civic and poetic cells. The heart of the book, which the poet awakened, will also move to shuur. Begins his new life. In his poems, especially beautiful artistic images are abundant. While the poet sometimes feels like a boat like a point at sea is a “hole on the water”, sometimes the tail of the Seagulls rings as a “question asked to the horizon”.

Sheikhzoda's poems were printed in dozens of collections, such as” for a quarter of a century“,” the world is immortal“,” Alley”. These poems were sung with the fantasies, love, sorrows, hopes of a contemporary living with high human dreams. True, in his work, which lasted for forty years, The Sheik also sang Lenin, the Kremlin, the saloons, the irqas and the factionalists. But this is the seal of time and order in the fate and work of the poet. However, the value of Sheikhzoda's poetry is determined not by works in this direction, but by the delicate and unique States of the human heart, which, in a refined and uplifting, hopeful reflection, serve in the reader in the enrichment of such beautiful moments. Shaikhzoda saw the main task of the poet as “to educate the human soul, to increase the elements of good in man, to raise the feeling of beauty and elegance to the people to a more aland level.”

In the treatment of his lyrical philosophical epic,” The Tashkent book”, it would also be correct to come from this point of view. These thoughts of Shaw can also be blatant for most of his poems.

Maqsud Shaykhzoda believes and believes that one of the great blessings in life is poetry, and one of the unequal beauties is poetry. Shaykhzoda, in her poem” The poem is a sister of true beauty”, shone throughout her work - sings the gift-loving essence of poetry to man of endless beauties, spiritual extortion and evrations, seeks to reveal its new-new facets.

The thought in the title of the poem, in one way or another, seems not new. We also meet close views on him in the creativity of Navoi, Pushkin, Yesenin, Chulpan. However, according to the unwritten rules of poetry, the main issue is not only the thought that motivated the work and the meaning in which it is expressed, but their way of artistic manifestation, the art of being able to awaken new wave feelings in the reader's psyche. Shaikhzoda's "poetry is a true beauty sister" is valuable in these aspects.

In the work, poetry is glorified as one of the great traits that make human nature and life GLOW. Being oshno with poetry, in the opinion of the author, makes a person's character, energy, spirituality immeasurable, has a strong influence on the perfection of his psyche.

If anyone loves her if -

It is they who add beauty to Husni.

This beauty is not only a photo, but also a hint of urine. It's standing that the reader will be convinced by the example of classmates, long-close like-minded friends, acquaintances that these verses are vital, lively, purhikmat. A poetry lover is a bitter truth in the meaning of life-does he not seem to be attracted to his own person, influenced by them, to have a deep understanding of instant femininity, to feel clearer, to be fanatical about beautiful meanings and feelings?

Near the end of his life, Shaykhzoda experienced a series of losses with his behavior, his view of the world, his attitude towards those around him, in particular, his inner and outer desire. In 1966, a close friend, the great poet Ghafur Ghulam, the great statesman with whom the relationship was close, Uthman YUsupov died. These losses resonated strongly in the poet's heart: poems entitled "Letter to Gafur" and "separation" (in memory of Usman Yusupov) were created.

The appreciation of Man, the impartial attitude to the glory of each soul make up the leading direction of Shaykhzadeh's poetry, the artistic illumination of problems. The poet himself faced a series of injustices in life. In the 20s of the last century was unjustly slaughtered, unjustly besieged in the beginning of the 50s. These bari beiz did not pass, of course:

Friends, save the good avidly!

Excuse the salute of "Hello"!

From crying for a hundred hours when he dies -

Eliminate him for an hour in his life!

In the poem "separation", the same poetic idea was further elaborated. Although the work is aimed at glorifying the memory of the beloved child of the people, who led Uzbekistan in the middle of the 20th century, in essence, it is aimed at perpetuating the name of the selflessness siymos for the people, the motherland, paying tribute to them. The heart is small, but can accommodate a lot. Although the lost person is not the eldest, it is difficult to fit into the heart the separation of a friend, the loss of the beloved child of the motherland, says the poet:

A measure of mourning to an impenetrable heart,

Cries bitter to the tear chest.

The last two verses of the poem "separation" are particularly notable:

But to his untimely death, oh,

Both you and I have sin like a demon!

This realistic byte is deeply meaningful. Is it true that the familiar-knowing, some premature death of loved ones in our environment is not caused in some cases by the ineptitude, lack of consequence, negligence, indecency, coldness that we allow ourselves to notice? This is a lesson that comes from the general psyche, artistry of the poem. When it comes to the historicity of the work, this idea is a gesture to some of the injustices shown in its time in relation to the historical figure that underlies the lyrical hero. This idea was not easy to say in the middle of the 60s of the last century. But the poet Shaykhzoda expresses this poetic thought beautifully and impressively in the artistic way found a way to reflect, in addition to artistic reality, historical history. Maqsd Shaykhzoda enriched Uzbek literature with historical dramas “Jaloliddin Manguberdi”, “Mirzo Ulugbek”.

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Современные методы бизнес-планирования как инструмент стратегического управления организацией

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Аннотация

В статье рассматриваются современные методы бизнес-планирования и их роль в стратегическом управлении организацией. Проведен сравнительный анализ традиционных и инновационных подходов к бизнес-планированию, выделены ключевые тенденции. Автор делает вывод о том, что цифровизация, применение искусственного интеллекта и использование больших данных становятся неотъемлемыми элементами современного бизнес-планирования, способствующего принятию стратегических решений и повышению конкурентоспособности компании.

Annotation

The article examines modern business planning methods and their role in strategic management of an organization. A comparative analysis of traditional and innovative approaches to business planning is conducted, highlighting key trends. The author concludes that digitalization, artificial intelligence, and Big Data are becoming integral elements of modern business planning, facilitating strategic decision-making and increasing company competitiveness.

Ключевые слова. Бизнес-планирование, стратегическое управление, прогнозирование, цифровые технологии, SWOT-анализ, искусственный интеллект, Big Data.

Keywords. Business planning, strategic management, forecasting, digital technologies, SWOT analysis, artificial intelligence, Big Data.

Бизнес-планирование является неотъемлемой частью стратегического управления современной организацией. В условиях глобальной конкуренции, технологических изменений и высокой неопределенности компании вынуждены использовать более эффективные инструменты планирования и прогнозирования, которые позволяют адаптировать стратегию к изменяющимся условиям внешней среды.

Современные методы бизнес-планирования направлены не только на разработку краткосрочных и долгосрочных целей, но и на оценку рисков, оптимизацию ресурсов и повышение операционной эффективности. Целью данного исследования является анализ современных методов бизнес-планирования и их влияние на стратегическое управление организацией.

Бизнес-планирование – это процесс разработки стратегии организации, направленный на обеспечение ее устойчивого развития и конкурентных преимуществ. В стратегическом управлении бизнес-план выполняет несколько ключевых функций:

Определение целей и задач – формирование четких ориентиров для развития бизнеса.

Прогнозирование рыночной ситуации – выявление потенциальных угроз и возможностей.

Оптимизация ресурсов – эффективное распределение материальных, финансовых и кадровых ресурсов.

Оценка рисков – снижение неопределенности и управление кризисными ситуациями.

Таблица 1.

Основные подходы к бизнес-планированию

Подход	Характеристика
Традиционный	Основан на статических моделях планирования, предполагает использование стандартных финансовых расчетов и SWOT-анализа.
Современный	Ориентирован на динамичные методы прогнозирования, включает цифровые технологии, искусственный интеллект, анализ Big Data.

Современное бизнес-планирование основано на концепции адаптивного управления, при котором планы регулярно корректируются с учетом новых данных и рыночных условий.

В условиях цифровой трансформации бизнеса появляются новые инструменты стратегического планирования. К числу наиболее эффективных относятся:

Метод	Описание
SWOT-анализ	Оценка сильных и слабых сторон организации, а также внешних возможностей и угроз.

PEST-анализ	Анализ политических, экономических, социальных и технологических факторов.
Сценарное планирование	Разработка нескольких альтернативных вариантов развития событий.
Big Data и аналитика	Использование массивов данных для прогнозирования тенденций и принятия решений.
Моделирование на основе AI	Применение искусственного интеллекта для анализа больших объемов информации и автоматического формирования стратегий.
Когнитивное планирование	Использование нейросетей и алгоритмов машинного обучения для предсказания будущих изменений в отрасли.

Применение современных методов бизнес-планирования позволяет организациям не только повышать эффективность своих стратегических решений, но и минимизировать потенциальные риски.

Бизнес-планирование оказывает непосредственное влияние на стратегическое управление, обеспечивая долгосрочное развитие организации. На рисунке ниже представлена взаимосвязь между бизнес-планированием и ключевыми аспектами стратегического управления:

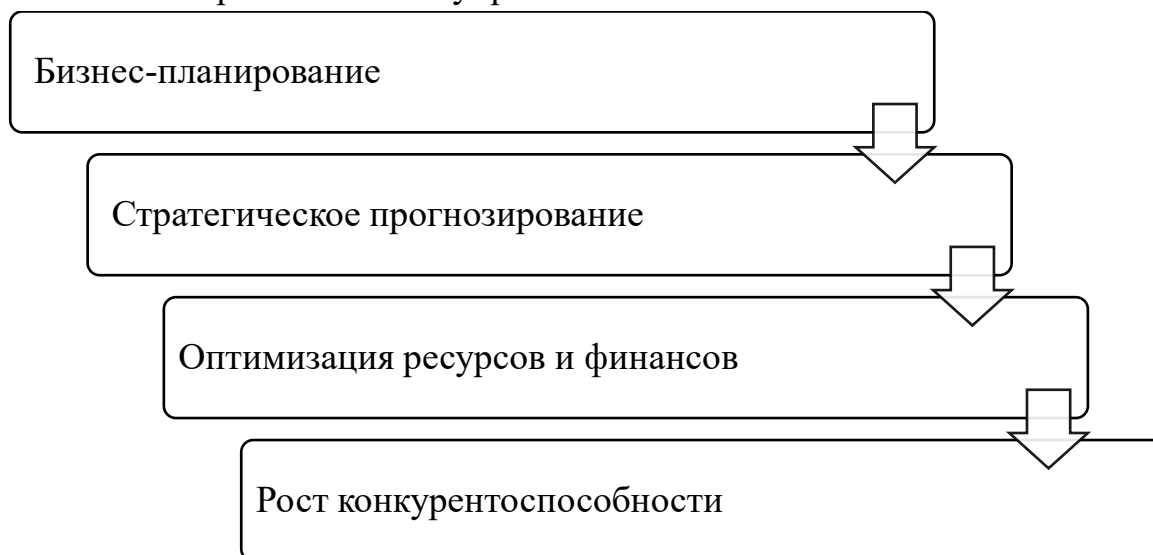


Рисунок 1. Влияние бизнес-планирования на стратегическое управление

Оптимизацию финансовых ресурсов – эффективное распределение бюджета и управление инвестициями, что способствует снижению финансовых рисков, повышению ликвидности компании и обеспечению стабильного денежного потока. Кроме того, стратегическое планирование капитальных вложений

позволяет улучшить рентабельность бизнеса и повысить его инвестиционную привлекательность.

Анализ и адаптацию к изменяющейся рыночной среде – выявление новых возможностей и рисков путем анализа конкурентной среды, макроэкономических факторов и потребностей целевой аудитории. Современные методы прогнозирования позволяют компаниям оперативно реагировать на изменения спроса, корректировать ассортимент продукции и адаптировать маркетинговую стратегию.

Развитие инноваций – поиск новых бизнес-моделей и использование цифровых технологий для повышения конкурентоспособности. В условиях глобальной цифровизации бизнес-планирование охватывает внедрение автоматизированных решений, анализ данных на основе искусственного интеллекта и применение agile-методов для быстрого тестирования и внедрения инновационных продуктов и услуг.

Повышение операционной эффективности – минимизация затрат, автоматизация бизнес-процессов и внедрение методов бережливого производства. Оптимизация логистики, повышение производительности труда и цифровизация внутренних процессов позволяют компаниям снижать издержки, сокращать время выполнения операций и повышать общий уровень конкурентоспособности.

Развитие устойчивого управления и корпоративной социальной ответственности – интеграция принципов ESG (экология, социальная ответственность и корпоративное управление) в стратегию компании. Современное бизнес-планирование включает оценку экологических и социальных факторов, что позволяет минимизировать воздействие на окружающую среду, повышать доверие инвесторов и укреплять корпоративную репутацию.

Формирование устойчивой корпоративной стратегии – создание долгосрочного видения развития бизнеса с учетом цифровых трендов, глобальных экономических изменений и потребностей клиентов. Комплексный подход к бизнес-планированию позволяет компании не только успешно конкурировать на рынке, но и предвосхищать тенденции, формируя стратегическое преимущество. Таким образом, современные методы бизнес-планирования являются не просто инструментом стратегического управления, а многофункциональным механизмом, обеспечивающим устойчивое развитие компании, эффективное использование ресурсов и формирование долгосрочной конкурентоспособности. Исходя из вышеизложенных:

Бизнес-планирование является неотъемлемой частью стратегического управления и играет ключевую роль в развитии организации. В современных условиях успешное планирование требует применения цифровых технологий, искусственного интеллекта и анализа больших данных.

Применение современных методов, таких как сценарное моделирование, когнитивный анализ и AI-прогнозирование, позволяет компаниям более точно адаптировать стратегию к изменяющимся условиям внешней среды.

Бизнес-планирование влияет на ключевые аспекты управления: финансовую устойчивость, рыночную конкурентоспособность, развитие инноваций и повышение операционной эффективности.

Гибкость и адаптивность бизнес-планов становятся критически важными для долгосрочного устойчивого роста компании.

Интеграция аналитических инструментов и цифровых решений в процесс стратегического управления позволяет минимизировать риски, повысить эффективность принятия решений и обеспечить конкурентные преимущества на рынке.

Таким образом, современные методы бизнес-планирования — это не просто инструмент разработки стратегий, а важный механизм, способствующий устойчивому развитию и эффективному управлению организацией.

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MOLIYAVIY NATIJALARNI SHAKLLANTIRISH TARTIBI

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Fan: Bugalteriya hisobi va soliqqa tortish. 99-586-46-36

Annotatsiya: Ushbu maqolada moliyaviy natijalarni shakllantirish. Moliyaviy natijalarning mohiyati va ahamiyati tartibi haqida ma'lumotlar berilgan.

Kalit so'zlar: Buxgalteriya, daromad, xarajat, foyda, korxona, iqtisod, mablag', balans, moliyaviy natija.

Moliyaviy natijalar har qanday korxonaning iqtisodiy holatini baholashda muhim rol o'ynaydi. Ular korxonaning moliyaviy barqarorligi, foyda olish salohiyati va samaradorligini aniqlash uchun tahlil qilinadi. Ushbu maqolada moliyaviy natijalarni shakllantirish tartibi, asosiy bosqichlari, hisob-kitob usullari hamda ularni tahlil qilish metodlari batafsil yoritiladi.

1. Moliyaviy natijalarning mohiyati va ahamiyati

Moliyaviy natija korxonaning o'z faoliyati davomida olgan daromadlari va qilgan xarajatlari o'rtasidagi farq sifatida aniqlanadi. Agar daromadlar xarajatlardan yuqori bo'lsa, foyda hosil bo'ladi, aks holda zarar yuzaga keladi.

Moliyaviy natijalarning ahamiyati:

- ✓ Investitsiya qarorlarini qabul qilishda yordam beradi – korxonaning foydadorligi va rentabelligini baholash orqali investorlar va aktsiyadorlar strategik qarorlar qabul qiladi.
- ✓ Solvlik va likvidlikni boshqarishda yordam beradi – moliyaviy natijalar orqali korxonaning qarzlarini qoplash imkoniyatlari baholanadi.
- ✓ Soliq va dividend siyosatini belgilaydi – sof foyda asosida korxona soliq to'lovlarini rejalashtiradi va aktsiyadorlarga dividend to'lash imkoniyatlarini aniqlaydi.
- ✓ Faoliyat samaradorligini ko'rsatadi – foyda va zarar tahlili orqali korxonaning boshqaruv samaradorligi baholanadi.

2. Moliyaviy natijalarni shakllantirishning asosiy bosqichlari

Moliyaviy natijalarni shakllantirish quyidagi ketma-ketlikda amalga oshiriladi:

1-bosqich: Daromadlarni hisoblash

Korxona faoliyati natijasida hosil bo'ladigan barcha daromadlar aniqlanadi. Asosiy daromad turlari:

- Asosiy operatsion daromadlar – mahsulot va xizmatlarni sotishdan tushgan tushumlar.
- Moliya daromadlari – depozit foizlari, obligatsiyalar va dividendlardan tushgan daromadlar.
- Boshqa daromadlar – jarimalar, grantlar, subsidiyalar va boshqa moliyaviy yordamlar.

2-bosqich: Xarajatlarni aniqlash

Xarajatlar bu korxona tomonidan mahsulot ishlab chiqarish yoki xizmat ko'rsatish jarayonida amalga oshiriladigan harajatlar hisoblanadi. Ular quyidagilarga bo'linadi:

- Ishlab chiqarish xarajatlari – xomashyo, ish haqi, elektr energiyasi va boshqa ishlab chiqarish bilan bog'liq xarajatlar.
- Ma'muriy va tijorat xarajatlari – marketing, reklama, transport va ijara xarajatlari.
- Foiz to'lovlari va soliqlar – bank kreditlari bo'yicha foizlar, davlat soliqlari va bojlar.

3-bosqich: Moliyaviy natijalarni hisoblash

Moliyaviy natijalar quyidagi formula bo'yicha aniqlanadi:

Xo'jalik yurituvchi sub'ekt faoliyatining moliyaviy natijalari foydaning quyidagi ko'rsatkichlari bilan tasniflanadi:

- mahsulotni sotishdan olingan yalpi foyda, bu sotishdan olingan sof tushum bilan sotilgan mahsulotning ishlab chiqarish tannarxi o'rtasidagi tavofut sifatida aniqlanadi:

$$YaF=SST-IT$$

bunda,

YaF – yalpi foyda;

SST – sotishdan olingan sof tushum;

IT – sotilgan mahsulotning ishlab chiqarish tannarxi;

- asosiy faoliyatdan ko'rilgan foyda, bu mahsulotni sotishdan olingan yalpi foyda bilan davr xarajatlari o'rtasidagi tafovut va plyus asosiy faoliyatdan ko'rilgan boshqa daromadlar yoki boshqa zararlar sifatida aniqlanadi:

$$AFF = YaF - DX + BD - BZ,$$

bunda,

AFF – asosiy faoliyatdan olingan foyda;

DX – davr xarajatlari;

BD – asosiy faoliyatdan olingan boshqa daromadlar;

BZ – asosiy faoliyatdan ko‘rilgan boshqa zararlar;

- xo‘jalik faoliyatidan olingan foyda (yoki zararlar), bu asosiy faoliyatdan olingan foyda summasi plus moliyaviy faoliyatdan ko‘rilgan daromadlar va minus zararlar sifatida hisoblab chiqiladi:

$$UF = AFF + MD - MX,$$

bunda,

UF – umumxo‘jalik faoliyatidan olingan foyda;

MD – moliyaviy faoliyatdan olingan daromadlar;

MX – moliyaviy faoliyat xarajatlari;

- soliq to‘lagungacha olingan foyda, u umumxo‘jalik faoliyatidan olingan foyda plus favqulodda (ko‘zda tutilmagan) vaziyatlarda ko‘rilgan foyda va minus favqulodda zarar sifatida aniqlanadi:

$$STF = UF + FP - FZ,$$

bunda,

STF – soliq to‘lagungacha olingan foyda;

FP – favqulodda vaziyatlardan olingan foyda;

FZ – favqulodda vaziyatlardan ko‘rilgan zarar;

- yilning soy foydasi, u soliq to‘langandan keyin xo‘jalik yurituvchi sub’ekt ixtiyorida qoladi, o‘zida daromad (foyda)dan to‘lanadigan soliqni va minus qonun hujjatlarida nazarda tutilgan boshqa soliqlar va to‘lovlarni chiqarib tashlagan holda soliqlar to‘langunga qadar olingan foydani ifodalaydi:

$$SF = STF - DS - BS,$$

bunda, SF – sof foyda;

DS – daromad (foyda)dan to‘lanadigan soliq; BS – boshqa soliqlar va to‘lovlar.

Foydaning taqsimlanishi deganda uning iste‘mol va jamg‘arishga yo‘naltirilishi, joriy davr foydasining soliqlar to‘lovi, ishlab chiqarishni rivojlantirish va zaxiralashga hamda kapital egalari o‘rtasidagi shartlar, kelishuvlarga binoan taqsimlanishi tushuniladi.

Foyda quyidagicha taqsimlanadi:

- soliq qonunchiligiga muvofiq davlat byudjetiga soliqlar, yig‘imlar va to‘lovlarga;

- ishlab chiqarishni rivojlantirish va zaxiralashga; - aktsiya va kapital egalari dividendlar to‘lashga.

Korxona o'zining hisob foydasidan, avvalo, davlat oldida hisob beradi va o'zining ixtiyorida hamda tasarrufida bo'lgan foyda summasini aniqlaydi. Foydadan olingan soliqlar qat'iy stavkalarda va foizlarda undiriladi. Hisob foydasining qolgan qismi korxona sof foydasi sifatida uning erkin belgiloviga (aksionerlar umumiy yig'ilishining qarori va ichki nizomiga) muvofiq taqsimlanadi.

Sof foydadan ishlab chiqarishni rivojlantirish va kengaytirishga oid sarflar aksionerlarning umumiy yig'ilishida hisob berish hamda ularning roziligini olish asosida belgilanadi.

Sof foydaning qolgan qismi chiqarilgan aktsiyalarning turiga qarab va ularning imtiyozli shartlari asosida taqsimlanadi. Dastlab imtiyozli aktsiya egalariga oldindan kafolatlangan foizlarda to'lovlar hisobga olinadi, so'ngra oddiy aktsiya egalariga dividend foizlari va summalari e'lon qilinadi. Foydaning taqsimlanmagan qismi korxona uchun taqsimlanmagan foyda sifatida, agar korxona nochor ahvolda bo'lsa, qoplanmagan zarar sifatida keyingi hisobot yiliga o'tkaziladi.

4-bosqich: Moliyaviy hisobot tayyorlash

Moliyaviy natijalar bo'yicha hisob-kitoblar yakunlangach, quyidagi asosiy hisobotlar tuziladi:

✚ Moliyaviy natijalar to'g'risidagi hisobot – daromad, xarajat va sof foydani aks ettiruvchi hujjat.

✚ Balans hisobotlari – aktivlar, passivlar va kapital hajmini ko'rsatadi.

✚ Pul oqimlari hisobotlari – pul tushumlari va chiqimlari harakatini aks ettiradi.

3. Moliyaviy natijalarni tahlil qilish usullari

Moliyaviy natijalarni baholash uchun quyidagi tahlil usullari qo'llaniladi:

1. Gorizonttal tahlil

Bu usulda moliyaviy natijalar turli davrlarga solishtiriladi va o'zgarishlar aniqlanadi. Masalan, kompaniyaning yillik daromadi 2023 yilda 10% oshgan bo'lsa, uning iqtisodiy o'sish sur'ati baholanadi.

2. Vertikal tahlil

Har bir moliyaviy ko'rsatkichning umumiy hajmdagi ulushi foizlarda hisoblanadi. Masalan, umumiy daromad tarkibida ishlab chiqarish xarajatlarining ulushi qanday ekanligi aniqlanadi.

3. Ko'rsatkichlar (koeffitsiyentlar) tahlili

Moliyaviy natijalarni baholash uchun turli ko'rsatkichlardan foydalaniladi:

- Foyda marjasi = $\text{Sof foyda} / \text{Umumiy daromad} \times 100\%$
- Rentabellik darajasi = $\text{Foyda} / \text{Ishlab chiqarish tannarxi} \times 100\%$

- $\text{Likvidlik koeffitsiyenti} = \text{Joriy aktivlar} / \text{Joriy majburiyatlar}$

4. Moliyaviy natijalarni optimallashtirish yo‘llari

Moliyaviy natijalarni yaxshilash uchun quyidagi strategiyalar qo‘llanilishi mumkin:

- ✓ Xarajatlarni kamaytirish – ortiqcha ma‘muriy va ishlab chiqarish xarajatlarini optimallashtirish.
- ✓ Narx siyosatini to‘g‘ri belgilash – mahsulot yoki xizmat narxlarini bozordagi talab va raqobatchilarga mos ravishda belgilash.
- ✓ Moliyaviy menejmentni rivojlantirish – pul oqimlarini samarali boshqarish, investitsiyalarni diversifikatsiya qilish.
- ✓ Raqobatbardoshlikni oshirish – yangi texnologiyalarni joriy qilish, mijozlarga qo‘shimcha qiymat yaratish.

Xulosa

Moliyaviy natijalarni shakllantirish har qanday biznes uchun muhim jarayon bo‘lib, korxonaning iqtisodiy samaradorligini baholash va rivojlantirish uchun asos bo‘lib xizmat qiladi. To‘g‘ri moliyaviy tahlil va strategik rejalashtirish yordamida kompaniyalar o‘z foydasini oshirish va moliyaviy barqarorlikka erishishlari mumkin. Bu jarayonda hisob-kitoblarning aniq yuritilishi, hisobotlarning shaffofligi va samarali moliyaviy boshqaruv muhim o‘rin tutadi. Shu sababli, har bir korxona o‘z moliyaviy natijalarini tahlil qilib borishi va ularni doimiy ravishda optimallashtirish ustida ishlashi lozim.

Moliyaviy natijalarni shakllantirish kompaniya muvaffaqiyatining asosiy ko‘rsatkichlaridan biri hisoblanadi. To‘g‘ri hisob-kitob va tahlil korxonaga moliyaviy strategiyasini rejalashtirish, xarajatlarni optimallashtirish va daromadlarni oshirish imkoniyatini yaratadi. Shuning uchun moliyaviy natijalarni shakllantirish jarayonida aniq reja va tahlil usullariga amal qilish muhim ahamiyat kasb etadi.

Mitochondrial Dysfunction and Its Role in Disease Pathogenesis

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Annotation:

This article defines that mitochondria are essential organelles responsible for cellular energy production through oxidative phosphorylation. Mitochondrial dysfunction plays a significant role in apoptosis, necrosis, and oxidative stress, influencing disease progression in conditions like Parkinson's disease, Alzheimer's disease, and multiple sclerosis. Inherited through maternal transmission or nuclear mutations, mitochondrial disorders exhibit complex inheritance patterns, with heteroplasmy and threshold effects impacting disease expression. Advances in genetic research and metabolic studies have improved understanding, but effective treatments remain limited. Future therapeutic strategies, including targeted gene therapy and metabolic interventions, hold promise for managing mitochondrial diseases and mitigating their systemic effects.

Key Words: Mitochondria, oxidative phosphorylation, mitochondrial DNA (mtDNA), nuclear DNA (nDNA), mitochondrial diseases, mitochondrial myopathy, neurodegenerative disorders, mitochondrial inheritance, metabolic disorders, mitochondrial dysfunction, mitochondrial biogenesis, reactive oxygen species (ROS), genetic mutations.

Mitochondria have played a key role in the evolution of complex life. Their existence as an organelle is linked to endosymbiosis, a process that suggests their origins align with the emergence of eukaryotic cells. Mitochondrial oxidative phosphorylation contributed to an increase in nuclear genome size, protein expression, and overall cellular complexity, ultimately leading to the development of multicellular organisms. Mitochondrial diseases are a heterogeneous group of disorders caused by genetic, structural, and biochemical defects of mitochondria. Clinical and biochemical analyses are essential for diagnosing mitochondrial diseases. The main biochemical indicator of

mitochondrial pathology is the development of lactic acidosis, which usually manifests along with hyperlactacidemia and hyperpyruvicemia. In mitochondrial diseases, an increase in the normal concentration of pyruvic and lactic acids in cerebrospinal fluid is observed.

Initially, mitochondrial diseases were studied in relation to nerve and muscle pathologies. Later, it was discovered that mitochondrial DNA (mtDNA) mutations could cause various conditions, including cardiomyopathy, endocrinopathy, gastrointestinal tract disorders, and bone marrow damage. However, among these, mitochondrial diseases predominantly affect muscle tissues and the central nervous system.

Myopathy manifests in muscles as intolerance to physical exertion, eye diseases without reflex involvement, ptosis (drooping eyelids), muscle atrophy, and weakness. Neurological disorders include epilepsy, strokes, neuro-sensory deafness, optic nerve atrophy, myoclonus, polyneuropathy, psychomotor developmental changes, migraines, intellectual disabilities, and cognitive decline. Additionally, mitochondrial dysfunctions not only contribute to various organ pathologies but are also significantly evident in myocardial damage.

Mutations in mitochondrial proteins are associated with various neurodegenerative diseases such as Parkinson's disease, Alzheimer's disease, motor neuron disorders (Lou Gehrig's disease or amyotrophic lateral sclerosis), and multiple sclerosis. Furthermore, the presence of free radicals in mitochondria plays a crucial role in cell degradation and is fundamental to the aging process. It is hypothesized that certain genes protect mitochondria for extended periods and regulate the cell's antioxidant defense mechanisms.

A decrease in ATP reserves in cells is a primary cause of cell death under anoxia/hypoxia, toxic effects of xenobiotics, and stress conditions. Changes in mitochondrial function are also observed in some tumor cells. Mitochondria play a key role in cell death through necrosis and apoptosis. In necrotic cell death, a gradual and prolonged increase in Ca^{2+} concentration in the cytosol is observed. Under these conditions, the influx of Ca^{2+} into the mitochondria occurs slowly through the uniport system. It has been noted that an increase in mitochondrial Ca^{2+} concentration does not significantly alter the matrix pH and prevents the opening of the pore in a low-conductance state.

Excessive accumulation of Ca^{2+} in mitochondria leads to changes in the mitochondrial membrane potential, causing a transition to a high-conductance state and mitochondrial swelling. Consequently, mitochondrial function is altered, leading to cell death through

necrosis or apoptosis. Mitochondrial membrane permeability is crucial in determining whether a cell undergoes apoptosis or necrosis. Many cell death signals target mitochondria, involving proteins such as Bid and Bad from the Bcl-2 family.

Additionally, mitochondrial permeability transition (MPT) induces the release of catabolic hydrolases and enzyme activators (caspases) from mitochondria. Thus, mitochondrial dysfunction (including pore opening, respiratory inhibition, oxidative phosphorylation uncoupling, and ROS generation) leads to necrosis. Although pore opening plays a major role in necrosis development, it also contributes to certain types of apoptosis.

Various intracellular signaling pathways contribute to caspase system activation, increasing cytosolic Ca^{2+} , nitric oxide, amphipathic peptides, and ceramide concentrations, which directly or indirectly alter mitochondrial ion permeability.

Mitochondrial diseases present significant clinical variability. The same genetic mutation can result in different disorders (e.g., MELAS, MIDD, and CPEO from m.3243A > G mutations), while the same disorder can arise from multiple genetic mutations (e.g., Leigh syndrome has over 75 possible genetic causes). Additionally, nuclear DNA mutations have been identified in mitochondrial aminoacyl-tRNA synthetases (mtARs), which play a crucial role in mitochondrial translation. Variants in these genes can cause severe conditions such as brain malformations and fatal infantile lactic acidosis.

Inheritance and Genetic Complexity. Mitochondrial disorders can be inherited through various patterns, including autosomal dominant, autosomal recessive, X-linked, or maternal inheritance via mtDNA. The concept of heteroplasmy explains variable disease expression within the same family, as different cells and tissues carry varying levels of mutant mtDNA. The "bottleneck effect" during oocyte development influences mutation load, and the "threshold effect" determines when mitochondrial dysfunction occurs in affected organs. Over time, mitotic segregation can alter disease expression within an individual.

Energy Metabolism Disorders. Mitochondria generate energy through glucose metabolism, with pyruvate playing a key role in connecting glycolysis to the Krebs cycle. Defects in pyruvate metabolism often result in primary lactic acidosis, where excess pyruvate is converted into lactate and alanine. The ratio of lactate to pyruvate can help identify specific metabolic disorders, including:

Pyruvate Dehydrogenase Complex (PDHC) Deficiency: PDHC is a multi-enzyme complex composed of E1, E2, and E3 subunits. PDHA1 deficiency, an X-linked condition, can cause fatal lactic acidosis or neurological impairments, but high-dose

thiamine therapy has shown some benefits. PDHE2 and PDHE3 deficiencies are autosomal recessive and lead to severe metabolic disturbances.

Pyruvate Carboxylase (PC) Deficiency: This autosomal recessive disorder presents in three forms:

Group A (North American phenotype): Lactic acidosis with intellectual disability.

Group B (French phenotype): Severe neonatal lactic acidosis with hyperammonemia and neurological symptoms, often fatal in infancy.

Group C: Mild, episodic lactic acidosis with no significant cognitive impairment.

Oxidative Phosphorylation (OXPHOS) Defects. Mitochondria produce ATP through oxidative phosphorylation, a process driven by electron transport across five respiratory chain complexes (I-V). Mutations in both mtDNA and nDNA can disrupt this process, leading to various inherited disorders with neurocognitive and developmental symptoms.

Complex I Deficiency: The most common OXPHOS disorder, it can cause severe conditions like Leigh syndrome, cardiomyopathy, and exercise intolerance. While there is no cure, some patients respond to riboflavin supplementation.

Complex II Deficiency: Often linked to Leigh syndrome, this disorder affects the brainstem and basal ganglia, leading to neurological regression, muscle weakness, respiratory issues, and movement disorders.

Despite the complexity of mitochondrial diseases, ongoing research is enhancing our understanding of these conditions. Advances in genetic studies, disease modeling, and targeted therapies may lead to improved diagnosis and treatments for mitochondrial disorders in the future.

Conclusion

Mitochondria play a crucial role in cellular energy production, and their dysfunction is linked to various diseases affecting multiple organ systems. Mitochondrial diseases, caused by genetic mutations in mtDNA and nDNA, primarily impact high-energy-demanding organs like the brain, heart, and muscles. These disorders exhibit significant clinical variability, with different mutations leading to the same condition and vice versa. The complex inheritance patterns, including maternal transmission and heteroplasmy, further complicate disease expression. Metabolic disturbances, such as defects in pyruvate metabolism and oxidative phosphorylation, contribute to mitochondrial dysfunction and associated pathologies. While treatment options remain limited, advances in genetic research and therapeutic approaches offer hope for better

diagnosis and management. Understanding mitochondrial function is also essential in studying aging, neurodegenerative diseases, and cancer. Ongoing research on mitochondrial genetics and targeted therapies may lead to novel interventions, improving patient outcomes and expanding knowledge of cellular energy metabolism and disease mechanisms.

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JISMONIY TARBIYA VA SPORT TIZIMIDA YENGIL ATLETIKA

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Annotasiya

Mazkur maqolada jismoniy tarbiya va sport tizimida yengil atletikaning o'rni va ahamiyati tahlil qilinadi. Yengil atletika – jismoniy tarbiya va sportning eng qadimgi va ommabop turlaridan biri bo'lib, insonning har tomonlama jismoniy rivojlanishiga ko'maklashadi. Ushbu sport turi yugurish, sakrash va uloqtirish kabi mashqlarni o'z ichiga olgan bo'lib, sportchilarning chidamliligi, tezkorligi, kuchi va muvozanatini rivojlantirishga xizmat qiladi. Maqolada yengil atletikaning ta'lim tizimidagi o'rni, uni o'qitish metodikasi hamda yosh sportchilarni tayyorlash jarayonida samarali usullar tahlil etiladi. Bundan tashqari, yengil atletikaning jismoniy tarbiya darslarida va sport mashg'ulotlarida qo'llanilishi, uning sog'liq uchun foydali jihatlari hamda ommaviy sport sifatida rivojlantirish istiqbollari yoritiladi.

Kalit so'zlar: *Yugurish, sakrash, ta'lim, muassasa, ilmiy tadqiqot, metodika, jismoniy tarbiya, sport tizimi, yengil atletika, sport turlari, mashg'ulot jarayoni.*

Kirish. Tadqiqot natijalari yengil atletikaning nafaqat sportchilarga, balki barcha yoshdagi insonlarning jismoniy faolligini oshirishga xizmat qilishi, sog'lom turmush tarzini shakllantirishdagi ahamiyatini ko'rsatadi. Shu sababli, yengil atletika bo'yicha nazariy va amaliy bilimlarni chuqurlashtirish, zamonaviy usullarni tadbqiq etish va uni ommalashtirish muhim vazifalardan biri hisoblanadi.

Zamonaviy taraqqiyot va sivilizatsiya, bir tomondan, insoniyat hayotini yaxshilasa, ikkinchi tomondan, insonni tabiatdan uzoqlashtiradi. Uning motor faolligi kamaydi, bu salbiy ekologiya bilan birgalikda inson tanasiga katta zarar yetkazadi. Kasalliklar soni ko'paymoqda, immunitet tizimining faolligi pasaymoqda, asosan qariyalar tomonidan kasal bo'lgan ko'plab kasalliklar "yoshroq" bo'lib, buning natijasida inson umrining qisqarishiga olib keladi. Motor faolligining pasayishi insonning normal samarali hayotiga to'sqinlik qiladigan ko'plab salbiy omillardan biridir. Yengil atletika insonning har tomonlama jismoniy rivojlanishiga hissa qo'shadigan eng ommabop sport turidir, chunki u umumiy va hayotiy harakatlarni (yurish, yugurish, sakrash,

uloqtirish) birlashtiradi. Tizimli yengil atletika mashqlari inson uchun kundalik hayotda zarur bo'lgan kuch, tezlik, chidamlilik va boshqa fazilatlarni rivojlantiradi.

Yengil atletika - yurish, yugurish, sakrash va uloqtirish mashqlarini birlashtirgan sport turi bo'lib, bu ko'pkurash turlaridan iborat. O'rta maktabda yengil atletika yurish, yugurish (qisqa, o'rta, uzoq masofalarga; estafeta; kroska yugurish), sakrash (baland, uzunlik), uloqtirish (kichik to'p, granata, otish) kabi turlari bilan ifodalanadi. Muntazam yengil atletika mashqlari inson uchun kundalik hayotda zarur bo'lgan kuch, tezlik, chidamlilik va boshqa fazilatlarni rivojlantiradi. Yengil atletika mashqlarining ijobiy ta'siri ularni maktab o'quvchilari va yoshlar uchun jismoniy tarbiya dasturlariga, turli sport turlari bo'yicha mashg'ulotlar rejalariga keng kiritishni oldindan belgilab berdi. Yugurish, sakrash va uloqtirishning har xil turlari barcha darajadagi umumta'lim muassasalarida jismoniy tarbiya darsining va ko'plab sport turlari bo'yicha mashg'ulotlar jarayonining ajralmas qismidir. Yengil atletika o'zining xilmaxilligi, foydalanish imkoniyati, dozasi, shuningdek, amaliy ahamiyati bilan jismoniy tarbiya tizimida yetakchi o'rinni egallaydi. Yugurish, sakrash va uloqtirishning har xil turlari barcha darajadagi ta'lim muassasalari jismoniy madaniyatining har bir darsining va boshqa ko'plab sport turlarining mashg'ulot jarayonining ajralmas qismidir. Shu bilan birga, yengil atletika ilmiy-pedagogik fan bo'lib, shuning uchun ham o'ziga xos o'qitish metodikasi va texnikasiga ega. U boshqa asosiy jismoniy tarbiya va sport fanlari qatorida oliy o'quv yurtlarining jismoniy madaniyat fakultetlarida kasbiy tayyorgarlikni amalga oshiradi.

Yoshlikdan boshlab, maktabgacha ta'lim muassasalari, maktablar, o'rta va oliy o'quv yurtlarida yengil atletika mashqlari keng qo'llaniladi. Yengil atletika mashqlari barcha tana tizimlarining faolligini oshiradi va turli kasalliklarning oldini olishda samarali omillardan biridir. Oson dozalangan mashqlar yuqori toifali sportchilarning jismoniy fazilatlarini rivojlantirish uchun ham, yosh avlodni rivojlantirish uchun ham, sog'ligi yomon odamlar, qariyalar, jarohatlardan keyin rehabilitatsiya davrida va oddiygina normal holatni saqlab qolish uchun ishlatilishi mumkin. inson tanasining ishlashi. Foydalanish imkoniyati, mashqlarning nisbatan soddaligi, minimal xarajatlar deyarli hamma joyda, ham qishloqda, ham shaharda turli xil atletika turlari bilan shug'ullanish imkonini beradi.

Respublikamizda ta'lim soxasini yanada mustahkamlash, kadrlar tayyorlashda zamonaviy talablar asosida innovatsion texnologiyalar va pedagogik mahorat jarayonlaridan maqsadli foydalanish samaralarini yanada yuqoriga ko'tarish talablari kun sayin oshib bormoqda. Kelajagimiz xisoblangan o'sib kelayotganyosh avlodni

sogʻlom, jismonan baquvvat qilib tarbiyalashda albatta jismoniy tarbiya va sportni tutgan oʻrni beqiyosdir.

Maktab oʻquvchilarining sogʻlom va barkamol boʻlib shakllanishida jismoniy tarbiya darslarining roli beqiyosdir, chunki jismoniy madaniyat – oʻquvchilarda oʻziga, oʻz tanasiga boʻlgan ongli munosabatni, sogʻlikni mustahkamlashga boʻlgan ehtiyojni shakllantiruvchi, irodaviy hamda axloqiy sifatlarni tarbiyalovchi yagona oʻquv fanidir. Lekin oʻquvchilarda jismoniy madaniyatga va sportga boʻlgan yaxshi munosabatning shakllanishi koʻp jihatdan oʻquv jarayonini samarali tashkillashtirishga va aniq qoʻyilgan pedagogik vazifalarga bogʻliq. Umumtaʼlim maktablarining jismoniy tarbiya darslarida iqtidorli oʻquvchilarni izlab topish va ularni yengil atletika hamda sport ning boshqa turlariga yoʻnaltirish muhim ahamiyat kasb etadi. Shu boisdan jismoniy tarbiya darslarida sport turlari toʻgʻrisda kerakli maʼlumotlarni berish hamda darslarni mazmunli va qiziqarli oʻtishi lozim. Umumtaʼlim maktablarida jismoniy tarbiya va sportga jalb qilish bugungi kundagi davlat ahamiyatiga ega boʻlgan dolzarb vazifalardan biri sanaladi.

Dunyoning eng chekka burchaklariga kirib borgan va dunyodagi eng mashhur sport turlaridan biriga aylangan yengil atletika bilan koʻpchilik shugʻullanadi. Deyarli barcha sport turlari sportchilarni tayyorlash uchun u yoki bu tarzda atletikada mashqlaridan foydalanadi. Mashgʻulotlar va musobaqalar davomida ilmiy tadqiqotlar olib boriladi, bu esa fiziologiya, biomexanika, sport tibbiyoti, jismoniy tarbiya va sport nazariyasi va boshqalar kabi fanlarni yanada rivojlantirishga yordam beradi.

Yengil atletika va musobaqa faoliyatidagi sport mashgʻulotlari sportchilarga oʻzlarining potentsial qobiliyatlarini roʻyobga chiqarishga, oʻzini shaxs sifatida namoyon etishga, xarakter va optimal aqliy sohani shakllantirishga imkon beradi.

Yengil atletikani quyidagicha tavsiflash mumkin:

- sportchilar inson imkoniyatlari yoqasida natijalar koʻrsatadigan sport turi;
- tanani tiklash va reabilitatsiya qilish vositasi;
- yosh avlodni tarbiyalash va rivojlantirish vositalari;
- jismoniy tarbiya va sport sohasida mutaxassisni shakllantirishga yordam beradigan oʻquv intizomi.

Yengil atletika mashqlari nafaqat jismoniy tarbiya va sportda, balki, taʼlim sohalarining barcha tarmoqlarida har bir soha xodimlarining kundalik hayot tarziga aylanib bormoqda. Yengil atletika orqali aholini sogʻligini mustahkamlashda yurish, yugurish mashqlarining inson salomatligidagi oʻrni juda kattadir. Maktabgacha taʼlim, umum taʼlim maktablari, akademik-litseylar, kasb hunar kollejlari, oliy oʻquv yurtlarining taʼlim jarayonlariga kiritilganligi oʻqitish va oʻrgatish metodikasini yildan-yilga

takomillashtirib borishni taqozo etmoqda. Bu esa nafaqat ta'lim sohasini takomillashtirish balki, o'qitish va o'rgatish amaliyoti darslarini samarali tashkil qilishda ham muhim ahamiyat kasb etadi.

Yengil atletika yordamida egallangan ko'nikma va malakalar insonning kundalik mehnat faoliyatida asqotadi, shuningdek, yoshlarni armiya sifatida xizmat qilishga tayyorlashga yordam beradi. Bu sport turining mashqlari o'rta maxsus ta'lim muassasalari o'quvchilarining jismoniy tarbiya dasturidan keng o'rin olgan va "Alpomish" hamda "Barchinoy" maxsus testlarining barcha bosqichlariga kiritilgan. Ulardan ko'pchiligini boshqa sport turi bilan shug'ullanuvchi sportchilar trenirovkalarda qo'llaydilar. Yurish va yugurish ommabob va keng tarqalgan jismoniy mashqlardir. Ular insonning har tomonlama jismoniy rivojlanishiga ijobiy ta'sir ko'rsatadi, uning salomatligini asrashda, faol dam olishda ajoyib vosita bo'lib xizmat qiladi. Undan ko'pgina sport turlarida foydalaniladi va tezlikni o'zgartirib, shug'ullanuvchilar organizmiga maqsadli ta'sir ko'rsatib istalgan natijalarga erishiladi. Yengil atletika mashqlarining xilma-xilligi: yurganda, yugurganda, sakraganda va uloqtirganda kuch kelishni o'zgartirish mumkinligi — har xil jins va yoshdagi kishilar bilan yengil atletika mashg'ulotlari o'tkazaverish imkonini beradi. Bu mashqlarning ko'pchiligi ijro texnikasi jihatidan qiyin emas, o'rgatish uchun oson va ularni oddiy maydonchalar yoki ochiq joylarda bajaraversa bo'ladi. Maktab bolalarining va yoshlarning jismoniy tarbiyasi dasturlarida ham har xil sport turlaridagi mashg'ulot rejalarida ham, keksalarning jismoniy madaniyat mashg'ulotlarida ham yengil atletika mashqlariga keng o'rin berilgan ancha jismoniy madaniyat jamoalarida, ko'ngilli sport jamiyatlarida, oliy va o'rta maxsus ta'lim muassasalarida va boshqa tashkilotlarda yengil atletika seksiyalari yetakchi o'rinda turadi.

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Некоторые заметки к истории создания мавзолея Сайфиддина Бохарзи эпохи II Ренессанса

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Аннотация

В данной статье рассмотрены некоторые стороны истории создания уникального памятника архитектуры Бухары эпохи тимуридов и его места среди других шедевров зодчества Средней Азии и Узбекистана. В заметках раскрыта биография и духовный вклад великого философа и ученого-мистика Сайф-ад-дина Бохарзий , его роль в преодолении последствий монгольского нашествия.

Ключевые слова: эпоха тимуридов, зодчество Бухары, Шайх-уль-олам, архитектурный ансамбль, архитектурный декор, хонака, мавзолей, суфизм, учение кубравия.

Annotation

This article examines some aspects of the history of the creation of a unique architectural monument of Bukhara during the Timurid era and its place among other masterpieces of architecture in Central Asia and Uzbekistan. The notes reveal the biography and spiritual contribution of the great philosopher and mystic scientist Saif ad-din Boharziy, his role in overcoming the consequences of the Mongol invasion.

Key words: Timurid era, architecture of Bukhara, Shaikh-ul-olam, architectural ensemble, architectural decoration, khonaka, mausoleum, Sufism, doctrine of kubrawi.

С начала 90 годов 20 столетия, как отмечает академик Академии художеств республики Узбекистан А. А. Хакимов , с достижением независимости и историческими переменами , произошла ... “ резкая смена концепции с конкретными событиями социально-политической жизни” (1, с.104)

Слова ученого подтверждают оценку президента республики Узбекистан Ш. М. Мирзияева данное им в международном конгресс-центре 1 октября 2020 года о том, что если первый Ренессанс на земле Узбекистана имело место в 9-12 веках, 2 Ренессанс охватывал период эпохи тимуридов-15-16 века (2).

И огромный вклад в формировании духовного облика узбекского народа оказали великие мыслители, просветители и просвещенные правители мусульманского Востока и в частности средневековой Бухары Абу Али Ибн Сино, Исмаила Самани, Сайфиддина Бухарзи. И до наших дней дошли тысячелетние шедевры архитектурной мысли древних зодчих, созданные во имя и во славу своих великих предков. Таким неповторимым памятником и является один из известнейших во всем Среднем и Ближнем Востоке архитектурное чудо 15 века – мавзолей Сайфиддина Бухарзи.



Рис.1 Мавзолей Сайфиддина Бухарзи

История Бухарской архитектуры эпохи тимуридов, особенно таких как мавзолей Сайфиддина Бухарзи, по отношению к таким известным памятникам, как мавзолей Чашма-Аюб, медресе Улугбека, или Большой Мечети изучена недостаточно. Это касается частично дошедших до наших дней гражданских и общественных зданий, крепости города Арка, торговых центров, таких как Токи Заргарон, Токи Тельпак Фурушон, Токи Сарафон, религиозного характера архитектурных комплексов- мавзолеев, так к примеру Турки Жанди, и других мечетей и медресе, как Магоки Аттори.

Согласно дошедшим до нас источникам, Сайфиддин Бухарзи (1190-1261гг.) был учеником – муридом знаменитого шейха Нажмиддина Кубро. Сайфиддин Бухарзи оставил яркий след именно в период монгольского правления в Средней Азии. Известный как мударист и мутавалли медресе Хония, он сделал очень

много в развитии учения суфизма. Его авторитет был настолько высок, что даже под его влиянием сын всемирно известного завоевателя Батухана Берикхан принял из рук просветителя-ученого и богослова священное учение ислама.



Рис.2 Мавзолей Сайфиддина Бохарзи. Вид сбоку

В настоящее время мавзолей Сайфиддина Бохарзи это часть некогда обширного архитектурного комплекса у могилы Шайх-уль олам (главы мусульман), расположенного в так называемом месте Бухары-Фатхабада . Мавзолей представляет собой сейчас двухкупольную усыпальницу- гурхана и примыкающей к ней мечетью (зиератхона), портал мавзолея замыкают башни, постройка увенчана яйцевидной формы куполами. Мавзолей и поныне служит местом поклонения для многочисленных пономников и туристов со всего мира. Последователи суфизма чтут великого мыслителя, поэта, и богослова как основателя учения “кубравия”.

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TECHNOLOGIES FOR DEVELOPING STUDENTS' COMPETENCE IN FRACTAL GRAPHICS

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Abstract. This article describes the structure and possibility of developing students' competence in fractal graphics. Also, in this article, a method of using the proposed structure is proposed.

Key words: fractal graphics, competence, problem-based learning, web quest, computer graphics.

Today, due to the use of fractal graphics in various fields and scientific research, there is a need to develop modern approaches to increase the motivation of students, develop their creative, cognitive thinking and competence [1-4].

Therefore, it is important to increase the motivation of students for fractal graphics, including the development of fractal images, and to improve the technologies for developing their creative thinking and competence. Because fractal images are created by automatically creating images based on calculations using special formulas according to a certain algorithm. Changing the values in the algorithms or the coefficients in the formulas causes these images to change. As a result, fractal graphics allow the creation of abstract compositions with the ability to implement compositional techniques such as verticals and horizontals, diagonal directions, asymmetry and symmetry. Also, fractal graphics are indispensable for creating images of surfaces similar to nature, mountains, clouds, water and other non-Euclidean natural surfaces. At the same time, fractal images are widely used in the design of advertising leaflets, information boards and websites. Turbulent flows are also modeled using fractal graphics and various patterns are created.

Taking into account the possibilities of fractal graphics, it is important to develop the competence of students. Therefore, within the framework of the study, a framework for developing students' competence in fractal graphics was developed (see Figure 1).

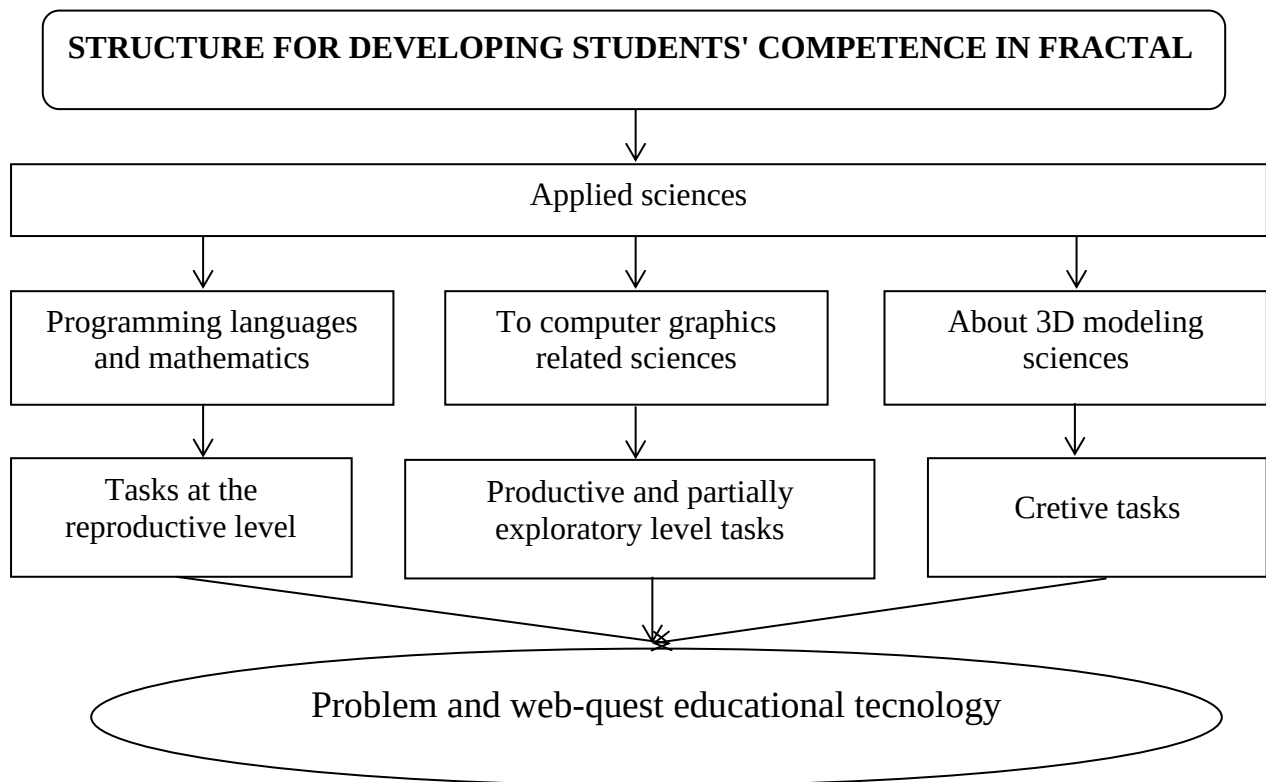


Figure 1. The structure of developing students' competence in fractal graphics

Based on the given figure 1, it is used in teaching programming languages to increase the motivation of students regarding fractal graphics. That is, when teaching the science of programming languages, tasks related to the construction of function graphs should be included in the content of the subject. Because in the analysis of the content of the conducted researches and the programming language curriculum in higher education institutions, almost no attention was paid to the construction of function graphs. That is, in the content of the science programs of subjects related to programming languages, it is mainly aimed at programming problems and performing various practical projects. This creates initial problems in the development of students' competence in graphics, including fractal graphics. Therefore, in order to increase the motivation of students regarding fractal graphics, it is necessary to increase the share of topics related to the construction of graphics in the content of programming language subjects and pay attention to their use.

In this, students will have ideas about constructing various graphs from the computer, based on learning how to construct graphs of two and three dimensions of functions using programming languages. Also, he is interested in the principles of computer arithmetic when creating graphs. As a result, students' motivation for fractal graphics begins to appear.

Also, in order to develop students' practical skills related to fractal graphics and increase their creative ability, it is necessary to include the use of fractal graphics programs, including the Ultra Fractal program, and the development of various graphic projects in the content of computer graphics subjects. Because according to the research conducted in higher education institutions, there are not enough subjects related to fractal graphics in the content of subjects related to computer graphics. Therefore, it is appropriate to include the development of projects using the Ultra Fractal program in the content of computer graphics subjects in higher educational institutions.

At the same time, in the development of students' cognitive thinking about fractal graphics, it is necessary to include the use of the XenoDream program and the development of various projects in the content of 3D modeling subjects. Because the XenoDream program allows you to develop various three-dimensional fractal projects.

It is proposed to use problem-based and web-quest educational technology to improve the effectiveness of teaching the proposed programs and to teach the development of various projects. In this case, it is appropriate to use problem-based learning technology in classroom training on computer graphics, and web-quest learning technology in organizing students' independent education.

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CULTURAL DEVELOPMENT AND ITS IMPACT ON YOUNG PEOPLE

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Annotation. The article is devoted to the study of the influence of culture on the youth of Asia in the context of globalization and technological progress. Traditional values, the influence of modern technologies, as well as the issues of preserving national identity among young people are considered.

Key words: youth, culture, Asia, globalization, traditions, identity, technology.

Culture plays a key role in shaping young people's identities, defining their values, norms, and lifestyles. Asia, as a region with a rich historical heritage and a variety of cultural traditions, is a unique example of the interaction of tradition and modernity in the lives of young people. This article examines the main trends in cultural change among Asian youth, the impact of globalization and digital technologies, and the preservation of national identity.

The issues of the influence of culture on young people and the transformation of national identity in the context of globalization are widely considered in scientific works. S. Huntington in his work "The Clash of Civilizations" (1996) emphasizes the importance of cultural identities in world processes and their impact on youth communities. Z. Bauman in his book "Globalization. Consequences for the individual and society" (2000) analyzes changes in traditional societies and the adaptation of young people to new realities.

Robertson's work "Globalization: Social Theories and Global Culture" (2003) explores the balance between globalization and local cultural practices. Hofstede in "The Dimension of Cultures" (2001) examines in detail the influence of national values on the formation of personality. These works provide an important theoretical basis for studying changes in the culture and self-consciousness of Asian youth.

Many societies are traditionally oriented towards collectivism, respect for the elderly, family foundations and spiritual practices. In countries such as China, Japan, South Korea, and India, these values are passed down from generation to generation.

Confucianism, Buddhism, Islam, and Hinduism continue to play an important role in shaping young people's worldviews, influencing their behavior, moral norms, and social relationships.

With the spread of the internet and social media, young people in Asia are increasingly influenced by Western culture. The popularity of K-pop, anime, online games, and international brands is shaping a new lifestyle based on global trends. However, Asian youth are adapting these elements by combining them with local traditions. For example, the South Korean wave (Hallyu) shows how Asian culture can integrate into the world cultural space while preserving its identity.

The cultural changes brought about by globalization have had a significant impact on the national identity of young people in Asia. On the one hand, the active borrowing of elements of Western culture contributes to the development of intercultural dialogue and integration into the global community. On the other hand, there is a danger of losing national traditions and languages, which causes concern among the older generation and cultural figures.

Many young Asians are in the process of searching for identity, combining elements of traditional culture with modern trends. In countries such as China, Japan and South Korea, a new patriotism is developing, which is expressed in the popularization of national art, fashion and language. Government initiatives aimed at strengthening national identity include educational programmes, support for national films and music, and cultural festivals.

The transformation of culture in the context of globalization does not lead to a complete blurring of national identity, but rather contributes to its adaptation to new conditions, providing young people with the opportunity to express themselves and preserve cultural heritage. Despite the impact of globalization, many Asian countries are taking measures to preserve national culture. In China and Japan, interest in traditional arts such as calligraphy, tea ceremonies and martial arts is developing. In Southeast Asian countries, folk festivals and ceremonies are supported, attracting young people to participate in cultural traditions.

Young people in Asia are in a unique position between ancient traditions and modern trends. Globalization and technological innovation bring new forms of expression, but cultural identity remains an important part of their lives. It is important to find a balance between preserving traditions and integrating into the global community, which will allow the youth of Asia to develop in harmony with the historical heritage of their countries.

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Antioxidants Based on Gossypol and Epichlorohydrin and Their Application Polyethylene

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Abstract. In this paper, the study of a new antioxidant based on gossypol with epichlorohydrin (ECH) was carried out in two ways: in the presence of 1% phosphoric acid and 0.5% alkali solution in a molar ratio of gossypol: alkali=1:2. Obtained in the presence of phosphoric acid, has the following characteristics: it is a homogeneous brown powder, average molecular weight 2300-3500, non-volatile, main component content 99.6% and in an alkaline environment, has the following characteristics: uniform brown powder, average molecular weight 2500-3800, non-volatile, main component content 99.7%. The technological regime of the optimal conditions for the synthesis of gossypol with epichlorohydrin is carried out at a molar ratio of 1:1 in the temperature range of 313–353 K in an alcohol solution. The structure of this compound was confirmed by IR, ¹H NMR, spectral and elemental analysis. For comparison, IR spectra of gossypol and its oligomeric derivatives GECH were taken. This obtained oligomer was applied to polyethylene as an antioxidant and improved its mechanical and thermal properties.

Keywords: gossypol, epichlorohydrin, antioxidant, elemental analysis, IR-analysis, ¹H NMR- analysis.

Abbreviations and notation: epichlorohydrin (ECH), gossypol and epichlorohydrin (GECH), gossypol and allyl halides (GAG), gossypol with allylthiourea (GATM), polyethylene (PE), low density polyethylene (LDPE).

Introduction.

Currently, there is an intensive growth in the production and use of polymer materials based on polyolefins and elastomers. At the same time, although they have valuable physicochemical properties, they have a significant drawback: polymer materials based on polyolefins and elastomers are subject to various types of aging under the influence of heat, light, oxygen, etc., and their properties are not always

sufficiently stable. Therefore, one of the ways to increase the resistance of polymer materials to heat and oxygen is to introduce antioxidant stabilizers into them.

[1,2]. In recent years, foreign studies have also observed trends in replacing synthetic products with products of natural origin, the raw materials for the production of which are renewable resources [3,4], biological and chemical processes [5], the source of raw materials for the synthesis of which is waste from the wood processing industry (wood and bark of coniferous and deciduous trees) [6,7]. The introduction of a terpene substituent into the aromatic ring of phenols is possible through the interaction of phenols with terpene hydrocarbons, alcohols or halogen derivatives in the presence of acidic catalysts[8-10].

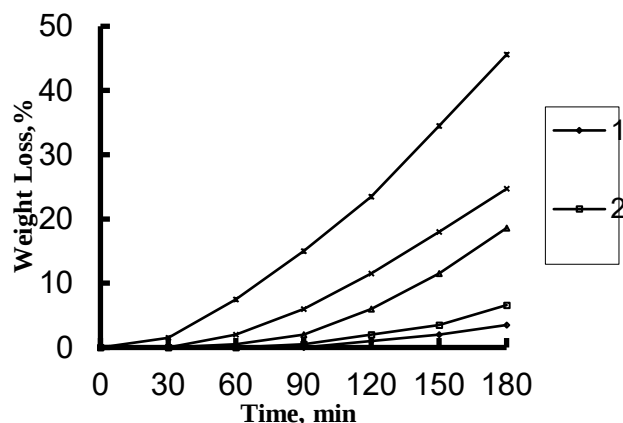
assessment of the effectiveness of antioxidants based on oligomeric derivatives of gossypol polyethylene.

As noted above, the addition of oligomeric antioxidants to polymers has important technical advantages - it ensures the non-volatility and non-leaching of antioxidants, and increases their compatibility with the polymer.

As with other polymers, the effect of oxygen alone on PE at ordinary temperatures is negligible. The addition of small amounts of antioxidants unlimitedly increases its service life. However, in sunlight, aging occurs quickly, i.e. Many antioxidants currently used are extremely ineffective. The greatest success in increasing the heat and light resistance of PE is achieved by introducing into it pigments such as carbon black, iron oxide and natural stabilizers, which isolate the entire mass of the polymer from light, with the exception of the surface layers.

In this regard, the thermostabilizing properties of the synthesized oligomeric antioxidants were studied. The effectiveness of the compounds GECH, GAB, and GATM was assessed in comparison with that of the well-known thermal stabilizer «Irganox-1010».(tetraester of β -(3,5-di-tert-butyl-4-hydroxyphenyl) propionic acid and pentaerythritol).

Analysis of the data obtained (Fig. 1) showed that during the thermal oxidation of stabilized LDPE, a significant induction period is observed. At the end of this period, the slope of the kinetic curves and anamorphoses for stabilized samples becomes the same as in the case of an unstabilized sample, which indicates the termination of the effect of the stabilizer. For an unstabilized LDPE sample, the mass initially increases slightly, apparently due to the absorption of oxygen, and after a few minutes decreases due to the destruction of the polymer.



1 - GATM; 2 — GECH, 3 — GAG; 4 — Irganox-1010;

5-unstabilized PE. Antioxidant content - 0.2%

Fig.1. Kinetic curves of thermal oxidative destruction of PE at 598 K.

The compounds GECH, GAG and GATM are quite effective thermal stabilizers, superior to the currently widely used industrial thermal stabilizer Irganox-1010.

The high stabilizing properties of oligomeric stabilizers are due to the presence of a large number of hydroxyl groups in the gossypol molecule, their interaction with the products of thermal decomposition of hydrocarbons when exposed to high temperatures.

The physical and mechanical properties of stabilized LDPE samples were determined by various methods. The influence of stabilizers on the melt flow index (MFI) of LDPE, molecular weight distribution (MWD) and density was studied. The research results are presented in tables 3.1 and 3.2.

With the introduction of stabilizers GECH, GATM and GAG, a slight increase in the MFI of polyethylene is observed.

Increasing the fluidity of LDPE does not affect its other properties, such as melting point and processing temperature. From the data in Tables 3.1 and 3.2, we can conclude that the MWD also decreases slightly compared to the original LDPE, and this difference is significant.

Table 3.1.

Results of testing the physical and mechanical properties of original and stabilized polyethylene

Indicators	PE without additive	PE c 0,2% «Irganox-1010»	PE with 0.2% «GECH»	PE with 0.2% «GAG»	PE with 0,2% «GAG»
Properties of the original and stabilized samples before aging					
Density, g/cm ³	0,9220	0,9198	0,9197	0,9197	0,9212

MFR, g/10 min	0,55	0,80	0,83	0,81	0,82
Tensile strength, MPa	26,05	27,75	27,84	27,92	28,12
Mol. wt. distribution.	1,56	1,39	1,30	1,31	1,31
Tin.pl., °C	110	113	115	114	112
Relative content of carbonyl groups, %	0	0	0	0	0
Elongation at break, %	860	870	880	875	875

Table 3.2

Properties of the original and stabilized polyethylene samples after aging (24 hours at 250 °C)

Indicators	PE without additive	PE with 0.2% «Irgonox 1010»	PE with 0.2% «GECH»	PE with 0,2% «GAG»	PE with 0,2% «"GATM"»
Density, g/cm ³	0,9240	0,9570	0,9250	0,9263	0,9272
MTR, g/10min	0,23	0,56	0,58	0,52	0,51
Tensile strength, MPa	17,35	20,42	23,13	24,71	22,64
Mol. wt. distribution.	1,24	1,11	1,15	1,09	1,08
Tin.pl., °C	125	129	135	132	131
Relative content of carbonyl groups, %	29,76	16,52	14,98	12,65	13,57
Elongation at break, %	351	390	405	410	400

Table 3.3 shows the dependence of the induction period and weight loss of PE on the content of stabilizers at 473 K for 8 hours of heating in vacuum and in air.

The data in Table 3.3 shows that stabilized samples exhibit a decrease in the amount of volatile destruction products and an increase in the induction period compared to the original PE. In this case, the greatest stabilizing effect both in vacuum and in air is observed in the presence of the oligomeric stabilizer GATM. For the stabilized sample, after 8 hours of heating in a vacuum, no release of volatile destruction products is observed; when heated in air, the induction period is 230 min,

which is 3 times longer compared to the original PE. Under similar conditions, the original PE loses 6.8% of its mass in a vacuum and 9.42% of its mass in air, and the GATM-stabilized PE loses 1.5% of its mass in a vacuum and 6.3% of its mass in air. Thus, the experimental data obtained show that the stabilizing effect of the tested compounds in vacuum is significantly higher than in air. This difference appears to be due to the influence of oxygen on the stabilizing effect of the tested compounds [11].

Table 3.3.

Dependence of the induction period and weight loss of PE on the content of stabilizers for 8 hours of heating at 473 K

<i>Samples studied</i>	<i>Induction period, min</i>	<i>Weight loss, %</i>
In a vacuum		
PE	140	6,8
PE+1.0% GATM	440	1,5
PE+1.0% GECH	430	1,7
PE+1.0% GAG	415	2,8
On air		
PE	80	9,4
PE+1.0% GATM	230	6,3
PE+1.0% GECH	220	6,5
PE+1.0% GAG	190	7,7

A study of the influence of temperature on the stabilizing effect of the compounds used shows that the oligomeric stabilizer GATM at all studied temperatures leads to a decrease in the amount of released volatile destruction products and an increase in the induction period compared to the original PE.

Conclusion

- (i). The kinetics of oxygen absorption by the original and stabilized LDPE was studied at different molecular oxygen pressures. It has been established that, along with reactions of inhibition of the polymer oxidation process, the oligomeric antioxidant leads to inhibition of the process of destruction of the polymer composition.
- (ii). According to the obtained results, the amount of antioxidant based on gossypol and epichlorhydrin showed the highest thermal and mechanical strength when the amount was 0.2%.

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THE INTRODUCTION OF INNOVATIVE TECHNOLOGIES IN THE EDUCATIONAL PROCESS CURRENT ISSUES AND SOLUTIONS

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Abstract. In the modern world, digital technologies have penetrated into all spheres of society and are radically changing them. The introduction of innovative technologies into the educational process is one of the most pressing problems today. The article discusses the introduction of innovative technologies in education, their advantages and problems.

Keywords. innovative technologies, Coursera, Udemy, Khan Academy, Moodle, artificial intelligence, gamification, Quizlet, Duolingo, robotics.

Login. The modern education system is in the process of rapid development and adaptation to technological changes. The introduction of innovative technologies into the educational process makes it possible to increase efficiency, simplify the learning process for students, and prepare them for future professions. The article examines the role of innovative technologies in the education system, the problems that arise during their implementation, and ways to solve them.

Analysis and results. Innovative technologies can be introduced into the educational process by various methods. Below we will list the most effective types.

Through digital learning platforms, students gain access to distance and independent learning opportunities. Examples of such platforms include Coursera, Udemy, Khan Academy, and Moodle. Students can attend these courses in their free time, complete assignments, and study on their own.

Educational programs based on artificial intelligence (AI) are also important for the implementation of personalized learning. With the help of SI, it is possible to develop individual programs for students. Chatbots based on artificial intelligence are being developed that will answer questions and provide explanations to students. Using ChatGPT or other artificial intelligence, complex concepts can be explained to students in simple language. SI allows you to automatically evaluate test results, check essays, and analyze errors. Artificial intelligence systems can also be used to detect plagiarism.

Artificial intelligence can also be used to create educational materials, including textbooks, tutorials, and tests. For example, apps like Quizlet create automated tests. AI can also improve automatic translation and pronunciation during language learning. Apps like Duolingo make language learning interactive using artificial intelligence. Technologies such as speech-to-text conversion for students with disabilities and voice interfaces for the blind are also widely used in education. Artificial intelligence makes the learning process more efficient and convenient. This makes it easier for teachers to work and allows students to learn more interactively and effectively.

Virtual reality (VR) and augmented reality (AR) technologies make the learning process more interactive, interesting and effective compared to traditional methods. Thanks to these technologies, students can visually understand complex concepts, conduct experiments, and learn in real-world settings. For example, in the field of medicine or engineering, it will be possible to conduct experiments using 3D models. Gamification (game learning) is a method that increases students' motivation and makes the learning process more interesting by adding game elements to it. Lessons can also be made interactive using various game platforms.

Coding and Robotics — allows students to learn the basics of programming and engineering. This is important when preparing for modern professions. These technologies help not only to develop technical knowledge, but also problem solving skills, logical thinking and creativity. With their help, students acquire useful skills that can be applied in real life.

In addition, the use of artificial intelligence and the Internet can affect students' independent thinking. Obtaining ready-made answers using SI tools can undermine academic integrity.

Despite the fact that the introduction of innovative technologies (artificial intelligence, VR/AR, robotics, gamification, etc.) into the educational process has many advantages, various problems may arise when they are implemented in practice. The first of these problems is financial. The implementation of these innovative technologies requires significant investments. In addition, virtual and augmented reality devices, robotics kits, programming platforms, and interactive whiteboards are expensive.

Most teachers may not have the skills to work with new technologies. Positive results can be achieved by organizing regular seminars, trainings, webinars for teachers, as well as by establishing knowledge exchange programs with teachers with advanced experience in implementing innovative technologies, as well as through the introduction of new technologies.

The lack of updating of educational programs hinders the effective implementation of innovative technologies. Although innovative technologies bring quality and efficiency to the educational process, their implementation may face financial, technical, pedagogical and methodological challenges. Of course, there may be some problems when using innovative technologies in the educational process. Insufficient logistical support, as a result of which many educational institutions lack or lack the necessary tools for the introduction of new technologies.

In many regions, the Internet quality is poor or non-existent. The lack of computers and tablets does not allow making the learning process fully interactive. Problems with power supply can hinder the full implementation of innovative technologies.

Some education systems are overly tied to traditional teaching methods and resist innovation. Sometimes problems arise as a result of improper use of technology by students and teachers. In such cases, it is necessary to target technologies to achieve efficiency. In addition, misunderstandings arise due to the lack of technical knowledge among some teachers. Currently, in order to teach using new methods, teachers themselves have to be in a constant learning process.

In conclusion, we can say that technological equipment of educational institutions is necessary, that is, the introduction of modern computer classes, VR laboratories, and artificial intelligence-based programs. It is necessary to update training programs and integrate technologies. It would be advisable to combine traditional and innovative teaching methods.

It will also be necessary to organize special courses so that teachers can effectively use innovative methods of retraining and advanced training. The introduction of innovative technologies into the educational process plays an important role in improving the quality of education and training highly qualified specialists in the professions of the future. To do this, it is important to develop the education system technologically, improve the skills of teaching staff, and make extensive use of new methods.

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ZAMONAVIY HARBIY TA'LIMDA SOFT KOMPETENSIYALARNING MUHIMLIGI

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Annotatsiya. Ushbu maqolada oliy harbiy ta'lim muassasalarida harbiy kadrlarni o'qitish tizimining yangicha zamonaviy ko'rinishida "Soft" (yumshoq) kompetensiyalarni muhimligi, ularning o'ziga xos xususiyatlari, ahamiyatli tomoni, shuningdek bo'lajak ofitserlarni tayyorlashda ularning o'rni va roli va asosiy tamoyillari yoritib berilgan.

Tayanch so'zlar: kompetensiya, yumshoq ko'nikma, innovatsion yondashuv, harbiy-pedagogik ta'lim, bo'lajak yosh ofitser, "Soft Skills", muloqot, harbiy jamoa.

Аннотация. В данной статье рассматривается значение «мягких» компетенций в новой современной адаптации системы подготовки военнослужащих в высших военных учебных заведениях, их характеристики, значение, а также их место и роль, основные принципы в подготовке будущих офицеров.

Ключевые слова: компетентность, "Soft Skills", инновационный подход, военно-педагогическое образование, будущих молодых офицеров, общение, военный коллектив.

Annotation. This article the importance of "Soft Skills" competencies in the new modern design of the training system of military personnel in higher military educational institutions, their specific characteristics, significance, as well as their place and role in the training of future officers and basic principles are explained.

Keywords. Competence, "Soft Skills", innovative approach, military-pedagogical education, future young officer, society, military collective.

KIRISH

Jahonda harbiy ta'lim-tarbiya jarayonini zamon talablari asosida rivojlantirish, jumladan oliy harbiy ta'lim muassasalarida tahsil olayotgan bo'lajak yosh ofitserlarda ularning individual psixologik xususiyatlarini hisobga olib, aynan ta'lim va tarbiya jarayonida kursantlarning harbiy va fuqarolik fanlarni o'zlashtirishi davomida "Soft Skills" yumshoq ko'nikmalarini rivojlantirish, bilim, malaka va ko'nikmalarini kamol toptirish zarurati tan olinmoqda.

Qurolli Kuchlarni modernizatsiya qilish jarayonida bo'lajak mutaxassislarning yuksak yetakchilik boshqaruvchanlik darajasini yanada o'stirish, harbiy-kasbiy

kompetentligini, axborot-kommunikativ va texnik layoqatini rivojlantirishda shuningdek “Soft Skills” yumshoq ko‘nikmalarini rivojlantirish masalasiga Yevropa davlatlari, AQSH va Rossiya kabi rivojlangan xorijiy mamlakatlarda alohida e‘tibor qaratilmoqda. Oliy harbiy ta’lim muassasalarida harbiy-pedagogik ta’lim jarayonida kursantlarning harbiy kompetentligini yumshoq ko‘nikmalar mazmunidagi, nazariy va amaliy masalalarini yechish, kasbiy, mantiqiy va Fedbeck (teskari aloqa), keng fikrlash qobiliyatlarini o‘stirish usullarini ishlab chiqish dolzarb ahamiyat kasb etmoqda.

O‘zbekiston Respublikasi Vazirlar Mahkamasining 2018-yil 23-fevraldagi “Yoshlarni harbiy-vatanparvarlik ruhida tarbiyalash konsepsiyasini tasdiqlash to‘g‘risida” 140-sonli, O‘zbekiston Respublikasi Prezidentining 2019-yil 28-iyundagi “O‘smirlarni harbiy-vatanparvarlik ruhida tarbiyalash hamda O‘zbekiston Respublikasi Qurolli Kuchlari va davlat xizmati uchun kadrlar zaxirasini tayyorlash tizimini takomillashtirishga oid qo‘shimcha chora-tadbirlar to‘g‘risida”gi PQ-4375-son qarori, O‘zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 10-iyundagi “Yoshlarni vatanparvarlik ruhida tarbiyalash ishlari samaradorligini yanada oshirish chora-tadbirlari to‘g‘risida”gi 369-son qarori, O‘zbekiston Respublikasi Vazirlar Mahkamasining 2023-yil 29-iyundagi “Yoshlarni harbiy-vatanparvarlik ruhida tarbiyalash ishlari samaradorligini oshirish chora-tadbirlari to‘g‘risida”gi 267-sonli qarorlarida mamlakatimiz ofitser kadrlarini vatanparvarlik asosida tarbiyalash, yuksak intellektual salohiyat va kasbiy mahoratga ega kadrlar sifatida kamol toptirish masalasi asosiy vazifa sifatida belgilab berilgan. Ushbu yuqoridagi vazifalardan kelib chiqib, Mamlakatimizda O‘zbekiston Qurolli Kuchlari uchun yuqori malakali harbiy kadrlarni tayyorlash, vatanparvarlik tuyg‘usini kamol toptirish, vatanparvarlik tarbiyasi asosida, Vatanga sadoqat, muhabbat ruhida tarbiyalash, ularga qat’iylik, jasurlik va xizmat burchini bajarishga ma’suliyat bilan yondashish hislarini singdirish davlatimiz mudofaa siyosatining asosiy talablaridan biridir. Talab darajasida bo‘lajak ofitserlarni tarbiyalashda harbiy ta’lim tizimi va mazmunini modernizatsiyalash, harbiy ta’lim sohasiga ilg‘or xorijiy tajribalarni joriy etish, “Soft Skills” yumshoq ko‘nikmalar sifatini oshirish, fan-texnika va ishlab chiqarishning yangicha talablariga mos ravishda, kursantlarga berilayotgan bilimlar mazmuniga harbiy sifatlar va zarur harbiy kasbiy kompetentlik sifatlarini, yumshoq ko‘nikmalarning asl mohiyatini chuqur singdirish, ilg‘or innovatsion yondashuvlar va milliy vatanparvarlik tarbiyasiga asoslangan davlat ta’lim standartlarini joriy etish, o‘quv jarayoniga zamonaviy pedagogik

texnologiyalarni tadbiq etish hamda bu jarayonda axborot-kommunikatsiya texnologiyalari imkoniyatlaridan samarali foydalanishga katta e'tibor qaratilmoqda.¹

HARBIY TA'LIMDA SOFT KOMPETENSIYALARNING TUTGAN O'RNI VA UNING MUHIMLIGI

Shu o'rinda keyingi yillarda oliy harbiy ta'lim muassasalarida tahsil olayotgan kursantlarni, oliygohni tamomlagandan so'ng, mudofaa vazirligi barcha qo'shin turlariga guruh komandiri lavozimiga tayinlangan davrda, boshlang'ich ofitserlik faoliyatini boshlaganda ularda mustaqil fikr yuritish, keng dunyoqarash, kundalik va jangovar harakatlarda bo'linmani muvaffaqiyatli boshqarish ularga yetakchilik qilish, aniq qaror qabul qilish kabi ko'nikmalari salbiy tomonlama xarakterlanib borayotganligi, vazirlik tizimida bir qator muammolarni keltirib chiqarmoqda.

Bunday xavotir ortida pedagogika va psixologiya sohasida faoliyat yuritayotgan oliy harbiy ta'lim muassasa rahbariyati va professor-o'qituvchilari, bo'linma komandirlariga ma'lum bir topshiriqlar yuklanmoqda. Xususan, O'zbekiston Respublikasi Prezidentining 2020-yil 6-noyabrdagi "O'zbekistonning yangi taraqqiyot davrida ta'lim-tarbiya va ilm-fan sohalarini rivojlantirish chora-tadbirlari to'g'risida"gi PF-6108-son farmoni ijrosini ta'minlash maqsadida:

Bo'lajak yosh ofitserlarning psixologik va pedagogik tomonlama boshqaruvchanlik ko'nikmalarini shakllantirish, ularning barqaror ijtimoiy va intellektual salohiyatini rivojlanishini ta'minlash.

Bo'lajak yosh ofitserlarning harbiy-pedagogik ta'lim jarayonida ularda mavjud bo'lgan "Hard Skills" ya'ni "qattiq" ko'nikmalari mashg'ulotlarda olgan barcha bilim, ko'nikmalarini "Soft Skills" ko'nikmalarini uyg'unlikda rivojlantirish va ularga ijtimoiy-psixologik yordam ko'rsatish.

Bu vazifalar oliy harbiy ta'lim muassasalari oldida katta mas'uliyat yuklaydi. Ana shu vazifalarni amalga oshirish maqsadida bugun oliy harbiy ta'lim muassasalari pedagoglarning oldiga juda katta vazifalar qo'yilmoqda.

Maqolaning dastlabki bosqichida biz ushbu mashhur kompetensiyaning o'ziga xos qobiliyatlari va xususiyatlari bilan qiziqdik. "Yumshoq malakalar" (Yumshoq kompetensiyalar) atamasiga murojaat qilish maqolaning boshlang'ich nuqtasi bo'lib, boshqa odamlar bilan oson muloqot o'rnatishga, turli vazifalarni samaraliroq bajarishga va yangi narsalarni tezda o'rganishga imkon beruvchi kompetensiyalar

¹ O'zbekiston Respublikasining "Ta'lim to'g'risida"gi Qonuni. (23.09.2020) Qonun hujjatlari ma'lumotlari milliy bazasi, 24.09.2020., 03/20/637/1313-son.

sifatida talqin etiladi. Ingliz tilidan “Yumshoq qobiliyatlar” atamasi “moslashuvchan” yoki “yumshoq” qobiliyatlar deb tarjima qilingan. Umuman olganda, ular mutlaqo har qanday sohada foydali bo‘ladi va egasiga martaba zinapoyasini tezroq ko‘tarishga yordam beradi.²

O‘qitishning zamonaviy ko‘rinishidan kelib chiqqan holda harbiy-pedagogik ta’lim jarayonida bo‘lajak yosh ofitserlarda yumshoq malakalar kompetensiyani jadal rivojlantirish juda muhim ahamiyat kasb etadi. “Yumshoq” ko‘nikmalarga misol sifatida harbiy faoliyat nazarida qaraydigan bo‘lsak, biz harbiy jamoada ishlash qobiliyati kabi misollarni keltirmoqchimiz.

Bulardan bo‘lajak yosh ofitserlarning kelajakdagi faoliyatida birinchi navbatda zarur ko‘nikmalar:

- muloqot strategiyangizni taqdim etish va himoya qilish;
- harbiy amaliy-ilmiy loyihalar bilan ishlash;
- yuzaga kelgan muammolarni hal qila olish ko‘nikmasi;
- harbiy jamoaga yetakchilik va boshqara olish va ko‘nikmasi;
- turli xil vaziyatlarga moslashuvchanlik ko‘nikmasi.

Harbiy faoliyat natijalarini ilmiy tilda tasvirlash qiziq. Shuni ta’kidlash kerakki, o‘tgan davrda harbiy bilim berish, o‘nlab yillar davomida o‘zgarmagan va mutaxassislarning kasbiy fazilatlari bir ish joyida ishlagan yillar soniga qarab baholangan bo‘lsa, hozir hammasi boshqacha va zamonaviy ko‘rinishda deb aytishimiz mumkin.³

Oliy harbiy bilim yurtlarida kursantlar doimo bilim olishlari, yangi zamonaviy ta’lim jarayoniga oid barcha narsalarni o‘rganishlari va ba’zan notanish kasbiy sohalarni o‘zlashtirishlari kerak. Buning negizida “Qattiq” ko‘nikmalar bunday qiyinchiliklarni yengishga yordam bermaydi, shuning uchun uni o‘zgartirish dolzarb masala hisoblanadi. Ilg‘or xorij armiya olimlarining ta’kidlashicha, insonning kasbiy muvaffaqiyatining **85 foizi** Soft ko‘nikmalari bilan belgilanadi, bu zamonaviy harbiy kadrlarni tayyorlash uchun bunday kompetentsiyalarning muhimligini va ularni rivojlantirish zarurligini isbotlaydi.⁴

² Mirziyoyev, Sh.M. Tanqidiy tahlil, qat’iy tartib-intizom va shaxsiy javobgarlik har bir rahbar faoliyatining kundalik faoliyati bo‘lishi kerak. - T. “O‘zbekiston”, 2017. - 102 b.

³ O‘zbekiston Respublikasi Qurolli Kuchlari va davlat xizmati uchun kadrlar zaxirasini tayyorlash tizimini takomillashtirishga oid qo‘shimcha chora-tadbirlar to‘g‘risida”gi PQ-4375-son qarori.

⁴ Герман Греф Г., Гришаков М., Мацоцкий С. “Soft Skills: гибкость, а не мягкость”.<https://www.newtonew.com.> (2017).

Shu nuqtai nazardan olib qarasak, kursantlar o‘rtasida “yumshoq” ko‘nikmalarni rivojlantirish zarurati masalasi dolzarb bo‘lib qoladi. Muvaffaqiyatli martaba va ishonchli kelajak uchun harbiy-kasb va ofitserlik bilimlarini egallashda nafaqat kasbiy bilimlarni shakllantirish, balki yumshoq kompetensiyalarni rivojlantirish bilan shug‘ullanishni taqozo etmoqda. Adabiyotlarning nazariy tahlili bo‘lajak yosh ofitserlarda harbiy-pedagogik ta‘lim davomida va kelgusi faoliyatida albatta foydali bo‘ladigan o‘nta Yumshoq kompetensiyani aniqlash imkonini beradi:

Shu asosda oliy harbiy bilim yurtlarida tahsil olayotgan bo‘lajak yosh ofitserlarimizda ushbu kompetensiyalarni rivojlantirish imkoniyatlarini ko‘rib chiqsak, bulardan:



1. Samarali va aniq muloqot kompetensiyasi;
2. Maqsadni aniq belgilash kompetensiyasi;
3. Ishbilarmonlik kompetensiyasi;
4. Emotsional intellekt kompetensiyasi;
5. Qaror qabul qilish kompetensiyasi;
6. Tanqidiy fikrlash va ijodiy fikrlash kompetensiyasi;
7. Tanqidiy fikrlash va o‘z-o‘zini taqdim etish kompetensiyasi;
8. Harbiy jamoa va omma oldida nutq so‘zlash kompetensiyasi;
9. Vaqtni to‘g‘ri boshqarish kompetensiyasi.

Yuqoridagi o‘tkazilgan tajribadagi tadqiqotlarning tahliliga asoslanib, harbiy faoliyat davomida bo‘lajak ofitserlarda ushbu kompetensiyaning aniqroq xususiyatlari samarali muloqot ko‘nikmalarini birinchi navbatda hayot davomida eng zarur ko‘nikmaligini aytish joiz. Keling endi ushbu kompetensiyalarni qanday rivojlantiramiz degan savolga javob izlaymiz. Oliy harbiy bilim yurtlarida ta‘lim olayotgan kursantlarimizda ularning shaxsiy muloqotida ham, onlayn muzokaralarda ham juda ham muhimdir. Kursantlar rivojlangan muloqot qobiliyatlarini qanday qo‘llashlari mumkin:

- o‘z nuqtai nazarini va fikrlarini aniq tushuntirish orqali;
- ishonchli tarzda muzokara bahslashmoq orqali;
- ishonchsiz, qiyin vaziyatlardan chiqish yo‘lini topish orqali;
- tezda o‘z sohasiga oid yaqin do‘stlar orttirish orqali.

Bo‘lajak yosh ofitserlarda maqsadni aniq belgilash qobiliyati muhim mahoratdir. Axir, yakuniy natijaning muvaffaqiyati 50% ga vakolatli maqsadni belgilashga bog‘liq. Yana nima uchun kursant maqsadlarni belgilashni o‘rganishi kerak: ular o‘zlarida

diqqat markazini aniqlash; ustuvorlikni belgilash osonroq; tezroq oldinga siljish; vaqtni boshqarish qobiliyatlari orqali maqsadlarni aniq belgilash kompetentsiyalarni oshirishimiz mumkin.⁵

O'z kasbiy sohasining ustasi ishbilarmonlik, o'z fikrlarini og'zaki yoki yozma ravishda bayon etish ko'nikmalari, bu ko'nikmalar ayniqsa, harbiy aloqa masofaviy formatga o'tayotgan paytda juda muhimdir. Ular bo'lajak yosh ofitserlarga quyidagi kompetentsiyalarni rivojlantirishga imkon beradi: o'z fikrni yozma ravishda aniq ifodalash; ishbilarmonlik odob-axloq qoidalarining nozik tomonlarini tushunish; suhbatdoshini tezroq tushunish; tezislar va dalillarni nafaqat xatlarda, balki shaxsiy tarkib bilan ishlash davomida ham aniq shakllantirish.⁶

Harbiy sohada uzluksiz ta'lim-kelajakdagi harbiy ta'limining eng muhim tendentsiyalaridan biri. Kursant harbiy bilim yurtini tamomlab diplom olib, navbatdagi yangi xizmat joyiga joylashsa ham, uning o'qishi va o'z ustida ishlashi tugamaydi, chunki bu umr bo'yi cheksiz jarayon. Kursantlar ushbu jarayonni qanchalik tez tushunsalar, ular uchun kerakli ko'nikmalarni rivojlantirish va o'rganishga bo'lgan qiziqishlarini saqlab qolish osonroq bo'ladi.

Bo'lajak ofitserlarda ushbu turdagi aqlni rivojlantirish orqali kursant tezda shaxsiy tarkib bilan umumiy til topadi, o'zini yaxshiroq tushunadi va hayotga ko'proq muvaffaqiyat keltiradi.

Harbiy faoliyat davomida to'g'ri qaror qabul qilish qobiliyati, harbiy ish nazariyasida o'z sohangizda istalgan vaqtda sizga yordam beradigan qobiliyatdir. Agar kursant uni ta'lim jarayonida mukammal o'zlashtirsa, u: hodisalarni rivojlantirishning turli variantlarini tezda o'qiy oladi va quyidagi amallarni tavsifiya o'rnida aytib o'tamiz:

Avvalo, tavakkal qilishdan hech qachon qo'rqmang, ko'zlangan maqsaddan chetga chiqmang, sohaga oid barcha qiyinchiliklarni enging, o'tkazib yuborilgan imkoniyatlar uchun pushaymonlik bilan o'zingizni qoralamang, hayotingiz uchun mas'uliyatni o'z zimmangizga oling, masalalarni hal qilishga ongli yondashing. Mana shunda siz o'z sohangizda ulkan zafarlar va yutuqlar sohibiga aylanasiz.⁷

Bu mahorat va kompetensiyalar, yosh ofitserlarning ilk harbiy faoliyati davomida va muhim qadamlar qo'yish vaqti kelganida juda foydali bo'ladi. Doimo bo'lajak ofitser

⁵ Daniel Goleman. "Emotsional intellekt: nima uchun u hayotimizdagi eng muhim ko'nikma". Emotsional intellekt haqidagi klassik asar.

⁶ Stephen Covey. "7 ta odatli muvaffaqiyatli odamlar" Shaxsiy va professional rivojlanish uchun muhim tamoyillarni bayon qiladigan asar.

⁷ Волкова М. Э. Педагогик иxtisoslik talabalarida yumshoq ko'nikmalarni shakllantirish: nazariy tahlil 2017.

ijodiy fikrlashdan to'xtamasligi muhim, chunki, bu oddiy narsalarda g'ayrioddiy narsalarni ko'rish va yangi g'oyalarni o'ylab topish qobiliyati rivojlanib boradi.

XULOSA

Xulosa o'rnida aytish joizki, XX-asrning o'rtalarida o'qitish tizimining texnik va texnologik o'zgarishlarning ortib borayotgan tezligi, kasbiy ahamiyatga ega bo'lgan ma'lumotlar va harbiy ta'limda bilimlarning yangilanishi rivojlanish, o'zgarish va malaka oshirish nuqtai nazaridan oliy harbiy ta'lim muassasa professor va o'qituvchilar tarkibiga qo'yiladigan talablarni o'zgartirdi. Endi "tor" ixtisoslashuv mehnat bozori talablarining o'zgarishiga javob berish qobiliyatiga ega emas, balki hozirgi vaqtda global vaziyatdagi, global o'zgarishlar, zamonaviy taktik harakatlarning o'zgarib borish teatri va uning istiqboli sizni, bizdan malaka talablarini qayta ko'rib chiqishga majbur qilmoqda.

Shu asosda oliy harbiy bilim yurtlari ta'limi tizimida yangi tendentsiyalarni keltirib chiqarmoqda. Oliy harbiy ta'lim tizimida bo'lajak yosh ofitserlarni har tomonlama yetuk, o'z kasbining mohir ustasi va professional qilib tayyorlashda o'qitishning zamonaviy modelini qayta ko'rib chiqishni talab etadi. Oliy harbiy ta'limni 2030 yilgacha rivojlantirish strategiyasini chuquroq tahlil qilsak, harbiy-pedagogik ta'lim jarayonida, bo'lg'usi ofitserlarni tayyorlashda ulardagi yangi kompetensiyalarni shakllantirishdan iborat bo'lishi alohida ahamiyat kasb etadi. Ushbu kompetensiyalarni oshirishimizda nafaqat texnologiya bilan bog'liq bo'lgan professional kompetensiyalarga, balki yumshoq ko'nikmalarga alohida e'tibor berish talab qilinadi. Zero bu ko'nikmalar bilan bizlar yosh ofitserlarimizni harbiy faoliyatida o'z miqdorda bo'lsa ham muvaffaqiyatga erishishiga hissa qo'shsak, oldimizga qo'ygan asosiy maqsadimizga erishgan bo'lamiz.

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THE USAGE OF TOTAL PHYSICAL RESPONSE METHOD IN TEACHING FOREIGN LANGUAGE IN UZBEKISTAN

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Abstract: This study examines the effectiveness of the Total Physical Response (TPR) method in enhancing foreign language learning. By incorporating physical movements into language instruction, TPR helps students enhance vocabulary retention and engagement. The approach reduces stress, increases motivation, and aligns with embodied cognition theories. Findings suggest that movement-based learning strategies make an enjoyable and effective language learning experience, particularly for young learners.

Keywords: innovative technology, modern methods, foreign language, total physical response (TPR).

In today's rapidly developing world, learning a language has become of great importance. Unlike traditional teaching methods, modern methods provide sufficient conditions for the development and formation of the student's personality, allowing them to acquire adequate knowledge. The role and significance of modern methods and innovative technologies are immensely important. In teaching English, especially to young children, the lessons need to be engaging, repetitive, and understandable. To achieve this, certain key methods for teaching English should be used. One of these methods is the Total Physical Response (TPR) approach. This method is primarily designed for young children but is also highly effective for adolescents.

Especially in language learning, the use of modern methods today has led to a high level of language acquisition. It is not only foreign languages but also every subject that requires teaching through modern innovative technologies and methods in accordance with the demands of the time. By today, the role of modern technology and methods has become significant. There are several methods in foreign language learning, such as using dialogues, video clips, films, cartoons, and CDs during lessons, which have proven to be quite effective.

As mentioned earlier, one of the modern methods for teaching language effectively and easily to young children and adolescents is the Total Physical Response

(TPR) method. This method was developed by American psychologist James Asher in 1960. The main focus of TPR is physical movement. In this method, children are required to use their body parts and be physically active. As emphasized by Savi (2014), when the brain and body work together, children learn language quickly and easily.

As English language teaching has gained popularity, it is now taught starting from the first grade. Therefore, English language teachers, who engage in teaching children, should not only master the essential components of teaching but also understand the psychological nature of the children they are teaching. The advantages of the TPR method are:

1. Developing students' speaking abilities,
2. Expanding vocabulary,
3. Increasing students' activity during lessons,
4. Creating an engaging environment.

There are many types of speech, one of which is vocabulary. When using this method, the teacher gives several commands (such as jump, walk, raise your hand, sit), and the students are required to perform the commands with full-body movements (for example, clapping while jumping).

During the TPR teaching process, physical exercises and games are naturally incorporated into the language learning process, helping to increase the physical activity of children. This not only aids in language learning but also contributes to their physical development. When using TPR, students can actively engage in actions that can be performed in the classroom. The teacher gives commands (such as run, jump), and the student listens attentively and performs the action.

By actively participating, the student demonstrates both physical and listening abilities at an excellent level. Physical activity helps reduce stress or emotional tension among students learning a foreign language. Game-based lesson processes make learning more interesting and effective for students. In the TPR method, the teacher's commands are part of the process, and in response, students must perform and demonstrate the action with physical movement, showing their understanding. Examples of commands might include:

1. Depending on the lesson topic, the teacher can prepare certain commands to reinforce vocabulary, which may involve using flashcards or pictures. For example: catch, show, hold (your face, your feet, your mouth).
2. For extracurricular lessons, additional movements and commands can be incorporated, such as: take three steps forward, turn right/left, raise your hands up.

Children love running or shouting and talking with each other, so the teacher must choose the right teaching method to engage students, make them enthusiastic, and focus on the learning process. During lessons, using interesting books, toys, and pictures can be an effective way to make language learning enjoyable and engaging for students.

As Barun (2004) emphasized, speech proficiency is the ability to create one's own language. Language skills (listening, speaking, reading, writing) play an essential role in vocabulary acquisition. Moreover, vocabulary occupies a central position in the early stages of learning a foreign language (Cameron, 2001: p72). This means that learning vocabulary is crucial as the foundation for acquiring a new language. Some students find it difficult to memorize English vocabulary because they do not use it in their daily lives. The teacher must employ the best techniques to enhance the students' vocabulary. This is important because students can become bored and perceive learning English as difficult.

"TPR is a method of language learning that coordinates speech and movement, where language is learned through physical (motor) activity" (Richard and Rodgers, 2001, p73). Communicating in English with people from other countries is one of the most important points of interaction. How quickly and easily a student learns English also depends on the teaching methodology employed by the teacher. Especially for young children, who love to play and talk a lot, some teachers may unintentionally break the students' spirits by shouting or scolding them. Khanzode (2004) in his Research Methodology emphasized: "All can teach, but not all can teach well. There are good as well as bad teachers. Students call a teacher good for his good method of teaching, and they call a teacher bad for his bad method of teaching." The TPR method is particularly suitable for young learners, especially those who have just started school. Looking at the history of language teaching, it is evident that traditional methods were used more than other teaching approaches. Barsalou (2008) proposed the embodied cognition theory, which suggests that the nature of human consciousness is primarily shaped by the human body. According to his view, embodied perception involves all aspects of cognition shaped by the environment, simulation, location movement, and parts of the body.

In conclusion, every method, including Total Physical Response (TPR), has its own effective outcomes in learning English. The effective use of modern technologies and methods in the teaching process helps students think independently and freely, encourages their curiosity about gaining knowledge, and fosters a serious approach to each task. When both the teacher and student collaborate and engage in cooperative activities, both sides achieve positive results. In this rapidly growing era, the need to

learn foreign languages is greater than ever. In this context, the effective use of innovative educational technologies and modern methods, including TPR, leads to successful outcomes. By utilizing these opportunities, our future task is to cultivate well-rounded and skilled students, teaching them languages in a perfect manner.

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ЁШЛАРДА ВАТАНПАРВАРЛИК ТУЙҒУСИНИ ЮКСАЛТИРИШДА АЖДОДЛАР МАЪНАВИЙ МЕРОСИНИНГ АҲАМИЯТИ.

Расулова Ф.О.

Чирчиқ шаҳар политехникуми гуманитар фанлар кафедраси ўқитувчиси

Аннотация: Ушбу мақолада мард ва жасур саркарда аждодимиз Жалолиддин Мангубердининг қалбида ёвга нафрат ва Ватанга муҳаббат туйғуларининг сингдирилиши, муқаддас Ватанимизни мўғул босқинчиларидан ҳимоя қилишда олиб борган қаҳрамонона кураши, Она ватанни ҳимоя қилишда кўрсатган бемисл қаҳрамонликлари ва мардона кураши ҳақида ҳикоя қилинади.

Калит сўзлар: Ватан, буюклик, Ватанпарварлик, мустақиллик яловбардори, маънавият, “Кубровия”, садоқат, мўғул, „Жазокор“ кўшин, Парвон дашти.

Аннотация: В данной статье рассказывается о воспитании ненависти врагам, и любви к Родине в сердце нашего смелого и отважного полководца, нашего предка Джалалуддина Мангуберди, его героической борьбе за защиту нашей святой Родины от монгольских захватчиков, его несравненном героизме и доблестной борьбе в обороне. Родины.

Ключевые слова: Родина, величие, патриотизм, носитель независимости, духовность, «Кубравия», верность, монголы, войско «Карателя», Парванская степь.

Abstract: This article tells about the inculcation of hatred and love for the Motherland in the heart of our brave and brave leader, our ancestor Jalaluddin Manguberdi, his heroic struggle to protect our holy Motherland from the Mongol invaders, his incomparable heroism and valiant struggle in the defense of the Motherland.

Keywords: Motherland, greatness, patriotism, the bearer of independence, spirituality, "Kubroviya", loyalty, Mongol, "The Punisher" army, Parvan steppe.

Ватан! Мана шу бир сўзнинг замирида қанчалар маъно, қанчалар қудрат бор. Ватан деган улўғ тушунча инсон юрагига Она сути, меҳри орқали жо-бажо бўлади.

Инсондаги ватанпарварлик эса бола улғайгани сайин киши қалбининг, юрагининг тубида аста-секин улғайиб боради.

Ватанни севмоқлик, уни кўз қорачиғидай асраш шу ватанда яшаётган ҳар бир инсоннинг бурчидир. Ватанни асраб-авайлаб, унга сидқидилдан хизмат

қилишда, ўсиб келаётган ёш авлодларимиз қалбида ватанпарварлик туйғусини ривожлантиришда Ватанимиз тарихида ўз қахрамонликлари билан ўчмас из қолдирган буюк саркарда аждодларимизнинг бой маънавий мероси муҳим манба бўлиб ҳисобланади.

1198 йил Хоразм Султони Муҳаммад Хоразмшоҳ оиласида авлоди шаънини дунёларга таратувчи, метин иродали, пўлатдек мустаҳкам, куч-ғайратга эга бўлган бир ўғил дунёга келди.

Инсон улғайиб вояга етиб борар экан, унинг қалбида инсоний туйғулар ҳам у билан баробар улғайиб боради. Агарда бу туйғу-Ватан деган улуғвор бир неъмат билан суғорилса – вақти келганда у ўзининг энг яхши меваларини беради.

Ватанимиз тарихининг зарварақларида исмини олтин ҳарфлар билан ёзишга лойиқ, кўркмас, жасур ва мард юрт ўғлони, буюк саркарда Жалолиддин Мангубердиннинг ибратли ҳаёт йўли ҳар бир ўқувчи ҳаётида муҳим аҳамиятга эга.

Жалолиддин Мангуберди ёшлигиданок “Кубровия” маънавият масканининг шайхи ҳисобланган, Шайхул-Валитарош унвонига сазовор бўлган Нажмиддин Кубро тарбиясига берилди. Ану шу масканда Шайх Нажмиддин Кубро бирваракайига икки Жалолиддинни тарбия қила бошлади. Улардан бири дунёнинг энг буюк шоири ва мутафаккири, маънавият юлдузи даражасига кўтарилган Жалолиддин Румий бўлса, иккинчиси шоҳ ўғли Жалолиддин Мангуберди эдилар.

Ҳар иккиси Шайхул-Валитарош қўлида тарбия топиб, Ватанни севиш, халқи ва она юрти учун жисмоний, руҳий-ақлий, маънавий кучларни яхлит бир йўналишга йўналтириб, шер ва асрлондек наъра тортиб ларзага келтиришнинг руҳий-мафкуравий сир-синоатларини ўрганди. Ҳар икки Жалолиддинлар – бири “Маснавий ва маънавий”ни шеърят орқали ёритиб адабият зарварақларида ўзининг ўчмас номини қолдирган бўлса, иккинчиси эса қилич билан ёвузликнинг шарқ узра ёйилишига қарши курашиб, дунёни лол қолдирдилар.

Шу жойда Султон Жалолиддин Мангуберди мана шу ёшларда шундай юксак ватанпарварлик қандай пайдо бўлган экан? деган савол туғилиши табиий. Ҳа, бу буюк инсонга рух, тан ва иродани мужассамлаштириб тарбиялашда буюк устози шахзодага шундай ўғитлар берди: “Ватан – бу шунчаки қора тупроқ эмас, у биз учун буюк иноят, ор-номусимиз, шон-шарафимиз, суянган тоғимиз, қолаверса, каъбамиз ҳамдир. Унга борлиғимиз фидо бўлсин. У биз учун тенгсиз, баҳоси ўлчаб бўлмас маъво. Сен эса бўтам шамшир ва қалқонда қоматини кериб жанг майдонида уни ҳимоя қилувчи афсонавий баҳодиргина эмас, баҳодирлар

султони бўлишинг тақдирига битилган шахзодасан”. (1-59) Бу билан Шайхул-Валитарош Жалолиддиннинг жисмига Ватан туйғусини жойлабгина қолмасдан, балки уни яшовчан руҳига сингдира олди. Она юрт душмани ва ғанимларига нисбатан нафрат ҳиссини алангалатди. Шу жиҳатдан олганда “Кубровия” тариқатининг бошқа тариқатлардан туб фарқли хусусияти Ватанга меҳр-муҳаббат ва содиқликнинг устуворлигидир. Яъни, Ватаннинг муқаддаслиги ва унга садоқат бу тариқатнинг бош ғоясидир.

Ватан ҳимоясини ўзига шараф деб билган Она ватанимизнинг мард ва жасур ўғлонларимиз Султон Жалолиддиннинг ворислари десак муболаға бўлмайди. Чунки мана шундай шердил ва шерюрак ўғлонларимизнинг фидокорона хизматлари туфайли юртимиз тинч, осмонимиз мусаффо. Биз ўқитувчи ва мураббийлар эса ҳар бир ўқув машғулотларини буюк аждодларимизнинг меросини ўқувчилар, талабалар ҳамда ҳарбий хизматчилар қалби ва онгига чуқур сингдирган ҳолда, уларнинг ҳаёт йўлларида дарс машғулотларида мисоллар келтириб олиб боришимиз лозимдир.

Қаҳрамонимизнинг отаси ўғлининг ҳарб сирларини ўрганиши учун ўзининг ҳарбий вазири, ҳарбий санъат илмининг етук билимдони, олим ва давлат арбоби Шихобиддин ал-Ҳевакийга топширган. (1-75)

Жалолиддин ҳарбий жанг олиб боришнинг жуда кўп сирларини – жанг учун қулай жойлар танлаш, танг ҳолатда вазиятдан чиқиб кета олиш, ўша жойларни харитага тушириш каби кўплаб ҳолатларни Шихобиддин ал-Ҳевакийдан ўрганди.

Жалолиддин Мангуберди ҳақида унинг шахсий котиби, тарихчи ан-Насавий шундай ёзади: **«Жалолиддин Мангуберди султон арслонлар орасидаги энг кучли шер эди. Бир сўзли, гина сақламайдиган, очик кўнгил, тўғри сўз одам эди. У жиддий шахс эди, ҳеч қачон кулмасди. Жуда нари борса жилмайиб кўярди. У адоласизликларни ёмон кўрарди. Жалолиддин ўта қатъиятли, ниҳоятда иродали, мураккаб вазиятларда, тақдирнинг қалтис синовларида ўзини йўқотиб қўймайдиган фавқулодда мард ва ботир саркарда эди».** (2-45)

Биз ўсиб келаётган ёш авлодга буюк саркарда бобомиз Жалолиддин Мангубердининг Ватанни севиш ва ардоқлаш хусусиятларини ҳар дақиқа сўзлаб беришимиз, ундан ўрнатилган намуна сифатида кўрсатиб борсак мақсадга мувофиқ бўлади. Президентимиз Ш.М.Мирзиёев ҳам ёшларни ватанпарвар инсонлар этиб тарбиялашда машҳур саркарда Жалолиддин Мангубердининг

ҳаёти ва фаолияти, унинг она Ватанга бўлган тенгсиз муҳаббатидан ўрнатилишга чақирган эдилар.

Ватанимиз тарихининг шонли саҳифаларини мана шундай улуғ саркарда боболаримизнинг фаолияти ва жанг санъатлари беэба туради.

Буюк саркарда, ҳарбий жанг олиб боришда беқиёс тактика ва стратегиялар қироли Жалолиддин Мангубердиннинг номи қалбларда мангу сақланиб қолади.

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KICHIK MAKTAB YOSHIDAGI O‘QUVCHILAR MULOQOTIDAGI QIYINCHILIKLARGA PSIXOLOGIK YONDASHUV

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Annotatsiya: Kichik maktab yoshidagi bolalar (6-10 yosh) muloqot jarayonida turli qiyinchiliklarga duch kelishadi. Bu yosh davri bola shaxsining shakllanishida muhim bosqich bo‘lib, unda ijtimoiy muhitga moslashish, his-tuyg‘ularni boshqarish va o‘z fikrlarini ifodalash ko‘nikmalari rivojlanadi.

Kalit so‘zlar: Muloqot, qiyinchiliklar, psixologik yondashuv, agressivlik, tajovizkorlik, nutq,

Muloqot bola shaxsini rivojlanishining muhim omilidir. Muloqotda shaxsiy munosabatlar shakllanadi va tashqi dunyo bilan munosabatlarning tabiati ko‘p jihatdan bolaning qanday fazilatlarini rivojlanishiga bog‘liqdir. Muloqot har bir davrda o‘ziga xos holda amalga oshiriladi. Kichik maktab yoshidagi o‘quvchilarda ham o‘yin faoliyati o‘ziga xos xususiyatlarga ega. Ular endi o‘yinchoqlar bilan emas, balki ko‘proq harakatli, sport o‘yinlarini o‘ynaydilar. Ular harakatli o‘yinlar o‘ynashi davomida nutq orqali tevarak –atrof bilan bevosita verbal aloqa o‘rnatadilar. Psixologik-pedagogik tadqiqotlar natijalari shuni ko‘rsatadiki, inson shaxsiyatining shakllanishi muloqotda birinchi navbatda, muhim odamlar (otaonalar, o‘qituvchi, tengdoshlar va boshqalar) bilan bevosita muloqotda bo‘ladi. Buning natijasida eng muhim xususiyatlar, axloqiy fazilatlar va dunyoqarashi o‘ziga boradi. Kichik maktab davrida bolaning boshqa insonlar bilan munosabatlarida katta o‘zgarishlar ro‘y beradi. Bolaning muloqoti endi aniq maqsadga qaratilgan bo‘ladi. Bunga sabab bir tomondan o‘qituvchining faol ta’siri bo‘lsa, ikkinchi tomondan o‘quv jamoasining ko‘rsatadigan ta’siridir. Kichik maktab yoshidagi o‘quvchilar sinfida jamoa bilan muloqot qilish jarayonida turli darajadagi o‘quvchilar bor: gipermuloqotchan (sergap) bolalardan dars holatidan qo‘rqadigan: javob berishga uyaladigan, tortinchoq yoki darsga quloq solmaydigan o‘quvchilar ham bo‘lishi mumkin. Ularda maktab davrigacha oilada, bog‘chada muloqot ko‘nikmalari shakllangan bo‘ladi.

Muloqotdagi qiyinchiliklarni bartaraf etish

O‘ziga ishonchsiz bolalar uchun individual yondashuv va rag‘batlantirish tizimini ishlab chiqish. Nutqiy muammolari bo‘lgan bolalar bilan logopedik mashg‘ulotlar

tashkil qilish. Tajovuzkorlik yoki tortinish kabi xulq-atvor muammolarini psixologik maslahat va o'yin terapiyasi orqali bartaraf etish. Oila va o'qituvchi bilan hamkorlik Ota-onalar va o'qituvchilarga bolalar bilan samarali muloqot qilish bo'yicha tavsiyalar berish. Uy sharoitida ham muloqotni rivojlantirish uchun kitob o'qish va suhbat qurish an'anasini shakllantirish. Maktabda psixologik yordam xizmati orqali bolalarning muloqot muammolarini nazorat qilish. Ba'zi bolalar so'z boyligining cheklanganligi yoki nutqiy muammolar (logopedik muammolar) tufayli o'z fikrlarini to'liq yetkaza olmaydi. Bu ularning o'zaro munosabatlariga ta'sir qiladi. Bolalar guruhda o'zini qanday tutish, nizolarni hal qilish va hamkorlik qilish bo'yicha tajribaga ega emas. Bu ijtimoiy muloqotda qiyinchiliklarga olib keladi. Jismoniy va psixologik tortinishlar uyalish, o'ziga ishonchsizlik yoki ortiqcha tortinish natijasida ba'zi bolalar jamoadagi muloqotdan chetda qoladi. Ota-ona va muhit ta'siri Farzandning muloqot qobiliyatlari oilaviy tarbiya va atrof-muhit omillariga bog'liq. Ota-onaning qattiqqo'l yoki beparvo munosabati bolaning muloqot qobiliyatlarini susaytirishi mumkin.

Psixologik yondashuvlar Nutq va muloqot ko'nikmalarini rivojlantirish bolalarga so'z boyligini oshirish uchun interaktiv o'yinlar o'tkazish. Logoped va pedagoglar bilan hamkorlik qilish. Hikoya aytish va rolli o'yinlar orqali nutq faoliyatini rivojlantirish. Ijtimoiy ko'nikmalarni shakllantirish Jamoaviy faoliyatlarni tashkil etish. Empatiya va hamdardlik bo'yicha mashg'ulotlar o'tkazish. Qiziqarli vaziyatli o'yinlar orqali ijtimoiy muammolarni hal qilish usullarini o'rgatish. O'ziga ishonchni oshirish bolalarni rag'batlantirish va ijobiy fikrlashga o'rgatish. Psixologik mashg'ulotlar orqali o'zini ifodalashga rag'batlantirish. O'ziga ishonchsiz bolalar bilan individual ishlash. Agressivlikni kamaytirish va his-tuyg'ularni boshqarish His-tuyg'ularni ifodalash uchun maxsus mashg'ulotlar o'tkazish. San'at terapiyasi (chizish, rasm ishlash, qo'g'irchoq teatri) orqali hissiyotni ifodalash.

Nizolarni tinch yo'l bilan hal qilish usullarini o'rgatish. Oilaviy va o'qituvchi bilan hamkorlik Ota-onalar va o'qituvchilar uchun treninglar tashkil etish. Bolaning muloqotiga ta'sir qiluvchi muhitni tahlil qilish va yaxshilash. Maktab va uy sharoitida psixologik qo'llab-quvvatlash tizimini shakllantirish.

Xulosa o'rnida shuni aytishimiz mumkinki, Kichik maktab yoshidagi o'quvchilarning muloqot muammolari ularning ijtimoiy va ruhiy rivojlanishiga ta'sir qilishi mumkin. Ushbu muammolarni bartaraf etishda psixologik yondashuvlardan foydalanish muhim ahamiyatga ega. O'quvchilarning muloqot ko'nikmalarini rivojlantirish uchun o'qituvchilar, psixologlar va ota-onalar birgalikda ishlashlari zarur.

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THE GREATEST BETRAYAL OF WORLD WAR II

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Abstract: *The most significant betrayals that occurred during World War II, their causes, consequences and historical context are analyzed. Information is provided about the defection of General Vlasov and his army to the German side during the war.*

Keywords: *General Vlasov, USSR, Stalin, Germans, ROA, Moscow.*

General Vlasov, the commander of the Russian Liberation Army formed by the Germans, was arrested by Soviet soldiers in the spring of 1945 and then secretly brought to Moscow. Vlasov was tried there and sentenced to death. The Soviets, who tried and punished the general, hid this case from the public until the collapse of the USSR. The first half of the 20th century was an important period in the USSR, which was built on violence from the very beginning. This state was ruled by Stalin for 31 years, from 1922 to 1953. Stalin is remembered not only as one of the most evil and bloodthirsty figures in the history of the USSR, but also in world history. Under Stalin's rule, millions of people were expelled from their homes under various pretexts. Many of the population was killed, first in the fight against the Rifle Guards, collectivization, then in the cleansing of the country from foreign elements, and millions of people were destroyed on charges such as traitors and supporters of imperialism [1].

One of the evil deeds of Stalin and Beria was the deportation of several nationalities living in their homeland, accusing them of treason. The exiled Crimean Tatars, Chechens, Ingush, Kalmyks, and Balkars, who were accused of treason, were accused of spying for the Germans. It is enough to recall the Russian general Vlasov. At the height of the war, General Vlasov, where every soldier played an important role, was captured by the Germans without a fight with a large army. As a result, the army was weakened and the war continued for a long time. The injustice of the USSR was such that after the war, the memory of General Vlasov's betrayal was forbidden until the USSR collapsed. On March 8, 1942, Vlasov was sent with his army to the Volkhov Front, where the defense of Leningrad was organized, and took part in the battle against the enemy. On June 25, the army led by the general was surrounded by enemies.

General Vlasov had two options: to fight the enemy or to retreat through a narrow corridor that would allow him to escape the encirclement, but Vlasov did neither and ordered his army to surrender. After Vlasov and his army surrendered without a fight, he told the prisoner of war camp in Vinnytsia that the Germans would establish a new state in Russia and that Vlasov would be given the command of the camp. After that, Vlasov persuaded some of the fighters who had been captured with him to join the Germans. They were also joined by fighters captured in other places. As a result, an army of about 200,000 fighters was formed under Vlasov and they fought against the Soviet army. In 1943, Vlasov's open letter was published, in which he criticized the leader of the USSR, Stalin. Vlasov's main goal was to overthrow the leader of the USSR and establish a state in Russia that would give freedom to citizens. At that time, no one believed the general's open letter, as the citizens were very hostile to the Germans. This letter did not benefit the Germans at all. At that time, the ROA, the Russian Liberation Army, published several newspapers in Russian, in which they carried out extensive propaganda against the USSR. The general needed assistants to lead his army. Therefore, he attracted General G.N. Zhilenkov, who was captured by the ROA and considered missing, and he served as Vlasov's right-hand man in the ROA. Many generals helped Vlasov lead the ROA [2].

In 1944, the war moved beyond the borders of the USSR and into the territory of Eastern European countries. In the spring of 1945, Berlin was besieged by Soviet troops. General Vlasov was on his way to the Balzion city of Czechoslovakia, when Soviet soldiers captured him. Vlasov was sent to Moscow, but the Soviet press and radio, which were constantly reporting on the victory every day, did not report any information about Vlasov's capture.

In 1946, a small report was made about a group of traitors being tried in Moscow. The USSR was keen to keep Vlasov's trial a secret. The USSR knew that if it were revealed to the citizens of the USSR at that time that General Vlasov led an army of about 200,000 traitors, mostly Russians, the consequences could be dire, so it did not disclose the case. On August 1, 1946, the Supreme Court of the USSR sentenced Vlasov to death, and the sentence was carried out by hanging. All information related to Vlasov was classified as top secret documents. The press, radio, and writers were forbidden to even mention his name as a traitor.[2] In 1991, on the eve of the collapse of the USSR, the Soviet archives were temporarily opened and Russian historians obtained secret documents about Vlasov. They are published in the press, and then everyone knows that General Vlasov was arrested, tried in Moscow and sentenced to death [3].

Until then, many people were unaware of Vlasov's fate. Russia, which had been mired in internal problems for some time, has since the 2000s gone down the path of chauvinism and imperialism, promoting the greatness of the Russian nation. Due to these factors in foreign and domestic policy, it is not uncommon to talk about General Vlasov's betrayal in Russia today. Studies and works have been written about Vlasov's betrayal, but those who constantly talk about the betrayal of others remain silent when it comes to Vlasov. Because if they talk about the betrayal of Vlasov, who is Russian by nationality, this contradicts the work of those who promote the greatness of the Russians. It is right that they do not know that traitors can also come from among the Russians. Since 1992, we have received several requests to acquit Vlasov, but they have all been rejected. Because Vlasov was a traitor by his own name.

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АНАЛИЗ РЕЗУЛЬТАТОВ ИММУНОГИСТОХИМИЧЕСКОГО ИССЛЕДОВАНИЯ РАКА ЛЕГКИХ, ВЫЯВЛЕННОГО В УСЛОВИЯХ ХОРЕЗМСКОЙ ОБЛАСТИ

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Актуальность темы. Рак легких (РЛ) является наиболее распространенным видом опухоли и занимает первое место в структуре смертности от злокачественных новообразований. Ежегодно во всем мире регистрируется 2,1 миллиона новых случаев рака легких, 1,8 миллиона пациентов умирают от этого заболевания.

В современной литературе имеются данные, подтверждающие полиэтиологический характер этого заболевания и его значительную зависимость от географических факторов, климатических условий и образа жизни населения. (Непомнящих Л.М. и др., 2000; Жук А.Г. и др., 2005; Фонг К. и др., 1997).

По данным ВОЗ, более 80% случаев рака легких у мужчин и около 70% у женщин связаны с никотиновой зависимостью. У людей, выкуривающих более 20 сигарет в день, наблюдается высокий риск развития рака. Вторичный табачный дым также может повысить риск развития заболевания.

Цель научной работы. При помощи иммуногистохимического исследования улучшить качество таргетной терапии при раке легких в условиях приаралья.

Материалы и методы. Иммуногистохимическое исследование. Для изучения патоморфологически злокачественных опухолей иммуногистохимическим методом было проведено иммуногистохимическое исследование 20 пациентов с немелкоклеточным раком легкого в условиях Хорезмской области. В дополнение к результатам морфологического исследования следует отметить, что в настоящее время иммуногистохимическое исследование признано золотым стандартом во всем мире. При иммуногистохимическом исследовании изучали экспрессию клеток с помощью моноклональных антител Ki67, Bcl 2, TTF, p53 и Цитокератин 5/6, используя иммуногистопротектор Bond Leica Australia (Австралия). У всех пациентов были взяты срезы с парафиновых блоков для

проведения иммуногистохимического исследования, затем срезы были помещены на предметное стекло и изучены методом иммуногистохимического исследования с помощью антигенов Ki67, Bcl 2, TTF, p53 и Цитокератина 5/6.

Результаты: Ki 67 - признак пролиферативной активности опухолевых клеток оценивался в процентах. Полученные результаты оценивались в виде легкой, средней и тяжелой положительной реакции. Из 20 обследованных больных у 12 (60%) наблюдалась высокая степень положительной реакции, у 6 (30%) - средняя степень положительной реакции и у 2 (10%) - низкая положительная реакция. Процессов отрицательной реакции не наблюдалось. Микроскопически опухолевые клетки подвергаются полиморфизму, их ядра гиперхромны и состоят из множества патологических митозов. В просвете эпителия расположены ангиоматозные кровеносные сосуды и рыхлая волокнистая соединительная ткань. Ядра опухолевых клеток окрашены в темно-коричневый цвет.

Маркер Bcl-2 используется для определения опухолевого апоптоза, который регулирует клеточную гибель путем контроля проницаемости митохондриальной мембраны при мелкоклеточном раке легкого. При мелкоклеточном раке легкого окрашивание цитоплазмы в коричневый цвет свидетельствует о наличии белка Bcl 2 и апоптозе. В наших исследованиях высокая степень позитивной реакции у 15 (75%) из 20 больных немелкоклеточным раком легкого выявила, что при немелкоклеточном раке легкого белок Bcl 2 часто встречается в плазме и помогает выявить апоптоз опухоли.

Результаты иммуногистохимического исследования при немелкоклеточном раке легкого у всех 20 пациентов, оцененных по положительным и отрицательным результатам, имели вид положительной реакции 95%, наблюдалось состояние экспрессии в ядрах эпителия бронхов. В выбранном образце в 75% случаев наблюдалась высокая гиперэкспрессия через процесс, влияющий на структурно-функциональные свойства клеток поражения легких при немелкоклеточном раке.

Микроскопически опухолевые клетки подвергаются полиморфизму, их ядра гиперхромны и состоят из множества патологических митозов. В просвете эпителия расположены ангиоматозные кровеносные сосуды и рыхлая волокнистая соединительная ткань. Ядро опухоли окрашено в темно-коричневый цвет.

Заключение: Из 20 пациентов с немелкоклеточным раком легких в условиях Хорезмской области, наблюдавшихся с помощью маркеров пролиферации (изучение белка Ki-67 и митотического индекса), у 12 (60%) пациентов наблюдалась высокая степень положительной реакции, у 6 (30%) - средняя степень положительной реакции и у 2 (10%) - низкая положительная реакция. Полученные результаты показывают, что при немелкоклеточном раке легкого пролиферативная активность была высокой у 12 (60%) больных и умеренной у 6 (30%) больных. Это свидетельствует о высоком агрессивном течении немелкоклеточного рака легкого.

USEFUL TIPS FOR LEARNING FOREIGN LANGUAGES

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Annotation. This article covers interesting information and skills on the most effective reading, listening and speaking skills that will facilitate the learning of foreign languages. This article aims to further increase the number of people who know foreign languages and increase their interest in the language. These tips will be useful for those who are new to learning a foreign language and for those who want to strengthen their knowledge.

Аннотация. В этой статье представлена интересная информация и навыки о наиболее эффективных навыках чтения, аудирования и разговорной речи, которые облегчат изучение иностранных языков. В этой статье описывается, как еще больше увеличить количество изучающих иностранный язык и повысить их интерес к языку. Эти советы будут полезны тем, кто только изучает иностранный язык и тем, кто хочет улучшить свои знания.

Keywords: Subtitle, motivation, strategy, visualization, intonation, shadowing method, podcast, interview.

Ключевые слова: субтитр, мотивация, стратегия, визуализация, интонация, метод сопровождения, подкаст, интервью.

We hear that some people are gifted with languages. Learning comes easily to them, and the results come very quickly. But perhaps it's not about superpowers, but also about the fact that these people have the right learning process. If you develop the following guidelines for yourself, your language learning will be effective and convenient.

Set goals. One of the first steps in learning a language is choosing a goal. Without them, success is impossible. In addition, setting them helps to narrow down your focus to specific parameters. This will help you overcome the fear of novelty and get down to business. Follow these guidelines:

Focus on specific indicators. Describe your plans in detail. Focus on what you want to learn, not how much time you will spend studying the textbook. The wrong goal looks like this: This week I will study English for 30 minutes every day. Set the right goal: I will learn 25 new food-related words this week.

Achieve short-term goals. It is common to set one big goal at the beginning of a journey: to speak like a native speaker by the end of next year. However, such a monolith cannot motivate you every day. Set small goals to increase motivation: by the end of the month I will be able to name all the products in the refrigerator in English. Challenge yourself. Here too, you should not overdo it. It is worth solving the problem with a relatively short-term and set results. For example, "in two weeks I will learn 40-60 foreign words related to restaurants and cafes." The lowest indicator indicates that the goal is achievable, the highest indicator encourages you to overcome laziness [1]. Have the right motivation. Motivation is very important when learning a foreign language, but at the same time it is a very insidious variable. It is very easy to get lost on the way to achieving your goal. To avoid this, always think about how important a language is in your life and how knowing a language will open up great opportunities for you. Someone learns a foreign language to easily move around the world, someone wants to expand their career opportunities, and someone may have met their love while living abroad. But without the ability to communicate freely, there will be no success in any field. When you suddenly give up, restore your motivation with the following questions: "Do I want a new great job?", "Do I want to blush for my English (German or any other) when communicating with locals?" "Do I want to travel?" without language barriers? And so on. In addition, it is important to remember that learning a foreign language is an excellent preventive measure that helps the brain become flexible. When learning it, new neural connections are formed in the brain, memory and attention improve.

Learn the right words. According to various sources, there are from 600 thousand to 1 million words in the English language. Of course, learning them all is not only impossible, but also pointless: in 1993, philologist Edward Fry found that the 100 most common words make up half of the vocabulary of absolutely all texts in the English language. Fry also calculated that 90% of all textual information in the English language falls into 1000 words. It is worth learning them to start [2].

Read smarter. There are many special techniques that help speed up language learning. For example, one of the best ways to learn new words is flashcards. On one side, the meaning is written in Russian, on the other - in a foreign language. They develop memory by training the brain. The effectiveness of the method has been repeatedly

proven in studies. Flashcards can be done on plain paper or through electronic resources such as Quizlet. In addition, strategies can include visualization (representing words as images that they represent), sounding out (saying unfamiliar words out loud and repeating them) and gestures (showing pantomime, for example, remembering the word fist. fist).

Use the language in everyday life. For beginners, this point may seem very complicated, but in fact everything is very simple, because there are many options. First of all, use your free time - take flashcards with you on the go. Don't forget to learn a language even during your vacation - watch TV series and movies in the original. If you have difficulty understanding by ear, turn on the subtitles. This method also allows you to fully enjoy the acting and intonation of the actors you see on the screen. For example, in Denmark, all cinemas show American and British films only in the original with subtitles. Partly because of this, 86% of the country's population speaks English fluently [3].

Talk to yourself in a foreign language. Then list the dishes you have for dinner, talk about what you saw while walking the dog, repeat a recent conversation with your mother, etc. Believe me, it's exciting. Gradually, you will want to learn as many words as possible that you constantly encounter in Russian. You will increasingly begin to ask yourself questions: I wonder what this word will be in English (German and other)? What is the name of this vegetable or fruit? And so on.

Regularity of lessons. Regularly studying a small amount of material is much more effective than studying a textbook for several hours once a month. This allows us not to overload the brain and maintain interest in learning, because we do not have time to get tired. As a result, lessons become an interesting process, not hard work. Regular lessons also form the habit of learning, and over time, reading a book in a foreign language for 20 minutes before going to bed will become as natural as brushing your teeth. Therefore, if you want to significantly speed up the process of learning it, do not neglect daily contact with the subject.

Read simple texts. If you have recently started learning a foreign language, do not rush to solve complex texts. Start with simple children's stories. For example, you can reread the famous works of the Brothers Grimm, translated into many languages of the world, and it is best to start with books whose plot you already know. Scrolling through the X feed (formerly Twitter) can also help improve your foreign language skills. Since there are many short messages on this social network, it is easier to focus on their essence and remember new words than reading long, complex materials. In addition, reading a foreign language every day trains your brain and subsequently has a

beneficial effect on your participation in the learning process. Each time you understand more and more, and this does not make you happy. This means that reading will become more interesting for you. For example, if we take English as an example, you can try the following methods on yourself, which will certainly be effective, and it is recommended to study other languages in the same direction.

Speaking – Use the language fluently. Talk to yourself – Say your daily plans or thoughts out loud.

Shadowing – Listen to audio or video and immediately repeat the speech.

Talk to a native speaker – Use apps like Tandem, HelloTalk, or Omegle (with a word filter) for English.

Record your speech – Listen to your own voice and analyze your mistakes.

Reading – Increase your vocabulary

Start with easy texts – Read children's books or simplified stories.

Read on your favorite topics – Find interesting articles, news, and blogs.

Learn unfamiliar words with explanations – Read English definitions, not translations.

Listening – Improve your listening skills

Listen to podcasts and audiobooks – Choose topics that interest you and listen to them regularly.

Watch movies with subtitles – Watch with English subtitles first, then without.

Listen to real speech – Use resources like interviews, vlogs, or TED Talks.

Writing – Expressing thoughts

Keep a journal – Write down even simple sentences every day.

Rewrite what you read and hear – Retell it as you understand it.

Use editing apps – Tools like Grammarly or QuillBot can help.

Key facts:

Visual memory and associations are important in language learning. Learning without translation is more effective when understanding words and grammar in context. Learning pronunciation first makes it easier to remember words. Flashcards and the Spaced Repetition System (SRS) method are effective. Grammar rules should not be memorized, but understood through examples. “Fluent Forever” – Gabriel Wyner [4]. The biggest obstacle in language learning is fear and embarrassment of shortcomings. It is not necessary to achieve “perfect” grammar, the main goal is communication. You need to speak a foreign language every day (even if with mistakes). “Language hacking” is learning the most important and frequently used words first.

Communicating with language exchange partners is an effective method. “Fluent in 3 Months” – Benny Lewis.

To learn a language naturally, you need to read more. It is more effective to understand grammar in context, not through rules. A person who reads a lot also naturally learns grammar. Through reading, vocabulary increases significantly. Reading books that you like accelerates the process of learning a language. “The Power of Reading” - Stephen Krashen.

Memory and the process of memorization play a crucial role in language learning. The Pimsleur method is based on memorizing the most frequently used words and phrases. Using short and understandable sentences more often helps communication. Listening and repetition are effective language learning techniques. Learning grammar rules alone does not develop communication. “How to Learn a Foreign Language” - Paul Pimsleur [5].

At the initial stage, learning correct pronunciation makes it easier to memorize vocabulary. It is more effective to associate letters and sounds with visual methods. You should pay attention to the intonation and stress of a foreign language. To improve pronunciation, it is useful to write and listen to yourself. Correct pronunciation helps you learn a language faster and more fluently. “The Fluent Forever Pronunciation Trainer” – Gabriel Wyner.

In conclusion, we can say that there are easy and effective ways and methods to learn English or any other foreign language. We need to choose clear goals and objectives for this path. Only then can we achieve our intended goal.

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WHY CAN'T YOU GET A LANGUAGE PROFICIENCY CERTIFICATE IN A SHORT TIME?

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Annotation: This article will tell you how to learn English and get a certificate quickly and easily, how to reach level 0 to B2 in a short time. The article provides very important and necessary recommendations for language learners. It will show you how to achieve a good level in a short time, that is, in 6 months, using modern science and technology.

Аннотация: В этой статье мы расскажем о том, как быстро и легко выучить английский язык и получить сертификат, а также как за короткое время перейти с 0 до уровня B2. В статье даны очень важные и необходимые рекомендации для изучающих язык. Представлены методы, как достичь хорошего уровня за короткий период времени, а именно за 6 месяцев, используя современную науку и технологии.

Keywords: CEFR, IELTS, certificate, training courses, result, English, level, 6 months, quick and easy, teaching methods, training centers.

Ключевые слова: CEFR, IELTS, сертификат, курсы обучения, результат, английский, уровень, 6 месяцев, быстро и легко, методика обучения, образовательные центры.

Nowadays, English is developing and spreading more widely than other languages. Now the state language of most countries is English. We can say that English has become popular very quickly and has taken over the world. For many years, no matter who we see on the street or at school, they are all studying English. At least they listen to English music.

The developing technologies of our time are also written mainly in English. If a person knows English, many doors of opportunity begin to open for him. We have a saying: "He who knows the language, the hand knows". So, learning a language for all of us will improve our lives and expand our thinking, worldview, and the scope of our thinking.

So, the questions that interest and concern us all are: Is it possible to reach level 0 to B2 in 6 months? What should we do for this? So now, moving on to the main issue, we see and hear advertisements on the Internet and on the streets that say, "We teach English in an easy and fast way. With us, you can quickly achieve your goals and results. For those who pass the CEFR, at least B2, and for those who pass the IELTS, IELTS 5 or higher." Should we believe this or not?

For this, a person must have strong self-confidence and, of course, a sense of patience. Is it possible to get from 0 to B2 level in 6 months? Yes, but it is very difficult and everyone's results may be different. This level can be reached if the learner:

- Practices at least 3-5 hours every day.
- Uses all learning methods (reading, writing, listening, speaking).
- Immerses himself in the language environment.
- Uses the right methodology [1;26].

Who is this possible for?

- Those who have previously studied other languages and gained experience.
- Those who know fast and effective learning methods.
- Those who have had the opportunity to go abroad and live in a language environment.

Who may find it difficult?

- Those who have not studied a foreign language before.
- If they can't spare even 1-2 hours a day
- If they don't practice and communicate.

If a person relies only on textbooks and grammar, it will be difficult to reach the B2 level. But if you sincerely, with good intentions, give it your all, and focus only on it, you can achieve your goal. This certainly requires great perseverance from a person.

So, what is the role of training courses in this?

We can see that many people go to English training centers and study at the time they want, in the training courses they want. A person should consider training courses as having their place and importance in obtaining B2 or IELTS. Because the training centers are staffed by the most qualified, carefully selected people with foreign language certificates. Preparing at their hands will help the student a lot.

If you pass IELTS or CEFR and do not achieve the level you want, you should not give up on studying. It is better to understand your mistakes, draw good conclusions from them, and not repeat them, but only move forward. Our people say that "you will not be satisfied with the struggle that you have lost," and a person who aspires to higher levels should definitely follow this saying and not stop until he achieves his goal.

Today, many applications and online platforms help you learn a language. Applications such as Duolingo, Babbel, Rosetta Stone are among them. They make it easier to learn a language through interactive exercises and games [2;23].

Online courses: There are many English courses available on platforms like Coursera, Udemy, and edX. One of them, the “English for Career Development” course, teaches people how to use English in the workplace.

Books and movies: You should read and watch books and movies in English. This will improve your listening and speaking skills. It is more beneficial to start with subtitles and then try to watch them without them.

Learn from your mistakes: If you fail to achieve the level you want in IELTS or CEFR, you should not give up on studying. You should understand your mistakes, learn from them, and not repeat them. You should just keep moving forward.

Practical tips: Describe your daily study plan in detail. For example, study grammar from 7:00 to 8:00 in the morning, and do listening exercises in the afternoon.

Vocabulary building: Recommend apps and methods you can use to learn new words every day. For example, flashcard apps like Anki or Quizlet.

Use of technology: Online resources: It is necessary to watch English videos on YouTube, TED Talks and other platforms. Watching them with subtitles allows you to improve your listening and speaking skills.

Podcasts: Listening to English podcasts improves your listening skills. For example, podcasts like “The English We Speak” or “6 Minute English”.

Motivation and psychological tips: Goals and rewards: Setting small goals and rewarding yourself when you achieve them motivates you and makes the learning process interesting.

Language tests and evaluation: Checking your knowledge every week or month helps you monitor your progress and make the necessary changes. Mock Exams: Before the real exams, you can test your preparation by taking mock exams.

Group learning: Language exchange groups: One of the important things is to join language exchange groups. This gives the person the opportunity to use English in real life and helps them test their knowledge [4;54].

Five simple ways to learn a foreign language quickly:

There is rarely a person who is not impatient when learning a foreign language. You can learn a language by just saying “Kuf suf” or “Abraka-Dabra”. But it is not as easy as it seems, but at the same time it is not as difficult as it seems.

The most important aspect that ensures success in learning any foreign language is ability and desire. You should not be afraid of the issue of ability, because everyone has it. In 2006, American scientist Richard Sparks proved with his research that the idea that some kind of universal innate talent is needed to learn a language is unfounded. Now, as for desire. The wise saying "Desire is a thousand opportunities, and unwillingness is a thousand excuses" is very apt. Determine one thing: do you want to learn a language or not? If your desire is serious, the following tips will definitely help you.

Use dictionaries. Many linguists believe that learning a language with the help of dictionaries greatly improves the ability to remember individual words and phrases, as well as sentence structure. A person who learns a language through ready-made sentences in the first person does not just repeat sentences, but feels himself in certain situations. For example, while learning the phrases needed to make a purchase in a store, a person feels as if he is buying and selling. A study was conducted in a school specializing in in-depth teaching of English in Russia. Students remembered the part of the text in the first person by ninety-eight percent. This shows that learning a language with the help of dictionaries is very effective.

Work according to the rule. Experts have found a very effective way to master new words. Memorize 30 words a day, 5 of which should be verbs. Every day, you will sort the words in the dictionary alphabetically. For example, if today the first thirty words starting with the letter "A" are selected, tomorrow the thirty words starting with the letter "B" are selected. After going through the alphabet completely, the next thirty words starting with the letter "A" are memorized. This habit will gradually form into a system, and your memorization will become easier and easier. For this method to be effective, memorize words every day, and there should be no days off at all!

Learn poems and songs. One of the most enjoyable and effective methods is to learn foreign poems and songs along with their translations. There are many people who have learned English in three months using this method. Linguists say that this method is especially effective when the learner translates the poems and songs himself.

Understand the content. Psychologists who conduct research on the acquisition of foreign languages have drawn attention to one mistake that many people make: learners often try to fully understand the speaker's speech or a conversation on a dictaphone. In fact, you should strive to understand the general meaning, not to catch every sound. Try to learn the tone of the language, the repetitive words, and the sentence structure. Don't focus on the small details.

Conclusion. From this article, it should be concluded that if a person really wants, everything is within his power. It is possible to reach the B2 level from 0 in 6 months. To do this, you need to set a goal, study regularly, use modern technologies and use the language in real life. By implementing these methods, you can also achieve success in learning a language.

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THE STRUCTURE AND FUNCTION OF CARDIAC MUSCLE TISSUE

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Annotation

Cardiac muscle tissue is a highly specialized and involuntary striated muscle type that forms the myocardium, the muscular layer of the heart. It possesses unique characteristics that distinguish it from skeletal and smooth muscles, including the presence of intercalated discs, autorhythmicity, and an extensive mitochondrial network. This thesis explores the structure and function of cardiac muscle tissue at cellular and molecular levels, discussing its role in maintaining cardiovascular function. It also reviews global research on cardiac histology, electrophysiology, and regenerative medicine, emphasizing the significance of these studies in understanding and treating heart diseases.

Keywords: Cardiac muscle, myocardium, intercalated discs, sarcomere, calcium regulation, electrophysiology, cardiovascular system, regenerative medicine.

Relevance of the topic

Cardiac muscle tissue is fundamental to the proper function of the cardiovascular system. The heart contracts rhythmically and continuously throughout life, maintaining circulation and ensuring the delivery of oxygen and nutrients to all body tissues. Given the increasing prevalence of cardiovascular diseases (CVDs), which remain the leading cause of death worldwide, understanding the structure and function of cardiac muscle tissue is critical.

Cardiac tissue differs from skeletal and smooth muscle due to its unique ability to generate its own electrical impulses, enabling autonomous contraction. The presence of intercalated discs facilitates rapid and synchronized contraction, ensuring efficient blood pumping. Studying the molecular mechanisms that regulate cardiac muscle function is essential for developing targeted therapies for conditions such as heart failure, myocardial infarction, and arrhythmias.

Moreover, advancements in regenerative medicine, including stem cell therapy and tissue engineering, have opened new avenues for repairing damaged cardiac tissue. The

study of cardiac histology and physiology provides valuable insights into developing novel treatment strategies for heart disease, making this an important and timely research topic.

Scientific basis of the topic

1. Histological and Structural Characteristics of Cardiac Muscle

Cardiac muscle tissue is composed of individual cardiomyocytes that are interconnected via specialized junctions known as intercalated discs. These structures play a crucial role in maintaining mechanical and electrical coupling between cells.

Cardiac Muscle Fibers: Unlike skeletal muscle fibers, cardiac muscle fibers are branched, allowing a three-dimensional network that supports uniform contraction.

Sarcomere Organization: The sarcomere, the basic contractile unit of the muscle, consists of actin and myosin filaments arranged in a striated pattern similar to skeletal muscle.

Mitochondrial Density: Cardiac muscle cells contain a large number of mitochondria, which provide the ATP required for continuous contraction.

2. Electrophysiological Properties

Cardiac muscle tissue has unique electrical properties that allow it to contract rhythmically without direct nervous system stimulation.

Autorhythmicity: The sinoatrial (SA) node acts as the natural pacemaker of the heart, generating action potentials that spread through the myocardium.

Excitation-Contraction Coupling: Calcium ions (Ca^{2+}) play a vital role in initiating contraction through the interaction of troponin and tropomyosin in the sarcomere.

Gap Junctions: Located within intercalated discs, these structures allow the rapid transmission of electrical signals, ensuring synchronized contraction of the heart chambers.

3. Functional Adaptations of Cardiac Muscle

Cardiac muscle tissue is adapted for high endurance and efficiency:

Resistant to Fatigue: Due to its rich capillary network and abundant mitochondria, cardiac muscle resists fatigue compared to skeletal muscle.

High Oxygen Demand: The myocardium relies almost exclusively on aerobic metabolism, utilizing fatty acids, glucose, and lactate as energy sources.

Intrinsic Regulation: The Frank-Starling law states that the heart's stroke volume increases in response to greater venous return, allowing the heart to adjust to varying circulatory demands.

Materials and methods

1. Specimen Collection and Preparation

Histological Analysis: Heart tissue samples are collected from animal models or human biopsies.

Tissue Fixation: Samples are preserved in formalin to maintain structural integrity.

Sectioning and Staining: Thin sections (3-5 μm) are prepared using a microtome and stained with hematoxylin and eosin (H&E) for microscopic examination.

2. Imaging Techniques

Light Microscopy: Used to observe general histological structures of cardiac muscle.

Electron Microscopy: Provides high-resolution images of sarcomeres, mitochondria, and intercalated discs.

Immunohistochemistry: Used to detect specific proteins such as troponin, connexin-43 (gap junctions), and desmin (cytoskeletal protein).

3. Electrophysiological Studies

Patch-Clamp Technique: Measures ion channel activity in cardiomyocytes.

Electrocardiography (ECG): Records electrical activity of the heart to analyze conduction properties.

4. Functional Assays

Calcium Imaging: Uses fluorescent dyes to track Ca^{2+} dynamics during contraction.

Metabolic Assays: Measures ATP production and oxygen consumption rates.

Global perspectives on the topic

Cardiac muscle research has seen significant advancements globally:

United States: Research institutions like the Mayo Clinic and Harvard Medical School are leading studies on myocardial regeneration using stem cell therapy.

Germany: Charité – Universitätsmedizin Berlin has developed advanced imaging techniques to study cardiac microstructure in heart disease patients.

Japan: Kyoto University is pioneering research on induced pluripotent stem cells (iPSCs) to create functional cardiomyocytes for transplantation.

China: Advances in CRISPR gene-editing technology are being applied to correct genetic mutations in inherited cardiac diseases.

Results and discussion

1. Cardiac muscle structure ensures efficient contraction and electrical conduction.

2. Molecular mechanisms regulating calcium homeostasis are critical for maintaining rhythmic contractions.

3. Advances in cardiac imaging and molecular biology have improved diagnostic and therapeutic approaches for heart disease.

4. Stem cell-based therapies and tissue engineering hold promise for regenerating damaged myocardium.

Conclusion

Cardiac muscle tissue is a remarkable biological structure that enables the continuous and rhythmic beating of the heart. Its specialized histological features, including intercalated discs and high mitochondrial density, ensure efficient contraction and resistance to fatigue. The electrophysiological properties of the myocardium enable autonomous contraction, regulated by complex ion channel dynamics.

Advancements in biomedical research, including stem cell therapy and cardiac tissue engineering, offer promising strategies for treating heart diseases. As cardiovascular diseases remain a major health burden worldwide, ongoing research into the structure and function of cardiac muscle tissue will continue to drive medical innovations and improve patient outcomes.

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ОРГАНИЗАЦИЯ УЧЕБНОЙ ДЕЯТЕЛЬНОСТИ СТУДЕНТОВ НА УРОКАХ ГОСПИТАЛЬНОЙ ПЕДАГОГИКИ В ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЯХ

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Резюме. В статье раскрывается авторский взгляд по организации учебного процесса в высших педагогических учебных заведениях с учетом требований национальной «Программы подготовки кадров», которое подразумевает воспитание всесторонне развитых и высоко квалифицированных специалистов, соответствующих требованиям международных стандартов. Для выполнения поставленных задач, каждый преподаватель должен с чувством ответственности и пониманием относиться к проведению занятий, и организовывать занятия с использованием современных педагогических технологий, которые позволят педагогам формировать познавательные умения и навыки студентов, способствующие профессиональному становлению будущих педагогов.

Ключевые слова: высшее учебное заведение, методы, занятия, формы, учебно-воспитательная работа, эмпирический материал, экскурсии, лекция.

Abstract. The article reveals the author's view on the organization of the educational process in higher pedagogical educational institutions taking into account the requirements of the national "Personnel Training Program", which implies the education of comprehensively developed and highly qualified specialists that meet the requirements of international standards. To fulfill the tasks set, each teacher must be responsible and understanding for conducting classes, and organize classes using modern pedagogical technologies that allow teachers to form the cognitive skills of students that contribute to the professional development of future teachers.

Key words: higher educational institution, methods, classes, forms, educational work, empirical material, excursions, lecture.

Сегодня в педагогическую практику вводятся такие понятия, как: «госпитальная педагогика», «система госпитальных школ», «госпитальная школа»,

«госпитальный педагог» и предпринимаются отдельные попытки дать определения этим понятиям.

Если посмотреть на основные события, предшествующие появлению современной модели госпитальных школ, можем увидеть ключевые этапы развития, актуальное состояние, направления деятельности, в том числе исследовательская проблематика в области госпитальной педагогики. Также уточняется понятийный аппарат, исходя из опыта, накопленного за период с 2014 года по настоящее время.

Введение в модуль предмета – «Госпитальная педагогика» намного усложняют работу педагогов. Эти разделы педагогики, связаны с организацией обучения детей, которые находятся на длительном лечении и не могут по состоянию здоровья посещать образовательные организации. Госпитальная педагогика, являясь частью педагогики, направляет свое внимание на отдельную категорию обучающихся — на детей, нуждающихся в длительном лечении.

Сложность реализации и развития данных направлений педагогики обуславливается межведомственной принадлежностью: к образованию, к здравоохранению и к социальной защите, — поскольку ученик, находящийся на длительном лечении в условиях стационара — это в первую очередь пациент, и лишь во вторую очередь — школьник. Объединение медицинских и педагогических технологий в процессе лечения ребёнка означает комплексную реабилитацию. Педагоги и тьюторы, которые работают с детьми и несут ответственность за их здоровье и безопасность, должны обладать навыками оказания первой помощи. Это один из важных показателей социальной цивилизации.

Современный педагог должен владеть методикой и инструментарием для организации образовательного процесса на уровне требований развивающегося социума для осуществления обучения и воспитания с учетом социальных, возрастных, психофизических и индивидуальных особенностей длительно болеющих детей, в том числе их особых образовательных потребностей.

Успех учебно-воспитательной работы зависит не только от использованных в ней тех или иных методов, но и от организационных форм этой работы. Формы эти в свою очередь определяются целями и задачами обучения длительно болеющих детей, охваченных дидактическим воздействием, характерными особенностями отдельных учебных предметов, местом и временем работы с такими детьми, обеспеченностью госпитальных школ учебными пособиями, дистанционными оборудованием и т.п. Таким образом, выбор

организационных форм, как и методов обучения, зависит от большого числа различных факторов [3].

Однако если методы обучения отвечают на вопрос, как учить в определенных условиях, например, в больницах или дома то формы, обуславливая организационную сторону учебной работы, определяют, каким образом должна быть организована эта работа с учетом того, кто, где, когда и с какой целью обучается.

Цель подготовка студентов для госпитальных школ – формирование профессиональных компетенций для организации обучения детей с ограниченными возможностями находящихся на длительном лечении которые не могут посещать образовательные организации. Также дать студентам систематизированные знания о действительности, сформировать у них основы научного мировоззрения, приучить к самообразованию и развивать их способности и интересы [4, 5, 6]. Однако в высших учебных заведениях эти цели достигаются в ходе изучения другой совокупности учебных предметов по сравнению с общеобразовательной школой или профессиональными колледжами. Такое положение является следствием того, что студенты в высших учебных заведениях, продолжая получать общее образование, в ходе учебы должны приобрести и квалификацию, необходимую для определенной профессиональной деятельности.

Такая задача решается с помощью профессиональной подготовки, главная цель, которой состоит в том, чтобы обеспечить молодежь основными профессиональными знаниями и умениями, относящимися к целой группе родственных профессий, а также специальными знаниями и умениями, необходимыми для выполнения определенной конкретной профессии.

Целью высших учебных заведений являются развитие у студентов интереса к своей профессии, а также приучение их к постоянной работе над повышением своей квалификации.

Основной формой организации учебного процесса в высших учебных заведениях является занятие, на котором либо читается лекция, либо проводится беседа с элементами самостоятельной работы, либо выполняется практическая работа, проводятся семинары и.т.д., например, на уроках госпитальной педагогики теоретические вопросы часто излагаются преподавателем в течение двухчасовой лекции, а эмпирический материал изучается на практическом занятии или в семинарных занятиях. Для практического занятия характерна самостоятельная работа студентов, связанная

наблюдением за педагогами, работающими с больными детьми, в больницах или в стационарах. Практическое занятие способствует овладению студентами учебного и некоторых профессиональных навыков, которые могут пригодиться им в дальнейшей работе.

В настоящее время, все большее признание получают такие формы обучения, как семинарские занятия, собеседования, консультации, модульное обучения, обучение на расстоянии которые способствуют активизации мыслительной деятельности обучаемых, развитие логического мышления, познавательной самостоятельности и в итоге формирование и развитие познавательного интереса к предмету госпитальная педагогика. Преподаватель выбирает ту или иную форму обучения исходя из изучаемого материала, конкретных учебно-воспитательных задач, наличия учебного оборудования.

Например, формирование понятий по госпитальной педагогике не может проходить успешно только на занятиях в аудитории. Необходимо организовывать для студентов экскурсии в больницы где обучаются длительно болеющие дети. Следует заранее определить какой форме обучения при рассмотрении того или иного вопроса следует отдать предпочтение. Важно подобрать наиболее эффективные в конкретных условиях формы организации учебно-воспитательного процесса. Однако недостаточно произвести выбор формы обучения, необходимо обеспечить четкую организацию познавательной деятельности студентов на занятиях. В зависимости от формы обучения, познавательную деятельность студентов можно организовать по-разному.

В высших учебных заведениях познавательная деятельность студентов организуется в коллективе: в группе из 30-35 человек. Это создает большие трудности в работе преподавателя, призванного обеспечить познавательную активность всех студентов, но при этом учитывать индивидуальные особенности каждого. Если же равняться на среднего студента, то от этого будут страдать как сильные, так и слабые. В целях преодоления указанных недостатков рекомендуется применять дифференцированный подход, т.е. учитывать возможности слабых, средних и сильных студентов. Это задача очень трудная, но она требует своего решения. В некоторой степени ее решению способствует применение различных форм организации познавательной деятельности студентов: фронтальной, групповой, индивидуальной. Для фронтальной работы характерна совместная деятельность студентов, всей группы над общим заданием под руководством преподавателя. Он делить ход работы на ряд этапов,

после завершения каждого этапа его результаты обсуждаются, и студенты приступают к следующему этапу.

Преподаватель может использовать на занятиях госпитальной педагогики модульное обучение. Изучаемый материал делится на модули, которые студенты решают поэтапно. Преподаватель в процессе занятий имеет возможность контролировать и оценивать освоенный учебный материал. Студенты самостоятельно выполняют задания, помогают друг другу и в процессе обучения у студентов формируются навыки работы в команде. Даже неудовлетворительная оценка студентами воспринимается обычно и для устранения студенты самостоятельно работают над учебным материалом. У студентов в ходе их решения возникают вопросы, которые свидетельствуют об умственной активности, о стремлении узнать больше, что является показателем развивающегося познавательного интереса к предмету госпитальной педагогики.

Групповая форма организации учебной деятельности студентов также рассматривается как коллективная, она характеризуется совместной работой студентов в небольших группах. Студенты одной группы делятся на небольшие группы, насчитывающие, как правило, от 3 до 6 человек. Эти группы совместно работают над решением определенных теоретических или практических задач на занятиях, а в некоторых случаях – и вовремя вне аудиторных занятий [7].

Групповая форма организации позволяет учитывать индивидуальные способности каждого студента в большей степени, чем фронтальная. Работой группы руководить старший, функции которого выполняют поочередно студенты с целью научиться руководить и подчиняться. Все группы работают на занятиях под руководством преподавателя. Основным методом групповой работы является дискуссия по совместно разрешаемой проблеме. В ходе дискуссии более способные или более продвинутые в учебе студенты помогают в работе своим более слабым товарищам.

Таким образом, групповая организация познавательной деятельности студентов позволяет полнее использовать дифференцированный подход, чем при фронтальной работе.

Индивидуальная форма организации деятельности студентов чаще всего используется во внеурочной работе. Это может быть работа с книгой, с домашним заданием или самостоятельно написанием эссе.

Содержание многих вопросов курса госпитальной педагогики имеет воспитательное значение. Об этом надо помнить преподавателю и заранее

продумать, какие мировоззренческие выводы можно сделать из изученного материала, какие вопросы использовать для повышения нравственных качеств студентов. Каждое занятие должно быть проведено так, чтобы оно способствовало развитию студентов, обогащению их кругозора, повышению интеллектуального уровня и др.

Чтобы обеспечить решение этих задач во взаимосвязи, необходимо тщательно продумывать учебно-воспитательные задачи, которые могут решаться на каждом конкретном занятии, с учетом этих задач отобрать содержание, методы и методические приемы обучения, учебное оборудование, наметить организационные формы работы студентов.

Как показывает мировая практика, ключевой проблемой, стоящей перед современным образованием, является низкая мотивация учителей, связанная с их собственным развитием и профессиональным ростом. Данная проблема также должна решаться в высших учебных заведениях, занимающихся подготовкой педагогических кадров. Для этого требуется большое внимание к формированию идеологии и непрерывного развития профессиональной подготовки студентов. Таким образом, формирование идеологии постоянного саморазвития и профессиональная подготовка студентов, должна стать первостепенной задачей, затрагивая всех студентов, а не только активных.

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The Great Silk Road and its impact on relations between civilizations

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Abstract:

The Great Silk Road was one of the most important trade routes in ancient and medieval times, playing an important role in the development of economic, cultural and scientific relations between the East and the West. This article analyzes the formation of the Silk Road, its main routes, trade and cultural exchange processes, and the impact of civilizations. The crisis of the Silk Road and its repercussions in the modern world are also discussed.

Keywords: The Great Silk Road, trade routes, contacts between civilizations, cultural exchange, economic influence, China, Central Asia, Europe, science, crafts.

INTRODUCTION

The Great Silk Road is one of the most important trade and cultural exchange routes in human history, strengthening the connection between Eastern and Western civilizations. This road was of great importance not only for the movement of trade caravans, but also for the exchange of science, religion, art and technology. Stretching from ancient China through Central Asia to Europe and the Middle East, this road has become an important factor in the economic and cultural development of different countries and peoples for centuries.

This article analyzes the formation of the Great Silk Road, its main routes, its impact on trade and cultural exchange, as well as its crisis and modern impact. How did the Silk Road unite world civilizations? How did it influence historical processes? By finding answers to these questions, one can gain a deeper understanding of the place of the Great Silk Road in human culture.

The emergence and main routes of the Great Silk Road

The Great Silk Road was formed in the 2nd century BC at the initiative of the Chinese Empire. It was initially used to deliver silk and other valuable goods from China to Europe and the Middle East. This road expanded at different times and connected China, India, Central Asia, Persia, Arab countries and Europe. The main routes of the Silk Road were as follows:

Eastern route - started in China and led through Central Asia to the Middle East and Mediterranean countries.

Western route - reached Europe through Persia and Arab countries.

Southern route - connected to Africa by sea via India and Southeast Asia.

Impact on trade and economic development

Not only silk was traded along the Great Silk Road, but also spices, precious stones, porcelain, metal products and other goods. As a result of the development of trade, the following changes occurred:

Trading centers and cities developed along the caravan routes (Samarkand, Bukhara, Khiva, Kashgar, Baghdad).

Economic development accelerated due to trade and the formation of an international market.

Diplomatic relations between states were strengthened.

Cultural exchange and impact on the development of science

The Silk Road was important not only for economic, but also for cultural and scientific exchange. With its help, the following processes occurred:

The spread of religions - religions such as Buddhism, Islam, and Christianity spread to Central Asia and East Asia.

The development of science - Chinese paper and silk production technologies, Indian mathematical and medical achievements, and the discoveries of the Islamic world in astronomy and philosophy reached Europe and other regions.

The exchange of arts and culture - architecture, music, literature, and handicrafts spread between different civilizations.

The Crisis of the Great Silk Road and Its Causes

By the 14th-15th centuries, the Great Silk Road gradually lost its importance. There were several reasons for this:

The discovery of sea routes and the change in trade routes.

The collapse of the Mongol Empire and political instability.

The decline in the security of caravan routes as a result of fierce wars and plunder in Central Asia.

The Modern Echo of the Great Silk Road

Although the Great Silk Road has been replaced by modern trade routes today, its cultural and historical heritage has been preserved. China's "One Belt, One Road" initiative is seen as the revival of this historical route. Through this initiative, economic and cultural cooperation between different countries is being strengthened again.

Conclusion

The Great Silk Road is one of the global trade routes that has occupied a unique place in the history of mankind, and has played a significant role in the development of

economic, cultural and scientific relations between the East and the West. Not only silk and other goods were exchanged along this route, but also science, religion, art and technology. The existence of the Silk Road led to the development of cities in Central Asia and adjacent regions, the prosperity of trade and the strengthening of ties between different civilizations.

However, by the 14th-15th centuries, the Great Silk Road lost its importance as a result of the development of sea routes, political instability and military conflicts. Despite this, its cultural heritage has been preserved to this day. China's "One Belt, One Road" initiative is making it possible to revive the Great Silk Road in a modern form.

Thus, the Silk Road was not only a trade route, but also an important bridge connecting civilizations. Its historical significance continues today and continues to play an important role in world development.

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THE CONCEPT OF INFORMATION SECURITY AND THE PROBLEMS OF PERFORMANCE INDICATORS

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Abstract:

This article analyzes the concept of information security, its basic principles and the problems of assessing performance indicators. It also discusses the problems encountered in ensuring the security of information systems and ways to overcome them. Modern approaches and indicators for improving the effectiveness of information security are considered.

Keywords: Information security, performance indicators, information systems, security principles, threats, protective measures, data security, cybersecurity.

INTRODUCTION

Information security is one of the most pressing issues for organizations and government agencies today. As a result of the rapid development of digital technologies, threats to information systems are increasing. Therefore, ensuring information security and assessing its effectiveness are of great importance. Determining performance indicators and methods for measuring them play a key role in the formation of security strategies.

This study aims to analyze the concept of information security, identify criteria for assessing its effectiveness, and shed light on existing problems.

Methodology

The following methodological approaches were used in the study:

Theoretical analysis - scientific sources on information security and its effectiveness indicators were studied.

Comparative method - existing security systems and their effectiveness indicators were compared.

Expert assessment - analyses were conducted based on the opinions and experience of experts in the field.

Statistical analysis - existing data and indicators on information security were studied.

Based on these approaches, recommendations were developed to improve the effectiveness of information security.

The concept of information security and its basic principles

Information security is a system of measures aimed at protecting information resources from unauthorized access, modification, destruction or loss. It is based on the following basic principles:

Confidentiality - only authorized persons have access to information.

Integrity - ensuring that information is protected from damage or alteration.

Availability - the readiness of information and systems to be used when necessary.

Information security depends not only on technical, but also on legal, organizational and human factors and requires an integrated approach.

Indicators for assessing the effectiveness of information security

Various indicators are used to determine the effectiveness of information security.

They are divided into the following main areas:

Technical indicators:

Level of system protection

Number of software vulnerabilities

Cyberattack failure rate

Organizational indicators:

Existence of security policies and procedures

Level of employee security awareness

Effectiveness of emergency response plans

Financial indicators:

Budget allocated to the security system and its effectiveness

Amount of material damage caused by cyberattacks

Current problems of information security

Today, the following problems are observed in ensuring information security:

Growth of cyberattacks - the number of hacker attacks and malicious programs is increasing.

Weak systems and software - outdated security systems remain vulnerable to cyberattacks.

Low level of employee awareness - errors in information security are often due to the human factor.

Lack of finance and resources – there is a lack of funds to implement security measures.

Legal and regulatory issues – weak or ineffective legislation against cybercrime.

Measures to improve information security effectiveness

The following measures should be taken to improve information security:

Implement strong authentication systems – use modern technologies such as two-factor authentication (2FA).

Software updates and monitoring – constant updating of systems and monitoring of cybersecurity.

Regular training of employees – organization of information security training and seminars.

Improving the legal framework – development and implementation of effective legislation against cybercrime.

Backups – regular backups of important data.

Implementation of an analysis and evaluation system – development and constant monitoring of an information security effectiveness assessment system.

These measures will help increase the level of information security and make it possible to effectively counter cybersecurity threats.

Conclusion

Information security is of great strategic importance in today's digital society, and ensuring its effectiveness is a priority for every organization and state institution. The study analyzed the basic concepts of information security, its performance indicators, and existing problems.

Technical, organizational, and financial indicators play a significant role in assessing the effectiveness of information security, and their systematic monitoring is necessary.

An integrated approach is required to eliminate problems such as the increase in the number of cyberattacks, software vulnerabilities, and the human factor.

Based on the results of the study, the following recommendations were made to improve information security:

Introduction of modern security technologies

Improving the knowledge and skills of employees

Continuous updating of information systems and strengthening protective measures

Strengthening the legal framework and measures to combat cybercrime

Implementation of these measures will increase the level of information security and effectively counter threats to cybersecurity. It also creates the basis for improving organizations' strategic approaches to protecting information resources.

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Методы и инструменты прогнозирования в коммерческом банке

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Methods and Tools for Forecasting in a Commercial Bank

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Аннотация

В условиях нестабильной макроэкономической среды коммерческие банки сталкиваются с необходимостью использования эффективных методов прогнозирования. В данной работе рассматриваются макроэкономическое прогнозирование, эконометрические модели и цифровые технологии, которые помогают коммерческим банкам минимизировать риски и повысить эффективность стратегического управления. Особое внимание уделено анализу современных инструментов прогнозирования в банковской деятельности.

Ключевые слова: прогнозирование, коммерческий банк, макроэкономическое прогнозирование, эконометрические модели, цифровые технологии, управление рисками.

Abstract

In an unstable macroeconomic environment, commercial banks face the need to use effective forecasting methods. This paper examines macroeconomic forecasting, econometric models, and digital technologies that help commercial banks minimize risks and enhance the efficiency of strategic management. Particular attention is given to the analysis of modern forecasting tools in banking activities.

Keywords: forecasting, commercial bank, macroeconomic forecasting, econometric models, digital technologies, risk management.

Введение

В современных условиях банковская деятельность подвержена влиянию

множества факторов: экономических кризисов, колебаний процентных ставок, валютных курсов и изменяющегося поведения клиентов. Для успешного функционирования коммерческие банки вынуждены применять различные методы прогнозирования, позволяющие заблаговременно оценивать возможные риски и корректировать стратегию развития. Основной целью данной работы является анализ методов и инструментов прогнозирования в коммерческом банке и их влияние на устойчивость финансовых институтов.

Макроэкономическое прогнозирование играет ключевую роль в управлении банковскими активами и пассивами. Оно основано на анализе таких показателей, как ВВП, инфляция, процентные ставки, уровень безработицы и платежный баланс. Банки используют макроэкономическое прогнозирование для:

- Разработки стратегии кредитования.
- Оптимизации управления ликвидностью.
- Оценки потенциальных рисков финансового кризиса.

Анализ этих факторов позволяет банкам адаптировать свои стратегии и минимизировать потенциальные финансовые риски. В таблице ниже представлены ключевые макроэкономические показатели и их влияние на банковскую деятельность.

Таблица 1

Ключевые макроэкономические факторы, влияющие на банковскую деятельность

Фактор	Влияние на банковскую деятельность
ВВП	Определяет уровень кредитования и платежеспособность заемщиков
Инфляция	Влияет на процентные ставки и уровень риска невозврата кредитов
Безработица	Определяет уровень спроса на кредиты и степень кредитных рисков

Понимание влияния макроэкономических факторов играет ключевую роль в эффективном прогнозировании деятельности банков. Однако, помимо макроэкономических индикаторов, коммерческие банки активно применяют эконометрические модели для анализа рисков и прогнозирования финансовой устойчивости. В следующем разделе рассматривается роль эконометрических моделей в прогнозировании банковских рисков, их применение и эффективность в снижении неопределенности.

Эконометрические модели позволяют анализировать взаимосвязи между экономическими показателями и банковскими рисками. Наиболее распространенные модели включают:

- **Регрессионные модели (ARIMA, VAR)** – используются для прогнозирования динамики доходов и расходов банка.
- **Логистическая регрессия** – применяется в системах скоринга для оценки вероятности дефолта заемщиков.
- **Стресс-тестирование** – моделирование сценариев кризисных ситуаций для определения устойчивости банка.

Регрессионный анализ является одним из ключевых инструментов прогнозирования в коммерческом банке, позволяя выявлять взаимосвязи между макроэкономическими факторами и уровнем невозврата кредитов. Использование регрессионных моделей, таких как ARIMA, VAR и логистическая регрессия, помогает банкам предсказывать возможные изменения в структуре кредитного портфеля и принимать превентивные меры для снижения рисков.

Ниже представлен график, иллюстрирующий зависимость уровня невозврата кредитов от ключевых макроэкономических факторов, таких как инфляция, уровень безработицы и изменения ВВП.

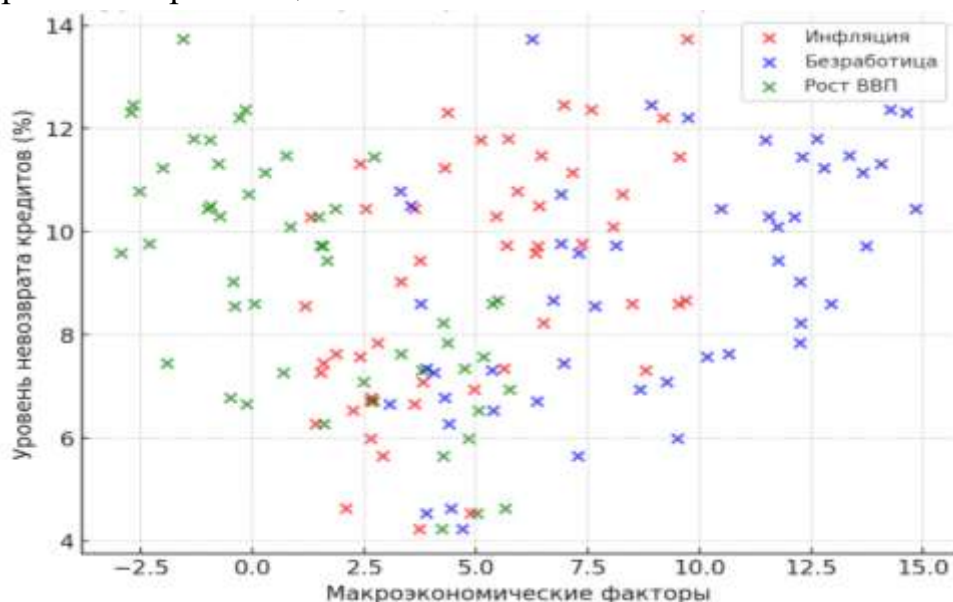


Рисунок 1. Зависимость уровня невозврата кредитов от макроэкономических факторов

Эффективное прогнозирование кредитного риска с использованием регрессионного анализа позволяет коммерческим банкам минимизировать

потери и повысить устойчивость финансовой системы. Однако современные технологии, такие как искусственный интеллект и машинное обучение, значительно расширяют возможности прогнозирования. В следующем разделе рассмотрены инновационные цифровые технологии, используемые в банковской деятельности для повышения точности прогнозов и оптимизации управления рисками.

Развитие цифровых технологий значительно расширило возможности прогнозирования в банковской сфере. К наиболее значимым инновациям относятся:

- **Big Data и машинное обучение** – анализ больших объемов данных для повышения точности прогнозов.
- **Искусственный интеллект (AI)** – предсказание поведения клиентов и кредитных рисков.
- **Облачные вычисления** – ускорение обработки данных и повышение доступности аналитических инструментов.

Анализ методов прогнозирования в коммерческих банках показывает, что интеграция макроэкономического анализа, эконометрических моделей и цифровых технологий позволяет значительно повысить точность прогнозов и минимизировать финансовые риски. Для повышения эффективности прогнозирования рекомендуется:

1. Активное использование машинного обучения и искусственного интеллекта в управлении рисками.
2. Совершенствование стресс-тестирования для повышения устойчивости банков в кризисных условиях.
3. Усиление интеграции макроэкономического прогнозирования в стратегическое планирование банка.

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UDC. 616.366-002-084-089.168.1-06

METHOD OF TREATMENT OF ACUTE OBTURATION CHOLECYSTITIS

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Abstract: *Intracavitary photodynamic therapy makes it possible to achieve regression of the active inflammatory process according to clinical and laboratory parameters and apply the second stage of the surgical treatment method after an average of 4.9 ± 1.1 days.*

Key words: *фотодинамическая терапия, холецистит, пожилой возраст.*

Relevance. A review of the literature on the choice of surgical treatment for acute obstructive cholecystitis in elderly and senile patients indicates an increasing tendency to refuse to use laparoscopic cholecystectomy. This is due to the presence of a large proportion of complex cases of not only the technical nature of the cholecystectomy operation, leading to the development of intraoperative complications of an iatrogenic nature in the form of damage to the bile ducts, bleeding, etc., but also the development of an impressively large number of postoperative complications (1,2,5,7,15,22). The increase in the number of conversions of laparoscopic cholecystectomy using the traditional form of surgery can be considered an acceptable choice for acute obstructive cholecystitis in elderly and senile patients with a mild form of the disease (4,6,8,10,16,20,21).

The presence of a pronounced inflammatory infiltrate around the gallbladder and concomitant somatic pathology with a comorbid course in elderly and senile patients, even with the use of PTCS at the first stage of the surgical method of treating acute obstructive cholecystitis, does not allow achieving the desired treatment results while maintaining a high proportion of the development of multiple organ failure and death (3,9,11,12,13,14,17).

All of the above necessitates the improvement of treatment methods for acute obstructive cholecystitis in elderly and senile patients already at the first stage of surgical intervention in the form of PCS. For this purpose, in patients of the main group, we used the method of intracavitary local photodynamic therapy of the gallbladder

through the installed percutaneous drainage at the first stage of the surgical method of treating acute obstructive cholecystitis (18,19). The main goal of this stage of treatment using intracavitary photodynamic therapy was to improve blood circulation, rapid resorption of inflammatory changes in the gallbladder and perivesical tissues in acute obstructive cholecystitis.

The aim of the study is to improve the treatment results of elderly and senile patients with acute obstructive cholecystitis.

Materials and methods. The study was conducted in 107 patients with acute obstructive cholecystitis in the elderly and senile age, who were examined and treated at the Bukhara regional branch of the Republican Scientific and Practical Medical Center for Emergency Medical Care of the Ministry of Health of the Republic of Uzbekistan from 2021 to 2024 inclusive.

In general, it can be noted that patients with acute obstructive cholecystitis in the elderly and senile age are characterized by an aggravated and severe course of the pathological process and require a thorough and comprehensive preoperative examination.

Results and their discussion. The main goal of this stage of treatment using intracavitary photodynamic therapy was to improve blood circulation, quickly resolve inflammatory changes in the gallbladder and perivesical tissues in acute obstructive cholecystitis.

The method is carried out as follows. Indications - acute obstructive cholecystitis of moderate or severe course.

Anesthesia - local infiltration anesthesia with 0.5% novocaine solution. Technique. After local layered infiltration anesthesia, a skin incision is made along the lower edge of the right hypochondrium along the anterior axillary line up to 0.5 cm long and a microcholecystostomy is applied under ultrasound control.

After taking samples for microbiological examination, a complete evacuation of the gallbladder contents was performed. Then, under X-ray control, cholecystography was performed by introducing iodine-containing contrast (hypaque, cardiotrast, urografin, uroselectan, triiotrast, etc.) into the drainage.

The contours, volume and level of gallbladder blockage, as well as the zones and nature of the location of the stones were determined. The next step was to evacuate the contrast solution until it was completely removed and into the gallbladder cavity. After that, the appropriate volume of photosensitizer in the form of 0.05% methylene blue solution, which belongs to the phenothiazine group with maximum absorption ($\lambda_{\max}$ nm) - 668 nm, was introduced into the gallbladder cavity and the solution was exposed

in the cavity for 5 minutes by clamping the drainage with a clamp. After the exposure time had elapsed, the clamp was opened and methylene blue was drained through the drainage. The gallbladder cavity was washed with a warm 0.9% sodium chloride solution.

Then, through the drainage installed in the cavity of the gallbladder, a conductor was inserted for photodynamic laser radiation using the ALT-Vostok model 03 device, corresponding to the technical specifications TSh 64-15302652-002:2010 for up to 10 minutes.

If the patient experienced a burning sensation or other thermal discomfort in the right hypochondrium, the photodynamic therapy session was stopped for that day. The second photodynamic therapy session lasted up to 5 minutes, and in the following days – up to 3 minutes. In dynamics, daily ultrasound examination of the abdominal organs was performed, with control of changes in the hepatobiliary zone (the volume of paravesical infiltrate and the state of the hepatoduodenal ligament, the presence of fluid in the abdominal cavity, in the subhepatic space or in the omental bursa, etc.).

As the patient's condition improved (compensation of organ dysfunction, abatement of the active inflammatory process according to clinical and laboratory parameters, reduction in the volume of inflammatory infiltrate in the gallbladder and liver hilum, reduction in microbial contamination of the gallbladder), the question of using the second stage of the surgical treatment method was collectively considered and raised. The average duration of intravesical photodynamic therapy was 4.9 ± 1.1 days.

In dynamics, daily ultrasound examination of abdominal organs was performed with control of changes in the hepatobiliary zone (volume of paravesical infiltrate and state of the hepatoduodenal ligament, presence of fluid in the abdominal cavity, in the subhepatic space or in the omental bursa, etc.). The use of differentiated methods of intracavitary photodynamic therapy at the first stage of the surgical method of treating acute obstructive cholecystitis in elderly and senile patients made it possible to significantly reduce the time of reduction of the local inflammatory process.

The use of photodynamic therapy at the first stage of surgical treatment of acute obstructive cholecystitis made it possible to achieve positive results in the elimination of the local inflammatory reaction, with the transfer of the acute process to a chronic one and thus to apply early laparoscopic cholecystectomy.

Thus, the main goal of endobiliary photodynamic therapy at the first stage of the surgical method of treating acute obstructive cholecystitis in elderly and senile patients after percutaneous drainage of the gallbladder or bile ducts is the early achievement of local improvement of blood circulation and rapid resorption of inflammatory changes.

Conclusions

1. In order to improve local blood circulation, achieve rapid resorption of inflammatory changes in the gallbladder and perivesical tissues in acute obstructive cholecystitis in elderly and senile patients, at the first stage of the surgical treatment method, it is recommended to use the method of intravesical photodynamic therapy developed by us.
2. Intracavitary photodynamic therapy allows achieving regression of the active inflammatory process according to clinical and laboratory indicators and applying the second stage of the surgical treatment method on average after 4.9 ± 1.1 days.

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THE ROLE OF THE UN IN THE PRESERVATION AND DEVELOPMENT OF NATIONAL LANGUAGES IN THE CONTEXT OF GLOBALIZATION

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annotation: The article is devoted to the analysis of the role of the United Nations (UN) in the preservation and development of national languages in the context of globalization. The article examines the UN initiatives aimed at supporting linguistic diversity, as well as the role of international organizations in promoting languages within the framework of global communications. Special attention is paid to the UN strategies and programs aimed at preventing the disappearance of rare and endangered languages. documents, such as the Declaration on the Rights of Indigenous Peoples and International Mother Language Day, and assesses their impact on the preservation of languages in the face of the growing influence of global languages. The article also examines the challenges faced by national languages in the era of digital technologies and media platforms.

Keywords: UN, national languages, globalization, linguistic diversity, language policy, UN programs, cultural heritage, rights of indigenous peoples, International Mother Language Day, digitalization, threats of extinction of languages.

Globalization has a twofold effect on national languages: on the one hand, it promotes cultural exchange, on the other hand, it threatens the extinction of small languages due to the dominance of world languages such as English, Spanish and Chinese. In this context, the activities of international organizations, in particular the United Nations (UN), aimed at protecting and developing linguistic diversity, are of particular importance.

In the context of globalization, national languages face serious challenges associated with the dominance of major international languages, urbanization and digitalization. At the same time, the preservation of linguistic diversity is the most important factor in cultural identity and sustainable development of society. The United Nations (UN) plays a key role in the protection and promotion of national languages by developing international programs and legal mechanisms aimed at supporting multilingualism. This article is devoted to the analysis of the UN's activities in this area, including

UNESCO initiatives, UN education programs and documents regulating language policy issues.

The UN, as the leading international organization, plays a key role in shaping global language policy. The most important bodies responsible for the preservation of linguistic diversity are UNESCO and the Economic and Social Council (ECOSOC).

UNESCO is developing international programmes to support endangered languages, such as the International Decade of Indigenous Languages (2022–2032), which aims to promote the learning, development and transmission of national languages to future generations. The Atlas of the World's Endangered Languages is also published, which records endangered languages.

The UN uses several mechanisms to support national languages, among which international conventions and declarations should be highlighted - adopted documents, such as the UNESCO Universal Declaration on Cultural Diversity (2001), emphasize the right of peoples to preserve their linguistic heritage; Financing of educational programs – support for multilingual education, including education in mother tongues, especially among indigenous peoples; creation of digital resources – development of online platforms and digital archives for documenting and disseminating information on rare languages; Language promotion – International Mother Language Day (21 February) to draw attention to the problems of endangered languages.

Despite the efforts of the UN, globalization and economic factors continue to threaten the preservation of linguistic diversity. Young people are increasingly choosing global languages for professional and social growth, which leads to a decrease in interest in national languages. For more effective protection of languages, it is necessary to strengthen legislative measures at the national level, integrate language policy into the field of digital technologies and actively cooperate between states.

The UN plays a crucial role in the preservation and development of national languages by providing international protection mechanisms, funding educational projects and promoting linguistic diversity. However, the further development of language policy requires greater involvement by national governments, technology companies and native speakers themselves. In the context of globalization, only joint efforts can ensure the preservation of the unique linguistic heritage of mankind.

The UN makes a significant contribution to the preservation and development of national languages, providing international support and cooperation in this area. UNESCO's programmes, the UN Declaration on the Rights of Indigenous Peoples and the Global Education Report highlight the importance of linguistic diversity for cultural and social development. However, the effectiveness of these initiatives largely depends

on their adaptation to specific national conditions and the level of interaction between states and international institutions. In the future, it is necessary to strengthen measures to protect languages, including through the introduction of digital technologies and the active involvement of young people in the processes of preserving their native language.

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KORXONALAR SAMARADORLIGINI OSHIRISHDA INNOVATSION LOYIHALARNI JORIY ETISHNING ZAMONAVIY USULLARI

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Anotatsiya: Ushbu maqolada innovatsion loyihalarni korxonalarga joriy etish orqali samaradorlikni oshirish masalasi yoritilgan. Innovatsiyalar ishlab chiqarish jarayonlarini optimallashtirish, resurslardan samarali foydalanish va raqobatbardoshlikni oshirish imkonini beradi. Shuningdek, maqolada innovatsion loyihalarni amalga oshirishdagi asosiy muammolar va ularni hal etish strategiyalari tahlil qilingan.

Abstract: This article examines the issue of increasing efficiency through the implementation of innovative projects at enterprises. Innovations allow optimizing production processes, using resources efficiently, and increasing competitiveness. The article also analyzes the main problems of implementing innovative projects and strategies for solving them.

Аннотация: В данной статье рассматривается вопрос повышения эффективности за счет внедрения инновационных проектов на предприятиях. Инновации позволяют оптимизировать производственные процессы, эффективно использовать ресурсы и повысить конкурентоспособность. Также в статье анализируются основные проблемы реализации инновационных проектов и стратегии их решения.

KIRISH

Zamonaviy iqtisodiyotda korxonalar raqobatbardoshligini ta'minlash va o'sish sur'atlarini oshirish uchun innovatsion loyihalarni joriy etishga alohida e'tibor qaratmoqda. Innovatsiyalar korxona faoliyatining barcha jabhalariga ta'sir etib, ishlab chiqarish samaradorligini oshirish, resurslardan oqilona foydalanish va yangi bozorlarga chiqish imkonini beradi. Ushbu maqolada innovatsion loyihalarni amalga oshirish orqali korxonalar samaradorligini oshirishning istiqbollari tahlil qilinadi. Zamonaviy iqtisodiy muhitda korxonalar doimiy ravishda o'zgaruvchan sharoitlarga moslashishga va raqobatbardoshlikni saqlab qolishga majbur. Innovatsiyalar bu jarayonda muhim rol o'ynaydi, chunki ular nafaqat mahsulot va xizmatlar sifatini oshiradi, balki ichki jarayonlarni optimallashtirish, xarajatlarni kamaytirish va bozor talablariga tezkor javob berish imkonini beradi. Innovatsion loyihalarni joriy etish korxonalar samaradorligini oshirishning asosiy omillaridan biri sifatida tobora dolzarb bo'lib bormoqda. Ushbu maqolada innovatsiyalarning korxonalar faoliyatiga ta'siri, ularni amalga oshirishdagi muammolar va kelajakdagi istiqbollar ko'rib chiqiladi.

TAHLIL VA NATIJALAR

Innovatsion loyihalarni joriy etish asosida korxonalar samaradorligini oshirishning istiqbollari - zamonaviy iqtisodiy muhitda korxonalar doimiy ravishda o'zgaruvchan bozor sharoitlariga moslashishga va raqobatbardoshligini saqlab qolishga majbur. Ushbu jarayonda innovatsiyalar muhim rol o'ynaydi. Innovatsion loyihalarni joriy etish nafaqat korxonalar samaradorligini oshirish, balki ularning uzoq muddatli rivojlanishini ta'minlash uchun strategik imkoniyatlar yaratadi. Bugungi kunda texnologik taraqqiyot, raqamlashtirish va barqarorlikka qaratilgan yondashuvlar innovatsiyalarni biznesning ajralmas qismiga aylantirmoqda. Ushbu maqolada innovatsion

loyihalarni joriy etishning korxonalar samaradorligiga ta'siri va kelajakdagi istiqbollari keng ko'lamda tahlil qilinadi.

Innovatsion loyihalarning ahamiyati

Innovatsion loyihalar korxonalar uchun quyidagi asosiy afzalliklarni ta'minlaydi:

- ishlab chiqarish jarayonlarini optimallashtirish – yangi texnologiyalar va avtomatlashtirilgan tizimlar orqali xarajatlarni kamaytirish;
- mahsulot sifati va diversifikatsiyasini oshirish – yangi mahsulotlarni yaratish yoki mavjud mahsulotlarni takomillashtirish orqali bozorda raqobatbardoshlikni ta'minlash;
- resurslardan samarali foydalanish – energiya tejovchi texnologiyalarni joriy etish orqali sarflarni kamaytirish;
- korxona boshqaruv tizimini modernizatsiya qilish – raqamli texnologiyalar yordamida menejment tizimini takomillashtirish va qaror qabul qilish jarayonlarini tezlashtirish.

Korxonalar samaradorligini oshirishda innovatsiyalarning ahamiyati bir nechta jihatdan namoyon bo'ladi: ishlab chiqarish jarayonlarini optimallashtirish - avtomatlashtirish va sun'iy intellektga asoslangan texnologiyalar orqali ishlab chiqarish tezligi va sifati oshadi; xarajatlarning kamayishi - energiya tejamkor texnologiyalar yoki resurslarni samarali boshqarish tizimlari xarajatlarni sezilarli darajada qisqartiradi; mijozlar qoniqishining oshishi - yangi mahsulotlar yoki xizmatlar mijozlarning o'zgaruvchan talablariga javob beradi va ularning sadoqatini mustahkamlaydi; raqobatbardoshlikning kuchayishi - innovatsion yondashuvlar korxonani bozorda ajralib turishga yordam beradi.

Innovatsion loyihalarni amalga oshirishda muammolar

Innovatsion loyihalarni muvaffaqiyatli amalga oshirish yo'lida korxonalar bir qator qiyinchiliklarga duch keladi:

- moliyaviy resurslarning yetishmovchiligi – yangi texnologiyalarni joriy etish katta sarmoya talab qiladi;
- mutaxassis kadrlarning yetishmovchiligi – yuqori texnologiyalar bilan ishlay oladigan malakali xodimlarning kamligi;
- bozor talablarining o'zgaruvchanligi – innovatsion mahsulotlar va xizmatlarga bo'lgan talabning oldindan aniq prognoz qilinishi murakkab jarayondir;
- innovatsion risklar – yangi texnologiyalarni joriy etish muvaffaqiyatli bo'lmashligi mumkin, bu esa korxona uchun yo'qotishlarga olib kelishi ehtimoli mavjud.

Innovatsion loyihalarni muvaffaqiyatli joriy etish strategiyalari

Korxonalar innovatsion loyihalarni muvaffaqiyatli amalga oshirish uchun quyidagi strategiyalarga e'tibor qaratishi lozim:

- davlat qo'llab-quvvatlovidan foydalanish – innovatsiyalarni rag'batlantirishga yo'naltirilgan grantlar va subsidiyalarni jalb qilish;
- ilmiy tadqiqotlar va startaplar bilan hamkorlik qilish – innovatsion texnologiyalarni yaratish va joriy etish uchun ilmiy muassasalar hamda startap kompaniyalar bilan hamkorlik qilish;
- ichki tadqiqot va ishlanmalarni rivojlantirish – korxona ichida innovatsion bo'limlar tashkil etish va yangi mahsulotlarni ishlab chiqish;
- raqamli transformatsiya – biznes jarayonlarini avtomatlashtirish va sun'iy intellektdan foydalanish orqali samaradorlikni oshirish;

- xodimlarni qayta tayyorlash va malakasini oshirish – innovatsion texnologiyalar bilan ishlashga tayyor mutaxassislarni tayyorlash va o‘qitish.

Kelajakdagi istiqbollar

Innovatsion loyihalarni joriy etishning kelajakdagi istiqbollari bir nechta global tendensiyalar bilan bog‘liq.

Sun‘iy intellektning kengayishi: AI kelajakda korxonalarda qaror qabul qilish jarayonlarini avtomatlashtirish va bashoratli tahlillarni rivojlantirishda asosiy vosita bo‘ladi.

5G va aloqa infratuzilmasi: Tez internet va aloqa tarmoqlari real vaqtda ma‘lumotlarni uzatishni yaxshilaydi, bu esa masofaviy ishlab chiqarish va xizmatlarni rivojlantiradi.

Personalizatsiya: Mijozlar talablariga moslashtirilgan mahsulotlar ishlab chiqarish uchun 3D bosib chiqarish va moslashuvchan ishlab chiqarish tizimlari keng qo‘llaniladi.

Global hamkorlik: Innovatsiyalar ochiq innovatsiya platformalari orqali xalqaro miqyosda rivojlanadi, bu esa kichik korxonalarga ham katta loyihalarda ishtirok etish imkonini beradi.

XULOSA

Innovatsion loyihalarni joriy etish korxonalarga samaradorlikni oshirish va raqobatbardoshlikni ta‘minlash uchun muhim vositadir. Ularni muvaffaqiyatli amalga oshirish uchun moliyaviy resurslarni to‘g‘ri taqsimlash, ilmiy tadqiqotlarga e‘tibor qaratish, raqamli texnologiyalardan foydalanish va malakali kadrlarni tayyorlash zarur. Shunday qilib, innovatsion yondashuvlar korxonalarni rivojlantirish va iqtisodiy o‘sishning asosiy omillaridan biri bo‘lib xizmat qiladi.

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