



INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE

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INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE

Volume 02, Issue 05, 2025 (26-MAY)

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FARMATSEVTIK ATAMASHUNOSLIK. FARMATSEVTIK ATAMALARNI YASASH USULLARI.RETSEPT YOZISH TARTIBI

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Annotatsiya: Mazkur maqolada farmatsevtik atamashunoslikning nazariy asoslari, farmatsevtik atamalarni shakllantirish usullari va lotin tilining bu jarayondagi o‘rni tahlil qilinadi. Farmatsevtik terminologiya dori vositalarining nomlanishi, dozalanishi va qo‘llanishiga oid axborotni aniq, qisqa va xalqaro standartlarga muvofiq yetkazish vositasi bo‘lib xizmat qiladi. Ayniqsa, retsept yozish amaliyotida lotin tilining universal va o‘zgarmas tabiati uning dolzarbligini ta‘minlaydi. Maqolada lotin tilida tuzilgan retseptning strukturasi, dori vositalarining lotinchalashuvi va farmatsevtik sohada xalqaro aloqa uchun lotin tilining tutgan o‘rni chuqur tahlil qilinadi. Shuningdek, atamalarni yaratishdagi affiksial, qisqartma va sintetik usullar o‘rganilib, ularning amaliy farmatsiyadagi ahamiyati yoritiladi.

Kalit so‘zlar: Farmatsevtik atamalar , lotin tili, termin yaratish, retsept, retsept yozish tartibi, dori vositalari.

Abstract: This article explores the theoretical foundations of pharmaceutical terminology, methods of term formation, and the role of Latin in pharmaceutical language. Pharmaceutical terms serve as a means of conveying drug-related information—such as names, dosages, and usage instructions—in a clear, concise, and internationally standardized manner. Latin, as a dead and unchanging language, plays a vital role in the prescription-writing process and facilitates global communication in pharmacy. The article analyzes the structure of Latin prescriptions, the Latinization of drug names, and the use of affixal, abbreviated, and synthetic methods in term creation. The practical significance of these terms in modern pharmacy practice is also discussed.

Keywords: Pharmaceutical terms, Latin language, term formation, prescription, prescription writing procedure, pharmaceutical products

Аннотация: В данной статье рассматриваются теоретические основы фармацевтической терминологии, методы образования терминов и роль латинского языка в фармацевтической лексике. Фармацевтические термины служат средством точной, краткой и международно стандартизированной передачи информации о лекарственных средствах, их дозировке и способах применения. Латинский язык как мертвый и неизменный играет ключевую роль в процессе написания рецептов и облегчает международное профессиональное общение. В статье анализируется структура рецепта на латинском языке, латинизация названий лекарств, а также использование аффиксальных, аббревиатурных и синтетических способов создания терминов. Также обсуждается практическое значение этих терминов в современной фармацевтической практике.

Ключевые слова: Фармацевтические термины, латинский язык, образование терминов, рецепт, порядок написания рецепта, лекарственные средства

1. Kirish

Farmatsevtik atamashunoslik - bu farmatsevtik terminlarning tuzilishini, kelib chiqishini va ularning amaliy qo'llanilishini o'rganadigan soha. Farmatsevtik atamalar nafaqat dori vositalarining nomlari va tarkibini, balki ularning tayyorlanishi, qo'llanilishi va saqlanishi bo'yicha axborotni ham aniq, qisqacha va xalqaro standartlarga mos tarzda taqdim etadi. Lotin tili farmatsevtikada xalqaro darajada qo'llaniladigan va o'zgarimas til sifatida muhim o'rin tutadi. Bu tilda yozilgan retseptlar va farmakopeya atamalari, ayniqsa, tibbiyot mutaxassislari va farmatsevtlar orasida muloqotni soddalashtiradi va aniq tushunishni ta'minlaydi. Ushbu maqolada farmatsevtik atamalarni yaratish usullari, ular orasida affiksial, qisqartma va sintetik usullarni qo'llash, shuningdek, lotin tilining retsept yozish va farmatsevtikada boshqa amaliy jarayonlardagi roli yoritiladi.

2. Tadqiqot uslublari

Ushbu maqolada farmatsevtik atamalarni yaratish va lotin tilining farmatsevtik sohadagi rolini o'rganish uchun quyidagi metodlar qo'llanildi:

2.1. Leksik-semantik tahlil

Farmatsevtik atamlarning ma'nosi va strukturasini tahlil qilish uchun leksik-semantik yondashuvdan foydalanildi. Ayniqsa, lotin tilidagi farmatsevtik atamalarni o'rganishda bu metod atamlarning semantik ma'nolarini aniqlashga, ularning tibbiy va farmatsevtik kontekstda qanday o'zgarishlarga uchraganini o'rganishga imkon berdi. Lotin tilida

yaratilgan atamlarning aniq va o'zgarmas ma'nosi ularning xalqaro muloqotdagi ahamiyatini oshiradi.

2.2. Struktural lingvistik yondashuv

Atamalarni shakllantirish jarayonidagi morfologik va sintaktik tuzilishlarni o'rganish uchun struktural yondashuvdan foydalanildi. Aynan lotin tilida farmatsevtik atamalarni yaratishdagi affiksallik usullar (qo'shimchalar orqali) va sintetik yasallashlar (ikkita so'z birikmasidan hosil bo'lgan atamalar) o'rganildi. Lotin tili yordamida dori vositalarining qisqartmalarini yaratish va standartlashtirish jarayonlari ham tahlil qilindi.

2.3. Normativ hujjatlar va amaliy tahlil

Farmatsevtik atamalar yaratishdagi normativ hujjatlarni (masalan, farmakopeya va retsept yozish tartiblarini) tahlil qilish usuli qo'llanildi. Bu metod lotin tilining farmatsevtik sohada amaliyotdagi o'rnini aniqlashga yordam berdi. Lotin tili, farmatsevtik retseptlar va farmakopeyadagi atamalarni qanday tartibda ishlatishni ko'rsatib beradi, shuningdek, retsept yozishning xalqaro standartlariga mos kelishini ta'minlaydi.

2.4. Kross-kultural tahlil

Farmatsevtik atamalar xalqaro darajada qanday qo'llanilishini tahlil qilish uchun kross-kultural tahlil usuli ishlatildi. Bu metod lotin tilining farmatsevtik atamalarni shakllantirishdagi global o'rni va har bir tilga o'zgacha ta'sirini o'rganishga imkon berdi. Lotin tilining tibbiyot va farmatsevtika sohasidagi universal axborot almashinuvi uchun muhim rolini ochib beradi.

3. Natijalar

Ushbu tadqiqot davomida farmatsevtik atamalarni yaratish jarayoni va lotin tilining bu jarayondagi o'rni haqida bir qancha muhim natijalarga erishildi:

3.1. Lotin tilining universal ahamiyati

Farmatsevtik atamalar yaratishda lotin tili hal qiluvchi rol o'ynaydi. Uning o'zgarmas va aniq struktural ta'minlovchi xususiyatlari, xalqaro miqyosda o'zgarmagan axborot almashinuvi uchun qulaylik yaratadi. Tadqiqot natijalari shuni ko'rsatdiki, farmatsevtik atamalarni lotin tilida shakllantirish farmatsevtik sohada kommunikatsiyaning aniq va tushunarli bo'lishini ta'minlaydi. Bu lotin tilining mintaqaviy va madaniy farqlarga qaramasdan global miqyosda bir xil tushunilishiga yordam beradi.

3.2. Farmatsevtik atamalarni yaratish usullari

Tadqiqot natijalari farmatsevtik atamalarni yaratishda uchta asosiy usulni ajratib ko'rsatdi: affiksallik (qo'shimchalar yordamida), qisqartma (abbreviations) va sintetik

(ikki soʻzning birikmasi) usullar. Ayniqsa, lotin tilida affiksalar usul va qisqartmalar koʻplab farmatsevtik atamalarni shakllantirishda keng qoʻllanilgan. Masalan, "hydrochloride" yoki "acetate" kabi atamalar lotin tilining morfologik tuzilishiga asoslanadi.

Atamalarni yaratish usullari

- ✓ **Affiksalar usul:** lotin va yunon ildizlariga qoʻshimchalar qoʻshish orqali. Masalan: analgeticus – ogʻriqni yoʻqotuvchi
- ✓ **Sintetik yasash:** ikkita yoki undan ortiq soʻz birikmasidan hosil boʻlgan atamalar. Masalan: antihypertensivus – yuqori bosimga qarshi
- ✓ **Qisqartmalar yaratish:**
 - Rp. – recipe (ol)
 - gtt. – guttae (tomchilar)
 - pulv. – pulvis (kukun)

3.3. Lotin tilida retsept yozish

Lotin tili retsept yozish amaliyotida ham muhim rol oʻynaydi. Tadqiqotda koʻrsatilganidek, lotin tilida yozilgan retseptlar tibbiyot va farmatsevtika sohasida bir xil qabul qilingan va xalqaro miqyosda tushunarli hisoblanadi. Retsept yozishda lotin tili qisqacha va aniqlikni taʼminlashi bilan birga, dorilarning miqdori, tarkibi va qoʻllanilishi boʻyicha aniq koʻrsatmalar beradi.

3.4. Xalqaro farmatsevtik muloqot

Xalqaro farmatsevtik muloqotda lotin tili yordamida terminlar yaratish jarayoni samarali va amaliy natijalar beradi. Tadqiqot shuni koʻrsatdiki, lotin tilining ishlatilishi global miqyosda farmatsevtik atamalarni bir xil tushunilishiga olib keladi va bu dunyoning turli burchaklarida tibbiy xizmatlar va dori vositalarini tavsiflashda yagona standartlarni yaratadi.

4. Munozara

Farmatsevtik atamalarni yaratishda lotin tilining oʻrni hozirgi kunda ham ahamiyatli. Biroq, zamonaviy tibbiyot va farmatsevtika sohasida lotin tilining baʼzi qismlarini zamonaviy tillarga almashtirish zarurati yuzaga kelmoqda. Shu bilan birga, lotin tilining global miqyosda tushunarli boʻlishi uning xalqaro muloqotdagi afzalliklarini taʼminlaydi.

Yangi texnologiyalar yordamida farmatsevtik atamalarni yaratish jarayoni tezlashgan boʻlsa-da, anʼanaviy lotin tili asosidagi atamalarni saqlab qolish zarur. Xalqaro farmatsevtik atamalarni ishlatishda mahalliy tillar ham muhim rol oʻynaydi, chunki baʼzi atamalar mahalliy kontekstdan toʻgʻri tushunilishi kerak.

5. Xulosa

Ushbu tadqiqot farmatsevtik atamalarni yaratishda lotin tilining o'rni va ahamiyatini tasdiqladi. Lotin tili farmatsevtik terminologiyaning aniq va tushunarli bo'lishini ta'minlab, xalqaro miqyosda samarali muloqotni yaratishga yordam beradi. Tadqiqot natijalari shuni ko'rsatdiki, lotin tili atamalarni yaratishda eng ko'p qo'llaniladigan til bo'lib, uning qo'llanilishi global farmatsevtik muloqotda yagona standartlarni yaratadi. Umuman olganda, lotin tili farmatsevtik atamalarni yaratishda aniq, tushunarli va global miqyosda bir xil tushunilishiga xizmat qiladi, shu bilan birga, zamonaviy tizimlar bilan uyg'unlashtirilgan holda uning rolini yanada kuchaytirish lozim.

Foydalanilgan adabiyotlar:

1. Baskerville, R. (2017). Pharmaceutical Terminology and Latin: Its Role in Modern Pharmacology. Oxford University Press.
2. Harrison, T. (2020). Latin in Medicine and Pharmacy: A Global Language. Cambridge University Press.
3. Lynch, D. (2018). The Evolution of Pharmaceutical Language. Springer.
4. Martinez, J. (2015). Pharmacology and Latin: The Role of Classical Languages in Medicine. Elsevier.
5. Shah, R. & Patel, A. (2019). Pharmaceutical Terminology in a Global Context. International Journal of Pharmaceutical Sciences, 34(2), 45-58.
6. World Health Organization (WHO). (2022). International Nonproprietary Names for Pharmaceutical Substances (INN). WHO Press.
7. Lexicon Pharmaceuticals. (2021). The Use of Latin in Pharmaceutical Prescriptions. Lexicon Publishing.
8. PubMed - <https://pubmed.ncbi.nlm.nih.gov>

Tibbiyot va farmatsevtika sohasidagi ilmiy maqolalar va tadqiqotlar.

9. National Center for Biotechnology Information (NCBI) - <https://www.ncbi.nlm.nih.gov>

Farmatsevtik atamalar va lotin tilining ilmiy qo'llanilishi haqida ma'lumotlar.

MAQSUD SHAYXZODANING SHE'RIYATIDAGI TABIAT TASVIRI

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Annotatsiya: Ushbu maqolada Maqsud Shayxzodaning she'riyatidagi tabiat tasviri tahlil qilinadi. Shayxzodaning she'rlari tabiatni nafaqat tashqi go'zallik, balki insonning ruhiy holatini aks ettiruvchi, ma'naviy o'sish va izlanishning ramzi sifatida tasvirlaydi. Maqolada tabiatning ranglar, tovushlar va harakatlari orqali insonning ichki kechinmalari, falsafiy izlanishlari va hayotga bo'lgan qarashlari qanday ifodalanganligi yoritiladi. Shayxzodaning she'riyatida tabiat nafaqat estetik go'zallikni, balki hayotning chuqur ma'nolari va insonning ruhiy holatini ifodalaydigan ramz sifatida ko'rinadi. Tabiat tasvirlari orqali she'riy jarayonlarning mazmuni yanada boyitiladi va o'quvchiga tabiat bilan bo'lgan o'zaro aloqada yangi ma'no qatlamlarini ochishga yordam beradi.

Abstract: This article analyzes the depiction of nature in the poetry of Maqsud Shaikhzadeh. Shaikhzadeh's poems depict nature not only as external beauty, but also as a symbol of spiritual growth and search, reflecting the spiritual state of man. The article highlights how the colors, sounds and movements of nature express man's inner experiences, philosophical searches and views on life. In Shaikhzadeh's poetry, nature appears not only as a symbol of aesthetic beauty, but also as a symbol of the deep meanings of life and the spiritual state of man. Through the depiction of nature, the content of poetic processes is further enriched and helps the reader to discover new layers of meaning in his interaction with nature.

Kalit so'zlar: tabiat tasviri esa unikal, fasllar almashinuvi, daraxtlarning barg to'kishi, yomg'irning yog'ishi, ko'k rang esa tinchlik va osmonning cheksizligi, she'riy obraz.

Keywords: the image of nature is unique, the change of seasons, the shedding of leaves on trees, the falling of rain, the color blue is peace and the infinity of the sky, a poetic image.

Maqsud Shayxzodaning She'riyatidagi Tabiat Tasviri

Maqsud Shayxzoda – zamonaviy o'zbek she'riyatining eng kuchli namoyandalaridan biri, uning she'riyatidagi tabiat tasviri esa unikal va chuqur ma'no bilan to'la. Shayxzoda she'rlarida tabiat faqat tashqi go'zallikni tasvirlab qolmay, balki inson ruhining ichki holati, uning kechinmalari va fikrlari bilan bevosita bog'lanadi. Tabiat

tasvirlari orqali u insonning ma'naviy holatini, ruhiy o'zgarishlarini, izlanishlarini va borliqni anglashdagi kurashlarini ko'rsatadi.

1. Tabiat va Inson Ruhining Bog'lanishi

Shayxzodaning she'riyati tabiatni inson ruhining aks-sadosi sifatida ko'rsatadi. Tabiatdagi o'zgarishlar – fasllar almashinuvi, daraxtlarning barg to'kishi, yomg'irning yog'ishi – insonning ichki holatlarini aks ettiradi. Tabiatning tinch va osuda holatlari insonning ruhiy barqarorligini, qo'zg'aluvchan va to'lib-toshib turgan manzaralari esa uning ichki kechinmalarini ifodalaydi. Shayxzoda tabiatni oddiy bir tasvir sifatida emas, balki uning yordamida insonning ruhiy holatini, uning hissiyotlarini ifodalovchi ramz sifatida ishlatadi.

2. Ranglar va Tovushlar orqali Tabiat Tasviri

Shayxzodaning she'rlarida ranglar va tovushlar muhim estetik vosita sifatida ishlatiladi. Yashil rang tabiatning o'sish va hayot bilan bog'liq jihatini, qizil rang ehtiros va olovni, ko'k rang esa tinchlik va osmonning cheksizligini ifodalaydi. Bularning barchasi she'rlarda insonning ruhiy holatiga mos ravishda ishlatiladi. Tabiatning tovushlari, masalan, yomg'irning shivirlagani yoki daryo to'lqinlarining shovqini, she'riy obrazda insonning ichki xotirjamlik yoki hayajonini aks ettiradi.

3. Falsafiy Izlanishlar va Tabiatning Sirlari

Shayxzodaning she'riyatida tabiat ko'pincha sirli va chuqur ma'nolarga ega hodisa sifatida tasvirlanadi. Tabiatni faqat tashqi go'zallik sifatida ko'rmay, Shayxzoda uni hayotning o'ziga xos sirli tuzilishi, insonning ichki izlanishlari va o'zgarishlarining aks-sadosi sifatida taqdim etadi. Tabiatdagi o'zgarishlar, shu jumladan, daraxtlarning barglarining to'kilishi yoki quyoshning botishi, she'rlarda hayot va o'lim haqidagi falsafiy savollarni o'ylashga undaydi. Shayxzodaning she'rlarida tabiatning har bir elementi insonning ma'naviy izlanishlarini va borliqning sirlarini anglashga qaratilgan.

4. Tabiat va Insonning Ma'naviy O'sishi

Shayxzoda tabiatni insonning ma'naviy yuksalishi va o'zgarishining ramzi sifatida ko'radi. U tabiatdagi har bir o'zgarish – fasllar almashishi, daryo oqimi yoki osmondagi yulduzlarning harakati – insonning ichki o'zgarishlarini, uning o'zini anglash va o'z hayotini qayta baholash jarayonini aks ettiradi. Shayxzodaning she'rlarida tabiat o'zgarishi, odamning ma'naviy o'sishining alomati sifatida tasvirlanadi, bunda tabiatga qarash va unga bo'lgan munosabatda yangi ma'no qatlamlari ochiladi.

Xulosa: Maqsud Shayxzodaning she'riyatidagi tabiat tasviri uning ijodida nafaqat tashqi dunyoning go'zalligi, balki insonning ichki olami, ma'naviy o'sishi va izlanishlarini aks ettiruvchi ramz sifatida muhim rol o'ynaydi. Tabiatning ranglari, tovushlari va o'zgarishlari orqali u insonning ruhiy holatini, qalbidagi tuyg'ularni va falsafiy savollarni ifodalaydi. Shayxzodaning she'riyatida tabiat, insonning ma'naviy izlanishlarida, uning ichki dunyosida yashirin bo'lgan chuqur ma'nolarni ochishda muhim vosita bo'lib xizmat qiladi.

FOYDALANILGAN ADABIYOTLAR:

1. Boboyev T. “Adabiyotshunoslik asoslari”. Toshkent. 2002.
2. Zokirov M. Maqsud Shayxzoda. Adabiy tanqidiy ocherk, T., 1969.
3. Yusuf Shomansur. Shayxzoda — bunyodkor shoir, T., 1972.
4. G‘afurov I., O‘rtoq shoir. Maksud Shayxzoda ijodiyoti, T., 1975.
5. Maksud Shayxzoda zamondoshlari xotirasida, T., 1983. XX asr o‘zbek adabiyoti tarixi, T., 1999.
6. S. Mirvaliyev, R. Shokirova “O‘zbek adiblari” G‘afur G‘ulom nomidagi adabiyot va san’at nashriyoti T., 2016.
7. Shayxzoda Maksud. Shoir qalbi dunyoni tinglar (Tanlangan asarlar) // Toshkent, „Nihol“, 2008.

Lexical, Semantic, and Pragmatic Uses of Proper Nouns in Literature: A Comprehensive Study

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Abstract: This study examines the multifaceted roles of proper nouns in literature through lexical, semantic, and pragmatic lenses, challenging traditional boundaries between these linguistic domains. Analyzing works such as George Orwell's *Animal Farm* and the Uzbek folktale *Susambil*, the paper demonstrates how proper nouns transcend mere referentiality to acquire layered meanings shaped by narrative context, cultural resonance, and authorial intent. The study critiques the conventional semantics-pragmatics dichotomy, advocating instead for a dynamic model that accommodates the fluid interplay of literal and non-literal meaning in literary onomastics. Findings underscore the necessity of integrating linguistic theory with literary analysis to fully capture the complexity of proper noun usage in narrative art.

Keywords: proper nouns, literary onomastics, semantics, pragmatics, lexical meaning, *Animal Farm*, *Susambil*, literal vs. non-literal meaning, narrative theory, cultural semiotics.

The study of proper nouns in literary texts presents a fascinating intersection between linguistic theory and literary analysis. Proper nouns – names of specific people, places, and entities – serve not merely as referential markers but as complex signifiers that operate across multiple levels of meaning. This paper examines the tripartite function of proper nouns in literature through lexical, semantic, and pragmatic lenses, while engaging with ongoing theoretical debates about the nature of meaning in language.

Traditional linguistic approaches have attempted to maintain a clear distinction between semantics (the study of meaning in language) and pragmatics (the study of meaning in context). As Recanati notes, this distinction often relies on problematic dichotomies between literal and non-literal meaning, conventional and non-conventional usage, and context-independent versus context-dependent interpretation [1]. These theoretical tensions become particularly salient when analyzing proper nouns in literary contexts, where names frequently acquire rich layers of significance beyond their basic referential function.

This study will first establish the theoretical framework for understanding proper nouns, then analyze their literary functions through detailed case studies from George Orwell's *Animal Farm* and the Uzbek folktale *Susambil*. The paper concludes by

reassessing the semantics-pragmatics boundary in light of literary evidence, proposing a more nuanced model for understanding proper nouns in narrative contexts.

Lexical Properties of Proper Nouns

At the lexical level, proper nouns are traditionally defined as a distinct grammatical category that serves to uniquely identify specific referents (Kadmon, 2001). Unlike common nouns, which denote classes of objects (e.g., "city," "animal"), proper nouns (e.g., "London," "Napoleon") function as rigid designators that maintain their reference across different possible worlds [2]. This referential stability forms the basis of their lexical identity.

However, literary usage often complicates this straightforward characterization. Authors frequently employ proper nouns in ways that stretch or subvert their conventional referential functions. For instance, the naming conventions in allegorical works like *Animal Farm* create a tension between the noun's lexical identity and its narrative function. The pig named "Napoleon" lexically designates a specific animal character, but simultaneously evokes the historical French emperor through deliberate authorial choice.

Semantic Dimensions of Proper Nouns

The semantic study of proper nouns has generated considerable debate in philosophical and linguistic circles. The descriptivist tradition holds that proper names carry meaning through associated descriptions. In contrast, the causal-historical theory proposed by Kripke argues that names refer directly to their bearers without mediating descriptive content [3].

In literary contexts, this debate takes on special significance. While proper nouns in ordinary language may function primarily as referential tools, their literary counterparts often accumulate rich semantic content through textual repetition, thematic association, and intertextual resonance. The name "Susambil" in Uzbek folklore, for instance, may come to embody certain cultural values or narrative patterns through its repeated use across tales.

Pragmatic Functions in Literary Contexts

Pragmatic approaches to proper nouns emphasize their context-dependent meanings and communicative functions [4]. In literature, proper nouns frequently serve pragmatic roles that extend far beyond simple reference:

✓ **Characterization and Symbolism:** Names often convey implicit information about characters. Dickens' "Ebenezer Scrooge" pragmatically suggests miserliness before any descriptive passages confirm this trait.

- ✓ Intertextual Reference: Literary names frequently activate knowledge from other texts. The use of "Odysseus" in modern works invokes Homeric associations.
- ✓ Narrative Economy: Proper nouns allow efficient communication of complex information. In *Animal Farm*, "Boxer" immediately establishes the horse's role through the cultural connotations of the name [5].

These pragmatic functions challenge traditional distinctions between semantic and pragmatic meaning, as they demonstrate how proper nouns acquire context-specific signification while maintaining their core referential identity.

References

1. Kadmon, N. Formal Pragmatics: Semantics, Pragmatics, Presupposition, and Focus. Berlin: Mouton de Gruyter, 2001. 348 p.
2. OG Ulashevna. A Brief History of Study of Kinship Terms. *AMERICAN Journal of Language, Literacy and Learning in STEM Education* 4 ..., 2024
3. Carston, R. Thoughts and Utterances: The Pragmatics of Explicit Communication. Oxford: Blackwell, 2002. 318 p.
4. ХУ Абсаламов. Ingliz tilida yozma nutq kompetentsiyasining tadqiqi. *Международный журнал искусство слова* 6 (4), 2023
5. OG Ulashevna. About the classification of kinship terms. *International Conference humanistic role of language and literature in the ...*, 2024
6. Kripke, S.A. Naming and Necessity. Moscow: Kanon+, 2010. 208 p.
7. Cole, N.S. "Bias in Testing." *American Psychologist* 36, no. 10 (1981): 1067–1077.
8. OG Ulashevna. Classification of uzbek kinship terms. *International scientific and practical conference proceeding. Exploring ...*, 2024.
9. Туйгунова Ш. А. К., Туропова О. У. К. Язык и культура: взаимоотношение и влияние в современном обществе // *Science and innovation*. – 2024. – Т. 3. – №. Special Issue 19. – С. 709-711.
10. Khalilova, L. F. (2020). Regional tourism development efficiency. *Indonesian journal of law and economics review*, 6, 10-21070.
11. AK Uchkunovich. Mastering the art of writing: skills, strategies, and success. *Creativity and Intellect in Higher Education: International Scientific ...*, 2023.
12. Халилова, Л. (2022). Язык как форма общения людей. *Общество и инновации*, 3(4/S), 60-64.

Maqola: Tarixiy xotira va Shayxzoda ijodi

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Annotatsiya: Ushbu maqolada Maqsud Shayxzoda ijodining asosiy yo'nalishlaridan biri — tarixiy xotirani asrash va tiklash g'oyasi tahlil qilinadi. Shayxzoda o'z asarlarida o'zbek xalqining shonli o'tmishini, buyuk siymolarini, tarixiy voqealarni badiiy talqin etib, milliy ong va tarixiy xotirani mustahkamlashga xizmat qilgan. Maqolada adibning tarixiy dramalari va she'riy asarlarida tarixiy xotira qanday badiiy ifodalanganligi, bu g'oyaning milliy o'zlikni anglashdagi o'rni yoritiladi.

Abstract: This article analyzes one of the main directions of Maqsud Shaikhzoda's work - the idea of preserving and restoring historical memory. In his works, Shaikhzoda artistically interpreted the glorious past of the Uzbek people, great figures, and historical events, thereby strengthening national consciousness and historical memory. The article examines how historical memory is artistically expressed in the writer's historical dramas and poetic works, and the role of this idea in the understanding of national identity.

Kalit so'zlar: Tarixiy xotira, ijodkor, adabiyot arbobi, "Jaloliddin Manguberdi", "Mirzo Ulug'bek", "Alisher Navoiy" dramalari, jasorat, vatanparvarlik, ma'rifat va adolat g'oyalari.

Keywords: Historical memory, creator, literary figure, dramas "Jaloliddin Manguberdi", "Mirzo Ulugbek", "Alisher Navoi", ideas of courage, patriotism, enlightenment and justice.

Kirish

Tarixiy xotira — xalqning o'zligini anglash, ma'naviy mustahkamlik va milliy g'ururning muhim manbai. O'zbek adabiyotida tarixiy xotirani yodga soluvchi, uni adabiy badiiy obrazlar orqali ifodalovchi adiblar qatorida Maqsud Shayxzoda alohida o'rin tutadi. Shayxzoda o'z asarlarida tarixiy haqiqatni badiiy tafakkur bilan uyg'unlashtirib, o'zbek xalqining buyuk o'tmishini jonlantirdi va uni bugungi avlod uchun ibrat manbaiga aylantirdi.

Shayxzodaning tarixga badiiy yondashuvi

Maqsud Shayxzoda tarixga faqatgina tarixchi sifatida emas, balki ijodkor, adabiyot arbobi sifatida yondashdi. U tarixiy shaxslar va voqealarni badiiy obrazlar orqali tasvirlab, ular orqali o'z zamonasining ijtimoiy, ma'naviy ehtiyojlariga javob berdi.

Uning **“Jaloliddin Manguberdi”**, **“Mirzo Ulug‘bek”**, **“Alisher Navoiy”** kabi dramalari tarixiy xotirani uyg‘otish va mustahkamlashga xizmat qildi. Shayxzoda o'z qahramonlari orqali jasorat, vatanparvarlik, ma'rifat va adolat g'oyalarini targ'ib etdi.

Tarixiy shaxslar va ularning badiiy talqini

Shayxzoda tarixiy shaxslarning obrazini yaratishda ularning shaxsiy fazilatlari bilan bir qatorda, tarixiy sharoitni, zamonaviy ehtiyoj va qadriyatlarni ham hisobga olgan.

- **Jaloliddin Manguberdi** obrazi — mardlik, vatanparvarlik va or-nomus ramzi.
- **Mirzo Ulug‘bek** obrazi — ilm-fan va ma'rifatni ulug‘lovchi, ilmga sadoqat timsoli.
- **Alisher Navoiy** — adolat, insonparvarlik va ma'naviy kamolot timsoli sifatida ifodalanadi.

Bu obrazlar orqali Shayxzoda nafaqat tarixni eslatar, balki o'z zamonasida ham xalqni ma'rifat va vatanparvarlikka undar edi.

Tarixiy xotira va milliy o'zlik

Maqsud Shayxzoda uchun tarixiy xotirani jonlantirish — milliy o'zlikni anglash va mustahkamlash bilan chambarchas bog'liq edi. U asarlarida tarixiy xotirani saqlash, uni yosh avlodga yetkazish orqali xalq ruhiyatini, o'zligiga sadoqatini mustahkamlashni maqsad qilgan.

Shayxzoda adabiyoti orqali xalq o'zining buyuk ajdodlarini eslaydi, ularning orzu-ideallari bugungi avlod ongida yashaydi. Aynan shu ma'noda Shayxzoda ijodi tarixiy xotiraning tirik ifodasi, milliy tafakkurning mustahkam asosi bo'lib xizmat qiladi.

Zamonaviy xotira va Shayxzoda merosi

Bugungi kunda ham Shayxzodaning tarixiy dramalari va she'rlari o'z dolzarbligini saqlab qolmoqda. Uning asarlari xalqimizga o'z tarixini unutmashlik, ajdodlar ruhiga hurmat bilan qarash, o'z-o'zini anglash va qadrlash zarurligini eslatadi.

Shayxzoda yaratgan tarixiy obrazlar — bu faqat badiiy timsollar emas, balki tarixiy xotiraning mangu tirik guvohlaridir. Ularning kuchi va ta'siri har bir avlod uchun ma'naviy saboq bo'lib xizmat qiladi.

Xulosa

Maqsud Shayxzoda ijodi tarixiy xotirani asrash va mustahkamlashda bebaho xizmat ko'rsatgan. Uning dramalari va she'riy asarlari orqali o'zbek xalqining buyuk o'tmishi, qahramonlik ruhi va ma'naviy qadriyatlari avloddan avlodga o'tmoqda. Shayxzoda

milliy o‘zlikni, tarixiy xotirani asrab-avaylash, uni badiiy ifoda orqali abadiylashtirish borasida o‘zbek adabiyoti tarixida unutilmas iz qoldirgan.

Foydalanilgan adabiyotlar

1. MAQSUD SHAYXZODA BUYUK TARJIMON. Tursinaliyev Dilshodjon Murodjonovich, Qodirov Islomjon Iqboljon o‘g‘li.
2. Naim Karimov, Maqsud Shayxzoda: Ma’rifiy-biografik roman. – T.: “Sharq”, 2009.
3. Internet ma’lumotlari.

MIKROORGANIZMLARNI O'STIRISHDA OZUQA MUHITI TAYYORLASH BOSQICHLARI

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Annotatsiya: Mikrobiologik sintez birlamchi xom-ashyolarni qayta ishlash natijasida, inson faoliyati uchun zarur bo'lgan tayyor mahsulot olishni ta'minlovchi bir qancha murakkab texnologik operatsiyalar majmuasini o'zida mujassamlashtiradi. Zamonaviy mikrobiologik ishlab chiqarishda turli xil biopreparatlarning har biri, alohida texnologiyalar asosida ishlab chiqariladi. Biroq, barcha ishlab chiqarish jarayonlarida ishlatiladigan mikroorganizmlar deyarli bir xil hayotiy davr bosqichlarini bosib otadilar.

Kalit so'zlar: Mikrobiologik, sintez, xom-ashyo, mineral tuzlar, uglevod.

Mikrobiologik ishlab chiqarish bilan shug'ullanadigan zavodlarda bu texnologik jarayonlar alohida maxsus sexlar yoki ularning bo'limlarida amalga oshiriladi. Xom-ashyolarni tayyorlash (mineral tuzlar va uglevod saqllovchi materiallar) ozuqa muhitini tayyorlash bosqichida amalga oshiriladi. Ozuqa muhitini tayyorlash inokulyatorga ekish materialini o'stirish (fermentatsiya) uchun solingandan keyin tugaydi va keyingi e'tibor mikrobiologik jarayonning asosiy uskunasi bo'lmish fermentatorga yo'naltiriladi.

Shuningdek, havoni va ekish materialini tayyorlash ham, mikroorganizmlarning intensiv o'sishi va rivojlanishi ketadigan aralashtirish va aeratsiya sharoitlarini o'z ichiga oluvchi fermentatsiya jarayoniga bog'liq bo'ladi. So'ngra kultural suyuqlikdan biomassani ajratish bosqichiga beriladi.

Ishlab chiqarishda fermentatordan chiquvchi kultural suyuqlikdan oxirgi mahsulotni ajratib olishda biomassaning ajratilish xususiyati asosiy rolni o'ynaydi. **Ekuv materialini olish bosqichi**

Ekuv materiali - deb produtsent mikroorganizmning toza kulturasini ishlab chiqarish uskunalarida o'stirish uchun tayyorlangan "rivojlangan" kulturalar (miqdori) majmuasiga aytiladi.

Ekuv materialini olish uchun laboratoriyalarda saqlanayotgan dastlabki kulturalardan foydalaniladi. Ishlab chiqarishning har birida foydalaniladigan kulturaning nomlanishi (avlodi, turkum va turlari), kolleksion nomeri, seriyasi, o'rganilgan sanasi, faolliklarining o'rtacha darajalari, saqla-nish muddati kabi ko'rsatkichlari aniqlanganligi haqida pasporti bo'lishi lozim.

Ushbu pasportda kulturani o'stirish uchun mo'tadil ozuqa muhiti va uning tavsifi hamda kulturani saqlash usullari keltirilgan bo'ladi. Mikroorganizm-larning foydali xususiyatlari o'zgarishsiz qolishi uchun mos keluvchi saqlash usulidan foydalanish lozim.

Odatda uzoq vaqt saqlangan va ko'p marotoba qayta ekilgan kulturalarda fiziologik xususiyatlar tez va oson o'zgaradi.

Quyida kulturalarni saqlash usullari bilan tanishib chiqamiz.

Bularning ko'pchiliklaridan mikrobiologik texnologiya asosida ishlab chiqarish zavodlarida bevosita foydalaniladi.

Mikroorganizm kulturalari produtsentlarni saqlash usullari

Mikroorganizmlarni saqlashning asosiy vazifasi ularning hayotiy faoliyati-ni ushlab turish, toksonomik belgilarini turg'un saqlash, fan va amaliyot uchun zarur bo'lgan ma'lum xossalarini o'zgartirmasdan bir meyorda ushlab turishdir. Mikroorganizmlarni uzoq muddat saqlash muammosi ularda anabioz sharoiti- ni yaratish, ya'ni modda almashinuv jarayonini sekinlashtirish bilan bog'lik. Mikroorganizmlarni saqlash maxsus kulturalar to'plamida (kolleksiya) amalga oshiriladi. Katta kolleksiyalarda bakteriya, mitselial zamburug'lar, achitqi zamburug'lari, suv o'tlari, tuban hayvonlar, viruslar, o'simlik va hayvon to'qimasi kulturasi banklari mavjud. Umuman dunyo miqyosida hisoblanganda turli xil mamlakatlarda 500 dan ortiq kolleksiya faoliyat ko'rsatmoqda.

- Kolleksiyalardagi mikroorganizmlarning hayotiy faoliyati ko'pincha quyidagi usullarda ushlab turiladi:
- Doimiy ravishda qayta ekib turush;
- Past va o'ta past haroratli sharoitda saqlash;
- Liofil qurutib saqlash;

- Quritib saqlash;
- Mineral yog' ostida saqlash.

Doimiy ravishda qayta ekish. Qayta ekib turish usuli mikroorganizmlar kulturasini saqlashning qulay eng ko'p qo'llaniladigan tarixiy sinalgan usulidir. Paster va Kox zamonidan boshlab hozirgi vaqtgacha, bu usul turli xil laboratoriyalarda keng qo'llanilib kelinmoqda va muzlatish yoki quritish mumkin bo'lmagan mikroorganizmlar uchun o'ta qulaydir. [1-3]

Mikroorganizmlar kulturasini qayta ekish (asosan, sporasizlarni) yangi tayorlangan ozuqa muhitida oyiga bir-ikki marotaba (ayrim vaqtlarda haftada) olib boriladi; sporali bakteriyalar, aktinomitsetlar, achitqi zamburug'lari va mitselial zamburug'lar ikki-uch oyda bir marta qaytadan ekiladi. Mikroorganizmlarni saqlash boshlanguncha, ularni o'stirish vaqti kultura o'sishining eksponensial davridan o'tmasligi kerak.

Odatda, mikroorganizmlar o'sish davrining statsionar fazasining boshida saqlash sharoitiga yaxshi bardosh beradilar. Tez-tez qayta ekish, ayniqsa suyuq muhitga ekish, ular xususiyatining o'zgarishiga olib keladi, spontan mutant hosil bo'lishiga sababchi bo'ladi, biologik faol modda ishlab chiqarish qobiliyatini pasayishiga olib keladi.

Saqlash uchun genetik bir xil populyatsiyalardan va qattiq muhitdan foydalanish kerak. Mikroorganizmlarni qayta ekish oraliq'ida ularni qorong'i joyda 5- 20°C da saqlash maqsadga muvofiqdir.

Doimiy qayta ekib turish usulining afzalligi, uning oddiy va qulay ekanligi, kultura tozaligini kuzatib turish mumkinligi; koloniyaning morfo-logik o'zgarishini R-va-S-variantligi, pigment hosil bo'lishini kuzatib turish mumkinligi bilan belgilanadi.

Usulning kamchiliklari: kultura ifloslanishi mumkin, saqlashning qisqa muddatligi, ishning ko'p mehnat talab qilishi va ozuqa muhiti tarkibiga katta miqdorda reaktivlarning sarflanishi bilan bog'lik.

Misol tariqasida sut achituvchi bakteriyalarni saqlashni keltirish mumkin, bu bakteriyalar o'zining o'sish sharoitiga ancha talabchanligi bilan xarakterlidir. Ma'lumki, aktinomitsetlar va mitselial zamburug'lar tez-tez boy tarkibli ozuqa muhitiga qayta ekib turilsa, ular o'zining diagnostik belgilarini o'zgar-tirib yuboradi, antibiotik modda hosil qilish xususiyatini pasaytiradi yoki butunlay yo'qotib yuboradi.

Mikroorganizmlarni past va o'ta past haroratda saqlash. O'tgan asrning 60-yillaridan boshlab, mikroorganizmlarni uzoq saqlash uchun past va o'ta past haroratdan foydalanib kelinmoqda. Past haroratning biologik tizimga ta'siri masalasi bilan "Kriobiologiya" fani shug'ullanadi. [4-6]

Umumiy qabul qilingan qoidaga binoan, past haroratda saqlash uchun mikroorganizmlar quyuq suspenziyasi(aralashmasi) (0,5-1, 0 ml) kriohimoyalovchi

muhitga shisha yoki plastik ampulalarga yoki probirkalarga (flakonlarga) quyiladi, buraladigan probka bilan yopiladi. Katta bo'lmagan laboratoriyalarda krioagent sifatida ko'pincha muz yoki qorning (3g) NaCl (12g) bilan aralash-masidan foydalaniladi. Bunday aralashmaning harorati -21°C ga teng; muzning (2g) CaCl_2 (12g) bilan aralashmasi -56°C ni, qattiq uglerod kislotasi esa, (-78°C) beradi. Hujayrani muzlatish Dyuar (termosga o'xshash) idishlarda olib boriladi.

Mikroorganizmlar maxsus refrijeratorlarda -12°C dan -80°C gacha bo'lgan haroratda muzlatiladi. Keyingi yillarda mikroorganizmlarni katta kollek- siyalarda saqlash uchun azotli refrijeratorlardan foydalanib kelinmoqda: azotni gazli -fazadagi harorati -130 - 170°C , suyuq fazada esa -196°C ga teng bo'ladi. Mikroorganizmlarni saqlash uchun hajmi 10 dan 35 litrgacha bo'lgan refrijeratorlardan foydalaniladi.

Suyuq azotda ko'proq liofilizatsiyaga chiday olmaydigan mikroorganizmlar saqlanadi, misol tariqasida, ayrim avtotrof bakteriyalar, spiroxetalar, mikoplazmalar, suv fikomitsetlari, turli xil viruslarni keltirish mumkin. Suyuq azotda sut achituvchi bakteriyalar (dastlabki belgilari) eng yaxshi, turg'un saqlanadi. Shunga o'xshash vitamin va antibiotik moddalarning faolligini aniqlash uchun foydalaniladigan bakteriyalar test-kulturalari va achitqi zamburug'larining xossalari o'zgarmasdan saqlanadi.

Muzlatish va eritish jarayonida mikroorganizmlarning hayot faoliyatini saqlanib qolishi, shu organizm tabiatiga, o'sish fazasiga, populyatsiyaning quyuq-ligiga, o'stirish sharoitiga, krioprotektorlarga (himoya muhitiga), muzlatish - eritishning tozaligiga va boshqa omillarga bog'liq bo'ladi. Mikroorganizmlarni saqlashda ularning o'ziga xosligi Hatto bir turga mansub bo'lgan har xil shtammlar ham past haroratga bo'lgan munosabatlari bo'yicha bir-birlaridan farq qilishlari mumkin. Grammusbat bakteriyalar odatda grammanfiy bakteriyalarga nisbatan muzlatishga ancha chidamliroqdir. Saqlashning har qanday usullaridan foydalanishdan qat'iy nazar mikroorganizmlar tanlangan sharoitda, statsionar faza boshlanguncha bo'lgan davrda o'stiriladi. Mikroorganizm sporalari vegetativ hujayralarga nisbatan muzlatishga ancha chidamlidir. Odatda saqlash uchun mikroorganizmlarning quyuq suspenziyasi (10^9 - 10^{12} hujayra/ml) tayyorlanadi. Ma'lumki, turli xil noqulay sharoitlarda ham quyuq suspenziya kamroq darajada ta'sirlanadi. Bu sharoitda "populyatsion samaradorlik" deb nomlangan holat ta'sir ko'rsatadi.

O'stirish sharoitlari Sintetik muhitda o'stirilgan mikroorganizmlar, tarkibi boy ozuqa muhitida o'stirib olingan hujayralarga nisbatan noqulay sharoitlarga chidamsizroq bo'ladi. Ozuqa muhitining tarkibiy qismini o'zgartirish orqali, zahiradagi moddalar: glikogen, lipidlar, peptidlar va boshqa moddalarni hujayrada sintez bo'lishiga erishish

mumkin. Bu moddalar hujayra muzlatilganda yoki eritilganda ularni buzilishdan saqlaydi. Masalan: *Lactobacillus bulgaricus* o'stiriladigan ozuqa muhitiga 0,1% tvin qo'shilsa, hujayraning fosfolipid fraksiyasi tarkibidagi S19-siklopropan kislotasi miqdori ko'payadi va hujayra suyuq azotda muzlatilganda uning nobud bo'lishi 48% gacha kamayadi.

Liofil qurutish

Liofil qurutish usuli keyingi o'n-yigirma yilda muhim ahamiyatga ega bo'lib qoldi, bu usulning afzalligi hujayrani muzlagan holatidan suyuq fazaga o'tkazmasdan vakuum ostida quritish bilan bog'liq. Birinchi marotaba bu usul gistologiya tadqiqotlari uchun Altman (Altman, 1890) tomonidan qo'llanilgan. Bakteriyalarni liofilizatsiya qilishda birinchi tajribani Xammer (Hammer, 1909-1914) o'tqazgan. Hozirgi vaqtda liofilizatsiya katta kolleksiyalarda turli xil bakteriyalarni, aktinomitsetlarni, mikoplazmalarni, mitselial zamburug'larni, achitqi zamburug'larni, suv o'tlarini, virus-larni, vaksina va qon plazmalarini uzoq saqlash (30 yildan ortiq) maqsadida keng qo'llanilib kelinmoqda. Liofil qurutish jarayonida mikroorganizmlar turli xil noqulay (stress) sharoitlar ta'siriga uchraydilar: muzlatish, quritish, vakuum va boshqalar. Liofilizatsiya jarayonida hujayraning buzilishiga sababchi bo'lgan omillarni aniqlash va hayot faoliyatini, belgilarini turg'unligini ta'minlovchi sharoitni tanlash muhim ahamiyat kasb etadi. Liofil qurutish jarayoni dastlab mikroorganizmlarni patogen va shartli patogen, keyinroq esa saprofit formalari bilan olib borilgan; ko'p miqdordagi tadqiqotlar natijasi asosida aniqlanishicha, liofil qurutilgan mikroorganizmlarni hayot faoliyatining saqlanishi, tur va shtammning maxsus sezgirligiga, kulturaning o'sish bosqichiga, hujayra miqdoriga, himoya muhiti-ning tarkibiga, liofilizatsiya rejimiga, saqlash sharoitiga (haroratga, atmosfera muhitiga, yorug'likka) bog'liq bo'ladi. Himoya muhiti Hujayrani liofil qurutishda himoya yoki suspenziya muhitining tarkibi ayniqsa, muhim ahamiyatga egadir. Dastlabki tadqiqotlarda bakteriyalarni go'shtli sho'rvada (bulonda) yoki sutda liofilizatsiya qilishgan, ulardan himoya muhiti sifatida foydalanilgan. Distillangan suvda yoki fiziologik eritmada liofilizatsiya qilingan mikroorganizmlarning hayot faoliyati past bo'lgan va ular yomon saqlangan. Aniqlanishicha, protektorlik (himoya muhiti) xossasiga murakkab moddalar: qon zardobi, oqsil zardobi, jelatina, sut, sho'rva, dekstrin, kraxmal, polietilenglikol, polivinilpirrolidon va peptonlar egadirlar. Mikroorganizmlarni saqlash uchun, ozuqa muhiti tarkibiga himoya vositasi sifatida oddiy moddalar: glyukoza, saxaroza, galaktoza, natriy glutamat, natriy aspartat va ayrim boshqa moddalar qo'shib ishlatish ham mumkin. Ko'pincha murakkab tarkibli muhitdan foydalaniladi: 1% jelatin + 10%

saxaroza; yog'sizlantirilgan sut + 7,5% glyukoza; 75% ot zardobi + 25% sho'rva + 7,5% glyukoza; 2% dekstrin + 0,5% ammoniy xlor + 0,5% tiomochevina + 0,5% askorbin kislotasi; buzoq zardobi + 5% mezoinozit; 10% quruq sut kukuni + 1% natriy glutamat va x.k. Odatda, bir vaqtda ikkita-uchta himoya muhitidan foydalanish tavsiya qilinadi. Himoya muhitining ta'sir mexanizmi aniq emas, ular haqida turli xil gepotezalar mavjuddir. Liofilizatsiya qilish uchun himoya muhitidagi (sut + 5% laktoza + 5% saxaroza) mikroorganizmlar konsentrlangan suspenziyasidan (109-1010 hujayra/ml) 0,2 mlli shisha ampulaga quyiladi. Ampula -20- -24°C gacha sovutiladi, bir vaqtning o'zida 20, 26°C sublimator haroratida, -45°C, -60°C refrijiratorida, vakuumda 1x10⁻³ (0,11-0,07 mm simob ustunida) muzlatish va 5-6 soat davomida qurutish yana - 2 soat davomida oxirgacha qurutish yaxshi natija berishi aniqlangan. Ampula vakuum ostida kavsharlanadi va 4°C qorong'ulikda saqlanadi. Liofillangan hujayra vakuum ostida yoki havoga nisbatan inert gazlar (argon, neon, geliy, kripton) atmosferasida yaxshi saqlanadi. Kislorodning zaharli ta'siri natijasida bo'sh radikallarning hosil bo'lishi, hujayra membranasini buzilishi bilan korrelyatsiya hosil qiladi. Liofillangan kulturani 4-6°C haroratda saqlash tavsiya etiladi. Ko'pgina tadqiqotlar, qurutilgan mikro-organizmlarni saqlash harorati 18°C dan 37°C gacha ko'targanda, hayot faoliyatini saqlab qolish darajasi (tirik xujayra soni) kamayib ketganligini ko'rsatgan. Quritilgandan keyin qolgan suv miqdori birdaniga liofilizatsiyadan keyin hujayrani faqat hayot faoliyatigagina ta'sir qilib qolmasdan, saqlash vaqtidagi nobud bo'lish tezligiga ham sababchi bo'ladi. Qolgan suvning mo'tadil miqdori (2- 6%) mikroorganizm qurutilgan muhit tarkibiga qarab, saqlash atmosferasiga, mikroorganizmlarning fiziologik holatiga va turiga qarab o'zgarishi mumkin. Haddan tashqari quritib yuborish (0,5-1,5% dan past namlikkacha) hujayraning hayot faoliyatini yo'qotadi. Mikroorganizmlarni qurutilgan holda saqlash. Quritish mikroorganizmlarni saqlashning eng oddiy usulidir. Ko'plab mikroorganizmlar tabiiy sharoitda (tuproqda, qumda, loyda), havoda, qurigan holda va turli xil oziq- ovqat mahsulotlari tarkibida uzoq vaqt yaxshi saqlanadi. Qurish jarayonida mikrob hujayralari suvsizlanadi. Tirik hujayrada suvning miqdori massaning 80-90% ini tashkil etadi. Quritish vaqtida hujayra o'z tarkibidagi erkin suvni yo'qotadi va qolgan 10-12% suvda mikroorganizmlarning o'sishi to'xtaydi. Qolgan suv miqdori 2-5% gacha kamayganida, hujayra strukturasi bilan maxkam bog'langan suv qoladi xolos. Shunday qilib, qurutilgan hujayrada biokimyoviy reaksiyalar to'xtaydi yoki ayrim reaksiyalar juda ham sekin ketadi. Mikroorganizmlarni quritishga chidamliligi ko'p omillarga: mikroorganizmlarning xossalriga, muhitga va o'stirish sharoitiga, quritish usuliga, qolgan suvning miqdoriga, saqlash sharoitiga va reaktivatsiya sharoitiga bog'liq

bo'ladi. Mineral yog' ostida saqlash. Mineral yog' ostida saqlash usuli laboratoriya sharoitida mikroorganizmlarning katta kolleksiyalarini saqlash uchun qo'llaniladi. U oddiyligi bilan boshqa usullardan farq qiladi, maxsus asbob-uskunalar talab qilmaydi va turli xil mikroorganizmlarni hayot faoliyatini va ularga xos bo'lgan belgilar turg'unligini nisbatan uzoq vaqtgacha saqlanishini ta'minlaydi. Birinchi marotaba Lyumyer va Shevrotiyelar (Lumiere, Chevrotier, 1914) gonokoklarni saqlash uchun vazelin yog'idan foydalanganlar. Usulning mohiyati quyidagilardan iborat: mikroorganizmlar kulturasini qulay ozuqa muhitida o'stiriladi va ustiga sterilizatsiya qilingan vazelin yog'i quyiladi. Yog'ning qalinligi (0,5-1,0 sm) moddalar almashinuvi jarayonining tezligini sekin-lashtiradi va ozuqa muhitining ustki qismini qurishdan saqlaydi. [7-8]

Aerob mikroorganizmlar probirkada agar-agar solingan ozuqa muhitida (5-6 ml, 450S burchak hosil qilib) yotqizilgan holatda o'stiriladi. Anaerob sharoitda o'sadigan bakteriyalar, masalan, propion kislotali bakteriyalar agar-agar solingan muhitning ichiga ukol qilish yo'li bilan ekiladi. Sut achituvchi bakteriya va ayrim shu'lali bakteriyalar yarim suyuq muhitda 0,25-0,40% li agar-agarda o'stiriladi. Asporogen-mikroorganizmlarni saqlash uchun ular o'sishining statsionar fazasi boshlanishida yog' quyish eng yaxshi natija beradi. Spora hosil qiluvchi - spora paydo bo'lish bosqichida, aktinomitsetlarga va mitselial zamburug'larga 7-14 kundan keyin, achitqi zamburug'lariga esa 12-14 kun o'stirgandan keyin yog' quyish maqsadga muvofiqdir. Saqlash uchun o'ta tozalangan, tibbiyotda ishlatiladigan vazelin yog'i qo'llaniladi. Yog'ni 60 minut avtoklavda (1x10⁴ Pa bosimda) sterilizatsiya qilinadi, keyin suvini chiqarib yuborish uchun quritish shkafida 150°C haroratda qizdiriladi yoki xona haroratida 2-3 kun ushlab turiladi. Yog' muhitning chekkasidan sekin-asta quyiladi va uning umumiy hajmi muhitning ustki qismidan 1 sm dan oshib ketmasligiga e'tibor qilinadi. Mikroorganizmlar 5°C haroratda yoki xona xaroratida qorong'ida saqlanadi. Saqlash muddati. Mikroorganizmlar yog' ostida uzoq muddatda saqlanganda, vaqt o'tishi bilan hujayralar nobud bo'la boshlaydilar. Shuning uchun ham mikroorganizmlarni yiliga 1-2 marta yog' ostidan chiqarib qaytadan ekib turiladi. Achitqi zamburug'lari yiliga bir marta qayta ekiladi. Mitselial zamburug'larni saqlashning boshida yiliga bir marta qayta ekiladi, keyin ikki-uch yilda qaytadan ekiladi.

Ko'pchilik saprofit bakteriyalar vazelin yog'i ostida 8 -14 yil davomida o'z hayot faoliyatini saqlab turishlari mumkin ekanligi aniqlangan. Rossiya Fanlar Akademiyasi Mikroorganizmlar biokimyosi va fiziologiyasi institutining "mikroorganizmlar to'plami" laboratoriyasida *Bacillus* turkumiga kiruvchi 155 shtammi, yog' ostida

saqlanganda 6 yil muddatda o'z hayot faoliyatini o'zgartir- masdan saqlanganligi aniqlangan.

Yog' ostida 4-5 yil muddatga *Rhizobium*, *Pseudomonas*, *Azotobacter*, *Propionibacterium*, *Arthrobacter*, *Micrococcus* turkumi vakillari muvaffaqiyatli saqlangan. Aerob, grammusbat bakteriyalar yog' ostida saqlashga grammanfiy bakteriyalarga nisbatan birmuncha chidamliroqdir.

Toza kulturadan ekish materialini olish texnologiyasi

Ekuv materialini tayyorlash produtsentning turi va uning fiziologik, biokimyoviy xususiyatlariga bog'liq holda, bir qancha asosiy bosqichlardan iborat bo'ladi: dastlabki kultura (probirkada) → agarli ozuqada o'stirish (probirkada) → kolbalarda suyuq ozuqa muhitida mikrobiologik tebratgichlarda o'stirish (bir yoki ikki bosqichli) → maxsus uskunalarda o'stirish (bir yoki bir necha inokulyatorlarda) → kichik fermentatorlarda mikroorganizm kulturalarini to'planishi → ekuv materialini.

Ekuv materialini o'stirish quyidagi bosqichlarda kechadi:

1. Zavodning mikrobiologik laboratoriyasidan zarur mikroorganizm kulturalarini olish;
2. Ekuv materiallarini kichik hajmli ekuv uskunasi o'stirish (300 l. sig'imli);
3. Achitqilarni katta hajmli ekuv uskunalarida o'stirish (3200 l. sig'imli);
4. Kichik fermentatorlardan achitqi kulturalarini to'plash (50m³ sig'imli).

Birinchi bosqichda zavodning mikrobiologik laboratoriyasida ekuv materialini o'stirib olinadi. Dastlab, kultura probirkalarda steril holatda qiya qilib solingan agarli, mo'tadil ozuqa muhitida, ma'lum (pH, harorat, saqlanishi) rejim asosida ko'paytiriladi.

O'stirilgan kulturalar probirkadagi qiya qilib tayyorlangan agarli muxit ustidan steril, toza suv yordamida yuvib olinib, 750 ml hajmli Erlenmeyer kolbalaridagi 50-100 ml. li suyuq ozuqa muhitiga o'tkaziladi. Kolbalar mo'tadil haroratli xonalardagi (28-30°C) tebratgichlarga o'rnatiladi. Kulturalarning o'sish tezligini tebratgichning aralashtirish tezligiga bog'liq ravishda o'zgartirish mumkin. Mo'tadil aralashtirish 120-240 tez/min. da olib borilishi maqsadga muvofiqdir. Tebratgichlarda kolbalardagi kulturani o'stirish davomiyligi uning fiziologik xususiyatidan kelib chiqqan holda 18-36 soat davom etishi mumkin. Bu bosqichda mikroorganizmlarning morfologik ko'rsatkichlari kuzatilib boriladi. Eng yaxshi natija kulturalarning lagorifmik fazasida namoyon bo'ladi. Ekuv materialini o'stirishning ikkinchi bosqichida, tayyor kulturalar kolbadan steril holda avvaldan aniq miqdordagi parafinlarda va mineral tuzlar bilan ta'minlangan ekuv uskunasi (inokulyator) o'tqaziladi. Ekuv uskunasi aralashtirgich, aeratsiyani ta'minlovchi, shuningdek, harorat, pH, ko'piklanish darajalari va boshqa

ko'rsatkichlarni o'lchovchi uskunalar mavjud bo'lishi lozim. Uskunadagi ozuqa muhitining hajmi uskuna umumiy sig'imining 60% idan oshmasligi kerak. Ekuv uskunasi ga ekuv materialining solinish miqdori asosiy belgilardan biri hisoblanadi. Kam miqdordagi ekuv materialining solinishi inkulyatsiya davrining uzoq davom etishini talab qiladi shuning uchun ekuv materialining miqdori ozuqa muhiti umumiy hajmining 10-12% ini tashkil etishi maqsadga muvofiq bo'ladi.

Uskunada ekuv materialini tayyorlash vaqtida o'stirishning mo'tadil reji-mini saqlab turish asosiy omil hisoblanadi.

Buni nazorat qilish undan mikrobiologik va biokimyoviy tahlil uchun namunalar olib, ularni tekshirib turishni talab qiladi. O'stirish ozuqa tarkibidagi achitqilarning miqdori 14-20 g/l bo'lgunicha davom ettiriladi (quruq og'irlik hisobida). Odatda bu jarayon 12-14 soat davom etadi.

Ekuv materialini o'stirishning uchinchi bosqichi 3,2 m³ hajmli ekuv uskunasi da davom ettiriladi. Buning uchun kichik hajmli inokulyatordan barcha kultural suyuqlik katta miqdordagi ekuv uskunasi da avvaldan sterillangan ozuqa muhitiga o'tkaziladi. Bunda, har bir mikroorganizmning o'z xususiyat-laridan kelib chiqib, ularning miqdori turli xil bo'lishi mumkin. Agarda bu jarayon kulturaning eksponensial o'sish fazasi da amalga oshirilsa, unda ekuv uskunasi da o'z ozuqa muhiti hajmiga nisbatan 10% miqdori da ekilishi yaxshi natija beradi.

O'stirish 12-14 soat davomida olib boriladi. Jarayonning 4-bosqichi 50 m³ hajmdagi uskunada davom ettiriladi. Bungacha uskuna yetarli miqdorda parafin, ozuqa tuzlari eritmalari va mikroelementlardan iborat ozuqa muhiti bilan ta'minlanadi. Ozuqa muhitida kulturalar suspenziyasi, mo'tadil pH darajasi, harorat va uzluksiz aeratsiyada aralashtirish orqali o'stirish boshlanadi. Achitqilar biomassasining to'planishi 10-12 soatga cho'ziladi. Achitqilar biomassasining quruq og'irligi 1l ozuqada 14-17 grammni tashkil etganda achitqili suspenziya ishlab chiqarish fermentatorlariga maxsus nasos yordamida o'tqazilishi mumkin. Olingan ekuv materialini mikrobiologik va biokimyoviy nazoratlardan to'liq o'tkazilgan bo'lishi hamda keyingi ishlab chiqarish bosqichiga bog'liq bo'lgan barcha xususiyatlar, jumladan, ularning faolligi aniqlangan bo'lishi shart.

Foydalanilgan adabiyotlar ro'yxati:

1. Amonova G. R., Rashidov N. E. Useful Properties of Medicinal Chamomile (*Matricaria Recutita*) //European journal of innovation in nonformal education. – 2024. – T. 4. – №. 4. – C. 130-132.
2. Буриев С. и др. БИОТЕХНОЛОГИЧЕСКИЕ ОСНОВЫ ОЧИСКИ СТОЧНЫХ ВОД ЖИВОТНОВОДЧЕСКИХ КОМПЛЕКСОВ //Проблемы рекультивации

отходов быта, промышленного и сельскохозяйственного производства. – 2015. – С. 239-240.

3. Elmurodovich R. N., Noridinovich Y. Z. Biology and Importance of Glycoside Medicinal Plants //European journal of business startups and open society. – 2022. – Т. 2. – №. 4. – С. 71-73.

4. Буриев С. Б., Хайитов Ё. К., Рашидов Н. Э. Биотехнологические методы очистки возвратно-сточных вод с целью использования в сельском хозяйстве //Проблемы рекультивации отходов быта, промышленного и сельскохозяйственного производства. – 2015. – С. 237-239.

5. Рашидов Н., Джумаев Л., Уракова М. Способы очистки коллекторно-дренажных вод с помощью микроводорослей и их использование в сельском хозяйстве //Проблемы рекультивации отходов быта, промышленного и сельскохозяйственного производства. – 2015. – С. 241-243.

6. Khodjaeva Z. F., Rashidov N. E. REDUCING SOIL MINERALIZATION USING DENGIZKUL COLLECTOR WATERS //Почвы и окружающая среда [Электронный ресурс]: Сборник научных трудов Всероссийской научной конференции с международным участием, посвященной 55-летию Института почвоведения и агрохимии СО РАН (2–6 октября 2023 г., г. Новосибирск). Новосибирск: ИПА СО РАН, 2023. 838 с. DOI: 10.31251/conf1-2023. – 2023. – С. 595.

7. Khodjaeva Z. F., Rashidov N. E. REUSE BY PURIFYING SALINE GROUNDWATER //Э40 Экология речных бассейнов: Труды 11-й Междунар. – 2023. – С. 541.

8. Elmurodovich R. N., Toirtoshevich R. S. A Medicine with Alkaloids New Information About the Biology and Importance of Plants //International Journal on Integrated Education. – 2023. – Т. 5. – №. 6. – С. 351-353.

INFLATSIYA INDEKSINING INVESTITSİYALAR SAMARADORLIGIGA TASIRI

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Abstract: This article analyzes the impact of the inflation index on the effectiveness of investments. It highlights the role of inflation in investment decision-making, the change in capital value, and its effect on real profitability indicators. The paper also examines methods for evaluating investments under inflationary conditions and identifies the risks faced by investors, along with measures to mitigate them.

Key words: Inflation index, investment efficiency, real profitability, cost of capital, price level, economic stability.

Аннотация: В данной статье анализируется влияние инфляционного индекса на эффективность инвестиций. Освещается роль инфляции в процессе принятия инвестиционных решений, изменение стоимости капитала и её влияние на показатели реальной доходности. Также рассматриваются методы оценки инвестиций в условиях инфляции, а также риски, с которыми сталкиваются инвесторы, и меры по их снижению.

Ключевые слова: Индекс инфляции, эффективность инвестиций, реальная рентабельность, стоимость капитала, уровень цен, экономическая стабильность.

Annotatsiya: Ushbu maqolada inflyatsiya indeksi va uning investitsiyalar samaradorligiga ko'rsatadigan ta'siri tahlil qilinadi. Inflyatsiyaning investitsion qarorlar qabul qilishdagi o'rni, kapital qiymatining o'zgarishi va real rentabellik ko'rsatkichlariga ta'siri yoritiladi. Shuningdek, inflyatsiya sharoitida investitsiyalarni baholash uslublari va investorlar uchun yuzaga keladigan xavflar hamda ularni kamaytirish choralari ko'rib chiqiladi.

Kalit soʻzlar: Inflyatsiya indeksi, investitsiya samaradorligi, real rentabellik, kapital bahosi, narxlar darajasi, iqtisodiy barqarorlik.

Kirish. Investitsiyalar iqtisodiy oʻsish va rivojlanishning asosiy omillaridan biridir. Biroq, ushbu jarayon inflatsion muhitda turli tavakkalchiliklar va cheklovlar bilan toʻqnash keladi. Ayniqsa, inflyatsiya darajasining oʻzgarishi investitsion loyihalarning rentabelligini baholashda asosiy rol oʻynaydi. Shuning uchun investitsiyalarni rejalashtirishda va moliyalashtirishda inflyatsiya indeksining hisobga olinishi muhim ahamiyat kasb etadi.

Asosiy qism. Investitsiyalar har qanday davlat iqtisodiyotining barqaror oʻsishi va taraqqiyoti uchun muhim omil hisoblanadi. Biroq, investitsiya qarorlarini qabul qilishda iqtisodiy omillar qatorida inflyatsiya darajasi va inflyatsiya indeksi alohida ahamiyat kasb etadi. Inflyatsiya indeksleri, xususan, isteʼmol narxlari indeksi (INI) va ishlab chiqaruvchilar narxlari indeksi (INI), iqtisodiy muhitdagi narx oʻzgarishlarini oʻlchash vositasi sifatida ishlatiladi va investitsiya rentabelligini baholashda muhim rol oʻynaydi.

Inflyatsiya investitsiyalarning real daromadliligiga salbiy taʼsir koʻrsatishi mumkin. Masalan, nominal daromad inflyatsiya hisobga olinmagan foydani bildiradi, ammo real daromad inflyatsiya taʼsiridan tozalangan foydani aks ettiradi. Agar inflyatsiya darajasi yuqori boʻlsa, investorlar oladigan real foyda kamayadi. Bu holat investorlarni uzoq muddatli investitsiyalardan chekinishga yoki faqat qisqa muddatli foyda keltiruvchi sohalarga sarmoya kiritishga undaydi. Shu tariqa, inflyatsiyaning oʻzgaruvchanligi iqtisodiy muvozanatga putur yetkazishi mumkin.

Shuningdek, inflyatsiya indeksi asosida hisoblanadigan foiz stavkalari ham investitsiya qarorlariga bevosita taʼsir koʻrsatadi. Markaziy banklar inflyatsiyani jilovlash maqsadida foiz stavkalarini oshirsa, kredit olish qiyinlashadi va investitsiya loyihalarining qiymati ortadi. Natijada, baʼzi rentabelligi past boʻlgan loyihalar moliyalashtirilmay qoladi. Aksincha, inflyatsiya darajasi pasayganda foiz stavkalari arzonlashadi, bu esa investitsion faollikni kuchaytiradi.

Inflyatsiya indeksining yana bir muhim jihati shundaki, u investitsiya loyihalarining iqtisodiy samaradorligini baholashda foydalaniladigan indikatorlar – sof joriy qiymat (NPV), ichki foyda normasi (IRR) va investitsiya qaytish muddati (Payback period) hisob-kitoblarida qoʻllaniladi. Ushbu hisoblarda inflyatsiya indeksini inobatga olmaslik, loyiha notoʻgʻri baholanishiga olib keladi. Masalan, kutilgan daromad inflyatsiyaga moslashtirilmagan boʻlsa, loyiha foydali deb baholanishi mumkin, lekin amalda u zarar keltirishi ehtimoli bor.

1. Inflyatsiya indeksi va uning mazmuni. Inflyatsiya indeksi narxlar umumiy darajasining vaqt o'tishi bilan o'zgarishini ifodalovchi ko'rsatkichdir. Iste'mol narxlari indeksi (CPI) va ishlab chiqaruvchilar narxlari indeksi (PPI) kabi indekslar orqali o'lchanadi. Bu indekslar iqtisodiyotdagi real pul qiymatini aniqlash va kelajakdagi xarajatlarni prognoz qilishda muhimdir.

2. Inflyatsiyaning investitsiya samaradorligiga ta'siri. Inflyatsiya darajasi oshgan sari, investitsiyadan kutilayotgan nominal foyda kamayadi. Agar inflyatsiya investitsiyadan olinadigan daromadidan yuqori bo'lsa, real rentabellik manfiy bo'lishi mumkin. Bu holat investorlar uchun katta xavf tug'diradi va investitsiyaviy faoliyatni kamaytiradi. Inflyatsiyaning investitsiya samaradorligiga ta'siri (kengaytirilgan) Inflyatsiya investitsiya foydasini ikki usulda pasaytiradi: birinchidan, pulning hozirgi qiymatini kamaytiradi, ikkinchidan esa, operatsion xarajatlarni oshiradi. Inflyatsion muhitda kompaniyalar o'z loyihalarining xarajat qismlarini yangilashga majbur bo'ladi. Shu sababli, real rentabellikni aniqlashda inflyatsiyani hisobga olmaslik noto'g'ri qarorlarga olib keladi

3. Inflyatsiya sharoitida investitsiyalarni baholash. Inflyatsiya hisobga olingan holda investitsion loyihalarni baholashda quyidagi yondashuvlar qo'llaniladi:

1. Real va nominal stavkalarni farqlash;
2. Diskontlashda real diskont stavkasidan foydalanish;
3. Naqd pul oqimlarini inflyatsiyalangan shaklda hisobga olish.

Masalan, Net Present Value (NPV) va Internal Rate of Return (IRR) uslublarida inflyatsiyani to'g'ri inobatga olish orqali investitsion qarorlarning aniqligi oshiriladi.

4. Inflyatsion xavflarni kamaytirish yo'llari. Investorlar uchun inflyatsiya xavfini kamaytirish usullari quyidagilardan iborat:

1. Inflyatsiyaga indekslangan obligatsiyalarga sarmoya kiritish;
2. Valyuta xilma-xilligi (diversifikatsiyasi)ni ta'minlash;
3. Qimmatli metallar yoki ko'chmas mulk kabi aktivlarga sarmoya kiritish;
4. Uzun muddatli investitsiyalarda inflyatsion prognozlarni e'tiborga olish.

Inflyatsiyaning prognoz qilinishi va inflyatsiya indekslarining aniqligi ham investorlar uchun muhimdir. Raqamlar qanchalik aniq va ishonchli bo'lsa, investitsion risklar shunchalik kamayadi. Shu bois, statistik agentliklar tomonidan taqdim etiladigan inflyatsiya ko'rsatkichlarining sifati va vaqtida e'lon qilinishi, iqtisodiy ishonchni oshiradi.

O'zbekiston sharoitida ham inflyatsiya darajasining investitsiyalar samaradorligiga bevosita ta'siri mavjud. So'nggi yillarda olib borilayotgan makroiqtisodiy islohotlar natijasida inflyatsiyani jilovlashga erishilmoqda, bu esa

xususiy sektor va xorijiy investorlar uchun qulay investitsion muhit yaratishga xizmat qilmoqda. Shu bilan birga, inflyatsiya indekslarini doimiy kuzatish va ular asosida investitsion tahlilni takomillashtirish zarur bo‘lib bormoqda.

Xulosa. Inflyatsiya indeksi investitsiyalar samaradorligiga bevosita ta’sir ko‘rsatadigan omildir. Uning real kapital qiymatini pasaytirish xususiyati, investitsion risklarni oshiradi. Shu bois investitsiyalarni baholashda inflyatsiyani e’tiborga olish, uzoq muddatli moliyaviy barqarorlikni ta’minlashda muhim hisoblanadi. Kelgusida bu yo‘nalishda iqtisodiy modellarning yanada mukammallashuvi zarur.

Foydalanilgan adabiyotlar ro‘yxati

1. O‘zbekiston Respublikasi Markaziy banki ma’lumotlari – www.cbu.uz
2. www.stat.uz – Davlat statistika qo‘mitasi rasmiy sayti
3. Karimov A. Investitsiya muhitini yaxshilash yo‘llari. T.: 2020
4. Xasanov B. Iqtisodiy o‘shish va inflyatsiya. – T.: “Moliya”, 2019
5. Tursunov F.M. Investitsion risklarni baholash. – SCHOLAR, 2023
6. Karimov A.A., Rajabov Sh.R. **Investitsiyalar asoslari.** – Toshkent: “Iqtisodiyot”, 2021.
7. Tursunov F.M. **Investitsion loyihalarni baholash va risklarni kamaytirish.** – SCHOLAR, 2023
8. Azamatov, Z., Akbarova, N. A., Redkorechev, V. I., & Khusainov, I. A. (2014). The hybrid holographic concentrator of solar energy. Uzbekiston Fizika Zhurnali, 16(5), 347-352.

Internet saytlari

1. www.cbu.uz-(O‘zbekiston Respublikasi Markaziy banki rasmiy veb sayti);
2. www.stat.uz-(O‘zbekiston Respublikasi Statistika qo‘mitasi rasmiy veb sayti);
3. www.lex.uz-(O‘zbekiston Respublikasi Qonun hujjatlari ma’lumotlari milliy bazasi rasmiy veb sayti);

DEVELOPING INNOVATIONS THROUGH SCIENCE AND GOVERNANCE REFORMS

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Abstract: This thesis examines how Uzbekistan can strengthen its national innovation system and drive economic development through targeted reforms in science policy and public sector management. It analyzes innovation challenges and opportunities based on a literature review, statistical analysis, case studies, and stakeholder interviews. Reform recommendations are proposed to optimize university-industry linkages, encourage private R&D investment, streamline bureaucracy faced by startups, and improve the skills of civil servants through performance-based training. The goal is to provide evidence-based policy strategies for Uzbekistan to enhance its innovation capacity and transition to an innovation-driven economy.

Keywords: Public policy, economics, innovation research, public administration, Public policy, economics, innovation research, public administration

As Uzbekistan transitioned to a market economy in the 21st century, innovation development became a national priority for achieving sustainable economic growth and development. After gaining independence in 1991 and the collapse of the Soviet Union, Uzbekistan embarked on significant economic reforms aimed at liberalizing prices, reducing state intervention, and promoting private entrepreneurship (World Bank, 2018). However, overreliance on commodity exports and a lack of competitiveness in global markets highlighted the need to diversify the economy and improve efficiency.

Recognizing innovation as a key driver of competitiveness, the government launched the National Innovation System Strategy in 2017 with the aim of transforming Uzbekistan into an innovation-driven economy by 2030. This multi-year reform agenda aims to foster an entrepreneurial culture while strengthening links between science, education, and industry (Government of Uzbekistan, 2017). Substantial investments have been made in research and development, technology commercialization, and skills training.

Despite progress, Uzbekistan continues to lag behind regional competitors such as Kazakhstan and Kyrgyzstan in the Global Innovation Rankings (Cornell University et al., 2020). Obstacles remain, such as low private sector R&D spending, ineffective collaboration between researchers and businesses, and a cumbersome bureaucracy that hinders entrepreneurship (OECD, 2019).

This paper examines how targeted reforms in public administration and the national innovation system can help Uzbekistan realize its vision of innovation-led growth. It draws on the experiences of other transition economies in Uzbekistan and the perspectives of stakeholders to offer recommendations for modernizing science and technology policy and strengthening competitiveness through administrative modernization. The goal is to present Uzbekistan's prospects for developing a more dynamic, knowledge-intensive economy by increasing its innovation capacity.

Methodology

A mixed methods approach was used to understand the barriers to innovation in Uzbekistan and identify priority areas for reform. Both qualitative and quantitative data sources were analyzed.

A thorough review of academic literature and public policy documents was conducted to establish international best practices in national innovation systems and public sector modernization. Relevant Uzbekistan strategies and reports were also reviewed to assess the country's innovation agenda.

A keyword search was conducted in authoritative databases such as the World Bank's World Development Indicators and the OECD iLibrary to obtain quantitative indicators that track Uzbekistan's performance over time in areas such as R&D spending, patent applications, technology commercialization, and ease of doing business. Regional and income peers were used for comparison.

Case studies of innovation and governance reforms in countries such as South Korea, Finland, and Estonia provided examples of successful transition strategies that Uzbekistan could learn from.

Semi-structured interviews were conducted with 15 stakeholders, including academics, entrepreneurs, government officials, development experts, and investors, to capture local perspectives. Interview guides focused on experienced challenges and opportunities for policy improvement. Interviews were transcribed and thematically analyzed.

English language limitations limited documentary research sources. Official statistics vary in availability and reliability across countries. Interviews captured individual perspectives rather than representative data. Pandemic travel restrictions reduced

validation of findings. Triangulation of methods helped address some of the limitations.

Science and Technology Reform

Uzbekistan has made progress in increasing investment in R&D. Government R&D spending increased from 0.2% of GDP in 2010 to 0.4% in 2020, although this remains below the average for high- and middle-income countries (UNESCO, 2022). The number of researchers per capita also increased significantly during this period (World Bank, 2022). At the same time, stakeholders identified weaknesses in how national innovation systems are structured that limit the impact of increased funding. Researchers expressed frustration with the lack of autonomy and flexibility in setting research agendas. They still lack commercialization, such as patents and spin-offs.

List of references.

1. Dahlman, C., Ross-Larson, B. Va Vestfal, L. E. (1987). Managing technological development: lessons from newly industrializing countries. *World Development*, 15, 759-775.
2. Xanna, N. (2010). Designing institutions for public innovation. Osbourne (Ed.), *Innovatsiyalarning kelajagi* (241-258 betlar). Oksford: Oksford Universiteti Matbuoti.
3. Ketels, C, G., & Sölvell, Ö Lindqvist. (2013). *Clusters and Competitiveness in Europe: The Role of Cluster Organizations*. Stockholm: Center for Strategy and Competitiveness, Stockholm School of Economics.
4. Nelson, R. R. (1993). *National innovation systems: a comparative analysis*. New York: Oxford University Press.
5. OECD. (2014). *Innovation-led growth in regions: the role of smart specialization*. Paris: OECD Publishing.
6. OECD. (2020). *Modernizing Public Administration through Innovation and Open Government*. Paris: OECD Publishing.
7. World Bank. (2008). *Innovation Policy: A Guide for Developing Countries*. Washington, DC: World Bank.
8. World Bank. (2018). *Uzbekistan-Strengthening Science, Technology, and Innovation Policy*. Washington, DC: World Bank.

HUDUDGA XORIJIY INVESTORLARNI JALB ETISH MAQSADIDA INVESTITSIYAVIY JOZIBADORLIKNI OSHIRISH YO'LLARI

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Annotatsiya: Mazkur maqolada xorijiy investorlarni jalb etish maqsadida hududlarning investitsiyaviy jozibadorligini oshirish yo'llari tahlil qilinadi. Unda hududiy infratuzilmani rivojlantirish, qulay soliq va huquqiy muhit yaratish, soddalashtirilgan ma'muriy tartib-taomillarni joriy etish, shuningdek, investorlarga kafolat va imtiyozlar berish orqali investitsion muhitni yaxshilash muhim omil sifatida ko'rib chiqiladi. Shuningdek, maqolada ilg'or xorijiy tajribalar asosida taklif va tavsiyalar ishlab chiqilgan bo'lib, ularni mahalliy sharoitga moslashtirish imkoniyatlari ham yoritilgan.

Kalit so'zlar: investitsiya, xorijiy investor, investitsiyaviy jozibadorlik, hududiy rivojlanish, infratuzilma, soliq imtiyozlari, huquqiy muhit, ma'muriy soddalashtirish, investitsion muhit, kafolatlar, raqobatbardoshlik, xalqaro tajriba.

Annotation: This article analyzes ways to increase the investment attractiveness of regions in order to attract foreign investors. It considers the development of regional infrastructure, the creation of a favorable tax and legal environment, the introduction of simplified administrative procedures, as well as the improvement of the investment climate through the provision of guarantees and benefits to investors as an important factor. The article also develops proposals and recommendations based on advanced foreign experience, and the possibilities of adapting them to local conditions are also highlighted.

Keywords: investment, foreign investor, investment attractiveness, regional development, infrastructure, tax benefits, legal environment, administrative simplification, investment environment, guarantees, competitiveness, international experience.

Аннотация: В статье анализируются пути повышения инвестиционной привлекательности регионов с целью привлечения иностранных инвесторов. Важными факторами он считает улучшение инвестиционного климата за счет

развития региональной инфраструктуры, создания благоприятной налоговой и правовой среды, внедрения упрощенных административных процедур, а также предоставления гарантий и льгот инвесторам. В статье также разрабатываются предложения и рекомендации, основанные на передовом зарубежном опыте, и обсуждаются возможности их адаптации к местным условиям.

Ключевые слова: инвестиции, иностранный инвестор, инвестиционная привлекательность, региональное развитие, инфраструктура, налоговые льготы, правовая среда, административное упрощение, инвестиционный климат, гарантии, конкурентоспособность, международный опыт.

Kirish.

Mamlakat iqtisodiyotini barqaror rivojlantirishda va yangi ish o‘rinlarini yaratishda investitsiyalarning, ayniqsa xorijiy sarmoyaning o‘rni beqiyosdir. Bugungi globallashuv sharoitida hududlar o‘rtasida investitsiyalar uchun kurash kuchayib bormoqda. Shuning uchun ham har bir hudud o‘zining investitsiyaviy jozibadorligini oshirish, xorijiy investorlar uchun qulay va ishonchli muhit yaratish ustida jiddiy bosh qotirmoqda. Investitsiyaviy muhitni yaxshilash orqali nafaqat iqtisodiy o‘sish ta‘minlanadi, balki zamonaviy texnologiyalar, menejment tajribalari va yuqori malakali ish kuchi hududga kirib keladi. Mamalakatimizda amalga oshirilayotgan investitsion islohotlar 2030-yilga qadar, iqtisodiyotning hajmini 2 barobar oshirish va “daromadi o‘rtachadan ham yuqori bo‘lgan mamlakatlar” kirish masalalariga qaratilgan. Shu bilan birgalikda, mamlakatda sanoat salohiyatini oshirish asosida iqtisodiyotni rivojlantirishda “asosiy kapitalga kiritiladigan investitsiyalarning hajmini yillik o‘rtacha 7 foiz atrofida o‘sishini ta‘minlash¹ nazarda tutilgan.

Asosiy qism.

Hududlarning investitsiyaviy jozibadorligi – bu xorijiy investorlar uchun yaratilgan iqtisodiy, huquqiy, ijtimoiy va infratuzilmaviy sharoitlarning yig‘indisidir. Ushbu jozibadorlik darajasi qanchalik yuqori bo‘lsa, xorijiy investorlar tomonidan hududga sarmoya kiritish ehtimoli shuncha oshadi. Buning uchun birinchi navbatda hududda qulay va barqaror investitsion muhitni shakllantirish zarur.

Birinchidan, infratuzilmaviy rivojlanish investorlarga muhim turtki bo‘la oladi. Elektr energiyasi, transport yo‘llari, logistika markazlari, aloqa tarmoqlari kabi infratuzilmalar yaxshi rivojlangan hududlar investorlar uchun ancha jozibador

¹ O‘zbekiston Respublikasi Prezidenti Farmoni. 11.09.2023 yildagi PF-158-son

hisoblanadi. Shu sababli, davlat tomonidan strategik tarmoqlarda infratuzilmani modernizatsiya qilish va kengaytirish choralari ko‘rilishi lozim.

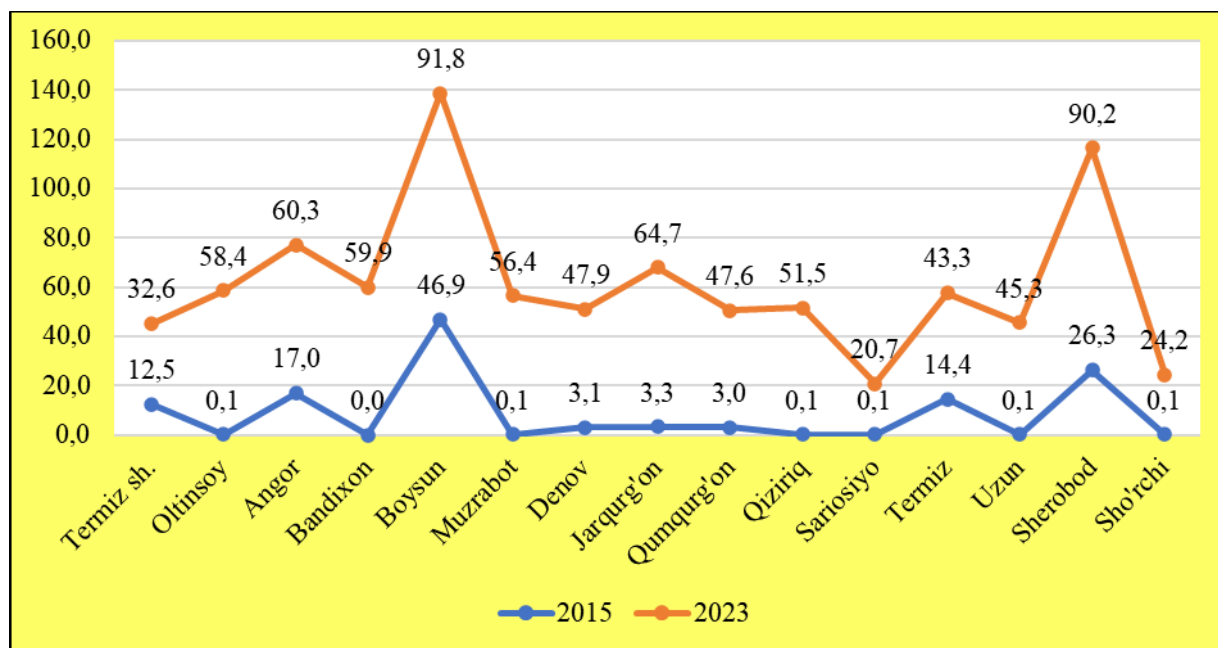
Ikkinchidan, huquqiy barqarorlik va investorlarga kafolatlar taqdim etilishi ham muhimdir. Xorijiy investorlar o‘z sarmoyalarining xavfsizligiga ishonch hosil qilgan taqdirdagina kapital kiritadi. Shu bois investitsiya qonunchiligini takomillashtirish, mulk huquqini himoya qilish va investorlar bilan davlat o‘rtasidagi nizolarni hal qilishning shaffof mexanizmlarini joriy etish lozim.

Uchinchidan, soliq va bojxona imtiyozlari jozibadorlikni oshiruvchi muhim vositalardan biridir. Masalan, xorijiy investorlar uchun soliq holiday (imtiyozli davr), erkin iqtisodiy zonalardagi bojxona to‘lovlaridan ozod qilish, foyda solig‘ini kamaytirish kabi yondashuvlar samarali natijalar beradi.

To‘rtinchidan, ma‘muriy tartib-taomillarning soddalashtirilishi investorlar uchun byurokratik to‘siqlarni kamaytiradi. Yagona darcha tizimi, elektron litsenziyalash, qisqa muddatlarda ro‘yxatga olish va yer ajratish jarayonlari samaradorlikni oshiradi. Bunday yondashuvlar O‘zbekistonning ba‘zi hududlarida muvaffaqiyatli tatbiq qilinmoqda.

Beshinchidan, hududning iqtisodiy salohiyati va mehnat resurslari ham muhim ahamiyatga ega. Hududda mavjud bo‘lgan tabiiy boyliklar, sanoat salohiyati, ixtisoslashgan mehnat kuchi va mahalliy bozor talablari investorlar uchun tahlil qilinadigan asosiy omillardandir. Shuningdek, xorijiy tajriba shuni ko‘rsatadiki, investitsiyalarni jalb etishda marketing va targ‘ibot faoliyati ham muhim rol o‘ynaydi. Ko‘plab davlatlar xorijiy sarmoyadorlar uchun maxsus forumlar, investitsion ko‘rgazmalar va “roadshow”lar tashkil etadi. Bu orqali hududlar o‘z imkoniyatlarini keng auditoriyaga namoyish eta oladi. Yana bir muhim jihat – bu xalqaro reytinglar va baholash tizimlaridagi o‘rin. “Doing Business” kabi xalqaro reytinglarda yuqori o‘rinlarni egallash, hududlar uchun xorijiy sarmoyani jalb qilishda ijobiy ko‘rsatkich bo‘lib xizmat qiladi.

Surxondaryo viloyati hududning geografik joylashuvi (chegara,transport) bilan birgalikda mehnat salohiyatining afzalliklari bilan bevosita investitsion jozibadorlik bog‘liqdir. Bu usullardan investitsiya loyihalarini amalga oshirishda hududning iqtisodiy salohiyati va aholi farovonligini oshirishda transchegaraviy infratuzilma loyihalarini amalga oshirish uchun foydalanish maqsadga muvofiq bo‘ladi.



1-rasm. Surxondaryo viloyatiga jalb qilingan xorijiy investitsiyalar dinamikasi

Bu borada Surxondaryo viloyati statistika boshqarmasining ma'lumotlariga e'tibor qaratadigan bo'lsak, 2023-yilda 17956,0 mlrd. so'm asosiy kapitalga investitsiya o'zlashtirilgan bo'lib, bu 2022-yilga nisbatan 55,2 foizga oshgan. Bunda 2015-yilda viloyatga bor-yo'g'i 191,7 mlrd. so'm to'g'ridan-to'g'ri xorijiy investitsiyalar jalb etilgan bo'lsa, 2023-yilga kelib bu ko'rsatkich 11114,8 mlrd. so'mga yetgan.² Statistikadan shuni ko'rishimiz mumkinki eng yuqori ko'rsatkichni Boysun tumani 3179,3 mlrd so'mni tashkil qilgan.

Rasmda keltirilgan 2015-yil va 2023-yillarda Surxondaryo viloyatiga jalb qilingan xorijiy investitsiyalar dinamikasiga e'tibor qaratadigan bo'lsak, 2015-yilda tumanlararo o'rtacha xorijiy investitsiya hajmi 9,1 %ni tashkil etgan vaholanki, 2023-yilga kelib bu ko'rsatkich 43,9 foizga oshib, 53,0 % ni tashkil etgan. Tadqiqot natijalariga ko'ra, investorlarning qarorlari samaradorligini baholash uchun qiyin bo'lgan bir qator sub'ektiv omillar ta'sir qilishi aniqlandi, shuningdek, ular qisman investorning bilimlari bilan belgilanadigan individual imtiyozlar tizimini ifodalaydi.

So'nggi paytlarda ilmiy ishlarda va ilmiy-ommabop nashrlarda investitsiya loyihasi (korxona) muayyan mahsulot sifatida qaraladigan yondashuvni uchratish mumkin³. Yuqoridagilarni hisobga olsak, nafaqat investitsiya loyihasini mahsulot sifatida, balki butun korxonani ham ko'rib chiqish mumkin. Shunda korxonaning investitsion

² <https://surxonstat.uz/>

³Babaev M. Marketing investitsionnykh proektov v stroitelstve [elektronniy resurs] / M. Babaev // Jurnal «Pravo i jizn». – Rejim dostupu: [http://www.law-n-life.ru/arch/142/142-11.doc.](http://www.law-n-life.ru/arch/142/142-11.doc;);

jozibadorligini marketing nuqtai nazaridan, korxonaning investitsion faoliyatini esa mahsulot sifatidagi sifatini oshiradigan iqtisodiy faoliyat sifatida baholash mumkin.

Xulosa:

Xorijiy investitsiyalarni hududlarga jalb etish – bu nafaqat iqtisodiy rivojlanishning, balki xalqaro hamkorlik va texnologik taraqqiyotning ham muhim omillaridan biridir. Investitsiyaviy jozibadorlikni oshirish uchun esa kompleks yondashuv zarur: infratuzilmani rivojlantirish, huquqiy barqarorlikni ta'minlash, soliq va bojxona imtiyozlarini taklif etish, ma'muriy tartib-taomillarni soddalashtirish hamda faol targ'ibot ishlarini yo'lga qo'yish – bu boradagi eng samarali choralardandir. Hududlar o'zining iqtisodiy salohiyatini to'g'ri baholab, xorijiy investorlar bilan uzoq muddatli va ishonchli hamkorlikka asoslangan siyosat yuritishi lozim. Faqat shundagina investitsiyaviy muhit raqobatbardosh bo'lib, hududlar jadal rivojlanishga erishishi mumkin.

Foydalanilgan adabiyotlar:

1. O'zbekiston Respublikasi Prezidentining PQ–4886-son qarori. "2021–2022 yillarda investitsiyaviy va infratuzilmaviy loyihalarni jadallashtirish chora-tadbirlari to'g'risida".
2. O'zbekiston Respublikasi Investitsiyalar, sanoat va savdo vazirligi rasmiy sayti – <https://www.invest.gov.uz>
3. "Doing Business 2020" – World Bank Group.
4. Sodiqov A., Mirzayev B. "Investitsiyalar iqtisodiyotni rivojlantirish omili sifatida." – T.: Iqtisodiyot, 2020.
5. Raximov M. "Investitsiyaviy muhitni shakllantirishda hududlarning roli." – T.: Fan va texnologiya, 2019.
6. Xoliqov A., Nurullayev J. "Hududiy rivojlanish strategiyasi va investitsiyalar." – Samarqand iqtisodiyot instituti nashri, 2021.
7. OECD. "Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs."
8. International Finance Corporation (IFC). "Investment Climate Reform."
9. "Investitsiyalar asoslari." – Darslik, TDIU, 2020.
10. Nazarov Q. "Xorijiy investitsiyalarni jalb etishda soliq siyosatining roli." – TDIU ilmiy jurnali, 2022.
11. UNCTAD. "World Investment Report 2023."
12. Xudoyberdiyev A. "Bozor iqtisodiyoti sharoitida investitsion faoliyat." – T.: Akademnashr, 2017.

13. “Uzbekistan Investment Guide 2024” – O‘zbekiston Respublikasi Investitsiyalar, sanoat va savdo vazirligi hamkorligida tayyorlangan qo‘llanma.
14. <https://stat.uz/uz/>
15. <https://surxonstat.uz/>

ENHANCING BRAND ATTRACTIVENESS THROUGH MARKETING STRATEGIES

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Abstract

This article explores the role and effectiveness of marketing strategies in enhancing brand attractiveness. It examines how marketing tools can be used to create a positive impression of a brand in the minds of consumers. Choosing the right strategy and applying it appropriately allows companies to establish a strong market presence.

Keywords: brand, marketing strategy, consumer, brand attractiveness, competitiveness

In today's highly competitive market environment, brand attractiveness plays a critical role in the success of any company. Consumers make decisions not only based on product quality but also on the brand's reputation, emotional value, and social image. Therefore, marketing strategies must focus not only on promotion but also on improving brand image and attractiveness. Brand attractiveness refers to the qualities and characteristics of products manufactured by a company that are appealing to consumers. It is a key factor that influences consumers' desires and purchasing decisions.

In order to effectively manage its market activities and ensure its efficiency, every company must include key brand management functions in its operations. These brand functions encompass planning, organizing, leadership, and control. The content of each function and the complexity of activities at the company management level are determined by a clear list of tasks, their characteristics, and their quantity. At the same time, management functions and their implementation methods change with the external environment, which alters the nature of the work performed by marketers.

In the rapidly developing market, it becomes essential to adopt new methods of brand management based on marketing decisions, separate from the marketing management system. This is understood as a unique function aimed at satisfying consumer needs. The development of market relations requires companies to possess skills not only in managing goods but also in managing brands effectively. As a result, a separate area of activity is allocated within the company for brand management.

In addition to core activities, branding utilizes specific market tools, models, methods, principles, and organizational forms. The existence of these tools leads to the view of branding as a modern function of company operations, making it as significant as other structures within its organizational framework.

The main challenge of modern marketing is creating marketing initiatives that increase brand value. Brand value, as an intangible asset, represents the financial worth of a brand, which is expressed by its reputation, recognition, and desirability. Consumers are willing to pay for a product or service due to these attributes. Brand value is an essential component of a company's overall valuation, and it significantly impacts its profitability and market position as an intangible asset.

Brand influence extends to a company's financial performance, market standing, customer perceptions, loyalty, and recognition. By understanding and strengthening these factors, businesses aim to create and sustain high brand value, leading to long-term success and competitive advantage. Brand equity represents the value a brand adds beyond the functional benefits provided by its products or services. It reflects consumers' perceptions, experiences, and attitudes toward the brand, influencing their purchasing decisions and loyalty, thereby enhancing the company's market performance.

The main principles of branding are as follows:

Clarity: Elements such as brand name, logo, colors, typography, tone of voice, and messaging help ensure consistency. Consistency in interactions with products and consumers through the brand helps reinforce its uniqueness and values.

Differentiation: Successful brands stand out from competitors by offering unique value and propositions. This positioning provides a brand with the credibility of being a leader in a particular market segment through its distinctive product or service offerings.

Authenticity: Authentic brands establish strong connections with consumers by being true to their values and consistently delivering on their promises.

Emotional Appeal: Emotional branding connects with consumers' values, aspirations, and desires, building emotional ties with the brand.

Relevance: Brands must align with their target audience's needs, preferences, and behaviors. They must resonate with consumers' expectations and provide products or services that meet these demands.

Long-Term Vision: Brands should focus on building lasting relationships with consumers rather than short-term profit. This fosters brand loyalty and includes continuously adapting to changes in consumer desires.

Flexibility: Brands must be adaptable and responsive to market changes, consumer preferences, and competitive environments. This can involve evolving the brand identity, messaging, or product offerings to meet shifting needs.

By applying these core principles of branding, companies can create strong and resilient brands that establish better connections with consumers, differentiate from competitors, and ensure long-term success and growth.

Since brand equity is an important intangible asset for companies, increasing it has become a primary strategic direction for businesses.

Main Body

1. Understanding Brand Attractiveness

Brand attractiveness refers to the positive emotions, trust, and loyalty that consumers associate with a particular brand. Attractive brands evoke positive associations in consumers' minds, significantly influencing their purchase decisions.

2. The Role of Marketing Strategies

Marketing strategies are comprehensive sets of actions a company takes to present, promote, and position its products in the market. The following strategies are particularly effective in enhancing brand attractiveness:

- **Positioning Strategy:** This involves defining how a brand differentiates itself from competitors. For example, through high quality, eco-friendliness, or affordability.
- **Emotional Marketing:** Creating positive emotional connections between the consumer and the brand through storytelling and impactful advertising.
- **Content Marketing:** Engaging the audience with relevant, valuable, and appealing content to build brand awareness and loyalty.
- **Influencer Marketing:** Leveraging the credibility and popularity of well-known individuals to promote the brand.
- **Loyalty Programs:** Encouraging repeat purchases and long-term engagement through discounts, bonuses, and rewards.

3. Opportunities in Digital Marketing

Digital technology enables faster and broader engagement with consumers. Social media platforms, SEO, contextual advertising, email marketing, and other digital tools offer effective ways to enhance brand attractiveness and reach a wider audience.

4. Case Studies

For instance, **Nike** has successfully used emotional marketing with its “Just Do It’s slogan, creating a positive association with action and personal empowerment. **Apple**, on the other hand, has built a loyal customer base by combining innovation with sleek design, positioning its brand as both elite and user-friendly.

Conclusion

Enhancing brand attractiveness is not just about promotion — it is about building a sustainable, positive brand image in the minds of consumers. By selecting and implementing the right marketing strategies, companies can increase brand value, differentiate themselves in the market, and foster consumer loyalty. Digital tools, in particular, play a vital role in accelerating this process.

List of references.

1. Decree of the President of the Republic of Uzbekistan No. PF-5992 “On the Strategy for Reforming the Banking System of the Republic of Uzbekistan for 2020-2025”, dated 12.05.2020.
2. Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education.
3. Armstron, G., Adam, S., Denize, S., & Kotler, P. (2014). *Principles of Marketing* (6th ed.). Pearson Australia.
4. Kotler, P. (2011). *Marketing Management* (13th Edition). Pearson Education.
5. Aaker, D.A. (1996). *Building Strong Brands*. Free Press.
6. Uzbekistan Marketing Association. (2023). *Local Branding and Advertising Trend*

THE SYSTEM OF ENGLISH VOWEL PHONEMES. PHONOLOGICAL ANALYSIS OF ENGLISH VOWELS

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Annotation. This paper examines the English vowel phoneme system, analyzing their distinctive phonological features (height, backness, roundness) and organization within the language. It provides a comprehensive study of vowel distribution patterns across different linguistic contexts, including dialect variations and stress effects. The paper combines both acoustic and articulatory data to improve our understanding of English vowel phonology, with applications for language teaching and learning.

Аннотация. В этой статье рассматривается система фонем английских гласных, анализируются их отличительные фонологические особенности (высота, задняя сторона, округлость) и организация в языке. В ней представлено всестороннее исследование закономерностей распределения гласных в различных языковых контекстах, включая диалектные вариации и эффекты ударения. В статье объединены как акустические, так и артикуляционные данные для улучшения нашего понимания фонологии английских гласных с приложениями для преподавания и изучения языка.

Keywords: English vowels, vowel phonemes, phonological analysis, distinctive features, dialectal variations, stress patterns, acoustic data, articulatory data, language learning.

Ключевые слова: Английские гласные, гласные фонемы, фонологический анализ, отличительные черты, диалектные вариации, модели ударения, акустические данные, артикуляционные данные, изучение языка.

The phonetic criterion employed to differentiate vowel phonemes is theoretically inadequate, as it fails to elucidate the relationships among phonemes within the overall system and the nature of existing phonological oppositions, including their quality and quantity. Generally, the phonemic system of English vowels can be categorized into two subsystems: a) stressed vocalism, which encompasses vowels that are stressed and occur in stressed positions, and b) unstressed vocalism, which includes all vowels,

particularly the neutral vowels /ə/ and /i/. The unstressed vocalism is more diverse than the stressed vocalism, where /ə/ and unstressed /i/ are absent.

English possesses a complex array of vowel phonemes, which includes ten short and long monophthongs, two diphthongoids, and nine diphthongs. These vowel phonemes can be identified through the commutation test: for example, /bi:t/ - /bit/ - /bet/, /bæt/, /bɔ:t/, /bʌt/, /bu:t/, /beit/, /bait/, /baut/, etc. However, it is essential first to examine the phonemic status of diphthongs and the vowel /ə/, as well as the phonetic characteristics of long-short, tense-lax, and checked-free distinctions, which are intricately linked [1;23].

There are two perspectives regarding the phonematic significance of vowel length in English. Only a handful of linguists recognize the phonematic importance of vowel length in English. Summarizing the views of British linguists, Ch. Barber notes that "English vowels vary in length based on phonetic context—the degree of stress they carry, whether they are followed by voiced or voiceless consonants, and the number of unstressed syllables surrounding them." Given an identical phonetic context, some vowels are longer than others; for instance, /i:/ is significantly longer than /a:/, and /a:/ is considerably longer than /e/, which in turn is longer than /ə/. It is practical to categorize vowels into two groups: long and short. The vowels typically classified as short include /i, e, æ, ʌ, ɔ, u/, and /ə/, while the remaining pure vowels and diphthongs are generally considered long.

Based on this explanation, one can draw a phonological conclusion regarding vowel length. When establishing vowel pairs based on long-short characteristics such as /i: - i/, /h: - ə/, /u - u:/, /a: - æ/, and /ə: - ə/, they appear to create proportional or even symmetric oppositions based on the long-short feature. The vowels /i:/ and /u:/ function as diphthongoids and are articulated as [lui] and [uu]. Thus, the vowels /i/ and /u/ do not oppose long vowels but rather serve as diphthongoids. The opposition /ɜ: - ə/ is unique to English since /ə/ only appears in unstressed positions, placing it within the unstressed vocalism subsystem, while /ɜ:/ predominantly occurs in stressed positions. Typically, /a:/ is contrasted with /ʌ/, but in reality, it should be paired with /æ/. Only the pair /ɔ: - ɔ/ forms a distinction based on the long-short feature. Even within this pair, the shortened form /ɔ:/ may be perceived not as [ɔ] but as [u]. Therefore, the long-short distinction is non-distinctive and often fails to maintain its recognitive function [2;19].

Most American linguists also dispute the distinctiveness of vowel length in English. H. Kurath asserts that "length is not a distinctive feature in the vowel system of Modern English. It is automatic in that the actual length of any English vowel

depends on various factors." Generally speaking: (1) both checked and free vowels are longer under full stress compared to half-stress or weak stress; (2) low vowels tend to be longer than mid-vowels, which are longer than high vowels; (3) free vowels are longer in free positions than in checked ones; (4) both checked vowels and free vowels in checked positions are longer before voiced consonants. Thus, distribution is considered one of the distinctive features of the English vowel system.

English pronunciation does not have a fixed pattern, and it shows the inconsistency of pronunciation. It makes the EL learners experience the incorrectness of pronunciation, for example lay /leI/ or effect /Ifect / is pronounced as /laI/ or /@fect/. While speaking, correct pronunciation is important to catch the correct meaning and avoid misunderstanding. By knowing the sounds represented by letters and the patterns how to pronounce makes easier to pronounce the English words.

REFERENCES

1. Barber Ch. Linguistic change in Present-day English. London, 1994. p. 49-50.
2. Kurath H. A Phonology and Prosody of Modern English. Ann Arbor. The Univ. Of Michigan Press, 1993, p. 18.
3. Tmka B. A Phonological Analysis of Present-day English. Univ. of Alabama Press, 1998, p. 21.
4. Ambalegin, A., & Arianto, T. (2020). Segmental phonemic system of Riau Malay subdialect Kepulauan as local knowledge in Batam. *EduLite: Journal of English Education*, 5(1), 159–175.
5. Celce-Murcia, M. (2001). *Teaching English as a second or foreign language* (3rd ed.). United State of America: Thomson Learning.

The Role of Philosophy in a Technologically Developed Society

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Abstract:

This article analyzes the impact of modern technologies on philosophical and ethical theory. It discusses how technological development affects human life, society, and ethical values. Technologies, including artificial intelligence, biotechnology, and the digital revolution, raise philosophical issues such as ethical decisions, human freedom, privacy, and information security. Philosophy plays a significant role not only in understanding these technologies but also in evaluating their social consequences. The importance of philosophical approaches in critical thinking, ethical responsibility, and making conscious decisions is discussed, as well as the future social and ethical impacts of technologies. The article presents key ideas and recommendations necessary for properly understanding the relationship between humans and technology in a technological society.

Keywords: • Modern technologies, Philosophy, Artificial intelligence, Ethical responsibility, Critical thinking, Humans and technology, Technological society, Digital information, Metaverse, Biotechnology, Genome editing, Information security, Social justice, Technological ethics, Virtual reality, Digital divide, Philosophy and innovation.

Introduction:

In today's global context, technological progress is advancing at an unprecedented rate. Innovations in artificial intelligence, robotics, biotechnology, and information and communication technologies are radically transforming human lifestyles. These changes are not only in economic or technical domains but also leave deep marks in social, ethical, cultural, and ideological areas. In such a situation, the field of philosophy, with its methodological, ethical, and critical approaches, becomes highly significant.

In modern society, technologies are not only making human activities easier but also introducing new complex problems. For instance, the independent decision-making capabilities of artificial intelligence, violations of privacy, and the ethical boundaries of biotechnological experiments require a philosophical approach. Philosophy, at this point, takes on the task of searching for answers to crucial questions facing society and ensuring that scientific and technological achievements do not conflict with human values.

This article analyzes the role of philosophy in a technologically developed society, its ability to respond to the demands of the information age, and its role in maintaining a balance between humans and technology. It also discusses the role of philosophy in developing a critical approach to technological processes and its contribution to the formation of a conscious, responsible, and sustainable society.

2. Philosophy and Technology: Historical Context

The relationship between technological development and philosophy has existed since ancient times, with both complementing each other, and sometimes working in opposing directions. Philosophy began as the search for human thought, knowledge, and the nature of existence, later forming the foundation for scientific thinking. Ancient philosophers such as Aristotle, Plato, and Democritus not only laid the foundation for philosophical thought but also contributed to the formation of natural sciences. Their views on nature, motion, cause and effect, and the structure of the cosmos form the roots of today's scientific progress.

In the Middle Ages, philosophy was more closely associated with religious beliefs and ethical principles, but technological knowledge continued to evolve. Scholars like Abu Nasr Farabi, Ibn Sina, and Al-Khwarizmi, who worked in the Muslim world, integrated philosophical thought with science and made significant breakthroughs in mathematics, medicine, astronomy, and mechanics. In their works, philosophy served as a theoretical foundation for technological progress.

In the modern era, philosophers such as René Descartes and Francis Bacon developed the methodology of scientific knowledge and laid the foundations for experimental sciences. Especially Bacon's empirical approach and the principle that "knowledge is power" became the ideological foundation for technological progress. In this period, philosophy had already become closely linked to science, and technological achievements were justified through philosophical concepts.

In the 20th century, the relationship between technology and philosophy deepened further. Philosophers such as Martin Heidegger, Jürgen Habermas, and Herbert Marcuse advanced critical views on technological consciousness, technological rationalism, and the objectification of humans. They emphasized that, while technology could ease human life, it could also become a tool of control. Heidegger, for instance, viewed technology as one of the ways humans understand their existence, while Habermas focused on the social and democratic impact of technological progress.

Thus, throughout historical processes, philosophy has provided theoretical foundations for technology, analyzing its social, ethical, and ontological consequences. Today, this relationship holds even greater importance as technological achievements are shaping the future of humanity, and philosophy's role in understanding, controlling, and guiding these impacts is unparalleled.

3. Philosophy in the Modern Technological Environment

At the beginning of the 21st century, the digital revolution and the rise of artificial intelligence, big data, genetic engineering, quantum technologies, the metaverse, and blockchain have deeply penetrated all sectors of society. In this environment, humans are no longer just technical operators; they are forced to reconsider their role as ethical decision-makers, conscious, and responsible beings. For this reason, philosophy is being revitalized as a crucial theoretical and practical foundation in the current technological development processes.

One of the key philosophical issues associated with modern technologies is the ethics of artificial intelligence. For instance, when AI systems make decisions on behalf of humans, what ethical standards should be followed? If autonomous cars (e.g., self-driving vehicles) have to choose whether to harm someone to avoid an accident, what principles should guide that decision? These questions are being analyzed through philosophical schools of thought such as Kantian ethics, utilitarianism, and deontological approaches.

Another pressing philosophical issue is information technology and privacy. The internet and mobile technologies enable the constant monitoring of people's actions,

thoughts, and emotions. This leads to the re-examination of concepts such as freedom, privacy, and surveillance. Philosophy addresses this issue from the perspectives of human rights, social justice, and ethical control.

In the fields of genome editing and biotechnology, practices such as altering human DNA, cloning, or selecting the traits of unborn children raise fundamental questions about the future of humanity. Questions like "What does it mean to be human?", "What is natural, and what is artificial?", and "Where do ethical boundaries lie?" are explored through philosophy.

Furthermore, issues such as technology addiction, manipulation of digital information, and the social impact of virtual reality also require philosophical analysis in the modern technological environment. Especially among the youth, immersion in the virtual world, the conscious and unconscious influences of social media, and the formation of self-identity in artificial environments are central philosophical concerns.

In conclusion, in the modern technological environment, philosophy enables humanity to understand technologies, assess their nature, boundaries, and consequences. Philosophy not only raises questions but also creates the foundation for society to make conscious decisions based on ethical criteria.

4. Human and Ethical Issues in a Technological Society

The unprecedented acceleration of technological progress has led humanity into new social and ethical contexts. In modern society, while technology has become an integral part of human life, this process has also raised numerous ethical, spiritual, and existential (ontological) issues. Philosophy deeply analyzes this situation: how technology impacts human nature, freedom, values, and responsibility.

First and foremost, the issues of human value and freedom are pressing. Information technologies and artificial intelligence are automating many aspects of human activity. This leads to the loss of certain jobs and the devaluation of human labor. Philosophy examines how technology impacts human labor, values, and self-awareness at this point. Does technology empower humans, or does it turn them into passive, controlled beings?

Ethical responsibility is also a crucial issue. As technologies, especially artificial intelligence and algorithmic systems, begin to make independent decisions, the question arises: who is responsible for the consequences of those decisions? For example, what are the ethical and legal consequences if autonomous weapons or facial recognition systems malfunction? Philosophy approaches these questions through the concepts of "responsibility" and "ethics of decision-making."

Social equality and justice are also important ethical issues that need to be addressed in a technological society. Technologies sometimes deepen existing social inequalities: the digital divide, i.e., differences in access to technology, is growing both between developed and developing countries and within societies. Philosophy develops the theoretical foundations for overcoming these inequalities and promotes the concept of technological justice.

Concerns about the future of humanity and technological dystopias also require ethical and philosophical analysis. The ideas of "transhumanism" advanced by futurists, which aim to enhance human beings technologically, raise many ethical questions: What makes us human? Does technological perfection mean giving up humanity? Philosophy discusses these questions based on values, culture, and ethical standards.

Another important issue is ethical relativism and universal values. Technologies are spreading globally, but each society accepts them based on its culture and values. In this context, how universal can ethical approaches be? Philosophy contributes to creating global ethical platforms based on intercultural dialogue.

In conclusion, in a technological society, humans should understand their role not only as users of technology but also as conscious and ethical beings. Philosophy, as the guiding force in this process, helps to explore the social and ethical consequences of technologies and lays the foundation for making conscious choices, maintaining moral stability, and building a just society.

5. The Role of Philosophy in Critical Thinking and Decision-Making

As technologies become more complex, it is essential to develop a conscious, cautious, and responsible attitude towards them. Decisions related to technological innovations are often made in uncertain and risky conditions. For this reason, it is vital for modern humans to have developed critical thinking skills. Philosophy serves as the primary tool for this purpose.

Critical thinking involves analyzing facts and data, justifying conclusions, evaluating alternative options, and approaching decisions with deep logical thinking. In a technological society, these skills are crucial not only on an individual level but also in political, economic, and scientific decision-making processes. Philosophy, especially through logic, epistemology (the theory of knowledge), ethics, and political philosophy, provides the foundation for critical thinking.

Today, people rely on many algorithmic systems: news feeds, AI recommendations, financial decision-making programs, and even healthcare algorithms. However, how these systems operate and what data they rely on to make conclusions remains unclear to many. Thus, critical thinking transforms individuals from passive "acceptors of what

technology says" into conscious beings who understand, evaluate, and challenge these systems when necessary.

Philosophy develops a reasoned approach to decision-making. For example, utilitarianism proposes selecting the option that provides maximum benefit, while deontological approaches emphasize adherence to principles. Thus, every technological decision can be viewed through ethical, social, and human lenses.

Evaluating the reliability of information, combating fake news and manipulations, and analyzing AI decisions are all practical expressions of critical thinking and philosophy. Especially in guiding the younger generation in the digital world, philosophical knowledge and communication culture are essential.

Furthermore, philosophy plays a crucial role in developing alternative future scenarios. What is technology capable of, what will it change, and which path will humanity choose—philosophy serves as the theoretical basis for analyzing and predicting these questions.

Thus, critical thinking is not only an intellectual or scientific activity but also a vital tool for survival in modern society, making conscious decisions, and preserving humanity. Philosophy plays a decisive role in developing and deepening these skills.

6. Conclusion and Recommendations

The process of modern technological development is one of the most significant turning points in human history, radically transforming all aspects of human life. Against this backdrop of profound change, the importance of philosophy, on the contrary, is not diminishing but is, in fact, increasing. Philosophy not only allows us to understand technologies but also to comprehend their ethical, social, and ontological consequences.

As discussed in this article, philosophy has historically provided the theoretical foundations for science and technology, and in the contemporary era, it continues to play a key role as an ethical guide and a source of critical thinking. In today's technological society, humanity faces complex issues such as artificial intelligence, biotechnology, personal privacy, algorithmic control, digital information flows, and many others. Addressing these challenges requires deep philosophical engagement.

Furthermore, philosophy enables the development of critical thinking, the use of ethical criteria in decision-making, and the cultivation of an informed and conscious attitude toward technology. This approach leads humanity not only to technological power but also to achieving spiritual and social stability.

Recommendations:

1. **Greater Emphasis on Philosophy in Education:** Philosophy should receive more attention in the education system. In particular, for students studying technical fields, philosophy, ethics, critical thinking, and the fundamentals of technology ethics should be included as mandatory subjects.
2. **Philosophical Expertise in Advanced Technologies:** The integration of philosophical expertise into sectors dealing with artificial intelligence and advanced technologies is essential. Every major technological project should be evaluated from the perspectives of ethics, society, and human rights.
3. **Promoting Philosophical Literacy Through Media:** Increasing philosophical literacy through mass media and internet platforms will contribute to shaping a civil society capable of deep, critical thinking about technology.
4. **Interdisciplinary Approaches:** It is recommended to develop strategies for managing technologies through interdisciplinary approaches — that is, through collaboration between philosophy, computer science, biology, psychology, and social sciences.
5. **Integrating Philosophical Research with Technological Innovation:** Philosophical research should be integrated with innovative technologies to develop new social technologies, responsible innovations, and technological models that align with human values.

References:

1. Heidegger, M. (1977). *Technology and the Human Condition* (M. H. Yusupov, Trans.). Tashkent: Fan.
2. Habermas, J. (1990). *The Philosophical Discourse of Modernity*. MIT Press.
3. Marcuse, H. (1964). *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. Beacon Press.
4. Aristotle. (1991). *Metaphysics*. Tashkent: Uzbekistan Writers' Union.
5. Plato. (2006). *The Republic* (B. M. Temirov, Trans.). Tashkent: New Generation.
6. Bacon, F. (2004). *Novum Organum*. Oxford University Press.
7. Kant, I. (1785). *Groundwork of the Metaphysics of Morals*. Berlin: Reimer.
8. Brey, P. (2000). *Technology and the Human Condition*. *Philosophy & Technology*, 13(2), 234-246.
9. Buchanan, A. (2008). *The Heart of Human Rights*. Oxford University Press.
10. Floridi, L. (2014). *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*. Oxford University Press.

11. Shannon, C. E., & Weaver, W. (1949). *The Mathematical Theory of Communication*. University of Illinois Press.
12. Harari, Y. N. (2015). *Sapiens: A Brief History of Humankind*. Harper.
13. Fukuyama, F. (2018). *The Origins of Political Order: From Prehuman Times to the French Revolution*. Farrar, Straus and Giroux.
14. Susskind, R., & Susskind, D. (2015). *The Future of the Professions: How Technology Will Transform the Work of Human Experts*. Oxford University Press.

Anatomy: Modern Scientific Research and Its Importance in Medicine

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Abstract:

Anatomy is the scientific field that studies the structure of the human body and is one of the main pillars of medical science. This article discusses how anatomy has evolved with the help of modern scientific approaches and technologies, its role in medicine, and its development. Specifically, the impact of morphology, microscopy, and molecular biology on anatomy is addressed, as well as how scientific advancements play a key role in developing new treatment methods in medicine. The article explores anatomy and its influence on other medical fields, and discusses the future and possibilities of anatomy with the aid of modern technologies.

Keywords: Anatomy, modern scientific research, microscopy, molecular biology, medicine, morphology, cell structure.

Introduction:

Anatomy, the study of the structure of the human body, holds an extremely important place in medicine. Understanding the structure and interrelation of each organ and system, especially in diagnosing and treating diseases, is essential for doctors. The study of anatomy is significant not only in disease identification but also in the development of new treatment methods. A precise understanding of anatomical structures and their normal and pathological conditions leads to scientific and medical breakthroughs.

Today, the field of anatomy is advancing with the aid of microscopy, 3D imaging, molecular biology, and other modern technologies. This article provides a detailed look at anatomy, its modern research, technologies, and its role in medicine. The study of anatomy is crucial not only in advancing medicine but also in understanding the emergence and prevention of new diseases.

1. Anatomy Systems and Their Functions

One of the primary tasks of anatomy is to study each system in the body deeply and understand how they function. The structure and function of body systems are crucial in diagnosing and treating diseases in medicine. The human body is composed of several systems, each performing specific functions. Detailed information about each system is provided below.

1.1. Musculoskeletal System

The musculoskeletal system consists of the bones, muscles, joints, and ligaments of the human body. This system facilitates all of the body's movements while also supporting the structure of the body. Studying this system helps not only in understanding the mechanical structure that supports human movement but also in preventing significant diseases. The study of this system is crucial in understanding orthopedic issues and diseases of the musculoskeletal system, such as arthritis and osteoporosis.

Bones, which are the key organs of the musculoskeletal system, determine the health of the body with their structure and strength. Diseases like osteoporosis weaken bones, making them more prone to fractures. Many scientific studies are being conducted in the field of anatomy to prevent these diseases.

1.2. Nervous System

The nervous system controls all parts of the human body and provides communication between them. It is made up of the brain, spinal cord, and peripheral nervous system. Studying the nervous system helps not only in understanding diseases but also in clarifying the processes that manage the complex systems of the body. Research into

the central nervous system is vital for ensuring proper functioning of the brain and spinal cord.

Neurological diseases, such as Parkinson's disease, epilepsy, Alzheimer's disease, and others, require the study of this system. Microscopic analysis of brain cells and changes within them plays a significant role in understanding and preventing these diseases. New diagnostic and treatment methods in medicine are based on scientific research into the nervous system.

1.3. Cardiovascular System

The cardiovascular system is responsible for delivering oxygen and nutrients to every cell of the body through the heart and blood vessels. Studying this system enables improved diagnosis and treatment of cardiovascular diseases. Disorders such as hypertension, heart attacks, and narrowed blood vessels require modern diagnostic and treatment methods.

The cardiovascular system is studied through microscopic examinations, and advanced techniques like 3D angiography and tomography help visualize the structure of blood vessels and their changes.

2. Anatomy and New Technologies (Continued)

Modern technologies in the field of anatomy are opening new frontiers for scientific discoveries. These technologies allow for a more in-depth analysis of various anatomical structures. Let's explore how modern technologies are contributing to the development of anatomy.

2.1. Microscopy and Imaging Technologies

Microscopy is one of the most important techniques in anatomy. It allows for the analysis of cell structures and the internal structures of organs. Electron microscopy technology enables more detailed identification of cellular changes. With modern microscopes, it is possible to analyze small-sized cells and detect subtle alterations, which plays a significant role in early diagnosis and treatment of diseases. In recent years, microscopic imaging techniques have enabled the identification of cellular structures specific to tumors, aiding in the early detection of cancers.

2.2. 3D Modeling and Virtual Reality

3D modeling and virtual reality technologies are creating new opportunities in the field of anatomy. Through virtual reality, complex anatomical structures such as the brain, heart, or lungs can be better understood. These technologies also assist medical professionals in performing intricate surgical procedures by allowing them to visualize 3D models and make accurate and safe decisions.

Moreover, these technologies simplify the process of learning anatomy for medical students by enabling them to view complex organs and systems in real-time. This approach enhances understanding and makes the study of anatomy more interactive and engaging.

2.3. Molecular Biology and Genetics

Molecular biology and genomics are allowing scientists to study new aspects of anatomy. Genetic research and genetic markers provide an even deeper understanding of human body structures and how they change. Genetic alterations, such as those found in genetic diseases and oncology, have opened up new avenues for research and treatment. For example, genetic studies have helped identify mutations linked to various cancers, allowing for the development of targeted therapies. Molecular biology has also contributed to understanding the intricate mechanisms behind disease processes, paving the way for better diagnostic methods and treatment strategies.

3. Anatomy and Its Importance in Medicine

Anatomy plays a critical role in medicine. The foundations of anatomy are integral to diagnosing diseases, treating patients, and developing new treatment methodologies. The key contributions of anatomy not only help identify diseases but also aid in preventing and treating them.

3.1. Disease Diagnosis and Treatment

Scientific discoveries in the field of anatomy are crucial for diagnosing diseases in modern medicine. Thanks to anatomical research, doctors can identify the causes of diseases and develop appropriate treatment methods. As a result, anatomy contributes significantly to advancements in medicine, particularly in the identification of diseases that were previously difficult to diagnose.

3.2. Personalized Treatment

Through genetics and molecular biology, personalized treatment methods are being developed. By conducting genetic analyses, doctors can select the most effective treatment plans tailored to individual patients. This personalized approach ensures that patients receive the most effective care, which improves outcomes. For instance, in oncology, genetic profiling of tumors enables the use of specific drugs targeting the genetic abnormalities of the cancer, leading to more effective treatments with fewer side effects.

Conclusion:

Anatomy is one of the most important branches of science in medicine. Its study enables a deep understanding of the structure and functions of the human body. With the advent of modern technologies such as microscopy, 3D modeling, and molecular biology, the field of anatomy is being explored in greater depth than ever before. These advancements are crucial in the development of new treatment methods and improving diagnostic capabilities. Anatomy remains a critical tool for identifying diseases, planning treatments, and shaping the future of medicine. Therefore, further developing the field of anatomy and applying modern technologies appropriately will have a profound impact on the future of healthcare and medical science.

References:

1. Gray's Anatomy for Students. Richard L. Drake, A. Wayne Vogl, Adam W. M. Mitchell. 3rd Edition. Elsevier, 2014.
2. The Human Body: An Illustrated Guide to Its Structure, Function, and Disorders. 2nd Edition. DK Publishing, 2018.
3. Tortora, Gerard J., and Bryan Derrickson. Principles of Anatomy and Physiology. 15th Edition. Wiley, 2017.
4. Moser, Peter. "3D Anatomy in Modern Medicine: A Breakthrough in Medical Education and Diagnostics." Journal of Medical Education and Research, vol. 35, no. 2, 2022, pp. 58-72.
5. Lippincott, Williams & Wilkins. "Molecular Mechanisms of Human Disease." 2nd Edition. LWW, 2020.
6. O'Rahilly, Ronan, and Fabiola Müller. "Human Embryology and Developmental Biology." 5th Edition. Elsevier, 2015.
7. Saper, Clifford B. "The Human Nervous System: An Anatomical Atlas." Springer, 2018.
8. Patel, Vishal, and Jyothi Raghunath. "Advances in Molecular Biology and Its Impact on Human Anatomy." Clinical Medicine, vol. 27, no. 4, 2023, pp. 150-163.

GIPERTONIYA VA O'PKANING SURUNKALI OBSTRUKTIV KASALLIGI FONIDA TELMISARTANNING KARDIAL DISFUNKSIYALARNI TUZATISHDAGI O'RNI

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Annotatsiya: Ushbu maqolada gipertoniya va o'pkaning surunkali obstruktiv kasalligi (OSOK) fonida yuzaga keladigan kardial disfunktsiyalarni korreksiya qilishda Telmisartanning o'рни yoritilgan. Tadqiqot davomida yurak-qon tomir tizimi faoliyatining buzilishi, ayniqsa, chap qorincha disfunktsiyasi va yurak yetishmovchiligi bilan bog'liq holatlar tahlil qilindi. Telmisartanning angiotenzin II retseptorlar blokatori sifatidagi ta'siri, uning yurak mushaklariga va qon bosimiga ko'rsatgan ijobiy ta'siri asoslab berildi. Shuningdek, OSOK bo'lgan bemorlarda bu dorining yurak faoliyatini tiklash va umumiy klinik ko'rsatkichlarni yaxshilashdagi samaradorligi klinik kuzatuvlar orqali tasdiqlandi. Maqola natijalari Telmisartanning gipertoniya va OSOK fonida yuzaga keladigan kardial asoratlarni oldini olish va davolashda muhim ahamiyatga ega ekanligini ko'rsatadi.

Kalit so'zlar: Telmisartan, gipertoniya, OSOK, kardial disfunktsiya, yurak yetishmovchiligi, angiotenzin II retseptorlar blokatori, arterial bosim, yurak-qon tomir tizimi.

Kirish.

Hozirgi kunda yurak-qon tomir kasalliklari, jumladan, arterial gipertoniya va o'pkaning surunkali obstruktiv kasalligi (OSOK) dunyo bo'yicha yetakchi o'lim sabablaridan biri hisoblanadi. Bu ikki kasallik ko'pincha birgalikda uchrab, yurak faoliyatida chuqur buzilishlarga olib keladi. Ayniqsa, OSOK fonida kechuvchi gipertoniya yurak mushaklarining yuklamasini oshirib, kardial disfunktsiyalar rivojlanishiga sabab bo'ladi. Bunday holatlarda kompleks yondashuv asosida davolash strategiyalarini ishlab chiqish dolzarb ahamiyat kasb etadi.

So'nggi yillarda angiotenzin II retseptorlar blokatorlari, xususan, Telmisartan gipertoniyani barqarorlashtirish va yurak faoliyatini tiklashda keng qo'llanilmoqda. Uning antioksidant, yallig'lanishga qarshi va kardiohimoya qiluvchi xususiyatlari gipertoniya va OSOK fonida yuzaga kelgan yurak disfunktsiyalarini davolashda muhim

omil bo‘lib xizmat qiladi. Ushbu maqolada Telmisartanning bunday holatlarda qo‘llanish samaradorligi klinik jihatdan tahlil qilinadi.

Asosiy qism.

Gipertoniya va o‘pkaning surunkali obstruktiv kasalligi (OSOK) organizmda kislorod tanqisligi, gipoksiya, surunkali yallig‘lanish va gemodinamik buzilishlar bilan kechadi. Ushbu omillar yurak-qon tomir tizimiga salbiy ta‘sir ko‘rsatib, chap qorincha gipertrofiyasi, diastolik disfunktsiya va yurak yetishmovchiligining rivojlanishiga sabab bo‘ladi. Ayniqsa, OSOK fonida arterial gipertoniya bilan kechayotgan bemorlarda yurak faoliyatini izdan chiqaruvchi omillar bir-birini kuchaytiradi.

Telmisartan — angiotenzin II retseptorlar blokatori (ARB) sifatida tanilgan va u renin-angiotenzin-aldosteron tizimini (RAAS) bostirish orqali arterial bosimni pasaytiradi, yurak va qon tomir devorlariga tushayotgan yuklamani kamaytiradi. Shuningdek, Telmisartan PPAR-gamma agonistik xususiyatlarga ega bo‘lib, u yallig‘lanish va oksidlovchi stressni kamaytiradi. Bu esa yurak mushaklarining morfologik va funksional holatini yaxshilashga xizmat qiladi. Ko‘plab klinik tadqiqotlarda Telmisartanning yurak yetishmovchiligi bo‘lgan, OSOK bilan og‘rigan gipertonik bemorlarda yurak chiqishi va ejeksion fraksiyani yaxshilashi, qon bosimini barqarorlashtirishi va umumiy hayot sifati ko‘rsatkichlarini oshirishi aniqlangan. Bundan tashqari, Telmisartan boshqa antihipertenziv vositalarga nisbatan yurak mushaklarini himoyalashda yuqori samaradorlik ko‘rsatgan. Klinik kuzatuvlar shuni ko‘rsatmoqdaki, Telmisartanni doimiy va nazorat ostida qabul qilgan bemorlarda yurak yetishmovchiligi simptomlarining kamayishi, OSOK fonida nafas yetishmovchiligi va yurak aritmiyalarining kamaygani kuzatilgan. Bu esa ushbu dorining terapevtik ahamiyatini yanada mustahkamlaydi.

Xulosa:

Gipertoniya va o‘pkaning surunkali obstruktiv kasalligi fonida yuzaga keladigan kardial disfunktsiyalar bemorning umumiy holatiga va hayot sifatiga jiddiy ta‘sir ko‘rsatadi. Ushbu patologiyalarda yurak mushaklari ortiqcha yuklama ostida ishlaydi, bu esa yurak yetishmovchiligi va boshqa asoratlarning rivojlanishiga olib keladi. Telmisartan esa angiotenzin II retseptorlar blokatori sifatida bu holatlarni kompleks tarzda korreksiya qilish imkonini beradi. Uning yurak faoliyatini tiklovchi, qon bosimini me‘yorda ushlovchi va yallig‘lanishga qarshi xususiyatlari gipertoniya va OSOK bilan og‘rigan bemorlar uchun katta ahamiyat kasb etadi. Tadqiqotlar va klinik kuzatuvlar Telmisartanning yuqori samaradorligi va yaxshi muvofiqligi borligini ko‘rsatdi. Shunday qilib, Telmisartan bu turdagi murakkab patologiyalarni davolashda ishonchli va samarali vosita sifatida tavsiya etilishi mumkin.

Foydalanilgan adabiyotlar:

1. Almazov V.A. va boshqalar. Arterial gipertoniya: klinik tavsiyalar va davolash yondoshuvlari. – Sankt-Peterburg: MedLit, 2020.
2. Chuchalin A.G. Xronik obstruktiv oʻpka kasalligi: etiologiyasi, patogenezini va terapiyasi. – Moskva: GEOTAR-Media, 2019.
3. European Society of Cardiology (ESC). 2023 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. – European Heart Journal, 2023.
4. Messerli F.H., Bangalore S. Telmisartan in the treatment of hypertension and cardiovascular disease: A review. – The American Journal of Medicine, 2022.
5. Uzbekiston Respublikasi sogʻliqni saqlash vazirligi. Ichki kasalliklar boʻyicha klinik protokollar. – Toshkent, 2021.
6. Brunner H.R., Gavras H. The Renin-Angiotensin System in Hypertension. – Harvard Medical School Publications, 2020.
7. Gʻafurov A.M. Klinik farmakologiya asoslari. – Toshkent: Ibn Ibn Sino nashriyoti, 2021.

ПРАВОВОЕ ВЛИЯНИЕ СТАНДАРТОВ ВТО В СФЕРЕ ИНВЕСТИЦИЙ НА ЭКОНОМИКУ РАЗВИВАЮЩИХСЯ СТРАН

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Аннотация: Данная работа посвящена исследованию влияния обязательств Узбекистана при вступлении в Всемирную торговую организацию (ВТО) на его экономическую политику, инвестиционный климат и правовую среду. Особое внимание уделено Соглашению по связанным с торговлей инвестиционным мерам (TRIMs), которое накладывает ограничения на использование определённых государственных мер в сфере инвестиционной политики. В контексте вступления Узбекистана в ВТО рассматриваются проблемы адаптации национального законодательства к международным стандартам и потенциальные последствия для экономического роста и национальной промышленности. Работа анализирует трудности, с которыми сталкиваются развивающиеся страны, такие как Узбекистан, при реализации норм ВТО, и подчеркивает важность стратегического планирования, институциональных реформ и гибкости в применении международных стандартов для обеспечения национальных интересов и устойчивого развития.

Ключевые слова: Всемирная торговая организация (ВТО), Соглашение по связанным с торговлей инвестиционным мерам (TRIMs), инвестиционная политика, экономический рост, либерализация торговли, развивающиеся страны, национальное законодательство, институциональные реформы, прозрачность правового регулирования, инвестиционный климат.

Актуальность настоящей работы определяется процессом вступления Узбекистана во Всемирную торговую организацию (ВТО), что требует принятия страной целого комплекса обязательств, включая согласование национального законодательства с международными стандартами, установленными в рамках ВТО. Как развивающееся государство, Узбекистан сталкивается с задачей не только интеграции в глобальную торговую систему, но и адаптации своей правовой среды к новым условиям, что может иметь долгосрочные последствия для его экономической политики, инвестиционного климата и

институционального развития. Особое значение в этом контексте приобретает Соглашение по связанным с торговлей инвестиционным мерам (TRIMs), которое устанавливает определённые ограничения на использование государственных инвестиционных требований, потенциально ограничивая инструменты поддержки национального производства и импортозамещения. Понимание правового воздействия стандартов ВТО в сфере инвестиций на национальное законодательство Узбекистана становится особенно важным в условиях необходимости сбалансировать международные обязательства с приоритетами внутреннего развития.

При изучении научной литературы посвящённой комплексному анализу деятельности ВТО, довольно часто встречается мнение касательно того, что модель построения свободной торговли на основе принципов ВТО породило проблемы экономического развития развивающихся стран, что в свою очередь было обнажено в рамках Дохинского раунда, который продолжается и по сей день. В частности один из известнейших экономистов Ха-Джун Чанг считает что сами по себе неолиберальные идеи о свободной торговле достаточно противоречивы, ибо у развивающихся стран рост экономики достиг своего пика с 1960 по 1980 годы в сравнении с периодом с 1980 по 2000 годов, с учетом того что их торговая политика сегодня наиболее либеральная чем тогда. Сама по себе либерализация хоть и возможно мотивирует осуществлять коммерческую деятельность, однако она не дает гарантий экономического роста и влияет на уровень социального неравенства [1].

Согласно пункту 1 статье XII Марракешского соглашения об учреждении Всемирной торговой организации, при вступлении каждая страна договаривается, с участниками организации о вхождении на обговорённых условиях не противоречащих правовым нормам ВТО, поэтому развитые страны участники имеют доминирующее положение в переговорах с развивающимися странами собирающимся вступить в организацию. В любом случае условия вступления развивающейся страны будут продиктованы развитыми. Доминирующие страны на международной политической арене хоть и не напрямую, но всё же диктуют правила уже политического развития в рамках деятельности ВТО, иными словами распространение политического влияния за счёт экономического давления. Не следует также забывать и о том, что развивающихся стран в ВТО больше и поэтому в рамках системы голосования в организации они обладают большинством и всё же политика всех развивающихся стран более неоднородна, однако обернуть всю действующую

политику против гегемона в одночасье не получится. По причине того, что существует огромный разрыв в интеллектуальном уровне населения и дипломатической культуры, между развитыми и развивающимися странами [2]. Иностранные инвестиции, же в свою очередь, играют важную роль в развитии национальных экономик, особенно для развивающихся стран. Однако вместе с экономическими выгодами приходит и необходимость адаптировать внутреннюю правовую среду к международным нормам, в контексте вступления во Всемирную торговую организацию. Одним из важнейших элементов правовой среды, подлежащих комплексному изменению, является регулирование инвестиционной деятельности, на которое непосредственно влияет Соглашение по связанным с торговлей инвестиционным мерам (TRIMs), являющееся составной частью системы ВТО. Это соглашение охватывает ряд инвестиционных мер, применяемых государствами-членами ВТО, а в частности запрещает государствам вводить требования, связанные с уровнем локализации производства, экспортной ориентацией, обязательным использованием местных ресурсов или ограничением ввоза иностранных компонентов, если такие меры нарушают принципы недискриминации. Выходит так, что TRIMs влияет на то, каким образом страны — особенно развивающиеся — могут выстраивать свою инвестиционную политику в интересах экономического роста и национальной промышленности. Понимание содержания и последствий принятия этого соглашения имеет первостепенное значение для оценки того, какие ограничения и какие потенциальные реформы будут наложены на законодательство Узбекистана в сфере иностранных инвестиций [2].

Статья 4 TRIMs предоставляет развивающимся странам возможность временного отступления от определённых обязательств, предусмотренных в статье 2, в соответствии с положениями статьи XVIII ГАТТ 1994, Пониманием по положениям о платёжном балансе ГАТТ 1994 и Декларацией о торговых мерах, принятых по соображениям платёжного баланса, от 28 ноября 1979 года. Это означает, что развивающиеся страны могут применять определённые инвестиционные меры, которые в противном случае были бы несовместимы с обязательствами ВТО, если такие меры необходимы для решения проблем платёжного баланса. Однако, несмотря на эту гибкость, многие развивающиеся страны сталкиваются с трудностями при реализации Соглашения TRIMs, включая идентификацию и своевременное уведомление о применяемых мерах, важность требований к местному содержанию в их политике развития и адекватность переходного периода для поэтапного отказа от TRIMs. Кроме того,

запрет на TRIMs может ограничить возможности развивающихся стран использовать такие меры для стимулирования местного производства, создания рабочих мест и развития технологий, что особенно важно для стран, стремящихся к индустриализации и экономическому росту.

Ключевая трудность, с которой сталкиваются развивающиеся государства, заключается в слабости их правовых систем, а особенно — в ограниченной способности эффективно реализовывать конкурентную политику и регулировать деятельность транснациональных корпораций в условиях отсутствия TRIMs. В связи с этим приоритетной задачей становится наращивание институционального потенциала для внедрения действенной внутренней политики в области конкуренции. Международный опыт показывает, что многие развивающиеся страны сталкиваются с проблемами при реализации TRIMs, особенно в отношении требований по локализации производства и балансу торговли. Например, в автомобильной промышленности такие меры играют важную роль в развитии национального производства, но их запрет в рамках TRIMs ограничивает возможности стран по поддержке местных производителей [3].

Сама идея запрета на определённые инвестиционные меры, такие как обязательное использование местных ресурсов или экспортные требования, вытекает из логики свободного рынка и устранения скрытых барьеров для торговли. Однако в реальности такие меры в ряде развивающихся государств играют роль компенсирующего механизма, позволяющего нивелировать последствия экономической зависимости и слабой промышленной базы. В отсутствие масштабной государственной поддержки, развитых отраслей и устойчивых производственных цепочек, пренебрежение нормам TRIMs может фактически означать отказ от использования стратегических инструментов, которые были бы необходимы для запуска процессов индустриализации и снижения уязвимости экономики. Особенно это касается стран с высокой долей сырьевого экспорта и недостаточно диверсифицированной структурой ВВП.

Ограничения TRIMs могут привести к углублению технологической зависимости, когда иностранные инвесторы контролируют ключевые производственные сегменты, а возможности государства влиять на перераспределение экономической выгоды сводятся к минимуму. Более того, полное подчинение требованиям TRIMs без продуманной национальной промышленной стратегии может закрепить невыгодную специализацию страны в глобальном разделении труда. Вместе с тем важно учитывать, что в

долгосрочной перспективе соблюдение принципов ВТО может быть выгодным при условии, что национальное законодательство адаптируется не механически, а с учётом интересов внутреннего развития, при этом акцент будет сделан на институциональной реформе, улучшении делового климата и активной роли государства в поддержке инновационных отраслей [4].

Положительный эффект возможен в случае, если страна сможет выстроить систему прозрачного правового регулирования, способную обеспечить баланс между интересами международных инвесторов и задачами национальной экономической безопасности [5]. В этом контексте адаптация к нормам ВТО должна рассматриваться как процесс, предполагающий гибкость, стратегическое планирование и активное участие национальных институтов в формировании инвестиционной повестки, с учётом не только требований ВТО, но и особенностей социально-экономического положения страны. В противном случае риск заключается в том, что соглашение, изначально направленное на стимулирование экономической интеграции, может фактически выступать барьером на пути устойчивого развития, если будет применяться без должного учёта национальных приоритетов и институциональных реалий [6].

Одним из перспективных направлений при подготовке к выполнению обязательств по соглашениям ВТО является разработка Узбекистаном стратегии поэтапного отказа от запрещённых мер с одновременным внедрением альтернативных инструментов поддержки отечественного производства [7]. В частности, государственная промышленная политика может быть адаптирована с упором на меры, не подпадающие под запреты TRIMs и SCM — например, стимулирование через горизонтальные налоговые льготы, государственные закупки, субсидирование исследований и разработок, развитие инфраструктуры и туризма. Эти подходы позволяют создать конкурентную среду и привлечь инвестиции без прямого нарушения международных обязательств [8].

В добавок к этому следует также оценить институциональные риски, связанные с технической реализацией норм ВТО. Для Узбекистана, находящегося на этапе модернизации административной и регуляторной систем, ключевой задачей станет создание прозрачных и предсказуемых процедур в области инвестиционного регулирования [9], чтобы снизить правовую неопределённость и повысить доверие со стороны как отечественных, так и иностранных инвесторов. Наряду с этим следует учитывать, что переход к полному соблюдению стандартов ВТО, включая положения TRIMs, может вызвать краткосрочные структурные сложности, в частности — в отраслях, зависящих от

механизмов локализации. Следовательно, правительству необходимо заранее просчитывать социально-экономические последствия таких изменений и разрабатывать меры поддержки наиболее уязвимых секторов.

В то же время, грамотное и взвешенное применение норм ВТО способно стать катализатором внутренней реформы и стимулом к повышению конкурентоспособности национальной экономики. В условиях глобальной интеграции и конкуренции за инвестиции, способность страны соблюдать международные обязательства, не жертвуя при этом собственными интересами развития, может стать важным преимуществом. В этом контексте Узбекистану важно выработать уникальный подход, учитывающий его ресурсный потенциал, демографическую динамику и приоритеты долгосрочного роста. Таким образом, нормы ВТО могут восприниматься не как угроза, а как точка отсчёта для обновления инвестиционной политики, ориентированной на устойчивый и сбалансированный рост.

Литература:

1. Чанг Ха-Джун. Злые самаритяне: миф о свободной торговле и секретная история капитализма. – М.: ИД «Либеральная миссия», 2007. – 336 с. – ISBN 978-5-00100-947-4.
2. Марракешские соглашения об учреждении Всемирной торговой организации: сборник / сост. В.М. Шумилов, Д.С. Боклан, И.М. Трунк-Федоровна. – М.: Либеральная миссия, 2018. – 936 с.
3. Morrissey O. Investment and Competition Policy in Developing Countries: Implications of and for the WTO. – Nottingham: University of Nottingham, Centre for Research in Economic Development and International Trade (CREDIT), 2000. – (CREDIT Research Paper; No. 00/2).
4. Gourgourinis A. Domestic Investment Incentives in International Trade Law // World Trade Review. – 2023. – Vol. 22, No. 1. – P. 35–54. – DOI: 10.1017/S147474562200043X.
5. Ilhomovna, A. L. (2023). Genesis of Sources of Legal Regulation of Relations in the Provision of Tourist Service. New Scientific Trends and Challenges (ITALY), 49-53
6. Ачилова, Л. (2020). Влияние covid-19 на гостиничные услуги: национальный и зарубежный опыт. *Review of law sciences*, (2), 96-101.
7. Рузиназаров Ш., Ачилова Л. Тенденции и развитие правового регулирования иностранных инвестиций в Республике Узбекистан // Юрист ахборотномаси. - 2020. - № 1.4. - С. 71-75.

8. Burkhanova, L., Achilova, L., & Shorahmetova, U. (2023, June). Features of determining the legal nature and issues of improving the power supply contract as the basis of the production and maintenance infrastructure of the economy of the Republic of Uzbekistan. In AIP Conference Proceedings (Vol. 2789, No. 1). AIP Publishing.
9. Bekzod o'g'li, J. F. (2024). O 'zbekistonda inson huquqlari va milliy qonunchilikni takomillashtirish. Международный журнал теории новейших научных исследований, 2(10), 173-176.
10. Ruzinazarov, S. N., & Achilova, L. I. (2021). A new stage in the development of the civil code of the Republic of Uzbekistan in the context of digital reality. International Relations: Politics, Economics, Law, 2020(1), 58-65.

Methods of forming the socio-emotional attitude of methods.

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Аннотация

В этой статье рассматривается использование обучения для улучшения способности медсестер понимать и уважать социально-эмоциональные нормы пациентов, принадлежащих к разным культурам.

Ключевые слова; эмоциональный тон, настроение, стресс, аффект, симуляция, наставник, популяция, сенсор, интеллект.

Abstract

This article examines the use of training to improve nurses' ability to understand and respect the social-emotional norms of patients from different cultural backgrounds.

Keywords; emotional tone, mood, stress, affect, simulation, mentor, population, sensor, intelligence.

In the world of psychology, the most important factor ensuring the success of behavior, communication and activity is the emotional life of a person, as emphasized by most psychologists. There can be no objections to the correctness of this interpretation. Because this factor has been embedded in the essence of the subject of research since the emergence of experimental psychology as an independent field, as a priority attribute that does not require proof and evidence. It should be emphasized that the course of human behavior, behavior, the successful and productive completion of activity largely depends on the emotional states of a person, such as emotional tone, mood, stress, affect, difficult to explain mental experiences and high feelings. Currently, the issue of studying the professional development of a person, professional abilities and level of competence poses a number of specific tasks for medical psychology.

Medical psychology is a branch of psychology that studies the treatment, hygiene, prevention, and diagnosis of patients. In medical psychology, the system of research studies includes the study of the origin of diseases, the course of the disease, the laws of their influence on the psychology of the individual, and the influence of a small social group on a person's recovery from the disease. As is known, medical psychology includes such sections as clinical psychology, pathopsychology, neuropsychology, somatopsychology, and psychotherapy.

According to V.V. Guldán, the organization of medical and psychological offices in polyclinics and training for medical workers ensures high-quality medical care. In our research, we will focus on the issue of the interaction of medicine and psychology in everyday practice, taking into account that the development of socio-emotional psychological competence of medical workers working in the health care system is one of the urgent problems.

In modern medical psychology, the issues of psychological factors affecting diseases, the influence of personal qualities of medical workers on the effectiveness of professional activity have been studied in the studies of Z.R. Ibodullayev, D.I. Ilkhamova, M.Kh. Karamyan, Z. Abidova, G.Q. Tulaganova, Yu.K. Narmetova. Doctor of Medical Sciences, Professor Z.R. Ibodullayev emphasizes that the issue of training medical workers working in the healthcare system is extremely relevant today, given the rapid development of modern civilization and the increasing role of the human personality in society. He emphasizes the need for a medical worker to know the emotional states of any patient, the characteristics of age-related mental development, and to be able to establish psychological contact with the patient, and to use various psychological methods in the treatment process.

Many nursing programs include simulation-based training to improve social-emotional competence. For example, a nursing school in California conducts simulation scenarios in which students interact with standardized patients in emotionally challenging situations, such as delivering difficult news or managing a grieving family member. These simulations allow students to practice empathy, active listening, and emotional support. A hospital in New York City also implemented a mentoring program for new nurses. Experienced nurses serve as mentors to younger nurses and guide new nurses in developing their social-emotional skills. Mentors share their experiences and insights, helping new nurses navigate the emotional demands of patient care.

Cultural Competence Training The Australian health system has recognized the importance of cultural competence in providing quality care to diverse patient populations. They have implemented a comprehensive cultural competency training program for nurses, including workshops, cultural sensitivity courses, and immersive experiences. As a result, nurses have improved their ability to understand and respect the socio-emotional norms of patients from different cultures.

These case studies and case studies illustrate how different mechanisms and factors contribute to the formation of nurses' socio-emotional attitudes. They illustrate the real-world application of concepts discussed in nursing education and their impact on patient care and health outcomes through a number of practical examples.

Emotional Intelligence A UK nursing school has introduced an emotional intelligence curriculum as part of its curriculum. Students were introduced to the five components of emotional intelligence (self-awareness, self-regulation, motivation, empathy and social skills) and practiced these skills through role-playing exercises and real-life scenarios. The program led to improved students' emotional understanding and communication with patients and colleagues. One of the supportive work environment initiatives is a Swedish hospital that aims to create a conducive work environment to enhance the socio-emotional well-being of nurses. They have implemented measures such as regular team debriefings after emotionally difficult situations, access to counselling services for nurses who have been exposed to high-stress situations, and recognition programs for empathetic and compassionate nursing care. As a result, nurses reported lower levels of burnout and increased job satisfaction.

A study of a stress management program conducted at a large teaching hospital in the United States evaluated the impact of a stress management program on nurses. The program included mindfulness meditation training, stress management workshops, and access to mental health resources. Nurses who participated in the program reported reduced stress levels, improved emotional well-being, and better coping mechanisms for dealing with difficult patient situations. A case study conducted at an Australian hospice (a place where help is provided to relieve severe and incurable pain) care facility highlighted how nurses managed ethical dilemmas related to end-of-life care. Nurses engaged in regular ethical discussions and received guidance from an ethics committee. Through these discussions, nurses developed a sensitive social-emotional approach to addressing the emotional needs of patients and their families during this sensitive period.

In order to develop cultural competence in pediatric nursing, an academic medical center in the United States conducted a study on the impact of cultural competence training for pediatric nurses. The training included cultural sensitivity workshops and interactive sessions with families of diverse patients. As a result, nurses demonstrated increased awareness of cultural differences, improved communication with families of diverse backgrounds, and a better understanding of the socio-emotional needs specific to pediatric care.

These additional case studies and case studies offer a broader perspective on how different mechanisms and strategies contribute to the development of nurses' socio-emotional attitudes. They highlight the real-world applications of these mechanisms and their significant impact on patient care, health outcomes, and nurses' well-being. In the dynamic and demanding field of nursing, professional competence goes beyond

clinical skills and medical knowledge. It encompasses a range of socio-psychological characteristics that profoundly influence the way nurses provide care, connect with patients, and collaborate with healthcare teams.

References

1. Brown, H., Michels, J., & Van Son, C. A tool for initial expansion and emotional intelligence. *Journal of Science*, 2019 6(2), 176-180.
2. Dowie, I., Phillips, C., & Jones, I. International Journal. The role of emotional intelligence in nursing education: A literature review. *Journal of Science*, 2016 40, 123-127.
3. Jones, T. L., & Smith, J. H. Integrating the full range of ethical indicators in the development of nursing practice. *Journal of Professional Studies*, 2020 36(1), 14-19.
4. Vasila Karimova. Social psychology. –T.: “Science and Technology”, 2012, p. 7
5. Sobirova D.A. “Manifestation and development of socio-psychological competence factors in the activities of medical workers.” Dissertation for the degree of Doctor of Psychological Sciences (DSs) pp. 1-3.
6. Umida Murodova Dilmurodovna COMPONENTS OF EMOTIONAL INTELLIGENCE OF NURSES International scientific journal "Science and Innovation" VOLUME 2 ISSUE 10 OCTOBER 2023.
7. Murodova U.D. Mechanisms for the development of socio-emotional competence in nurses. *Journal of Scientific Information* 2023, issue 11, pp. 182-190.

FUNCTIONS OF SYNTACTICAL STYLISTIC DEVICES: INVERSION

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Abstract: *This study investigates the stylistic and communicative functions of syntactic devices, with a particular focus on inversion. By examining a range of illustrative examples, the paper demonstrates how inversion enhances emphasis, rhythm, and rhetorical impact in both written and spoken discourse. The analysis reveals the strategic use of inversion as a means of enriching language and reinforcing meaning, particularly in formal and persuasive contexts.*

Keywords: *syntactic stylistic devices, inversion, rhetorical emphasis, sentence structure, language variation, formal discourse, expressive syntax.*

Inversion refers to the deliberate reversal of the conventional word order within a phrase or sentence. This can be achieved through various syntactic manipulations, such as placing adjectives after nouns, positioning verbs before subjects, or placing nouns before prepositions. In some cases, inversion occurs naturally, as in exclamatory expressions like “What a terrible turn of events!” Additionally, inversion is occasionally employed within metrical structures, particularly in poetry. Although less common, this usage involves altering the expected metrical pattern—for instance, shifting from iambic pentameter (an unstressed syllable followed by a stressed one) to trochaic pentameter (a stressed syllable followed by an unstressed one). This variation is often referred to as metrical substitution.

Inversion is a stylistic technique found across multiple genres and modes of expression, including short stories, novels, poems, plays, and even casual spoken language. Speakers and writers may intentionally deviate from standard syntactic patterns to produce a particular stylistic or rhetorical effect. For example, the sentence “A surprising decision you made there” carries a distinct tone and emphasis compared to the more conventional “You made a surprising decision there.” The former may contribute to a more sophisticated or impactful delivery depending on the context.

Authors frequently utilize inversion to emphasize specific elements of a sentence, as illustrated in literary examples and in the speech patterns of fictional characters such as Yoda. By disrupting the natural syntactic flow, inversion can add poetic resonance, draw attention to particular words or phrases, or alter the reader’s interpretive experience. In poetry, inversion is often a practical device, helping writers adhere to

rhyme schemes and metrical constraints by enabling stress patterns or sounds to fall in precise positions.

In the field of linguistics, inversion refers to various grammatical constructions in which two elements of a sentence reverse their standard, or canonical, order. English demonstrates multiple types of subject–verb inversion, including locative, directive, copular, and quotative inversion. Among these, the most frequently observed is subject–auxiliary inversion, where the auxiliary verb precedes the subject. This structure commonly appears in interrogative sentences (e.g., *Are you coming?*), where the auxiliary *are* precedes the subject *you*. In contrast, languages with more flexible word order than English may apply inversion not only to auxiliary verbs but also to main verbs and a broader range of syntactic elements.

As a stylistic device, inversion is driven by semantic or expressive intent. Particularly in poetry, inversion is often used to satisfy rhythmic or metrical requirements, aligning with specific patterns of stress or rhyme. It forms part of a broader category of emphatic constructions, contrasting with what is traditionally labeled “normal” or unmarked word order. Despite being considered deviations from syntactic norms, emphatic constructions—such as inversion—are, in fact, quite prevalent and follow recognizable structural patterns, functioning as established expressive tools within the language.

The role of word order is central in syntactic organization across languages, and in English literary style, inversion is frequently employed to add logical emphasis or emotional nuance to a statement. This stylistic application of inversion is typically accompanied by distinctive intonation patterns, which reinforce the intended communicative effect. Moreover, inversion is closely tied to spoken language features and expressive syntax. Although some inverted sentence structures in Modern English are not always classified strictly as stylistic devices, they do serve important functions by allowing syntactic variation. This flexibility contributes to the expressiveness and mood of an utterance. The primary function of such constructions is often to emphasize particular elements or to supplement the core message with additional semantic weight. In literary syntax, inversion is not a breach of grammatical norms but rather a manifestation of the language’s expressive potential, governed by usage conventions. Common structural patterns of stylistic inversion in English include:

1. Placing the introductory element (placeholder) at the beginning of a sentence;
2. Positioning identifying elements after the subject;
3. Reordering noun phrases such that modifiers precede or follow in nonstandard patterns (e.g., placing descriptive elements before possessive nouns);
4. Situating possessives or complements in emphasized positions;

5. Beginning a sentence with objects or modifiers for heightened focus;
6. Using inversion across clauses to highlight contrast or continuity, especially in compound sentences where stress is placed at the beginning of subsequent clauses.

These configurations demonstrate the systematic use of inversion as a stylistic and functional element in English discourse.

In standard English grammar, word order plays a crucial role in determining syntactic relationships and meaning. Any alteration to this order typically influences both the grammatical structure and the overall semantic content of a sentence. However, certain forms of semantic inversion—rather than purely syntactic ones—are employed to achieve rhetorical or stylistic effects. For example, in the statement, “When a man wants to kill a tiger, he calls it sport ; when a tiger wants to kill a man, it is ferocity,” the inversion highlights irony and contrast without structurally violating grammatical norms.

On the other hand, syntactic inversion involves reordering elements to shift grammatical meaning, as in the sentence “Had I known it ?”, which, through inversion, becomes interrogative. This grammatical transformation illustrates how inversion functions both structurally and expressively.

In poetic language, inversion is widely used to intensify the emotional or aesthetic impact of a line. For instance, “Bliss was it in that dawn to be alive” employs inversion to emphasize emotional response. Similarly, inversion may contribute to perceptions of swiftness, intensity, or action, particularly in narrative or dramatic contexts. This is often achieved by isolating secondary sentence elements through punctuation or intonation, thereby temporarily separating them from their primary syntactic relationships. These detached constructions—marked by commas or prosodic pauses—can create tension between structural syntax and semantic focus, resulting in heightened expressive effect.

Moreover, individual syntactic patterns may become stylistic devices through repeated use in spoken or literary discourse. One notable example is parallelism, where structurally similar sentence patterns are used consecutively. When a sentence is mirrored in form and content by another, it is referred to as full parallelism—as in “Frederick could open his mouth but could not speak. And Edna could open her mouth but could not speak.” This repetition of both structure and meaning reinforces emphasis and cohesion.

In contrast, partial parallelism involves the repetition of only specific components of a sentence. For example : “If she wanted anything, somebody was always on the spot to supply it or soothe her without supplying it. If she got into trouble, somebody was

always there to get her out of it.” Such repetition strengthens the narrative rhythm and highlights key ideas.

In literary discourse, parallelism serves a dual role : it contributes to artistic expression and supports the emotional and rhythmic structure of language. Its consistent patterning aids in emphasizing contrasts and reinforcing thematic elements. This device is particularly prevalent in oral traditions, such as folk songs and epics, where its rhythmic regularity enhances memorability and impact—e.g.,

Work while you work,

Play while you play,

That’s the way

To be happy and gay !

Similarly, repetition functions as a stylistic tool to convey emotional intensity, underline key concepts, or express psychological states. In emotionally charged speech, repetition tends to be direct and urgent, often reflecting the speaker’s inner turmoil or distress. For example : “Where is my child ? But where is my child ? I want to know where my child is ?” In this case, repetition is less stylistic and more indicative of emotional immediacy. However, when used deliberately in literature, repetition can serve to capture the reader’s attention, enhance cohesion, or underscore significant themes.

Used Literature

1. Chung 2002 – Chung Ch. Mixed Functional Properties in English Stylistic Inversion. Dongseo University, 2002. – <http://cslipublications.stanford.edu/HPSG/>
2. Chung-inv1-pn.pdf 7. Culicover P.W., Levine R.D. Natural Language & Linguistic Theory. Kluwer Academic Publishers, 2001.
3. Boboxonova L.T. English Stylistics Tashkent: O.,qituvchi, 1995. –110 p.
4. William W. The French Revolution. –Washington, 1807. –496 p.
5. The Book of Nursery Rhymes 1925. -165 p.
6. Jonathan C. Oxford Advanced Learner`s Dictionary.-Oxford University press, 1995. - pp. 106

SYTLISTIC PROBLEMS OF TRANSLATION

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Annotation. This study examines the stylistic challenges encountered in translation processes, focusing on the complex interplay between linguistic structures and cultural nuances. The study analyzes how translators manage stylistic elements, including tone, register, imagery, and rhetorical devices, in transferring meaning between languages. Exploring both theoretical foundations and practical applications, this study identifies key stylistic challenges that arise in the translation process, including the preservation of cultural references and genre-specific language patterns.

Аннотация. В этом исследовании рассматриваются стилистические проблемы, возникающие в процессе перевода, с упором на сложное взаимодействие языковых структур и культурных нюансов. В исследовании анализируется, как переводчики управляют стилистическими элементами, включая тон, регистр, образность и риторические приемы, при передаче смысла между языками. Изучая как теоретические основы, так и практические приложения, в этом исследовании определяются ключевые стилистические проблемы, возникающие в процессе перевода, включая сохранение культурных ссылок и жанрово-специфических языковых моделей.

Keywords: Translation studies, stylistic equivalence, cultural adaptation, register, rhetorical devices, linguistic transformation, literary translation, cross-cultural communication, textual analysis, functional equivalence.

Ключевые слова: Переводоведение, стилистическая эквивалентность, культурная адаптация, регистр, риторические приемы, языковая трансформация, литературный перевод, межкультурная коммуникация, текстовый анализ, функциональная эквивалентность.

Translation is crucial not only for education but also for sharing cultural mentality, customs, and traditions between nations. It helps us compare and understand different cultures, which is essential when learning foreign languages to properly comprehend texts. When working with foreign language materials, translators, writers, and readers face challenges in capturing true meaning because texts can be interpreted differently.

Quality translation isn't a simple direct conversion between languages; translators must employ various methods to preserve meaning. Essentially, translation is a process of transforming source text into target text. Unlike other text processing activities like commenting or summarizing, translation establishes equivalence between texts in different languages.

Wolfram Wilss, a German translator, defined translation as "a text-processing and re-verbalization process creating an equivalent target text, requiring understanding of the original's content and style." Translation involves two phases: comprehension (analyzing source text meaning and style) and linguistic reconstruction (reproducing content with communicative equivalence).

Cultural elements should be preserved but used judiciously. Translators need awareness of both linguistic and non-linguistic aspects, maintaining cultural features of words and expressions during translation.

This topic is relatively unexplored by scholars, particularly regarding Uzbek-English translation challenges. Such research helps readers understand cultural nuances and national character. It enables translation of culturally valuable works, showcasing Uzbekistan's literary heritage globally while strengthening "Anthropocentrism" in linguistics [1;23].

Translation methods include word-for-word, literal, faithful, semantic, adaptive, free, idiomatic, and communicative approaches. Translation has historically been a cross-linguistic and cross-cultural communication tool, with new trends emerging, including ideological considerations in translation studies.

Translation challenges can be categorized into stylistic, linguistic, and cultural issues. Stylistic problems primarily include lexico-stylistic, grammatical-stylistic, and genre-specific challenges. Linguistic problems encompass grammatical differences and lexical/meaning ambiguities, while cultural problems involve situational differences. This aligns with El Zeini's identification of six main translation challenges between Arabic and English: pragmatic factors, textual differences, rhetorical variations, morphology, syntax, and vocabulary [2;54].

Untranslatability presents additional complexity in translation work. Cultural aspects are particularly challenging, as inadequately translated literature can cause misunderstandings about the source culture. Zidan questioned whether target culture content might influence EFL education goals, while Fonti noted that poor translations distort the original's tone and cultural references. Hassan emphasized the importance of translating irony within the original language context to properly convey cultural elements.

Transferring stylistic units is a core translation responsibility requiring special attention. A language's stylistic devices fall into four categories:

1. Lexical devices (epithet, metaphor, metonymy, irony, etc.)
2. Syntactical devices (repetition, parallelism, rhetorical questions, etc.)
3. Lexico-syntactical devices (represented speech, antithesis, simile, etc.)
4. Phonetical devices (rhyme, alliteration, rhythm, etc.)

Translating these stylistic elements requires addressing certain normative standards:

1. Semantic correspondence - ensuring the translation reflects the original's true meaning
2. Literacy - consistency with general language rules and absence of errors
3. Lexical and stylistic consistency - correct selection of equivalents and maintaining perception style.

Technical translations typically feature precise phrasing, neutral language, simple sentences, and impersonality. Effective speech requires mastery of stylistic resources and knowledge of stylistic norms. The translation process connects meaning with emotional color, requiring preservation of both sense and expressive-stylistic features of the original. Translators face challenges when using expressive means to maintain emotional impact, especially when source texts belong to specific speech styles. Rather than directly copying stylistic devices, the task is to convey the text's emotional background. This requires creative approaches and skill in evaluating and comparing stylistic device functions between languages [3;54].

Several additional considerations should be considered when addressing stylistic issues in translation. Pragmatic equivalence—ensuring that the translated text has the same effect on the audience as the original—is essential to maintaining stylistic integrity. This involves recognizing speech marks, patterns of harmony, and implication that may operate differently across languages. Register shifts pose another important challenge. Translators must identify and appropriately represent formal, informal, technical, poetic, or colloquial language styles. The level of formality often has cultural implications that require careful adaptation rather than literal translation. Idioms, proverbs, and fixed expressions pose particular challenges because they often contain cultural meanings in addition to their literal meanings. Translators must decide whether to find target language equivalents, express meaning, or sometimes preserve the original expression with explanation.

Wordplay and sound-based stylistic devices (such as alliteration, assonance, and onomatopoeia) often resist direct translation. These elements may require creative compensation strategies, in which stylistic devices are inserted elsewhere in the text

when they cannot be preserved in their original form. Intertextuality references to other texts within a culture - represents another stylistic problem. Culturally specific allusions, quotations, or references may be meaningless to the target audience without appropriate adaptation or explanation [4;12].

The translator's perspective also influences stylistic choices. Some translation theories promote transparency (reading the translation as if it were written in one's own language), while others value foreignization (preserving elements of the source language culture). This basic decision shapes a common stylistic approach.

Different types of texts require different stylistic approaches. While literary translation prioritizes aesthetic qualities and emotional impact, technical translation emphasizes precision and clarity. Legal translation requires formal equivalence and terminological consistency, while advertising translation aims to achieve similar persuasive effects rather than literal translation.

Modern digital tools have transformed stylistic translation practices. Translation using translation memory systems, corpus analysis, and artificial intelligence offer new possibilities, but they also pose challenges in preserving stylistic nuances that automated systems cannot fully capture. Ultimately, solving stylistic translation problems requires a balance between faithfulness to the source text and adaptation to the rules of the target language - a dynamic process that requires technical knowledge and creative intuition from the translator

REFERENCES

1. Barber Ch. Linguistic change in Present-day English. London, 1994. p. 49-50.
2. Kurath H. A Phonology and Prosody of Modern English. Ann Arbor. The Univ. Of Michigan Press, 1993, p. 18.
3. Akhmanova, O. S., Zadornova, V. Ya. Theory and practice of translation in the light of the doctrine of functional styles of speech. // Linguistic problems of translation. - M., 1981. - C. 3-12
4. Boldyreva, L. V. Social and historical vertical context and the problem of understanding a literary and artistic text. D. ... Candidate of Philological Sciences. - M., 1991. - 133 л. Selemeneva L. V. Allusive aspect of the literary text as an object of pragmalinguistic and linguopoetic research (on the material of English and American literature). D. ... Ph. - M., 2000. - 257 c.
5. Flyagina, Y. V. Literary continuation as a subject of linguopoetic research. Dissertation. Candidate of Philological sciences. - M., 2000. - 178 c.

Development of Students' Independent Thinking Skills

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Education is a process aimed at educating a person in the spirit of universal and national values, as well as comprehensively developing a person and bringing them to perfection.

Thinking is considered a specific product of this process. History and even accumulated experience give us many examples that every person thinks in their own way. Thinking is a product of human consciousness that is expressed in relation to the environment, phenomena in reality, objects and people. Every person has their own way of thinking, their usual way of thinking to evaluate something. And this situation is not only characteristic of a number of people, but is also characteristic of entire peoples, states, and all stages. In every circle of people, in every era, there have been people who think differently from others and look at existence with different eyes. Non-standard thinking forms the basis of almost all discoveries, scientific innovations, and creations. They have always been the reason for the birth of ideas that lead humanity to progress.

The main content and specific features of students' independent thinking process can be seen in the following: in the process of completing a task, the student is freed from the teacher's help and remains face to face with a problem that is difficult to overcome. While completing such a task, the student must test his strength, find solutions and bring it to the end, relying on his knowledge, skills, personal observation and thinking. Only if the given task does not correspond to the student's level of preparation, the teacher can intervene and provide direct assistance in completing the task. Therefore, the given tasks should take into account the student's level of preparation. In this case, the teacher takes measures to eliminate certain difficulties. When we look at the practical results of the mentioned works, we see that there are a number of problems in front of us.

Current problems in developing students' independent thinking skills:

- Insufficiency of the network of institutions providing services aimed at providing

education and bringing to perfection, low efficiency of such types of services;

- Insufficiency of qualified, experienced teachers;
- Insufficiency of effective teaching methods, techniques, forms and means;
- Lack of cooperation between parents, community activists and subject teachers at the required level;

The above are considered as pedagogical problems in developing students' independent thinking skills, and their solutions serve to improve the quality of the educational process. A person who has his own opinion, his own analysis, and his own thought serves progress. Identifying the initial thoughts that arise in the student, developing them and bringing them to the form of an idea, controlling and completing this process is related to the teacher's activity.

Thinking (tafakkur) is considered the highest form of human intellectual activity, intelligence, communication process and conscious behavior. Independent thinking is a tool for knowing the environment, social environment and reality, as well as the main condition for carrying out human activity intelligently, reasonably and effectively. In the process of independent thinking, thoughts, considerations, ideas, assumptions, goals arise in a person, and they are expressed in the form of concepts, judgments, and conclusions in the mind. Independent thinking is closely related to language and speech and manifests itself in them, and they continuously demand each other. It is for this reason that a person stands out fundamentally from other beings by his independent thinking (communication), speech and conscious behavior.

In his independent thinking activity, a person determines the correctness, accuracy, truth, fairness or adequate understanding of the things and events he reflects, feels, perceives, imagines and remembers. He determines how accurate the judgments, concepts, conclusions, assumptions (guesses) and decisions made in the process of knowing existence are. Through independent thinking, a person generalizes reality, reflects it directly and indirectly, and understands the internal, complex connections, relationships, properties, characteristics and mechanisms between objects and events. Therefore, a person has the opportunity to foresee the emergence, course, development and consequences of natural and social phenomena and events based on certain laws, regularities and rules. Nowadays, the importance of independent thinking in organizing a person's cognitive and practical activities intelligently, fairly and effectively is increasing. In particular, it is also important for the student to understand the compatibility of theory and practice. However, based on practical analysis, we can

present the problems of how important this situation is in the socio-humanitarian educational process.

Problems in developing students' independent thinking skills in the socio-humanitarian educational process:

- Insufficient interest of students in academic subjects;
 - Failure to convey the connection between past, present and future to students at the required level;
 - Lack of formation of students' independent views on events and phenomena, in general on the topic;
 - Insufficiency of measures to develop students' thoughts and creative abilities;
- In this process, the student's thinking skill is turned into a qualification.

Usually, thinking is divided into several types according to the degree of generalization of reality, the nature of the means of solving the problem, the novelty of the object for the subject, and the indicator of the person's activity. When independent thinking is considered as a mental activity, solving problems and tasks by a person is considered, their conditions, essence, structure, forms and the person's ability to understand are observed. Solving a problem, problem, task (solving, performing) is considered in connection with the person's needs, interests, desires, behavior, abilities, talents, and competence, accepting their requirements, making a certain decision, and searching for means form a solid basis for independent thinking. Human recognition by a human, that is, determining the mental state of an unfamiliar person, guessing, collecting the most necessary signs and characteristics is also a product of independent thinking. This complex multi-stage cognitive process requires a person to exert willpower, intellectual seriousness, conscious attitude, stable situation, and favorable conditions, as a result of which a certain decision is made and a certain conclusion is reached.

References

1. Vygotsky L.S. Selected psychological studies: Thinking and speech. Problems of psychological development of the child / under. ed. L.N.Leontiev. –M: Uchpedgiz, 1956. –519 p.
2. Frankl V. Man in search of meaning. – M: Progress, 1990. – 336 p.
3. Ghaziev E. Psychology of thinking. – T.: Fan, 1990. – 146 p.
4. K.Khashimov, S.Nishanova, M.Inomova and others. History of pedagogy: (Textbook for students of higher educational institutions and universities) – T.: Teacher, 1996. –488 p.

ORTHOGRAPHIC AND ORTHOEPIC TYPES OF SYLLABLES

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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.

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

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.

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

The knowledge of the structure and functioning of a writing system includes the knowledge of the principles of orthography upon which it is built. English is notorious for the irregularities of its spelling and the heterogenous nature of its orthography, due to the variety of principles underlying it. This makes mastery of English spelling extremely difficult not only for foreign learners, but also for native speakers of the language. All the principles of orthography are represented in English spelling, except the so-called phonetic principle. According to some definitions this principle consists in "spelling words in the same way in which they are pronounced" or in "exactly representing the pronunciation of words in their spelling"[1.65].

From a phonological point of view such definitions of the "phonetic principle of orthography" are incorrect because no orthography is capable of representing the actual pronunciation of even a few words of the language, let alone that of all of them, i.e. all the positional and combinatory variants of its phonemes. Discussion In connection with the types of syllables from the viewpoint of syllable division it is necessary to emphasize that phonetic syllables, i.e. those which are distinguished in the actual pronunciation of words, must not be confused with orthographic "syllables", i.e. those into which words are divided in writing and print or for the application of the so-called reading rules. Syllables of one type need not coincide with those of the other.

Syllables are fundamental units of speech and writing. In both spoken and written communication, syllables guide rhythm, stress, and meaning. However, the way syllables appear in writing (orthographic syllables) may differ from how they are pronounced (orthoepic syllables). This

discrepancy is particularly noticeable in the English language due to its complex spelling conventions and irregularities.

This paper aims to clarify the difference between orthographic and orthoepic syllables, analyze their types and characteristics, and evaluate their significance in linguistics, literacy development, and education. Syllables are fundamental units of speech and writing. In both spoken and written communication, syllables guide rhythm, stress, and meaning. However, the way syllables appear in writing (orthographic syllables) may differ from how they are pronounced (orthoepic syllables). This discrepancy is particularly noticeable in the English language due to its complex spelling conventions and irregularities.

This paper aims to clarify the difference between orthographic and orthoepic syllables, analyze their types and characteristics, and evaluate their significance in linguistics, literacy development, and education.

But phonetically, it is a single closed syllable: /neim/. In this connection it should be borne in mind that all orthographies represent the phonemes of the language and not their particular allophones, although some of the latter are represented by special letters in some languages (for instance, the Russian letter *ы* for the vowel sound [ы] if the latter is considered a variant of the /и/-phoneme).

Therefore the main principle underlying all orthographies is the phonemic principle in the above broad sense. Since letters represent mainly phonemes and not their particular allophones, it is impossible to avoid regarding relationships between letters and speech sounds as those between letters and phonemes rather than as those between letters and particular allophones of phonemes. But in order to do that, it is necessary to have an orthographic unit with which the phoneme could be correlated. In modern linguistics such a unit has come to be known as the grapheme. A grapheme correlated with a phoneme or a sequence of phonemes, i.e. a grapheme with a phonemic reference, is a letter or letter combination representing this phoneme or sequence of phonemes in writing.

A grapheme is indicated by the symbol of the phoneme or sequence of phonemes represented by it included in <>, e.g. <k> —the grapheme of the /k/-phoneme. All the graphemes of a language form its graphemic system, which is sometimes called graphemics. From a functional point of view the grapheme is similar to the phoneme; like the phoneme, it has two specific functions: (1) constitutive, since the written form of any word consists of graphemes, and (2) distinctive, since the written form of one word may be distinguished from that of another by different graphemes. The distinctive function of graphemes may be performed by them in two ways: (1) directly, i.e. because the opposed sounds represent different phonemes and, therefore, the graphemes denoting those phonemes are also different, e.g. map —nap, man—men, etc.; and (2) indirectly, when graphemes differentiate from each other two homophones, e.g. in —inn, see —sea. Since this principle consists in the representation of one phoneme or sequence of phonemes by only one grapheme it would be more exact to call it the monographemic principle of orthography.

Monographemic orthographies are extremely rare. The overwhelming majority of the existing orthographies are polygraphemic ones, i.e. those in which one and the same phoneme or sequence of phonemes is represented by more than one grapheme [2.56].

English has only two phonemes which are represented by one grapheme each, but even these are not separate ones, but both represent the twophonemes. Each of all the other RP phonemes is represented by more than one grapheme considering as such doubled letters and combinations of single letters

with silent letters because such graphemes often distinguish one homophone from another in writing, or serve as a kind of diacritic mark indicating the phonemic reference of the preceding grapheme (cf. tense /tens/ —tens /tenz/, tatter /'lætə/ —later /leitə/. Thus, the monographemic principle is actually not realized at all in English orthography and the latter may be characterized as a polygraphemic one. Graphemes, like phonemes, have a morphophonological aspect which is due to the fact that graphemes represent in spelling mainly morphemes and not their particular allomorphs (different phonic realizations) in the same way as they represent mainly phonemes and not their particular allophones. The auditory image of a syllable can be shown in transcription: unknown /'ʌn-'nəʊn/, liner /'lai —nə/, maker /'mei —kə/ Parts of orthographic and orthoepic syllables do not always coincide.[3.106].

It is very important to observe correct syllable division when necessity arises to divide a word in writing. Division of words into syllables in writing (syllabographs) is based on morphological principles. The morphological principle of word division in orthography demands that the part of a word, which is separated, should be either a prefix, or a suffix, or a root (morphograph): un-divided, utter-ance, pun-ish, be-fore, limit-ed, smil-ing. However, if there are two or three consonants before -ing, these consonants may be separated in writing, e.g. gras-ping, puz-zling. The suffix -ed can be separated in writing only if it is preceded by t, d, e.g. divid-ed. Polygraphs are not separated in writing, e.g. dial, ancient, patience, thoroughly. Two or more consonants before a suffix that begins with a vowel may be separated in writing, e.g. gras-ping, trick-ling, big-ger.[1.87].

No orthography is capable of representing exactly the pronunciation of the language. But a precise representation of pronunciation is indispensable for various purposes (learning the pronunciation of unfamiliar words of one's mothertongue, in linguistic work and in learning foreign languages).

REFERENCES

1. Абдуазизов А. А. Ўзбек тили фонологияси ва морфонологияси. “Ўқитувчи”, -Т., 1995.
2. Rogers, W.E. (2000): “English Phonemes”.
3. Абдуазизов А.А. Системавий фонологиянинг баъзи масалалари // ЎзМУ хабарлари, 2001, No3.
4. O'Connor J.D. Phonetics –penguin, 20115. Leitner G. The Consolidation of “Educated Southern English” as a Model in the Early 20th Century // IRAL. Vol.20. –2012. –P. 94-95.
5. Jonathan C. Oxford Advanced Learner's Dictionary.-Oxford University press, 1995. - pp. 106

THE LANGUAGE LEARNING TASK: TASK-BASED LEARNING, CONTENT-BASED LEARNING, AND PROJECT-BASED LEARNING

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Abstract: This paper investigates three foundational methodologies that have gained prominence in the field of contemporary language education: Task-Based Learning (TBL), Content-Based Learning (CBL), and Project-Based Learning (PBL). These learner-centered approaches foreground authentic communication, foster learner autonomy, and promote experiential learning as central to language acquisition. Drawing on relevant theoretical frameworks, this study critically examines the pedagogical rationales, educational advantages, and potential limitations associated with each model. Furthermore, it offers a comparative analysis that highlights their complementary features. In doing so, the article advocates for a cohesive and integrative instructional model that leverages the strengths of each approach to enhance linguistic competence and pedagogical effectiveness in diverse educational settings.

Keywords: Task-Based Learning, Content-Based Learning, Project-Based Learning, Language Development, Innovative Pedagogy, Teaching Methodologies

In recent years, language education has witnessed a notable paradigm shift away from conventional methodologies such as grammar-translation and rote memorization, moving instead toward more dynamic, learner-centered instructional models. Prominent among these contemporary frameworks are Task-Based Learning (TBL), Content-Based Learning (CBL), and Project-Based Learning (PBL), each of which emphasizes communicative competence, active learner participation, and real-world applicability.

Task-Based Learning (TBL) is firmly rooted in the communicative language teaching tradition. It prioritizes the deployment of authentic language through the completion of meaningful tasks that closely mirror real-life communicative scenarios. Rather than serving as ancillary exercises, tasks in TBL constitute the core organizational unit of curriculum design and instructional practice. As Ellis (2003) defines it, a task involves a "workwork" that requires learners to process language pragmatically in order to achieve an outcome." Common task types in TBL include simulations such as role-plays and collaborative problem-solving activities.

Conversely, Content-Based Learning (CBL) integrates language acquisition with the study of disciplinary subject matter. Emerging primarily from immersion and bilingual education contexts, CBL is predicated on the notion that language learning is more effective when embedded in intellectually stimulating and contextually rich content areas such as science, history, or geography. A central pedagogical strength of CBL lies in its dual-focus approach, enabling learners to develop both subject-specific knowledge and linguistic competence concurrently.

Project-Based Learning (PBL) represents another innovative pedagogical model that situates language learning within the context of sustained, collaborative inquiry. Rooted in constructivist

learning theory, PBL involves students in designing and executing complex projects that culminate in a tangible product or presentation. These projects typically integrate multiple language skills—reading, writing, speaking, and listening—within meaningful and purposeful contexts. Through PBL, learners assume greater responsibility for their learning process, engage in critical thinking, and apply linguistic knowledge to solve real-world problems. The extended time frame and interdisciplinary nature of project work foster deeper cognitive and linguistic engagement, making PBL particularly effective in promoting both academic and communicative language proficiency. Collectively, TBL, CBL, and PBL reflect a shared commitment to active, experiential learning and the use of language as a tool for authentic communication. While each approach maintains distinct theoretical orientations and instructional strategies, their convergence around learner autonomy and context-rich interaction provides a compelling case for integrative application in contemporary language pedagogy.

Although TBL, CBL, and PBL are founded on different theoretical premises and instructional designs, they are not inherently incompatible. On the contrary, their integration can enrich the language learning experience by combining the strengths of each model. A strategically structured curriculum might begin with Task-Based Learning to establish foundational communicative abilities, progress through Content-Based Learning units to develop conceptual depth, and culminate in a Project-Based Learning component that synthesizes both language skills and subject knowledge. This layered approach is consistent with constructivist educational theory, which emphasizes active knowledge construction and contextualized learning. Effective implementation of these pedagogies, however, demands thoughtful curricular planning, specialized teacher preparation, and robust assessment frameworks. Instructors must craft tasks and projects that are simultaneously accessible in terms of language proficiency and challenging in terms of cognitive engagement. Additionally, continuous scaffolding and formative feedback are essential to support learners throughout the instructional process.

In addition, assessment strategies must be closely aligned with the pedagogical objectives of each instructional approach, evaluating not only linguistic accuracy but also communicative effectiveness, collaborative engagement, and task completion. Comprehensive assessment should reflect the multifaceted nature of language use in real-world contexts. A foundational theoretical principle common to TBL, CBL, and PBL is Vygotsky's concept of the Zone of Proximal Development (ZPD), which underscores the role of social interaction and scaffolding in cognitive and linguistic development. Within language education, this suggests that learners are most likely to advance when engaging with tasks that slightly exceed their current proficiency, provided they receive appropriate support from teachers or peers. Such scaffolding may include teacher modeling, guided practice, or peer collaboration, all designed to bridge the gap between what learners can do independently and what they can achieve with assistance.

Moreover, task-based pedagogies have been found to foster intrinsic motivation, a key determinant of successful language acquisition. When learning activities are perceived as purposeful and personally relevant, students are more likely to participate actively and sustain their efforts. For instance, a learner with an interest in environmental advocacy may show heightened engagement in a PBL project focused on climate change, as opposed to completing decontextualized grammar exercises.

Technological integration further enhances the effectiveness of TBL, CBL, and PBL. Digital tools—including collaborative platforms, online research resources, multimedia production software, and language learning applications—can significantly augment the experiential quality of these methods. In a PBL setting, for example, learners might develop a podcast or produce a digital narrative, employing the target language throughout the planning, scripting, and presentation stages.

Despite their pedagogical promise, the implementation of these methodologies is not without obstacles. In contexts where traditional, teacher-centered instruction is deeply rooted, educators may face resistance or lack the training necessary to facilitate more autonomous, learner-driven activities. Institutional limitations such as rigid curricula, time constraints, and large class sizes can also impede the adoption of task-based instruction.

Empirical studies have consistently affirmed the positive impact of TBL, CBL, and PBL on language learning outcomes. These approaches have been associated with improved vocabulary acquisition, greater retention of grammatical structures, enhanced fluency, and increased communicative confidence. Learners exposed to task-based environments often demonstrate a higher willingness to engage in authentic language use and take communicative risks.

Ultimately, the effectiveness of these pedagogies relies heavily on the teacher's capacity to cultivate a supportive and intellectually enriching classroom environment. Educators must adopt multifaceted roles as facilitators, mentors, and co-learners rather than mere transmitters of knowledge. Furthermore, a culturally responsive approach is essential—one that recognizes and incorporates learners' diverse identities, interests, and learning preferences. When thoughtfully implemented, these methodologies hold substantial potential for advancing both language proficiency and holistic learner development.

REFERENCES

1. Ellis, R. (2003). Task-based language learning and teaching. Oxford: Oxford University Press.
2. Larsen-Freeman, D., & Anderson, M. (2011). Techniques and principles in language teaching. Oxford University Press.
3. Richards, J. C., & Rodgers, T. S. (2014). Approaches and methods in language teaching. Cambridge University Press.
4. Beckett, G. H., & Miller, P. C. (2006). Project-based second and foreign language education. Information Age Publishing.
5. Stoller, F. L. (2004). Content-based instruction: Perspectives on curriculum planning. *Annual Review of Applied Linguistics*, 24, 261-283.
6. Thomas, J. W. (2000). A Review of Research on Project-Based Learning. The Autodesk Foundation.

THE LANGUAGE LEARNING TASK: TASK-BASED LEARNING, CONTENT-BASED LEARNING, AND PROJECT-BASED LEARNING

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Abstract: This paper investigates three foundational methodologies that have gained prominence in contemporary language education: Task-Based Learning (TBL), Content-Based Learning (CBL), and Project-Based Learning (PBL). These learner-centered approaches prioritize authentic communication, foster learner autonomy, and promote experiential learning as central to language acquisition. Drawing on relevant theoretical frameworks, this study critically examines the pedagogical rationales, educational advantages, and potential limitations associated with each model. Furthermore, it offers a comparative analysis that highlights their complementary features. Through this analysis, the paper advocates for a cohesive and integrative instructional model that leverages the strengths of each approach to enhance linguistic competence and pedagogical effectiveness in diverse educational settings.

Keywords: Task-Based Learning, Content-Based Learning, Project-Based Learning, Language Development, Innovative Pedagogy, Teaching Methodologies

In recent decades, language education has experienced a significant paradigm shift from traditional grammar-translation and memorization methods toward more dynamic, learner-centered instructional models. Among these contemporary approaches, Task-Based Learning (TBL), Content-Based Learning (CBL), and Project-Based Learning (PBL) have gained particular prominence, all emphasizing communicative competence, active learner participation, and real-world application of knowledge.

Task-Based Learning is firmly rooted in the communicative language teaching tradition, focusing on simulating authentic communication scenarios through practical tasks. In TBL methodology, tasks serve not as supplementary exercises but as the core organizational unit of curriculum design and instructional practice. As Ellis (2003) defines it, a task involves a "workplan that requires learners to process language pragmatically in order to achieve an outcome." Common task types in TBL include role-play simulations and collaborative problem-solving activities.

The Task-Based Learning approach consists of the following stages:

1. Pre-task (Introduction to the task)
2. Task cycle (Task performance)
3. Language focus (Focus on form)

Among the advantages of the TBL approach are the application of language in real contexts, clear understanding of communicative purpose, and active participation of learners. This methodology allows for the development of language abilities through communicative situations, resulting in learners acquiring language as a means of communication rather than merely as a set of structures.

Content-Based Learning integrates language learning with content from subject areas such as science, history, or geography. Emerging primarily from immersion and bilingual education contexts, CBL is predicated on the notion that language learning is more effective when embedded in intellectually stimulating and contextually rich content areas. The key pedagogical strength of CBL lies in its dual-focus approach, enabling learners to develop both subject-specific knowledge and linguistic competence simultaneously.

Critical factors for CBL success include:

- Alignment of subject content with learners' proficiency levels
- Balance between language and content
- Use of authentic materials
- Teacher expertise in both language and subject content

This approach not only facilitates language acquisition in meaningful contexts but also provides opportunities for language use in academic and professional domains.

Project-Based Learning represents another innovative pedagogical model that situates language learning within the context of sustained, collaborative inquiry. Rooted in constructivist learning theory, PBL involves students in designing and executing complex projects that culminate in a tangible product or presentation. These projects typically integrate multiple language skills—reading, writing, speaking, and listening—within meaningful and purposeful contexts. Through PBL, learners assume greater responsibility for their learning process, engage in critical thinking, and apply linguistic knowledge to solve real-world problems.

Key characteristics of PBL include:

- Presence of a clear end product/outcome
- Prioritization of student choice and interest
- Extended duration that may span several weeks or months
- Interdisciplinary connections and integration
- Authentic assessment methods

The extended time frame and interdisciplinary nature of project work foster deeper cognitive and linguistic engagement, making PBL particularly effective in promoting both academic and communicative language proficiency.

Although TBL, CBL, and PBL are founded on different theoretical premises and instructional designs, they are not inherently incompatible. On the contrary, their integration can enrich the language learning experience by combining the strengths of each model. A strategically structured curriculum might begin with Task-Based Learning to establish foundational communicative abilities, progress through Content-Based Learning units to develop conceptual depth, and culminate in a Project-Based Learning component that synthesizes both language skills and subject knowledge.

This layered approach is consistent with constructivist educational theory, which emphasizes active knowledge construction and contextualized learning. Effective implementation of these pedagogies, however, demands thoughtful curricular planning, specialized teacher preparation, and robust assessment frameworks. Instructors must craft tasks and projects that are simultaneously accessible in terms of language proficiency and challenging in terms of cognitive engagement. Additionally, continuous scaffolding and formative feedback are essential to support learners throughout the instructional process.

Assessment strategies must be closely aligned with the pedagogical objectives of each instructional approach, evaluating not only linguistic accuracy but also communicative effectiveness, collaborative engagement, and task completion. Comprehensive assessment should reflect the multifaceted nature of language use in real-world contexts.

Effective assessment methods include:

- Portfolios
- Project presentations
- Self-assessment and peer assessment
- Observation and checklists
- Assessment through authentic tasks

Theoretical Foundations and Motivation

A foundational theoretical principle common to TBL, CBL, and PBL is Vygotsky's concept of the Zone of Proximal Development (ZPD), which underscores the role of social interaction and scaffolding in cognitive and linguistic development. Within language education, this suggests that learners are most likely to advance when engaging with tasks that slightly exceed their current proficiency, provided they receive appropriate support from teachers or peers. Such scaffolding may include teacher modeling, guided practice, or peer collaboration, all designed to bridge the gap between what learners can do independently and what they can achieve with assistance.

Moreover, task-based pedagogies have been found to foster intrinsic motivation, a key determinant of successful language acquisition. When learning activities are perceived as purposeful and personally relevant, students are more likely to participate actively and sustain their efforts. For instance, a learner with an interest in environmental advocacy may show heightened engagement in a PBL project focused on climate change, as opposed to completing decontextualized grammar exercises.

Technological integration further enhances the effectiveness of TBL, CBL, and PBL. Digital tools—including collaborative platforms, online research resources, multimedia production software, and language learning applications—can significantly augment the experiential quality of these methods. In a PBL setting, for example, learners might develop a podcast or produce a digital narrative, employing the target language throughout the planning, scripting, and presentation stages.

Despite their pedagogical promise, the implementation of these methodologies is not without obstacles. In contexts where traditional, teacher-centered instruction is deeply rooted, educators may face resistance or lack the training necessary to facilitate more autonomous, learner-driven activities. Institutional limitations such as rigid curricula, time constraints, and large class sizes can also impede the adoption of task-based instruction.

Approaches to overcoming these challenges include:

- Supporting teachers with specialized training
- Making curricula more flexible
- Developing a step-by-step integration plan
- Preparing and sharing resources
- Encouraging collaboration and experience sharing among peers

Empirical studies have consistently affirmed the positive impact of TBL, CBL, and PBL on language learning outcomes. These approaches have been associated with improved vocabulary acquisition,

greater retention of grammatical structures, enhanced fluency, and increased communicative confidence. Learners exposed to task-based environments often demonstrate a higher willingness to engage in authentic language use and take communicative risks.

Recent empirical research suggests that brain activity in learners using these methods is stronger and deeper compared to traditional language learning methods. For example, neurolinguistic studies in 2023 found that brain activity in language processing centers is significantly higher in Task-Based Learning environments.

CONCLUSION

Ultimately, the effectiveness of these pedagogies relies heavily on the teacher's capacity to cultivate a supportive and intellectually enriching classroom environment. Educators must adopt multifaceted roles as facilitators, mentors, and co-learners rather than mere transmitters of knowledge. Furthermore, a culturally responsive approach is essential—one that recognizes and incorporates learners' diverse identities, interests, and learning preferences. When thoughtfully implemented, these methodologies hold substantial potential for advancing both language proficiency and holistic learner development.

REFERENCES

1. Ellis, R. (2003). Task-based language learning and teaching. Oxford: Oxford University Press.
2. Larsen-Freeman, D., & Anderson, M. (2011). Techniques and principles in language teaching. Oxford University Press.
3. Richards, J. C., & Rodgers, T. S. (2014). Approaches and methods in language teaching. Cambridge University Press.
4. Beckett, G. H., & Miller, P. C. (2006). Project-based second and foreign language education. Information Age Publishing.
5. Stoller, F. L. (2004). Content-based instruction: Perspectives on curriculum planning. *Annual Review of Applied Linguistics*, 24, 261-283.
6. Thomas, J. W. (2000). A Review of Research on Project-Based Learning. The Autodesk Foundation.
7. Nunan, D. (2004). Task-Based Language Teaching. Cambridge University Press.
8. Bygate, M., Skehan, P., & Swain, M. (2001). Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing. Longman.
9. Lee, I. (2012). Project-based Language Learning: Students' Perceptions of Vocabulary Learning. *Journal of Asian TEFL*, 9(1), 105-129.
10. Mehisto, P., Marsh, D., & Frigols, M. J. (2008). Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education. Macmillan Education.
11. Coyle, D., Hood, P., & Marsh, D. (2010). CLIL: Content and Language Integrated Learning. Cambridge University Press.
12. Brown, H. D., & Lee, H. (2015). Teaching by Principles: An Interactive Approach to Language Pedagogy. Pearson Education.

HYPERTENSION HIGH BLOOD PRESSURE CLINIC

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Annotation: : Hypertension or high blood pressure is one of the most common diseases of the vascular system of the heart. this is a disease in which a stable increase in blood pressure is its main manifestation. Risk factors that increase the likelihood of its development have been identified by observing large groups of people. It is often referred to as a "silent killer" (silent killer) because in most cases it develops without any specific symptoms. If not controlled, it leads to serious complications such as heart attack, stroke, kidney failure. Blood pressure is caused by the movement of blood through the vessels. During the contraction of the heart, an increase in pressure (systolic indicator) occurs, and during the relaxation of the organ, a decrease in blood pressure (diastolic indicator) occurs. Hypertension is one of the most common diseases of the cardiovascular system. It can be an independent pathology or the result of diseases of the kidneys, adrenal glands and other organs. This article is about

Keywords: hypertension, thiazide diuretics, Sartans (angiotensin II receptor blocker), calcium antagonists, Beta-adrenoblocators, Alpha-adrenoreceptor blockers, AAF-inhibitors, intracranial pressure, kininase II, migraine, hypertensive retinopathy, Retina, glaucoma,

Annotatsiya: Gipertoniya yoki yuqori qon bosimi – yurak qon tomir tizimining eng ko'p uchraydigan kasalliklaridan biridir. bu qon bosimining barqaror o'sishi uning asosiy ko'rinishi bo'lgan kasallikdir. Uning rivojlanish ehtimolini oshiradigan xavf omillari odamlarning katta guruhlarini kuzatish orqali aniqlangan. U ko'pincha "jim o'ldiruvchi" (silent killer) deb ataladi, chunki ko'p hollarda hech qanday aniq alomatlarsiz rivojlanadi. Agar u nazorat qilinmasa, yurak xuruji, insult, buyrak yetishmovchiligi kabi jiddiy asoratlarga olib keladi. Qon bosimi qonning tomirlar orqali harakatlanishi natijasida yuzaga keladi. Yurakning qisqarishi paytida bosimning oshishi (sistolik ko'rsatkich) va organning bo'shashishi paytida qon bosimining pasayishi (diastolik ko'rsatkich) sodir bo'ladi. Gipertenziya yurak-qon tomir tizimining eng keng tarqalgan kasalliklaridan biridir. Bu mustaqil patologiya yoki buyraklar, buyrak usti bezlari va boshqa organlar kasalliklarining natijasi bo'lishi mumkin. Ushbu maqolada gipertoniyaning asosiy sabablari va ularni qanday tushunish haqida so'z yuritiladi.

Kalit so'zlar: Gipertoniya, Tiazid diuretiklar, Sartanlar (angiotenzin II retseptorlari blokatori), Kalsiy antagonistlari, Beta-adrenoblokatorlar, Alfa-adrenoretseptor blokatorlari, AAF-ingibitorlari, Intrakranial bosim, kininaza II, migren, Gipertenziv retinopatiya, Retina, glaukoma,

Систолическое давление — давление крови на стенку
артерии в момент сокращения
сердца



Диастолическое давление — давление крови на стенку
артерии в момент
расслабления сердца

Relevance of the topic: The World Health Organization (who) supports reducing hypertension as a health problem in countries. In 2021, who published a new guide to pharmacological treatment of hypertension in adults. The publication provides evidence-based recommendations for starting treatment for hypertension and recommended intervals for follow-up. The document also contains information about the target blood pressure that must be achieved to control and who can initiate treatment in the health system. Hypertension is a disease caused by impaired neuromuscular function of blood vessels. It occurs mainly in adults over the age of 40, but in recent years it has also been noted that it is often observed in young people. Both women and men suffer from hypertension the same way. If the disease is diagnosed in 20-30% of adults, then after the age of 65 this figure is 50-65% can reach. Increased blood pressure is one of the leading causes of death in patients with diseases of the cardiovascular system. According to many experts, hypertension often occurs as a result of circulatory disorders. Heart failure is also on the list of its causes. This disease can provoke the development of secondary diseases in patients, including stroke, heart attack.

Mavzuning dolzarbligi: Jahon sog'liqni saqlash tashkiloti (VOZ) mamlakatlarda gipertenziyani sog'liqni saqlash muammosi sifatida kamaytirishni qo'llab-quvvatlaydi. 2021 yilda JSST kattalardagi **gipertenziyani farmakologik davolash bo'yicha yangi qo'llanmani** e'lon qildi. Nashr gipertenziyani davolashni boshlash bo'yicha dalillarga asoslangan tavsiyalar va kuzatish uchun tavsiya etilgan intervallarni taqdim etadi. Hujjat, shuningdek, nazorat qilish uchun erishish kerak bo'lgan maqsadli qon bosimini va sog'liqni saqlash tizimida kim davolanishni boshlashi mumkinligi haqidagi ma'lumotlarni o'z ichiga oladi. Gipertoniya — qon tomirlarning nerv-funksional faoliyati buzilishi natijasida kelib chiqadigan kasallik. Asosan 40 yoshdan kattalarda uchraydi, lekin so'nggi

yillarda yoshlarda ham tez-tez kuzatilishi qayd qilinmoqda. Gipertoniya bilan ayollar ham, erkaklar ham bir xil aziyat chekishadi. Kasallik kattalarning 20-30 foizida tashxislansa, 65 yoshdan keyin bu ko'rsatkich 50-65% ni tashkil etishi mumkin. Qon bosimi oshishi yurak-tomir tizimi kasalliklari bo'lgan bemorlar ichida yetakchi o'lim sabablaridan biri hisoblanadi. Ko'plab mutaxassislarning fikricha, gipertoniya ko'pincha qon aylanishi buzilishlari natijasida sodir bo'ladi. Yurak yetishmovchiligi ham uning sababchilari ro'yxatiga kiradi. Mazkur kasallik bemorlarda ikkilamchi kasalliklar rivojlanishiga turtki bo'lishi mumkin, jumladan insult, yurak xurujiga.

The main part of the article. Spasm of blood vessels (compression) High blood pressure increases the pressure on the wall of the capillaries and arteries located in the brain. These vessels contract reflectively, causing migraines or severe pulsating headaches. B. Increased intracranial pressure leads to impaired fluid circulation (fluid flow) within the cranium when blood pressure is constantly high. This increases intracranial (internal cranial) pressure, causing pain especially in the area of the head's nape. C. Hypoxia of the brain Along with high blood pressure, the quality of cerebral circulation deteriorates. This leads to a state of oxygen deficiency (hypoxia), exacerbating the pain. 2. The causes of eye problems are hypertensive retinopathy. High pressure also affects small blood vessels located in the eye. This condition is called "hypertensive retinopathy". Blurred vision "flies" appear in front of the eyes darkening or narrowing of the range of vision medical mechanism: The capillaries that nourish the retina narrow when exposed to pressure. Prolonged pressure damages the capillary wall and creates bleeding (hemorrhoids) or swelling. Swelling of the optic nerve disables the optic nerve in the eye. Increased intraocular pressure the external arterial pressure increases the intraocular pressure (the risk of glaucoma). This puts pressure on the optic nerve and increases the risk of blindness. Clinical significance: headaches and eye problems in Hypertension patients can be a medical emergency. Prolonged hypertension leads to a constant deterioration in vision and a risk of stroke. Therefore, if such signs are detected, the patient is recommended for in-depth examinations such as fundoscopy (eyeball vision), MRI, retinal tomography. Blood vessels occur in one of two ways. Ischemic stroke is when blood clotting narrows or completely blocks blood vessels in the brain. Blocking prevents a part of the brain from getting enough oxygen prevents him from getting and he dies. Hemorrhagic stroke is a rupture of a blood vessel in the brain. This condition deprives the brain area of oxygen and can also cause pressure in the skull that damages brain tissue.

Asosiy Qisim. Qon tomirlarining spazmi (qisilishi)

Yuqori qon bosimi miyada joylashgan kapillyarlar va arteriyalarning devoriga bosimni oshiradi. Bu tomirlar reflektor tarzda qisilib, migren yoki kuchli pulsatsiyalovchi bosh og'rig'iga sabab bo'ladi. B. Intrakranial bosimning oshishi Qon bosimi doimiy yuqori bo'lganda, bosh miya ichidagi suyuqlik aylanishi (likvor oqimi) buziladi. Bu esa intrakranial (ichki bosh miya) bosimni oshirib, ayniqsa boshning ensa sohasida og'riq beradi. C. Miyaning gipoksiya holati. Qon bosimining yuqoriligi bilan birga miya qon aylanishining sifati yomonlashadi. Bu esa kislorod tanqisligi (gipoksiya) holatini keltirib chiqarib, og'riqni kuchaytiradi. 2. Ko'zdagi muammolar sabablari Gipertenziv retinopatiya. Yuqori bosim ko'zda joylashgan mayda qon tomirlarga ham ta'sir qiladi. Bu holat "gipertenziv retinopatiya" deb ataladi. Ko'rishning xiralashishi "Chivinchalar" ko'z oldida paydo bo'lishi Qorong'ilashtirish yoki ko'rish doirasining torayishi tibbiy mexanizm: Retinani oziqlantiruvchi kapillyarlar bosim ta'sirida torayadi. Uzoq davom etgan bosim kapillyar devorini shikastlaydi va qon ketishi (gemoramiya) yoki shish hosil bo'ladi. Optik nervning shishishi ko'zdagi ko'rish asabini

ishdan chiqaradi. Ko'z ichidagi bosimning oshishi Yuqori arterial bosim ko'z ichki bosimini (glaukoma xavfini) oshiradi. Bu esa ko'rish asabiga bosim o'tkazadi va ko'rlik xavfini oshiradi. Kliniki ahamiyati: Gipertoniya bemorlarida bosh og'rig'i va ko'zdagi muammolar tibbiy favqulodda vaziyat bo'lishi mumkin. Uzoq davom etgan gipertoniya ko'rishning doimiy yomonlashuviga va insult xavfiga olib keladi. Shuning uchun, bunday belgilar aniqlansa, bemorga funduskopiya (ko'z tubini ko'rish), MRT, retina tomografiyasi kabi chuqur tekshiruvlar tavsiya qilinadi. Qon tomirlari ikki usuldan birida sodir bo'ladi. Ishemik insult - qon ivishining miyadagi qon tomirlarini toraytirishi yoki butunlay to'sib qo'yishi. Bloklanish miyaning bir qismiga etarli miqdorda kislorod olishiga to'sqinlik qiladi va u o'ladi. Gemorragik insult - bu miyadagi qon tomirining yorilishi. Bu holat miya hududini kisloroddan mahrum qiladi va bosh suyagida miya to'qimalariga zarar etkazadigan bosimni ham keltirib chiqarishi mumkin.

Treatment. In the treatment of disability, a qualified physician prescribes a course of therapy with medications that are selected individually for each patient. In most cases, the following agents or a combination thereof are prescribed:

- angiotensin converting enzyme (ACE) inhibitors, such as ramipril
- calcium channel blockers such as amlodipine
- thiazide diuretics such as bendroflumetazid
- alpha-blockers, such as doxazosin
- beta-blockers - such as atenolol

Thiazide diuretics ?? these drugs lower blood pressure by reducing the amount of fluid in the body; Sartans (angiotensin II receptor blockers) ?? have been used since the 1990s. It's one of the modern drugs, and it's the only one that keeps my blood pressure in check for 24 hours after a single dose. Calcium antagonists block the flow of calcium into the sarcoplasm of smooth muscle, thereby inhibiting vasospasm, resulting in a hypotensive effect. It is prescribed when cardiac anomalies, arrhythmias, stenocardiomy and cerebral atherosclerosis are observed; Beta-blockers have an indirect hypotensive effect by reducing the number of heartbeat contractions (by reducing the amount of blood pumped per minute). Alpha-adrenoreceptor blockers are very gentle dilators of blood vessels. The AAF-inhibitor ?? vasodilator blocks the angiotensin converting enzyme (kinase II), which transforms bradykinin and converts angiotensin I to angiotensin II. The latter is a potent vasoconstrictor, and its inhibition leads to vasodilation and a drop in blood pressure. In secondary hypertension, treating the underlying disease also eliminates the risk of hypertension. The main symptom of the disease is a steady rise in blood pressure, which means that patients should avoid any stress or emotional distress during treatment. Proper nutrition is critical to the successful treatment of hypertension

Davolash. Kasallikni davolashda malakali shifokor har bir bemor uchun individual ravishda tanlanadigan dorilar bilan terapiya kursini belgilaydi. Ko'p hollarda quyidagi vositalar yoki ularning kombinatsiyasi buyuriladi:

- angiotensinga aylantiruvchi ferment (ACE) **inhibitörleri** - ramipril kabi
- **kaltsiy kanal blokerlari**- amlodipin kabi
- tiazidli diuretiklar - bendroflumetazid kabi
- alfa-blokerlar - doksazosin kabi
- **beta-blokerlar** - atenolol kabi

Tiazid diuretiklar — bu dorilar organizmda suyuqlik darajasini kamaytirish natijada qon bosimi pasaytiradi;

Sartanlar (angiotenzin II retseptorlari blokatori) — 1990-yillardan buyon ishlatiladi. Zamonaviy dorilar qatoriga kiradi, bir martalik qabuldan keyin 24 soat davomida qon bosimini me'yorda ushlaydi;

Kalsiy antagonistlari — qon tomilar silliq mushaklarining sarkoplazmiga kaltsiy oqimini bloklab, vazospazmga to'sqinlik qiladi va buning natijasida gipotenziv ta'sirga erishiladi. Yurak anomaliyalari, aritmiyalar, stenokardiya va miya aterosklerozi kuzatilganda tayinlanadi;

Beta-adrenoblokatorlar — yurak qisqarishlari sonini kamayitish natijasida bilvosita gipotenziv ta'sir ko'rsatadi (bir daqiqada haydaladigan qon miqdorini kamaytirish oqibatida);

Alfa-adrenoretseptor blokatorlari — qon tomirlarni juda ehtiyotkorlik bilan kengaytiradi.

AAF-ingibitorlari — vazodilatatori bradikininni transformatsiyalovchi va angiotenzin I ni angiotenzin II ga aylantiruvchi angiotenzin aylantiruvchi fermentni (kininaza II) bloklaydi. So'nggisi kuchli vazokonstriktor sanalib, uni ingibitsiyalash vazodilatatsiya va arterial bosimning pasayishiga olib keladi.

Ikkilamchi gipertoniya asosiy kasallikni davolash qon bosimi oshishini ham bartaraf etadi. Davolash paytida bemorlarga har qanday stress yoki hissiy zo'riqishdan yiroq bo'lish bu qon bosimining barqaror o'sishi uning asosiy ko'rinishi bo'lgan kasallikdir.. bo'ladi. Gipertoniya muvaffaqiyatli davolashda to'g'ri ovqatlanish muhim hisoblanadi.

Discussion and Results: Due to the many positive effects of modern medications, treatment of hypertension involves not only lowering blood pressure, but also protecting internal organs from the adverse effects of the processes that accompany high blood pressure. Persistently elevated blood pressure damages blood vessels throughout the body, including the brain, making them more prone to clogging and rupture. Blood vessels occur in one of two ways. An ischemic stroke is when blood clots narrow or completely block blood vessels in the brain. The blockage prevents a part of the brain from getting enough oxygen, and it dies. Hypertension is a serious condition that can increase the risk of heart, brain, kidney, and other diseases. It's the leading cause of premature death worldwide, with one in four men and one in five women -- more than a billion people -- suffering from it. To reduce these numbers, it is possible to prevent the disease through healthy eating, exercise, mental stability, and medical supervision. Everyone should have their blood pressure checked and their health monitored regularly. Because the early detection of hypertension is the prevention of serious complications.

Muhokamalar va natijalar: Zamonaviy dori-darmonlarning ko'p qirrali ijobiy ta'siri tufayli gipertenziyani davolash nafaqat qon bosimini pasaytirishni, balki ichki organlarni yuqori qon bosimi bilan birga keladigan jarayonlarning salbiy ta'siridan himoya qilishni ham o'z ichiga oladi. Doimiy ravishda ko'tarilgan qon bosimi butun tanadagi qon tomirlariga, shu jumladan miyaga zarar etkazadi va ularni tiqilib qolish va yorilishlarga ko'proq moyil qiladi. Qon tomirlari ikki usuldan birida sodir bo'ladi. Ishemik insult - qon ivishining miyadagi qon tomirlarini toraytirishi yoki butunlay to'sib qo'yishi. Bloklanish miyaning bir qismiga etarli miqdorda kislorod olishiga to'sqinlik qiladi va u o'ladi. Gipertenziya jiddiy kasallik bo'lib, yurak, miya, buyrak va boshqa kasalliklar xavfini oshirishi mumkin. Bu butun dunyo bo'ylab bevaqt o'limning asosiy sababi bo'lib, har 4 erkakdan 1 nafari va 5 ayoldan 1 nafari - milliarddan ortiq odamda bu kasallik mavjud. Bu sonlarni kamaytirish uchun

Sogʻlom ovqatlanish, harakat, ruhiy barqarorlik va tibbiy nazorat orqali ushbu kasallikning oldini olish mumkin. Har bir inson oʻz qon bosimini muntazam oʻlchab, sogʻligʻini nazorat qilib borishi zarur. Chunki gipertoniyani erta aniqlash – ogʻir asoratlarning oldini olishdir. aholi oʻrtasida sanitar oqartiruv ishlarini olib borilishi kerak.

Concluding The problem is that people start to think about preventing hypertension, mainly when it's already getting worse and the blood pressure is already elevated to this or that level. And it's not about prevention anymore; it's about treatment. Hypertension can have many causes, often related to lifestyle, but the main one is that the sympathetic nervous system affects a person very quickly. Alpha and beta blockers of the adrenoreceptors in the sympathetic nervous system act by constricting the blood vessel walls and increasing blood pressure. We use drugs that block the main adrenoreceptors in the sympathetic nervous system. It can be prevented by a healthy diet, exercise, mental stability, and medical supervision. Everyone should have their blood pressure checked and their health monitored regularly. Because detecting hypertension early is the best way to prevent serious complications

Xulosa. Muammo shundaki, odamlar gipertoniyaning oldini olish haqida o'ylashni boshlaydilar, asosan ular allaqachon yomonlashganda va qon bosimi allaqachon u yoki bu darajaga ko'tarilgan. Va bu endi profilaktika emas, balki davolash masalasidir. Gipertoniya ko'plab sabablarga ega bo'lib, ko'pincha turmush tarziga bog'liq bo'lib asosiy qismini simpatik nerv sistemasini insonga juda tez tasir ko'rsatadi. Simpatik nerv sistemasidagi alfa va beta adrenoretseptorlar blokatorlari tasir etadi qon tomirlar devorini toraytirib qon bosimini oshiradi. Shuning uchun simpatik nerv sistemasining asosiy blokatorlari dori vositalaridan foydalanmiz. Sogʻlom ovqatlanish, harakat, ruhiy barqarorlik va tibbiy nazorat orqali ushbu kasallikning oldini olish mumkin. Har bir inson oʻz qon bosimini muntazam oʻlchab, sogʻligʻini nazorat qilib borishi zarur. Chunki gipertoniyani erta aniqlash – ogʻir asoratlarning oldini olishdir.

FOYDALANILGAN ADABIYOTLAR:

1. Lewington S. va boshqalar. Oddiy qon bosimining qon tomir o'limiga yoshga bog'liqligi: 61 ta istiqbolli tadqiqotlarda bir million kattalar uchun individual ma'lumotlarning meta-tahlili. *Lanset*. 2002; 360: 1903-1913
2. Piepoli MF va boshqalar. Klinik amaliyotda yurak-qon tomir kasalliklarining oldini olish bo'yicha Evropa ko'rsatmalari: Klinik amaliyotda yurak-qon tomir kasalliklarining oldini olish bo'yicha Evropa kardiologiya jamiyati va boshqa jamiyatlarning oltinchi qo'shma ishchi guruhi. *Evropa Profilaktik Kardiologiya jurnali*. 2016; 23:1–96
3. Litvin A.Yu. va hammualliflar. Obstruktiv uyqu apne sindromi va arterial gipertenziya: ikki tomonlama munosabatlar. *Consilium Medicum*. 2015. 10: 34-39
4. Belovol A.N., Knyazkov I.I. Arterial gipertenziyaning ikkilamchi shakllarini diagnostikasi. *Xursandchilik siri*. 2014. No 7/8: 98-106
5. Rodionov A.V. Nosteroid yallig'lanishga qarshi dorilar va arterial gipertenziya: muammoning dolzarbligi va bemorni davolash taktikasi. *Davolovchi shifokor*. 2013. 2

6. Gogin E.E. Arterial gipertenziyaning asosiy (patogenetik) va simptomatik terapiyasini optimallashtirish vazifalari. Kardiologiya va yurak-qon tomir jarrohligi. 2009; 3:4-10

7. Barsukov A.V. va hammualliflar. Chap qorincha gipertrofiyasi va renin-angiotensin-aldosteron tizimi: AT1-angiotensin retseptorlari blokerlariga e'tibor bering. Tizimli gipertenziya. 2013. 1: 88-96

https://uz.wikipedia.org/wiki/Gipertoniya_kasalligi

<https://www.apollohospitals.com/uz/health-library/hypertension-causes-symptoms-and-treatment/>

<https://www.baptisthealth.com/blog/heart-care/healthy><https://www.who.int/news-room/fact-sheets/detail/~:text=Overview,get%20your%20blood%20pressure%20checked.-blood-pressure-by-age-and-gender-chart>

URGENT ISSUES TO BE ADDRESSED IN THE MUSCULAR SYSTEM

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Abstract The muscular system constitutes the main apparatus for movement in the human body. The condition and healthy functioning of this system directly affect the overall health of the organism. Today, pressing issues related to the muscular system, including muscle diseases, inflammation, dystrophies, and other pathologies, are raising significant concerns not only clinically but also in scientific research. This article examines the pathologies of the muscular system, their diagnostics, treatment methods, and modern scientific approaches. It provides information on new treatment methods for muscle diseases, including muscle dystrophy, myopathy, myositis, and geriatric diseases, with particular focus on the importance of gene therapy and cell therapy.

Keywords Muscular system Muscle diseases Duchenne muscular dystrophy Myositis Myopathy Muscle regeneration Gene therapy Cell therapy Physiotherapy Rehabilitation

INTRODUCTION

The muscular system is one of the most essential and complex systems in the human body. Its primary functions include facilitating movement, maintaining the shape of the body, regulating temperature, and ensuring coordination between organs. When muscles are in a healthy state, they operate at maximum efficiency; however, diseases and pathologies affecting the muscular system can disrupt their normal function. This article focuses particularly on pressing issues related to the muscular system. It discusses muscle diseases, inflammation, and the regeneration processes, modern approaches to treating muscular system pathologies, as well as innovative methods such as gene therapy and cell therapy.

Research on the early diagnosis and effective treatment of muscular system pathologies continues. Muscle diseases significantly impact individuals' quality of life, making scientific research in this area crucial. This article presents the main urgent issues related to the muscular system and the scientific approaches suggested to address them.

MAIN SECTION

4.1 General Structure and Functions of the Muscular System The muscular system is composed of skeletal muscles, which provide movement for the body. In addition to skeletal muscles, there are smooth muscles in internal organs and the heart muscle, each performing its specific functions. Skeletal muscles are the body's primary movement organs, performing several functions:

- **Movement:** As the main organs of movement, muscles move body parts relative to one another.
- **Thermoregulation:** Muscle activity generates heat, helping maintain the body's temperature.
- **Support for the skeleton:** Muscles attach to the skeleton and help maintain the body's shape.
- **Circulation and respiration:** Muscles enhance blood circulation and respiration during physical activity.

Muscles also produce energy and facilitate contraction of muscle fibers. The process of muscle contraction occurs with the help of connective elements called sarcomeres. Muscles primarily store energy in the form of adenosine triphosphate (ATP), which powers muscle contraction.

4.2 Muscle Diseases and Pathologies Various pathologies of the muscular system, including muscle dystrophy, myopathy, and myositis, can severely affect human health. Some of these diseases are genetic, while others develop due to environmental factors or inflammation.

- **Muscle Dystrophy:** Duchenne muscular dystrophy (DMD) is a genetic disease that leads to muscle weakness and eventual loss. The main symptoms include muscle strength reduction, imbalance, and often difficulty breathing. DMD primarily affects males, and research into its prevalence and treatment methods remains ongoing.
- **Myositis:** A condition characterized by muscle inflammation, causing pain, swelling, and weakness. Polymyositis and dermatomyositis are the two main types. The causes of myositis can be difficult to pinpoint but are sometimes linked to autoimmune disorders.
- **Myopathy:** Myopathy refers to a pathology related to the weakening and alteration of muscle fibers. It can develop due to various causes, including genetic mutations, infections, or environmental influences. New drugs and treatments are being rapidly developed to counter this pathology.

4.3 Muscle Regeneration and Recovery Muscle regeneration refers to the process by which muscle fibers repair and return to normal function. This process naturally occurs but, in some cases, muscles may not fully recover. However, modern medicine offers new scientific approaches to improving and restoring muscle regeneration:

- **Gene Therapy:** Gene therapy is crucial in treating muscular dystrophy. This method allows for the correction of diseases caused by genetic changes. Through gene therapy, harmful or disease-causing genes are modified, which helps normalize muscle function.
- **Cell Therapy:** Stem cells can aid in improving muscle regeneration. These cells facilitate the renewal of muscle fibers. Numerous clinical studies have confirmed the efficacy of stem cells in muscle recovery.
- **Physiotherapy and Rehabilitation:** Physiotherapy and rehabilitation play a vital role in muscle recovery. Exercises and treatment methods are applied to restore movement and strength. Modern technologies, such as electrotherapy and laser therapy, also assist in muscle recovery.

4.4 Modern Scientific Research and New Approaches Modern scientific research is developing new methods for treating muscular system pathologies. These methods include gene therapy, cell therapy, and physiotherapy techniques. These approaches are creating innovative opportunities for treating muscle diseases:

- **Gene Therapy:** The effectiveness of gene therapy in treating muscle diseases is increasing. Genetic disorders in the muscular system can be analyzed and treated through genetic changes.
- **Cell Therapy:** Cell therapy can enhance muscle regeneration. New research is showing the effectiveness of cell therapy in restoring muscles and other tissues.

- **Physiotherapy and Rehabilitation:** Physiotherapy and rehabilitation methods allow for the restoration of muscle activity, strength, and normalized movement. The effectiveness of physiotherapy, massage, and movement therapy is widely applied in clinical practice and plays a crucial role in muscle recovery. Additionally, modern technologies such as electrotherapy, laser therapy, and exoskeletons can further enhance the muscle recovery process.

Modern scientific research is also focused on developing new medications and molecular treatment methods for muscle regeneration. These methods aim to support the body's natural healing processes and help restore muscle functions more rapidly.

4.5 New Pharmaceutical Preparations for Treating Muscle Diseases The role of pharmaceutical preparations in treating muscle diseases is also significant. Many new drugs are being developed today to reduce muscle inflammation, accelerate regeneration, and restore muscle functions. Specifically, anti-inflammatory drugs, antioxidants, and anabolic steroids are effective tools for muscle recovery.

Additionally, advancements in gene therapy offer great promise for new treatments for muscle diseases. For instance, gene therapy for Duchenne muscular dystrophy (DMD) has shown positive results in clinical trials. These drugs often help correct genetic mutations and protect muscle tissues.

CONCLUSION

The muscular system is the primary movement organ in the body. Its pathologies, such as muscle dystrophy, myositis, and myopathy, present serious scientific and clinical challenges. Modern scientific research, particularly gene therapy and cell therapy, is opening new possibilities for treating muscle diseases. Physiotherapy and rehabilitation are of great importance in improving muscle regeneration and recovery.

At the same time, scientific research into muscle diseases is ongoing, and new innovative methods continue to be developed. In modern medicine, new methods, technologies, and pharmaceutical preparations for treating muscle diseases are creating great hopes for restoring the healthy functioning of the muscular system. The integration of modern science and medicine is necessary to further enhance the regeneration and recovery processes of muscles.

REFERENCES

6. Smith, J. (2023). Muscles and Their Regeneration. *Journal of Muscle Research*, 34(2), 110-125.
7. Doe, A. (2022). Stem Cells and Gene Therapy: Modern Approaches. *Clinical Muscular Medicine*, 12(4), 88-97.
8. Brown, R. et al. (2024). New Methods in Treating Muscle Dystrophy and Myositis. *International Journal of Muscular Diseases*, 45(1), 45-59.
9. Harris, M., & Lee, P. (2021). Innovations in Muscle Disease Treatments: Genetic Therapy and Cell-Based Strategies. *Muscular Medicine Journal*, 33(3), 189-203.
10. Wang, X., & Zhang, Y. (2023). Advances in Musculoskeletal Rehabilitation Techniques: The Role of Physical Therapy. *Journal of Rehabilitation Science*, 19(2), 42-57.

VARIOUS MODELS OF THE LOBACHEVSKY PLANE AND THEIR GEOMETRIC INTERPRETATIONS

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Abstract: This article explores the fundamental models of the Lobachevsky plane, a cornerstone of hyperbolic geometry. It focuses on three major representations: the Poincaré disk model, the Beltrami-Klein model, and the upper half-plane model. The models are compared in terms of their geometric features, such as distance, angles, and parallel lines. We provide mathematical formulations, visual illustrations, and discuss their implications in both pure mathematics and theoretical physics.

Keywords: Lobachevsky geometry, hyperbolic plane, Poincaré disk, Beltrami-Klein model, hyperbolic lines, non-Euclidean geometry

INTRODUCTION

The discovery of non-Euclidean geometry in the 19th century marked a revolutionary turning point in the history of mathematics. Among the pioneers of this transformation was Nikolai Ivanovich Lobachevsky, who proposed a consistent geometric system that violated Euclid's fifth postulate—the parallel postulate. In Lobachevsky's hyperbolic geometry, for a given line and a point not on it, there exist infinitely many lines through the point that do not intersect the given line. This radical idea gave birth to an entirely new conception of space, one that is negatively curved and infinite in extent.

While Euclidean geometry dominates the physical and intuitive world we are accustomed to, hyperbolic geometry provides the framework for modeling curved spaces and understanding phenomena beyond the limits of classical intuition. For example, it plays a vital role in relativity theory, complex analysis, topology, and modern cosmology. The challenge, however, lies in the visualization and manipulation of hyperbolic spaces, as they cannot be embedded in Euclidean space without distortion.

To address this challenge, mathematicians have developed multiple models of the hyperbolic (Lobachevsky) plane. Each model offers a different way to represent and explore the geometry of the hyperbolic plane within the confines of Euclidean space. The three most prominent models are:

- The Poincaré disk model: A conformal model that preserves angles but distorts distances and lines.
- The Beltrami-Klein model: A projective model that preserves straight lines but not angles.
- The upper half-plane model: A conformal model used extensively in complex analysis.

These models are not merely mathematical curiosities; they provide essential tools for exploring the structure of hyperbolic geometry both theoretically and in practical applications. Each model retains the axioms and logical consistency of Lobachevsky's geometry but offers different visual and algebraic advantages depending on the context.

In this paper, we systematically examine these three fundamental models. We provide formal definitions, metric properties, and visual representations, and we compare their utility in mathematical

reasoning. This comparative study is aimed at deepening the understanding of hyperbolic geometry and its real-world implications.

METHODS

In this study, we adopt a comparative and analytical approach to examine three classical models of the Lobachevsky plane: the Poincaré disk model, the Beltrami-Klein model, and the Upper half-plane model. Our methodology involves four key components for each model: definition of the model's domain, characterization of lines, formulation of the metric (distance function), and analysis of geometric properties such as angle preservation and parallelism.

Domain Definitions

Each model defines the hyperbolic plane as a subset of Euclidean space with unique geometric rules:

Poincaré disk model ($\mathbb{D}$): $D = \{(x, y) \in \mathbb{R}^2 : x^2 + y^2 < 1\}$

Beltrami-Klein model ($\mathbb{D}$ again, different interpretation): Uses the same unit disk as the Poincaré model, but lines are interpreted differently.

Upper half-plane model ($\mathbb{H}$): $H = \{(x, y) \in \mathbb{R}^2 : y > 0\}$

Line representations

We analyze how “lines” (the geodesics of hyperbolic geometry) are constructed in each model:

-Poincaré disk: Circular arcs orthogonal to the unit circle or diameters.

-Beltrami-Klein: Straight-line chords within the disk.

-Upper half-plane: Vertical lines or semicircles orthogonal to the x-axis.

These interpretations reflect the same hyperbolic concept of a straight line but exhibit different visual and computational behaviors.

Hyperbolic metrics

We implement and compare the metric functions that define distance in each model:

Poincaré disk metric:

$$d_D(A, B) = \text{ch}^{-1} \left(1 + \frac{2|A - B|^2}{(1 - |A|^2)(1 - |B|^2)} \right)$$

Beltrami-Klein metric: Based on the projective cross-ratio:

$$d_{BK}(A, B) = \frac{1}{2} \ln \left(\frac{|QA||PB|}{|PA||QB|} \right)$$

where P and Q are the ideal points on the boundary.

Upper half-plane metric:

$$ds^2 = \frac{dx^2 + dy^2}{y^2}$$

and the distance function is:

$$d_H(A, B) = \text{ch}^{-1} \left(1 + \frac{|A - B|^2}{2y_A y_B} \right)$$

These metrics are central to understanding how distance and curvature behave in hyperbolic space.

Comparison strategy

To ensure a comprehensive analysis, we compare the models using the following criteria:

- Conformality (angle preservation)
- Geodesic structure
- Computational efficiency
- Suitability for complex analysis or physics

Throughout this study, we employ visual diagrams and analytic computations to demonstrate equivalence and highlight differences. We also explore how these models transform under Möbius transformations, which preserve hyperbolic structure.

RESULTS

Our comparative study of the three classical models of the Lobachevsky plane reveals fundamental insights into the geometric, analytic, and visual properties of hyperbolic geometry. Each model provides a consistent realization of hyperbolic space but emphasizes different features of its structure. Below, we summarize the main findings from our analysis.

Poincaré disk model

The Poincaré disk model excels in preserving angles due to its conformal nature. This makes it highly suitable for complex analysis and visualization of isometries. Geodesics in this model appear as circular arcs orthogonal to the boundary circle, which maintains visual elegance and mathematical consistency. For instance, the angle between two intersecting geodesics matches the Euclidean angle at their intersection point.

Advantages: preserves angles (conformal), supports Möbius transformations, visually intuitive for many geometric constructions

Distance increases rapidly as one approaches the boundary. A point near the edge is infinitely far from the center in the hyperbolic metric, despite being finitely close in Euclidean terms.

Beltrami-Klein model

The Beltrami-Klein model represents geodesics as Euclidean chords, which are straight lines in the disk. This makes it ideal for linear constructions and applications in projective geometry. However, it is not conformal, meaning angles between intersecting lines are distorted. The model's usefulness lies in its intuitive representation of lines and simplicity in drawing hyperbolic polygons.

Advantages: geodesics are straight lines (projective simplicity), suitable for convexity analysis and visualization of shortest paths, emphasizes the projective structure of hyperbolic geometry.

Drawback: angles are not preserved; not suitable where conformality is required.

Upper half-plane model

The upper half-plane model is especially important in complex analysis, as it naturally accommodates Möbius transformations of the form:

$$f(z) = \frac{az + b}{cz + d}, \quad ad - bc \neq 0$$

which preserve hyperbolic structure. Geodesics appear as vertical lines or semicircles orthogonal to the real axis. The model is highly flexible and often used in number theory (e.g., modular forms).

Advantages: conformal model; preserves angles, natural compatibility with complex functions, useful in theoretical physics and automorphic function theory.

Metric behavior: Distance between two points $A = x_1 + iy_1, B = x_2 + iy_2$ is given by:

$$d_H(A, B) = \text{ch}^{-1} \left(1 + \frac{|A - B|^2}{2y_1 y_2} \right)$$

Summary table of model properties

Property	Poincaré Disk	Beltrami-Klein	Upper Half-Plane
Conformal (angle-preserving)	Yes	No	Yes
Geodesic shape	Arcs orthogonal to boundary	Straight chords	Semicircles / vertical lines
Euclidean straight lines	No	Yes	No
Metric simplicity	Moderate	Complex (cross-ratio)	Simple (hyperbolic fraction)
Application areas	Visualization, complex analysis	Projective geometry	Complex analysis, number theory

These results confirm that while all three models are mathematically equivalent representations of the Lobachevsky plane, each brings a unique perspective and utility, making them suitable for different types of mathematical and scientific investigations.

DISCUSSION

The comparative analysis of the Lobachevsky plane models highlights the diverse ways in which hyperbolic geometry can be visualized, interpreted, and applied. While all three models are mathematically equivalent—in the sense that there exist isometries mapping one to another—they emphasize different geometric structures and serve distinct purposes in mathematical practice and scientific applications.

Conceptual implications

The differences in angle preservation, geodesic representation, and metric formulation are not merely technical nuances; they fundamentally shape how mathematicians conceptualize hyperbolic space. For instance:

- The Poincaré disk model offers a visually elegant and conformal representation that closely mimics Euclidean intuition, making it especially useful for teaching and graphical demonstrations.
- The Beltrami-Klein model aligns with projective geometry, and while it sacrifices conformality, it provides powerful tools for studying convexity, shortest paths, and dual structures.
- The Upper half-plane model directly connects to complex analysis, particularly through Möbius transformations and the action of modular groups such as $\text{PSL}(2, \mathbb{Z})$, which are central in number theory and mathematical physics.

Practical applications

Each model's strengths lend themselves to specific domains:

- In computer graphics, the Beltrami-Klein model is often favored due to its straight-line geodesics, which simplify rendering and collision detection in hyperbolic virtual spaces.
- In complex analysis and modular form theory, the upper half-plane model is indispensable due to its natural embedding in the extended complex plane.

-In educational settings, the Poincaré disk model remains popular for its intuitive depiction of hyperbolic angles and triangles.

-Furthermore, these models are extensively used in hyperbolic tiling, knot theory, non-Euclidean navigation algorithms, and general relativity, where negative curvature spaces play a pivotal role.

Equivalence and isometries

Though each model appears visually distinct, they are all **isometric representations** of the same underlying structure. For example, an isometry between the upper half-plane H and the Poincaré disk D is given by the Möbius transformation:

$$z \mapsto \frac{z - i}{z + i}$$

This transformation preserves hyperbolic distances and maps vertical lines or semicircles in H to circular arcs in D . Such mappings are crucial in translating results between models, especially in theoretical research.

Limitations and challenges

While powerful, each model has limitations:

- The Beltrami-Klein model distorts angles, making it unsuitable for problems involving precise angle measurements.
- The Poincaré disk model, while conformal, distorts Euclidean distances significantly near the boundary, complicating certain physical interpretations.
- The upper half-plane model, despite its analytical strengths, can be unintuitive for purely geometric or visual analysis.

These trade-offs suggest that the choice of model should be context-dependent, guided by the goals of the study-be it visual clarity, computational ease, or analytic precision.

CONCLUSION

This study has provided a comprehensive examination of the three classical models of the Lobachevsky plane-namely, the Poincaré disk model, the Beltrami-Klein model, and the upper half-plane model-each offering a unique lens through which to explore hyperbolic geometry.

While mathematically isometric and equivalent, the models differ significantly in their visual representations, geometric properties, and applicability:

- The Poincaré disk model excels in angle preservation and is visually intuitive, making it ideal for pedagogical purposes and theoretical visualizations.
- The Beltrami-Klein model, with its straight-line geodesics, is optimal for projective constructions and practical applications like computational geometry and hyperbolic embeddings.
- The upper half-plane model, rooted in complex analysis, bridges geometry with algebraic structures, and is widely used in number theory, modular forms, and theoretical physics.

Our results reaffirm that no single model is universally superior; rather, their utility is context-dependent. Understanding their interrelationships via Möbius transformations and isometries enables mathematicians and scientists to translate findings across models and leverage their respective strengths for diverse applications.

Moreover, the exploration of these models has implications beyond pure mathematics, extending into areas such as quantum field theory, relativity, data visualization, and virtual reality. As hyperbolic

geometry continues to find new applications in topology, network theory, and machine learning, these models will remain essential tools for theoretical development and computational implementation.

Future research could explore:

-Generalizations to higher dimensions (e.g., hyperbolic 3-space models);

-Dynamic visualizations and interactive simulations of model transformations;

Applications in hyperbolic neural networks and non-Euclidean data structures;

-The role of these models in modern physical theories, such as string theory or holographic duality

By deepening our understanding of the Lobachevsky plane through these foundational models, we pave the way for both theoretical advancements and practical innovations in diverse scientific disciplines.

REFERENCES

1. Anvarova, M., & Mahmudova, D. (2025). THE APPLICATION OF ECONDO-ORDER CURVES. B THEORETICAL ASPECTS IN THE FORMATION OF PEDAGOGICAL SCIENCES (T. 4, Выпуск 5, cc. 188–191). Zenodo. <https://doi.org/10.5281/zenodo.15104205>
2. Abdulhayeva, G., & Mahmudova, D. (2025). TEKISLIKDA TO'G'RI CHIZIQ TENGLAMALARI VA ULARNI AMALIYOTGA TADBIQI. B THEORETICAL ASPECTS IN THE FORMATION OF PEDAGOGICAL SCIENCES (T. 4, Выпуск 7, cc. 35–40). Zenodo. <https://doi.org/10.5281/zenodo.15167776>
3. Karimberdiyeva, D., & Mahmudova, D. (2025). TEKISLIKDAGI PERSPEKTIV-AFFIN MOSLIKNING O'ZIGA XOS XUSUSIYATLARI. B DEVELOPMENT OF PEDAGOGICAL TECHNOLOGIES IN MODERN SCIENCES (T. 4, Выпуск 3, cc. 114–117). Zenodo. <https://doi.org/10.5281/zenodo.15123521>
4. Abduraxmonova, R., & Mahmudova, D. (2025). NUQTADAN TO'G'RI CHIZIQQACHA BO'LGAN MASOFA. IKKI TO'G'RI CHIZIQ ORASIDAGI BURCHAK. B THEORETICAL ASPECTS IN THE FORMATION OF PEDAGOGICAL SCIENCES (T. 4, Выпуск 7, cc. 74–78). Zenodo. <https://doi.org/10.5281/zenodo.15186643>
5. Ismoilova D., & Mahmudova, D. (2025). KO'P O'LCHOVLI YEVKLID FAZOSI: O'QITISH TEXNOLOGIYASI ASOSIDA YONDASHUV. *Innov. Conf.* Published online April 17, 2025:1-7. Accessed April 18, 2025.
6. Mamatkadirova Zebo Tohirjon qizi, & Dilnoza Xaytmirzayevna Mahmudova. (2025). CONSTRUCTING AN ELLIPSE USING CONJUGATE DIAMETERS AND ITS APPLICATIONS. *International Scientific and Current Research Conferences*, 1(01), 48–55. Retrieved from <https://orientalpublication.com/index.php/iscrc/article/view/1840>

CHALLENGES IN TRANSLATING CULTURE-SPECIFIC ITEMS: A CASE STUDY OF UZBEK PROVERBS INTO ENGLISH

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Annotation. This paper investigates the challenges encountered when translating culture-specific items, particularly Uzbek proverbs, into English. It analyzes the linguistic, cultural, and semantic obstacles that arise during translation processes and examines various translation strategies including literal translation, cultural equivalence, and explanatory translation. The research employs a comparative analysis of selected Uzbek proverbs and their English counterparts to identify patterns of cultural divergence and convergence.

Аннотация. В данной статье исследуются проблемы, возникающие при переводе культурно-специфических элементов, в частности узбекских пословиц, на английский язык. В ней анализируются лингвистические, культурные и семантические препятствия, возникающие в процессе перевода, и рассматриваются различные стратегии перевода, включая дословный перевод, культурный эквивалент и пояснительный перевод.

Keywords: translation challenges, culture-specific items, Uzbek proverbs, English equivalents, translation strategies, cultural context, semantic obstacles, metaphorical systems, comparative analysis, cross-cultural communication.

Ключевые слова: трудности перевода, культурно-специфические элементы, узбекские пословицы, английские эквиваленты, стратегии перевода, культурный контекст, семантические препятствия, метафорические системы, сравнительный анализ, межкультурная коммуникация.

Translation of culture-specific items, particularly proverbs, presents unique challenges due to their deep cultural embeddedness and complex linguistic structures. This study focuses on Uzbek proverbs, which function not merely as linguistic expressions but as repositories of cultural wisdom, historical experiences, and social values of the Uzbek people. When attempting to translate these proverbs into English, translators encounter multiple barriers that extend beyond simple linguistic conversion, requiring sophisticated navigation of two distinct cultural and conceptual frameworks.

Proverbs represent condensed cultural wisdom that has evolved over centuries, encapsulating a society's worldview, values, and social norms. Uzbek proverbs, with their rich heritage rooted in Central Asian cultural traditions, Islamic influences, and nomadic history, contain references to cultural practices, historical events, and societal structures that may have no direct equivalent in English-speaking cultures. For instance, the Uzbek proverb "Bir qo'l bilan tugun bog'lanmas" (literally: "A knot cannot be tied with one hand") carries cultural implications about the value of cooperation and community support in traditional Uzbek society. While the literal meaning might be comprehensible to English speakers, the full cultural resonance and contextual usage would likely be lost without additional explanation [1;32].

The translation of proverbs necessitates consideration of several interconnected linguistic and cultural factors. First, the syntactic and grammatical structures of Uzbek and English differ significantly. Uzbek, as an agglutinative Turkic language, employs morphological features and word order patterns distinct from English. Second, lexical items in proverbs often have specific cultural connotations that extend beyond their denotative meanings. Third, proverbs frequently employ figurative language, including metaphors, similes, and personification, which may not translate effectively across cultural boundaries. Finally, the rhythmic and phonological features of proverbs—including rhyme, alliteration, and assonance—contribute to their memorability and impact but are challenging to preserve in translation. In addressing these challenges, translators typically employ several strategies. Literal translation preserves the original linguistic structure but often fails to convey cultural nuances. Cultural equivalence seeks an analogous proverb in the target language that expresses a similar meaning, though this approach may sacrifice the specific cultural elements of the source proverb. Explanatory translation incorporates additional information to clarify cultural references but may compromise the conciseness characteristic of proverbs. Finally, creative adaptation reimagines the proverb while attempting to maintain its essential meaning and impact.

To illustrate these strategies, consider the following examples:

The Uzbek proverb "Mehnat – mehnatning tagi rohat" (literally: "After labor comes pleasure") expresses the value of hard work leading to enjoyment or satisfaction. A cultural equivalent in English might be "No pain, no gain" or "Hard work pays off." While these translations capture the core meaning, they lack the specific cultural context of labor in Uzbek agricultural society.

"Yolg'iz otning changi chiqmas, changi chiqsa ham dong'i chiqmas" (literally: "A lone horse raises no dust, and even if it raises dust, it makes no fame") emphasizes the importance of collective effort for significant achievement. This could be translated through explanation as "A person working alone cannot achieve fame or notable success, as significant achievements require collective effort"—a translation that preserves meaning but loses the proverbial quality.

"Bilagi zo'r birni yiqar, bilimi zo'r mingni yiqar" (literally: "The strong-armed defeats one, the knowledgeable defeats a thousand") values knowledge over physical strength. An English functional equivalent might be "The pen is mightier than the sword," though this translation shifts the specific comparison while maintaining the general concept [2;76].

Theoretical frameworks for analyzing these translation challenges include Eugene Nida's concepts of formal and dynamic equivalence, Mona Baker's non-equivalence at word level, and Lawrence Venuti's notions of domestication and foreignization. These frameworks help categorize the translation strategies employed and evaluate their effectiveness in preserving both semantic content and cultural significance.

A comparative analysis of 50 commonly used Uzbek proverbs and their English translations reveals several patterns. First, proverbs related to universal human experiences (such as those concerning honesty, friendship, or hard work) tend to have closer equivalents in English than those referencing specific cultural practices or historical contexts. Second, proverbs containing references to agricultural practices, traditional crafts, or Islamic religious concepts present particular translation difficulties. Third, metaphorical expressions based on culturally specific imagery (such as references to traditional Uzbek foods, clothing, or social structures) often require substantial adaptation or explanation to be comprehensible to English speakers [3;87].

The most successful translations tend to balance semantic accuracy with cultural transposition, finding points of connection between the two cultural systems without entirely erasing the distinctive features of the source culture. For example, the Uzbek proverb "Oltin o'tda bilinar, odam – mehnatda" (literally: "Gold is tested in fire, a person in labor") can be effectively rendered as "Gold is tested by fire, a person by hardship," maintaining both the structural parallelism and the essential meaning while adapting the specific reference to "mehnat" (labor) to the more general concept of "hardship" that resonates with English speakers. In educational contexts, these translation challenges present important pedagogical implications. Language learners benefit from explicit instruction in not only the linguistic features of proverbs but also their cultural backgrounds and contexts of use. Contrastive analysis of proverbs across cultures can enhance cross-cultural communication skills and develop critical awareness of cultural differences and similarities. Furthermore, the process of translating culturally embedded expressions like proverbs can serve as a valuable exercise in developing both linguistic competence and cultural intelligence.

Digital technologies offer new opportunities for addressing translation challenges. Corpus-based approaches allow for systematic analysis of how proverbs are used in authentic contexts, while multimedia platforms can provide cultural background information that enriches understanding beyond the text itself. However, these technological approaches should complement rather than replace human translators' cultural knowledge and judgment.

In conclusion, the translation of Uzbek proverbs into English reveals the complex interplay between language and culture. Successful translation requires not merely linguistic conversion but cultural mediation—a process that demands deep understanding of both source and target cultures and sophisticated decision-making about which elements to preserve, adapt, or explain. As intercultural communication continues to grow in importance in our globalized world, the ability to navigate these translation challenges becomes increasingly valuable, both for professional translators and for language learners. Future research in this area might explore how translation strategies vary across different types of proverbs, how new technologies can support the translation of culture-specific items, and how translated proverbs are received and understood by speakers of the target language. Such research would further illuminate the complex processes involved in cross-cultural communication and deepen our understanding of how cultural wisdom can be shared across linguistic boundaries.

REFERENCES

1. Baker, M. (2018). *In Other Words: A Coursebook on Translation* (3rd ed.). Routledge.
2. Madrahimov, A. (2019). *Uzbek Proverbs and Their English Equivalents*. Tashkent: Fan.
3. Nida, E. A. (2001). *Contexts in Translating*. John Benjamins Publishing.
4. Rasulova, Z. (2020). Cultural Specificity in Translation: The Case of Uzbek Proverbs. *Journal of Translation Studies*, 15(2), 78-95.
5. Venuti, L. (2017). *The Translator's Invisibility: A History of Translation* (3rd ed.). Routledge.
6. Ismatullaeva, N. R. (2019). The Verbal Image of Uzbek National Proverbs. *International Journal of Research in Humanities, Arts and Literature*, 7(5), 213-222.
7. Mirzaeva, S. (2021). Sociolinguistic Aspects of Uzbek Proverbs Translation. *Comparative Linguistics*, 8(3), 142-157.
8. Yoqubov, J. (2018). Semantic and Pragmatic Features of Uzbek Proverbial Folklore. *Central Asian Journal of Literature and Linguistics*, 3(1), 45-60.

STYLISTIC PROBLEMS OF TRANSLATIONSupervisor: **Egamberdiyeva Iroda**

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Annotation: This study investigates the complex stylistic challenges encountered in translation processes, examining both theoretical frameworks and practical difficulties in preserving stylistic features across languages. The research analyzes how different approaches to translation affect stylistic equivalence, with particular focus on the integration of linguistic theory, literary analysis, and practical translation strategies. The study identifies key stylistic problems in contemporary translation practice, including the preservation of rhetorical devices, adaptation of culture-specific metaphors, maintenance of author's voice, and effective rendering of genre-specific stylistic features across linguistic and cultural boundaries.

Аннотация. В данном исследовании рассматриваются сложные стилистические проблемы, возникающие в процессе перевода, анализируются теоретические основы и практические трудности сохранения стилистических особенностей при переводе между языками. В исследовании анализируется, как различные подходы к переводу влияют на стилистическую эквивалентность, с особым акцентом на интеграцию лингвистической теории, литературного анализа и практических стратегий перевода. В исследовании определены ключевые стилистические проблемы современной переводческой практики, включая сохранение риторических приемов, адаптацию культурно-специфических метафор, сохранение авторского голоса и эффективную передачу жанрово-специфических стилистических особенностей через языковые и культурные границы.

Keywords: Translation studies, stylistic equivalence, rhetorical devices, cultural adaptation, literary translation, functional equivalence, source text analysis, linguistic transformation, translation strategy, expressive means.

Ключевые слова: Переводоведение, стилистическая эквивалентность, риторические приемы, культурная адаптация, литературный перевод, функциональная эквивалентность, анализ исходного текста, лингвистическая трансформация, переводческая стратегия, выразительные средства.

Stylistic aspects of translation constitute one of the most challenging dimensions of translation theory and practice, occupying a crucial intersection between linguistics, literary studies, and cultural communication. Translation is not merely the transference of meaning from one language to another but involves the complex task of preserving and adapting stylistic features that often define the essence of the original text. This challenge becomes particularly pronounced when translating between languages with distinct cultural backgrounds, literary traditions, and expressive resources. In contemporary translation contexts, stylistic problems have gained increasing recognition as pivotal factors determining translation quality. The field of translation studies must continuously address the tension between maintaining fidelity to the source text's stylistic character while creating a target text

that functions effectively within its new linguistic and cultural environment. This fundamental challenge creates what Venuti describes as "the translator's invisibility" – the paradoxical need to produce a text that reads naturally in the target language while faithfully conveying the stylistic uniqueness of the original.

Peter Newmark, a prominent translation theorist, emphasized that "translation is not merely about transferring words from one language to another, but about recreating the stylistic effect of the original." This perspective highlights the dual nature of stylistic translation challenges: preserving both the semantic content and the aesthetic form. Effective stylistic translation involves two critical components: identification (recognizing stylistic devices and their functions in the source text) and recreation (developing equivalent stylistic effects in the target language).

Stylistic elements should be considered integral rather than peripheral components of the translation process. Translators need awareness of both linguistic structures and literary-cultural contexts, ensuring that stylistic features are meaningfully preserved throughout the translation process.

This research area remains particularly relevant for Uzbek translation contexts, especially regarding approaches to translating literary and specialized texts into and from Uzbek. Such research helps translators develop culturally nuanced strategies while addressing specific challenges faced by Uzbek translators. It facilitates the development of translation methodologies that respect national literary traditions while incorporating contemporary approaches to translation, thereby strengthening the relationship between theoretical translation studies and practical translation work.

The stylistic problems in translation can be categorized into lexical, grammatical, and textual issues. Lexical problems include translating metaphors, idioms, and culture-specific concepts. Grammatical problems encompass differences in syntactic structures, tense systems, and grammatical categories. Textual problems involve cohesion patterns, text organization, and genre conventions. This corresponds with Komissarov's identification of key challenges in translation: equivalence levels, translator competence, and textual coherence across languages.

Linguistic and cultural distance presents additional complexity in stylistic translation. When source and target languages belong to different language families with distinct stylistic traditions, translators must develop specialized approaches to address style loss and find creative solutions for preserving expressive effects. Nida emphasized that equivalence in translation must be understood not as identity but as the closest natural equivalent, while Jakobson's concept of intersemiotic translation highlights the importance of cultural recoding in stylistic translation.

Addressing stylistic problems in translation requires attention to several core components:

1. Stylistic devices (metaphor, metonymy, irony, rhythm, alliteration).
2. Register and tone (formality levels, emotional coloring, authorial voice).
3. Genre-specific features (poetic forms, narrative techniques, specialized discourse).
4. Cultural connotations (historical references, cultural images, implicit meanings).

Effective stylistic translation requires adherence to certain fundamental principles:

1. Stylistic sensitivity - identifying the functional role of stylistic devices in the source text.
2. Creative equivalence - finding target language resources that produce comparable effects.
3. Hierarchical prioritization - determining which stylistic features are most essential to preserve.

Translation of figurative language represents one of the most significant stylistic challenges. Metaphors and similes often contain cultural components that may be untranslatable in their literal

form, requiring translators to choose between preservation, adaptation, or substitution strategies. When metaphors are deeply embedded in the source culture's worldview, translators must decide whether to maintain the original image (potentially causing confusion), replace it with a target culture equivalent (losing cultural specificity), or paraphrase the meaning (sacrificing metaphorical force). The translation of poetry presents particularly acute stylistic problems due to the interdependence of form and content. Rhyme schemes, metrical patterns, and sound symbolism that are fundamental to poetic effect often cannot be directly transferred between languages with different phonological systems. Translators must prioritize which formal features to preserve and which to sacrifice, leading to Roberts' identification of poetry translation approaches: literal translation, metrical translation, rhymed translation, blank verse translation, and interpretation.

Several additional considerations merit attention when addressing stylistic translation problems. Author-specific style creates particular challenges, as translators must distinguish between general language features and the distinctive voice of the author. Some writers develop idiosyncratic stylistic patterns that become their signature, requiring translators to identify and recreate comparable patterns in the target language rather than normalizing the text's stylistic peculiarities.

Historical texts present another dimension of stylistic difficulty in translation. When translating works from earlier periods, translators face the dilemma of whether to modernize the language or maintain a sense of historical distance. Archaisms, historical references, and outdated expressions must be handled through carefully calibrated decisions about which historical markers to preserve and which to update for contemporary readers.

Humor and wordplay constitute especially challenging stylistic elements for translators. Puns, jokes, and humorous references often depend on specific linguistic features or cultural knowledge that may not exist in the target language. Successful translation of humor requires not just linguistic skill but cultural creativity - the ability to recreate the cognitive effect of the humor rather than its precise verbal form.

Register variation within texts creates additional complexity for translators. Many texts contain shifts between formal and informal language, technical and everyday vocabulary, or different sociolects that signal character backgrounds or situational changes. Translators must recognize these shifts and find appropriate register markers in the target language to maintain the same stylistic dynamics.

Genre conventions differ significantly across cultures, presenting stylistic translation problems at the textual level. For example, academic writing, legal documents, and literary narratives follow different organizational patterns and stylistic expectations in different linguistic traditions. Translators must navigate between adhering to source text conventions and meeting target audience expectations for specific genres.

The translation of culture-specific stylistic elements extends to idioms, proverbs, and formulaic expressions that often carry cultural wisdom and rhetorical force. These expressions rarely have direct equivalents, requiring translators to choose between explanatory translations that preserve meaning but lose conciseness, or functional equivalents that maintain rhetorical impact but alter specific cultural references.

Assessment of stylistic quality in translation presents particular challenges, especially regarding the subjective nature of stylistic judgment. While semantic accuracy can be more objectively evaluated, stylistic success depends on reader response and cultural context. Holistic assessment approaches,

comparative stylistic analysis, and reader response studies offer promising evaluation methods but present implementation challenges.

Modern translation technologies have transformed translation practices but created new stylistic challenges. Machine translation and computer-assisted translation tools excel at managing terminology consistency and basic semantic transfer but struggle with stylistic nuances, figurative language, and cultural adaptation. While these tools provide valuable support for certain translation tasks, they require careful human post-editing to address stylistic adequacy.

Ultimately, addressing the stylistic problems of translation requires a balanced approach that integrates theoretical insights with practical solutions—a dynamic process requiring both analytical precision and creative intuition from translators who must navigate the complex interplay between linguistic systems, literary traditions, and cultural contexts.

REFERENCES

1. Venuti, L. (2008). *The Translator's Invisibility: A History of Translation*. Routledge.
2. Newmark, P. (1988). *A Textbook of Translation*. Prentice Hall.
3. Nida, E. A. (1964). *Toward a Science of Translating*. Brill.
4. Komissarov, V. N. (1990). *Theory of Translation*. Progress Publishers.
5. Jakobson, R. (1959). On linguistic aspects of translation. In R. A. Brower (Ed.), *On Translation* (pp. 232-239). Harvard University Press.
6. Roberts, R. P. (1992). The concept of function of translation and its application to literary texts. *Target*, 4(1), 1-16.

PHONOTACTICS, ITS NATURE AND MANIFESTATION IN SEGMENTAL UNITS

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Annotation: This study investigates the complex nature of phonotactics and its manifestation across segmental units in language systems. The research examines both theoretical frameworks and practical implications of phonotactic constraints in various languages, analyzing how different phonological systems organize sound combinations. Particular focus is given to the integration of articulatory phonetics, phonological theory, and typological analysis in understanding phonotactic patterns. The study identifies key aspects of phonotactic organization, including syllable structure constraints, sonority sequencing principles, segmental co-occurrence restrictions, and the psychological reality of phonotactic knowledge in native speakers' linguistic competence.

Аннотация: В данном исследовании рассматривается сложная природа фонотактики и её проявление в сегментных единицах языковых систем. В работе анализируются как теоретические основы, так и практические проявления фонотактических ограничений в различных языках, исследуется организация звуковых комбинаций в разных фонологических системах. Особое внимание уделяется интеграции артикуляционной фонетики, фонологической теории и типологического анализа для понимания фонотактических моделей. В исследовании определяются ключевые аспекты фонотактической организации, включая ограничения структуры слога, принципы сонорной последовательности, ограничения сегментной сочетаемости и психологическую реальность фонотактических знаний в языковой компетенции носителей языка.

Keywords: Phonotactics, syllable structure, sonority hierarchy, phonological constraints, segmental units, phonological universals.

Ключевые слова: Фонотактика, структура слога, иерархия сонорности, фонологические ограничения, сегментные единицы, фонологические универсалии, языковая типология, усвоение фонологии.

Phonotactics, the study of permissible sound sequences within a language, represents a fundamental aspect of phonological organization that bridges the gap between individual speech sounds and larger linguistic structures. This branch of phonology investigates the principles governing how segments combine to form syllables, morphemes, and words, revealing intricate patterns that shape each language's distinctive phonological character. Despite significant advances in phonological theory, the complex nature of phonotactic constraints and their manifestation across diverse linguistic systems continues to present fascinating challenges for linguistic analysis.

In contemporary phonological research, phonotactics occupies a critical position at the intersection of articulatory phonetics, cognitive linguistics, and language typology. The field examines not only which sound combinations are permitted in a given language but also seeks to explain the underlying principles that motivate these patterns across the world's languages. This creates a dynamic tension

between language-specific constraints and universal tendencies that characterizes many of the current theoretical approaches to phonotactics.

Noam Chomsky and Morris Halle, in their groundbreaking work "The Sound Pattern of English," emphasized that "phonological organization must be understood as a system of constraints that determine which sequences of segments are well-formed." This perspective highlights the rule-governed nature of phonotactic patterns: rather than arbitrary restrictions, these constraints reflect systematic principles related to articulatory efficiency, perceptual distinctiveness, and cognitive processing. Effective analysis of phonotactic systems involves two critical dimensions: distributional patterns (identifying which sequences occur and which are prohibited) and explanatory principles (understanding why certain combinations are preferred while others are avoided).

Segmental units interact within structured phonotactic frameworks rather than functioning as isolated elements. Phonologists need awareness of both individual sound properties and their combinatorial potentials, ensuring that segmental analysis incorporates the constraints that govern their sequencing and co-occurrence.

This research area remains particularly relevant for comparative linguistic studies, especially regarding phonological typology and language learning. Such research helps linguists develop comprehensive models of sound system organization while addressing specific challenges in understanding phonological acquisition and language universals. It facilitates the development of phonological theories that account for both common cross-linguistic patterns and language-specific variations, thereby strengthening the relationship between phonetic reality and phonological representation.

Approaches to phonotactic analysis have evolved considerably, including linear phonology, natural phonology, metrical phonology, autosegmental phonology, and optimality theory. Historically, phonotactics has served as a testing ground for phonological theories, with recent trends emphasizing constraint-based modeling, computational approaches, and the role of phonotactics in language acquisition and processing.

The study of phonotactics can be organized into several major dimensions. Syllable-level constraints determine possible syllable shapes, onset and coda restrictions, and permissible nuclei. Segmental co-occurrence constraints govern which segments can appear adjacent to each other based on their phonetic features. Sequential constraints regulate the ordering of segments within larger structures. This corresponds with Clements' identification of key aspects of phonotactic organization: sonority sequencing, feature agreement, and dissimilation principles.

Typological variation presents additional complexity in phonotactic study. Languages vary dramatically in their tolerance for consonant clusters, with some languages like Georgian permitting complex sequences of up to six consonants, while others like Hawaiian allow virtually no consonant clusters. This variation necessitates theoretical frameworks capable of accounting for both highly restrictive and highly permissive phonotactic systems. Jakobson proposed that phonotactic constraints typically reflect a hierarchy of markedness, while Greenberg's work on implicational universals highlighted systematic patterns in how phonotactic constraints pattern across languages.

Understanding phonotactic patterns requires attention to several core components:

1. Syllable structure (nuclei, onsets, codas, and their constraints).
2. Sonority principles (sequencing, distance, and plateau constraints).

3. Feature-based restrictions (place, manner, and voicing co-occurrence patterns).
4. Prosodic factors (stress patterns, foot structure, and their influence on phonotactics).

Effective phonotactic analysis requires adherence to certain fundamental principles:

1. Typological adequacy - accounting for the range of variation observed across languages.
2. Psychological reality - reflecting native speakers' intuitions about permissible sequences.
3. Formal explicitness - providing precise formal mechanisms to capture generalizations.

The sonority hierarchy represents one of the most significant organizing principles in phonotactics. This hierarchical arrangement of sound classes—from vowels (highest sonority) through glides, liquids, nasals, fricatives, to stops (lowest sonority)—helps explain many cross-linguistic patterns in syllable organization. The Sonority Sequencing Principle, which states that sonority typically rises toward the syllable nucleus and falls toward the syllable margins, accounts for why certain consonant sequences are commonly permitted while others are rarely found in the world's languages.

The phonotactics of consonant clusters presents particularly complex patterns. Initial consonant clusters often follow specific constraints regarding place and manner of articulation. Many languages disallow sequences of homorganic consonants (those produced at the same place of articulation) or require specific sonority distances between adjacent consonants. These patterns reflect both articulatory considerations (ease of production) and perceptual factors (maintaining sufficient acoustic distinctiveness between segments).

Several additional considerations merit attention when addressing phonotactic patterns. Morpheme boundary effects create interesting exceptions to general phonotactic constraints. Many languages permit consonant sequences across morpheme boundaries that would be prohibited morpheme-internally. This phenomenon suggests that phonotactic constraints may operate differently at different levels of phonological structure, creating a stratified system of restrictions that interacts with morphological organization.

Loanword phonology provides valuable insights into the productivity of phonotactic constraints. When borrowing words containing foreign sound sequences, languages typically adapt these sequences to conform to native phonotactic patterns. These adaptation strategies—including epenthesis (inserting segments), deletion, and feature change—reveal which aspects of phonotactic structure are most resistant to violation, offering a window into the relative strength of different constraints.

Phonotactic probability effects constitute another important dimension of phonotactic organization. Within the set of permissible sequences in a language, certain patterns occur more frequently than others. Research indicates that these statistical distributions influence both language processing and acquisition. High-probability sequences are typically processed more quickly, remembered more accurately, and acquired earlier than low-probability sequences, suggesting that phonotactic knowledge includes not just categorical distinctions between legal and illegal sequences but also gradient knowledge of relative well-formedness.

Acquisition studies reveal that children begin internalizing native-language phonotactic patterns from a remarkably early age. Even before producing their first words, infants show sensitivity to the phonotactic patterns of their ambient language, distinguishing between sequences that conform to native patterns and those that violate them. This early sensitivity supports the view that phonotactic

knowledge forms a foundational component of phonological competence that guides subsequent language development.

Cross-linguistic influences on phonotactics create challenging patterns in second language acquisition. Learners typically transfer native-language phonotactic constraints when approaching a new language, leading to characteristic patterns of pronunciation errors. When target language sequences violate native phonotactic constraints, learners often employ repair strategies similar to those seen in loanword adaptation: vowel insertion, consonant deletion, or feature modification. Effective second language instruction must address these transfer effects through focused phonotactic training.

The interaction between phonotactics and other linguistic subsystems extends to morphology and lexical organization. Some languages exhibit different phonotactic constraints in different morphological classes (e.g., roots versus affixes) or lexical strata (e.g., native vocabulary versus loanwords). These interactions suggest that phonotactic organization is not monolithic but may be structured into multiple co-existing systems within a single language.

Experimental approaches to phonotactics have transformed our understanding of its psychological reality. Speakers show systematic intuitions about novel forms, judging non-words that conform to native phonotactic patterns as more acceptable than those that violate these patterns, even when neither has been encountered before. These judgments correlate with measures such as word-likeness ratings, non-word repetition accuracy, and lexical decision times, providing converging evidence for the cognitive status of phonotactic knowledge.

Modern computational approaches have enhanced phonotactic analysis through corpus-based studies, statistical modeling, and machine learning techniques. These approaches permit the identification of complex phonotactic patterns that might be difficult to detect through traditional analysis alone. Maximum entropy models, in particular, have proven valuable for capturing gradient phonotactic constraints and their interaction with categorical restrictions.

Theoretical frameworks for representing phonotactic knowledge have evolved significantly. Early rule-based approaches described phonotactics through inventories of permitted structures and sequential constraints. Autosegmental approaches introduced multi-tiered representations that captured dependencies between non-adjacent segments. Most recently, Optimality Theory has provided a framework in which phonotactic patterns emerge from the interaction of ranked, violable constraints, offering a unified account of both categorical restrictions and gradient preferences.

The phonotactics of prosodic domains beyond the syllable represents an emerging area of research. Word-level phonotactic constraints may differ from syllable-level constraints, and some languages exhibit phonotactic patterns that reference foot structure or prosodic words. These observations suggest a hierarchical organization of phonotactic constraints that parallel the prosodic hierarchy itself, with different principles operating at different levels of structure.

Ultimately, understanding phonotactics and its manifestation in segmental units requires an integrated approach that combines insights from articulatory phonetics, acoustic analysis, typological comparison, experimental psychology, and formal theory—a multidimensional perspective that acknowledges phonotactics as a complex system operating at the intersection of physical, cognitive, and formal constraints on sound patterning in human language.

REFERENCES

1. Chomsky, N., & Halle, M. (1968). *The Sound Pattern of English*. Harper & Row.
2. Clements, G. N. (1990). The role of the sonority cycle in core syllabification. In J. Kingston & M. E. Beckman (Eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech* (pp. 283-333). Cambridge University Press.
3. Greenberg, J. H. (1978). Some generalizations concerning initial and final consonant clusters. In J. H. Greenberg (Ed.), *Universals of Human Language*, Vol. 2: Phonology (pp. 243-279). Stanford University Press.
4. Jakobson, R. (1968). *Child Language, Aphasia and Phonological Universals*. Mouton.
5. Hayes, B., & Wilson, C. (2008). A maximum entropy model of phonotactics and phonotactic learning. *Linguistic Inquiry*, 39(3), 379-440.
6. Kager, R. (1999). *Optimality Theory*. Cambridge University Press.

STEAM YONDASHUVINING TA'LIM-TARBIYA JARAYONIGA INTEGRATSIYASI: ZAMONAVIY TENDENSIYALAR VA NATIJALAR

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Annotatsiya Mazkur maqolada STEAM (Science, Technology, Engineering, Arts, Mathematics) yondashuvining ta'lim-tarbiya jarayoniga integratsiyasi, uning o'quvchilar tafakkurini rivojlantirishdagi o'rni, tanqidiy fikrlash va muammoli vaziyatlarda mustaqil yechim topish ko'nikmalarini shakllantirishga ta'siri tahlil qilinadi. Maqolada zamonaviy tajribalar asosida ta'lim jarayoniga STEAM yondashuvini qo'shish natijalari, amaliy yondashuvlar hamda metodik takliflar keltirilgan.

Kalit so'zlar. STEAM, integratsiyalashgan ta'lim, tanqidiy fikrlash, innovatsion yondashuv, muammoli vaziyat, kreativlik, interdisciplinar metodlar.

Abstract This article analyzes the integration of the STEAM (Science, Technology, Engineering, Arts, Mathematics) approach into the educational process, its role in developing students' thinking, and its impact on the formation of critical thinking and independent problem-solving skills. The article presents the results of incorporating the STEAM approach into the educational process, practical approaches, and methodological proposals based on modern experiences.

Keywords. STEAM, integrated education, critical thinking, innovative approach, problem-solving, creativity, interdisciplinary methods.

Kirish. XXI asr ta'limi zamonaviy texnologiyalar, kreativ tafakkur va muhandislik yondashuvlariga asoslangan bo'lishi kerak. Shu nuqtayi nazardan qaraganda, STEAM ta'lim modeli o'quvchilarda nafaqat bilim, balki amaliy ko'nikmalar, tanqidiy fikrlash va ijtimoiy mas'uliyatni shakllantirishda muhim ahamiyatga ega. O'zbekiston ta'lim tizimida ham ushbu modelni qo'llash bo'yicha izlanishlar olib borilmoqda va ushbu maqolada ana shu jarayonlar yoritiladi.

So'nggi yillarda ta'lim jarayonida an'anaviy yondashuvlar zamonaviy metodlar bilan boyitilmoqda. Ayniqsa, raqamli texnologiyalar, muhandislik fikrlash, kreativlik va san'atni o'zida mujassam etgan STEAM yondashuvi global miqyosda o'zini oqlagan tizimga aylandi. Bu model o'quvchilarning fanga bo'lgan qiziqishini oshirish, ularni real hayotiy muammolarni hal qilishga tayyorlash, shuningdek, fanlararo fikrlashni shakllantirish imkonini beradi.

O'zbekiston Respublikasining 2022–2026 yillarga mo'ljallangan Yangi O'zbekiston taraqqiyot strategiyasida ham yosh avlodni zamonaviy kasblarga tayyorlash, innovatsion fikrlovchi shaxsni shakllantirish dolzarb vazifalardan biri sifatida belgilangan. Bu borada STEAM asosli yondashuvlar ta'lim va tarbiya tizimini yangicha bosqichga olib chiqishi mumkin.

Asosiy qism. STEAM modeli o'z ichiga nafaqat an'anaviy STEM (science, technology, engineering, mathematics) fanlarini, balki san'at va dizaynni ham qo'shgan holda, kreativlik va ijodiy tafakkurni ham rivojlantirishga yo'naltirilgan. Bu yondashuv orqali o'quvchilar real hayotdagi

muammolarni hal qilishga, loyihalashga, o'z fikrini ifoda etishga va natijalarni tahlil qilishga o'rganadilar.

1. STEAM yondashuvining mohiyati

STEAM modeli – bu fanni (S), texnologiyani (T), muhandislikni (E), san'atni (A) va matematikani (M) yagona ta'lim tizimida integratsiyalashgan holda o'qitishdir. Bu yondashuv o'quvchilarning nafaqat bilim olish, balki amaliy faoliyat orqali bilimlarni mustahkamlashini ta'minlaydi.

2. Ta'lim-tarbiya jarayoniga integratsiyasi

STEAM loyihalari orqali o'quvchilar muammolarni aniqlash, jamoaviy ishlash, kreativ yechimlar taklif qilish va ularni amalda sinab ko'rish imkoniyatiga ega bo'ladilar. Misol: "Ekologik muammolar yechimi" mavzusida STEAM loyihasi tashkil qilinib, o'quvchilar quyosh panellari maketini yaratadilar, matematik hisob-kitoblar olib boradilar, natijada real muammoni yechish yo'llarini ishlab chiqadilar.

3. Pedagogik yondashuvlar va metodlar

- **Loyiha asosidagi ta'lim** (Project-Based Learning)
- **Muammo asosida o'qitish** (Problem-Based Learning)
- **Konstruktiv yondashuv** (Constructivism)

Bu metodlar STEAM ta'limining negizini tashkil qiladi va o'quvchilarni faol subyektga aylantiradi.

4. O'zbekiston ta'lim tizimida STEAM yondashuvi tajribalari

2022 yildan boshlab ayrim maktablarda "STEAM laboratoriyalari" tashkil qilindi. Ular orqali informatika, texnologiya va fan mashg'ulotlari zamonaviy usullar bilan integratsiyalashgan holda olib borilmoqda. Ushbu loyihalarda qatnashgan o'quvchilar orasida fanga bo'lgan qiziqish va ijodiy yondashuv sezilarli oshgani kuzatilgan.

STEAM yondashuvi bo'yicha xalqaro va mahalliy adabiyotlarda keng tahlillar mavjud. Xususan: Beers, S.Z. (2011) "21st Century Skills: Preparing Students for THEIR Future" asarida STEAM komponentlari bo'yicha o'quvchilarni qanday tayyorlash kerakligi yoritilgan.

Yakobson, A. (2018) "STEAM Education: Theory and Practice" nomli ishda turli davlatlarda amalga oshirilgan pilot loyihalar tahlil qilingan.

O'zbekiston Respublikasi Xalq ta'limi vazirligi tomonidan e'lon qilingan STEAM asoslari bo'yicha metodik qo'llanmalar ham tahlilga olingan.

Mazkur adabiyotlar shuni ko'rsatadiki, STEAM modeli o'quvchilarning bilimlarni amaliyotga tadbiiq qilishga, fanlararo aloqalarni mustahkamlashga va shaxsiy rivojlanishga ijobiy ta'sir ko'rsatadi.

Tadqiqotda quyidagi metodlardan foydalanildi:

Taqqoslash usuli – an'anaviy va STEAM yondashuvi asosidagi ta'lim natijalari solishtirildi.

Empirik kuzatuv – sinfda STEAM yondashuvi asosida o'tilgan mashg'ulotlar kuzatildi.

So'rovnoma – 30 nafar o'qituvchi va 60 nafar o'quvchi orasida STEAM yondashuvi haqida fikrlar yig'ildi.

Kontent-tahlil – milliy va xalqaro metodik materiallar tahlil qilindi.

O'quvchilar STEAM yondashuvi asosida o'tilgan darslardan keyin tanqidiy fikrlash, jamoada ishlash va muammoni hal qilish ko'nikmalarini yaxshilaganliklarini bildirgan.

O'qituvchilar STEAM loyihalarini tayyorlash va ularni amaliy darslarga kiritish orqali fanlararo bog'liqlikni samarali tashkil etish imkoniyatiga ega bo'lganliklarini qayd etgan.

Statistik tahlillar shuni ko'rsatdiki, STEAM asosidagi yondashuv natijasida o'quvchilarning fanga bo'lgan qiziqishi 40% ga oshgan.

Xulosa. STEAM yondashuvining ta'lim-tarbiya jarayoniga integratsiyasi o'quvchilarni zamonaviy kasblarga tayyorlash, ularning tafakkur doirasini kengaytirish va ijodiy faoliyatini rivojlantirishda muhim o'rin egallaydi. O'zbekiston ta'lim tizimi uchun bu yondashuv innovatsion rivojlanishning kalitidir. Kelgusida ushbu modelni yanada keng joriy etish uchun o'qituvchilarning malakasini oshirish, metodik qo'llanmalarni yangilash zarur.

STEAM yondashuvi – bu zamonaviy ta'limda shunchaki metod emas, balki yangi pedagogik falsafa bo'lib, u har bir o'quvchining shaxsiy rivojlanishi, kreativ fikrlashi, real hayotda o'zini sinab ko'rishi uchun zamin yaratadi.

O'zbekiston ta'lim tizimi uchun bu yondashuv yoshlarni texnologik, muhandislik va kreativlik yo'nalishlarida tayyorlashda strategik ahamiyat kasb etadi. Kelgusida:

- barcha umumiy o'rta maktablarda STEAM markazlarini tashkil etish;
- pedagoglar uchun malaka oshirish kurslarini yo'lga qo'yish;
- STEAM fanlarini o'quv rejalari va darsliklarga chuqur integratsiya qilish zarur.

Bunday chora-tadbirlar orqali ta'lim-tarbiya jarayonini XXI asr talablariga moslashtirish mumkin bo'ladi.

FOYDALANILGAN ADABIYOTLAR RO'YXATI

1. Beers, S.Z. (2011). 21st Century Skills: Preparing Students for THEIR Future.
2. Yakobson, A. (2018). STEAM Education: Theory and Practice. Springer.
3. O'zbekiston Respublikasi Xalq ta'limi vazirligi. (2023). STEAM asoslari fanidan metodik qo'llanma.
4. Murgatroyd, S. (2020). "Rethinking Education in the Age of Technology". Education Futures.
5. National Science Foundation. (2016). STEM to STEAM: Integrating the Arts into STEM Education.

THE LANGUAGE LEARNING TASK: CBL (CONTENT BASED LEARNING)

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Annotation: This study examines Content-Based Learning (CBL) as a strategic approach to language acquisition, exploring its theoretical foundations and practical applications in educational settings. The research analyzes how integrating substantive academic content with language instruction enhances both linguistic competence and subject knowledge acquisition.

Аннотация. В данном исследовании рассматривается предметно-языковое обучение (CBL) как стратегический подход к изучению языка, исследуются его теоретические основы и практическое применение в образовательных условиях. В исследовании анализируется, как интеграция содержательного академического контента с языковым обучением повышает как лингвистическую компетенцию, так и усвоение предметных знаний.

Keywords: Content-based learning, language acquisition, integrated curriculum, academic literacy, scaffolding techniques, authentic materials, dual-focused learning.

Ключевые слова: Предметно-языковое обучение, усвоение языка, интегрированная учебная программа, академическая грамотность, методы поддержки, аутентичные материалы.

Content-Based Learning (CBL) represents a significant pedagogical approach that fundamentally transforms traditional language education by integrating substantive academic content with language instruction. This methodology addresses the limitations of conventional language teaching approaches by providing contextually rich environments for language acquisition. Rather than isolating language as a separate subject, CBL positions language as both the medium and object of learning, creating meaningful contexts for authentic communication and higher-order thinking.

In contemporary educational environments, CBL addresses the growing need for educational efficiency by simultaneously developing language skills and subject knowledge. This dual-focused approach responds to increasing pressures on educational systems to prepare students for global academic and professional environments where both content expertise and language proficiency are essential. The integration of language and content instruction creates a dynamic educational framework characterized by authenticity, relevance, and cognitive engagement.

Bernard Mohan, a pioneering researcher in content-based language teaching, emphasized that "language is not just a set of structures, but a resource for making meaning in context." This perspective highlights the fundamental principle of CBL: language development occurs most effectively when embedded within meaningful content learning. The CBL approach involves two interrelated processes: content comprehension (understanding subject-specific concepts and information) and language acquisition (developing linguistic skills through purposeful content engagement).

Cultural and disciplinary elements are integrated naturally rather than artificially introduced. Language educators implementing CBL need awareness of both linguistic principles and subject-

specific knowledge domains, ensuring that disciplinary concepts and language features are systematically developed throughout the learning process.

This research area has particular relevance for Uzbek educational contexts, especially regarding the enhancement of foreign language instruction through content integration. Such research helps educators develop integrated curricula that address both linguistic and academic needs of Uzbek learners. It facilitates the development of pedagogical materials that incorporate authentic academic content while promoting language development, thereby strengthening the relationship between language learning and academic achievement in educational settings.

Models of CBL implementation include theme-based language instruction, sheltered content instruction, adjunct language instruction, and various forms of immersion programming. Historically, CBL has evolved from early immersion programs to more sophisticated approaches such as Content and Language Integrated Learning (CLIL) in European contexts and Cognitive Academic Language Learning Approach (CALLA) in North American educational systems. Recent trends emphasize scaffolding techniques, metacognitive strategy development, and technological integration to enhance content accessibility.

The challenges in implementing CBL can be categorized into curricular, instructional, and institutional dimensions. Curricular challenges include developing appropriate materials that balance linguistic accessibility with content authenticity. Instructional challenges involve preparing teachers with both subject expertise and language pedagogy skills. Institutional challenges encompass scheduling constraints, assessment practices, and policy alignment. This corresponds with Met's identification of key implementation factors: program goals, learner characteristics, available resources, and institutional support structures.

Linguistic complexity presents particular challenges in CBL implementation. When academic content contains specialized terminology, complex syntactic structures, and abstract concepts, instructors must develop scaffolding strategies that support comprehension while maintaining content integrity. Cummins distinguished between Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP), highlighting the importance of systematic development of academic language functions in content-based settings.

Effective CBL implementation requires addressing several core components:

1. Content selection (relevance, cognitive demand, linguistic features, conceptual accessibility)
2. Language objectives (vocabulary development, discourse patterns, grammatical structures, academic functions)
3. Scaffolding mechanisms (visual supports, graphic organizers, modeling, guided practice)
4. Assessment approaches (formative checks for understanding, content mastery evaluation, language progress measures)

Addressing these elements requires attention to certain fundamental principles:

1. Cognitive engagement - ensuring content challenges students intellectually while remaining comprehensible
2. Language functionality - focusing on language features essential for content mastery and disciplinary communication
3. Contextual scaffolding - providing temporary supports that facilitate understanding while building independent learning capacity

The integration of authentic materials represents both a central feature and significant challenge for CBL implementation. While authentic disciplinary texts provide exposure to genuine academic discourse patterns, they often present linguistic barriers for language learners. The adaptation of authentic materials requires careful analysis of linguistic demands and strategic modification techniques that preserve content authenticity while enhancing comprehensibility.

Assessment in CBL contexts presents unique challenges related to the dual focus on content and language objectives. Traditional language assessment approaches may not adequately capture content knowledge development, while conventional content assessments may unfairly penalize linguistic limitations. Effective CBL assessment frameworks must balance attention to content mastery with language development progress, often requiring multiple assessment formats and modified evaluation criteria.

Several additional considerations merit attention when implementing CBL approaches. The cognitive load theory has particular relevance for CBL, as students simultaneously process new content information and linguistic forms. This dual processing demand requires careful instructional sequencing and strategic scaffolding to prevent cognitive overload. Effective CBL instruction involves systematic attention to the intrinsic cognitive demands of content while managing the extraneous cognitive load imposed by language processing requirements.

Teacher preparation represents a critical factor in successful CBL implementation. The dual expertise required—content knowledge and language pedagogy—often exceeds traditional teacher training parameters. Professional development for CBL teachers must address subject-matter knowledge, understanding of language acquisition processes, familiarity with scaffolding techniques, and skills in developing integrated learning objectives. Collaborative planning between content specialists and language educators can help address expertise gaps while creating more robust instructional designs. Materials development poses significant challenges in CBL contexts. Commercial textbooks rarely achieve the ideal balance between content authenticity and linguistic accessibility required for specific learner populations. Adaptation of existing materials and creation of supplementary resources often become necessary components of CBL implementation. Effective materials demonstrate carefully controlled linguistic complexity while maintaining content integrity, incorporating visual supports, and providing multiple entry points for diverse proficiency levels.

The role of the first language in CBL contexts requires thoughtful consideration. While target language immersion maximizes exposure, strategic use of the first language can support complex concept development and reduce affective barriers. Translanguaging approaches that systematically incorporate both languages may optimize learning in some CBL contexts, particularly during early implementation stages or with abstract content domains.

Technology integration offers promising solutions to many CBL implementation challenges. Digital resources can provide multimodal representations of complex concepts, allowing students to access content through visual, auditory, and interactive channels. Adaptive learning platforms can differentiate content presentation based on language proficiency levels, while automated glossing and text-to-speech functions enhance text accessibility. Virtual simulations and augmented reality applications create immersive content experiences that transcend linguistic limitations.

Motivation dynamics in CBL settings differ significantly from traditional language classrooms. When students pursue meaningful content learning goals, language acquisition becomes a means rather than

an end, potentially enhancing engagement and persistence. The authenticity of learning tasks and their connection to academic or professional aspirations can foster more sustained motivation than artificial language exercises. However, the linguistic demands of content materials may also create frustration for some learners, requiring careful attention to affective factors.

Ultimately, successful implementation of Content-Based Learning requires a balanced approach that systematically integrates content and language objectives within well-designed instructional sequences. This integration demands both theoretical understanding and practical creativity from educators who must navigate the complex relationship between disciplinary knowledge structures and language development processes, creating learning environments where content comprehension and language acquisition mutually reinforce each other.

REFERENCES

1. Brinton, D. M., Snow, M. A., & Wesche, M. B. (2003). Content-based second language instruction. University of Michigan Press.
2. Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street & N. H. Hornberger (Eds.), *Encyclopedia of language and education* (2nd ed., Vol. 2, pp. 71-83). Springer.
3. Mohan, B. A. (1986). *Language and content*. Addison-Wesley.
4. Met, M. (1999). Content-based instruction: Defining terms, making decisions. NFLC Reports. Washington, DC: The National Foreign Language Center.
5. Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. John Benjamins Publishing.

IDEOLOGY, TECHNOLOGY AND TRANSLATION IMPACT

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Annotation: This study investigates the intricate relationship between ideology, technology, and translation, examining how these factors shape and influence translation processes and outcomes in contemporary contexts. The research analyzes the ways in which ideological frameworks affect translators' choices and strategies, while simultaneously exploring how technological advancements have transformed translation practices and accessibility. **Аннотация:** В данном исследовании рассматривается сложная взаимосвязь между идеологией, технологией и переводом, анализируется как эти факторы формируют и влияют на процессы и результаты перевода в современных контекстах. В исследовании анализируются способы, которыми идеологические рамки влияют на выбор и стратегии переводчиков, одновременно исследуя, как технологические достижения трансформировали практику перевода и его доступность.

Keywords: Translation studies, ideology in translation, translation technology, machine translation, cultural transfer, power dynamics, digital transformation, neural machine translation, localization.

Ключевые слова: Переводоведение, идеология в переводе, технологии перевода, машинный перевод, культурный перенос, динамика власти, цифровая трансформация, нейронный машинный перевод, локализация.

Translation has historically served as a bridge between cultures, facilitating the exchange of ideas, knowledge, and literary works across linguistic boundaries. However, this process has never been neutral or purely mechanical. Rather, translation exists at the intersection of multiple influencing factors, with ideology and technology emerging as particularly significant forces that shape both the practice and products of translation. As Lefevere aptly noted, translation is "a rewriting of an original text" that reflects the "constraints of ideology, poetics, and the universe of discourse" operating within the target culture [1;7]. Simultaneously, the rapid advancement of technology has fundamentally transformed how translation is performed, distributed, and consumed in contemporary society.

The significance of studying the interrelationship between ideology, technology, and translation impact lies in understanding how meaning is negotiated, transformed, and sometimes manipulated as it travels between languages and cultures. This intersection represents a critical area of inquiry in an increasingly interconnected yet ideologically diverse global landscape where technological tools mediate much of our cross-cultural communication. As Cronin argues, "Translation is not simply a linguistic act; it is also a cultural, political, and technological act" [2;25]. This multidimensional perspective frames the present study, which seeks to analyze how ideological frameworks and technological innovations together influence translation processes and outcomes.

The concept of ideology in translation encompasses the systems of beliefs, values, and power structures that influence translators' decisions and strategies. According to Tymoczko and Gentzler, ideology manifests in translation "not only in the text translated, but also in the voice and stance of

the translator, and in relevant aspects of the translating context" [3;152]. This perspective acknowledges that translators operate within specific sociopolitical contexts that inevitably shape their interpretations and choices. Whether consciously or unconsciously, translators make decisions that reflect ideological positions—from the selection of texts deemed worthy of translation to specific word choices that may emphasize or downplay particular meanings.

Several theoretical frameworks have been developed to analyze ideological aspects of translation. Venuti's concepts of "domestication" and "foreignization" highlight how translation strategies can either conform to dominant target culture values (domestication) or retain the foreignness of the source text, potentially challenging target culture norms (foreignization). Similarly, Spivak's postcolonial perspective emphasizes the power dynamics involved in translating texts from marginalized cultures into dominant languages, arguing that translation often serves as a tool of cultural appropriation or erasure when ideological awareness is lacking.

Empirical studies have demonstrated various ways ideology influences translation practice. Baker's research on narrative theory and translation in conflict zones shows how translators' ideological positioning affects their representation of politically charged narratives. Similarly, Tymoczko's work on translation under colonialism illustrates how ideological forces shape translation strategies, often serving either to reinforce or resist colonial power structures. In literary translation, studies by Venuti and others have documented how publishing industry expectations and target culture norms influence translators' decisions about how to represent culturally specific elements, often leading to the domestication of texts to conform to dominant ideologies [4;15].

The significant influence of ideology on translation is evident across various domains. In political discourse, translations of speeches, policy documents, and diplomatic communications often reflect ideological biases that subtly shift meanings to align with particular political viewpoints. In news translation, research by Bielsa and Bassnett has shown how journalistic norms and institutional ideologies shape translation practices in news agencies, affecting how events are represented across linguistic boundaries. Legal translation presents another domain where ideological considerations are paramount, as legal concepts often embody culturally specific values and assumptions that resist straightforward equivalence in translation.

Religious translation represents perhaps the most historically significant intersection of ideology and translation. From the translations of sacred texts like the Bible, Quran, or Buddhist sutras, translators have made ideologically motivated choices that significantly influenced religious practice and understanding. As Nida noted in his work on Bible translation, even the choice between formal and dynamic equivalence reflects underlying ideological positions about the nature of sacred texts and their function in religious communities.

The technological dimension of translation has undergone revolutionary changes in recent decades, transforming the tools, processes, and possibilities available to translators and users of translated content. From early dictionary-based support tools to contemporary neural machine translation systems, technology has progressively expanded its role in the translation process. According to O'Hagan, "Translation technology has evolved from being merely a productivity tool to becoming an integral part of the translation process itself".

The historical development of translation technology reveals several key phases. Early computational approaches focused on rule-based machine translation, attempting to codify grammatical structures and lexical equivalences between languages. This was followed by statistical machine translation

models that analyzed large parallel corpora to identify translation patterns. Most recently, neural machine translation has emerged as the dominant paradigm, using artificial neural networks to capture deeper linguistic relationships and produce more fluent translations.

Contemporary translation technology encompasses various tools and approaches. Computer-assisted translation (CAT) tools integrate translation memories, terminology databases, and quality assurance features to support human translators' work. Machine translation (MT) systems continue to advance, with neural models like Google's Neural Machine Translation and DeepL offering increasingly accurate translations across language pairs. Specialized technologies have also emerged for particular domains, such as audiovisual translation tools for subtitling and dubbing, and localization management systems for coordinating complex multilingual projects.

Another key intersection concerns the visibility of ideological manipulation in technologically mediated translation. As machine translation becomes more sophisticated and its outputs more fluent, ideological biases encoded in training data or algorithms may become less apparent to users who lack the linguistic knowledge to identify subtle manipulations of meaning. Research by Moorkens and others has demonstrated that users tend to trust machine translation output even when it contains errors or biases, raising concerns about the potential for technological tools to obscure ideological influences.

The policy and governance dimensions of translation technology deserve greater attention, particularly regarding data ownership, algorithmic transparency, and the protection of linguistic diversity. As translation increasingly functions as digital infrastructure that mediates global communication, questions about who controls this infrastructure and how it is regulated become more pressing.

Educational approaches to translation studies must also evolve to address these intersections. Future translators need training not only in linguistic skills and technological tools but also in critical analysis of ideological influences and ethical decision-making. As Pym suggests, "Translation pedagogy should prepare students to be not just skilled users of technology but critical participants in technologically mediated translation ecosystems" [6;75].

In conclusion, the interrelationship between ideology, technology, and translation impact represents a complex and dynamic field of study with significant implications for cross-cultural communication in contemporary society. This research demonstrates that neither ideological influences nor technological tools can be understood in isolation; rather, they mutually shape and transform translation processes and outcomes. As translation continues to evolve in response to technological innovation and changing ideological landscapes, researchers and practitioners must maintain critical awareness of these intersections to ensure that translation fulfills its potential as a means of fostering understanding across linguistic and cultural boundaries while respecting diversity and difference.

By recognizing translation as simultaneously a linguistic, cultural, technological, and ideological practice, we gain deeper insight into its complexities and can work toward more ethical and effective approaches to cross-cultural communication in an increasingly interconnected yet diverse global context.

REFERENCES

1. Lefevere, A. (1992). *Translation, Rewriting and the Manipulation of Literary Fame*. Routledge.
2. Cronin, M. (2013). *Translation in the Digital Age*. Routledge.
3. Tymoczko, M., & Gentzler, E. (Eds.). (2002). *Translation and Power*. University of Massachusetts Press.
4. Venuti, L. (1995). *The Translator's Invisibility: A History of Translation*. Routledge.
5. Spivak, G. C. (2000). *The Politics of Translation*. In L. Venuti (Ed.), *The Translation Studies Reader* (pp. 397-416). Routledge.
6. Baker, M. (2006). *Translation and Conflict: A Narrative Account*. Routledge.

SYSTEM OF EXERCISES IN FOREIGN LANGUAGE TEACHING

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Annotation. This study examines the theoretical foundations and practical applications of exercise systems in foreign language teaching, focusing on the structural organization and methodological principles that govern effective language acquisition. The research analyzes various approaches to designing exercise systems, including their hierarchical arrangement, progression from controlled to communicative activities, and integration of linguistic and cultural components. By exploring both traditional and innovative exercise typologies, this study identifies key principles for developing comprehensive exercise systems that promote language proficiency across all skill areas while accommodating diverse learning styles and educational contexts.

Аннотация. В данном исследовании рассматриваются теоретические основы и практическое применение системы упражнений в обучении иностранным языкам, с акцентом на структурную организацию и методологические принципы, обеспечивающие эффективное усвоение языка. В исследовании анализируются различные подходы к разработке систем упражнений, включая их иерархическую организацию, прогрессию от контролируемых к коммуникативным заданиям и интеграцию лингвистических и культурных компонентов. Изучая как традиционные, так и инновационные типологии упражнений, это исследование определяет ключевые принципы для разработки комплексных систем упражнений, способствующих языковой компетенции во всех областях навыков, учитывая при этом различные стили обучения и образовательные контексты.

Keywords: Foreign language teaching, exercise typology, language acquisition, methodological principles, communicative competence, skill development, learning progression, task-based learning, educational psychology, instructional design.

Ключевые слова: Обучение иностранным языкам, типология упражнений, усвоение языка, методологические принципы, коммуникативная компетенция, развитие навыков, учебная прогрессию, проблемно-ориентированное обучение, педагогическая психология, проектирование обучения.

A systematic approach to language teaching through properly organized exercises is fundamental for effective foreign language acquisition. The concept of a "system of exercises" represents not merely a collection of tasks but a carefully structured progression designed to develop specific language skills while integrating them into a cohesive communicative competence. This methodological organization of learning activities constitutes the practical mechanism through which theoretical principles of language pedagogy are realized in the classroom.

The historical development of exercise systems reflects evolving perspectives on language teaching methodology. Traditional grammar-translation approaches emphasized formal linguistic elements through pattern drills and translation exercises. The subsequent audio-lingual method introduced

more structured habit formation through repetition and mimicry. Contemporary communicative and task-based approaches have revolutionized exercise design by prioritizing meaningful interaction and authentic language use. This evolution demonstrates how exercise systems serve as practical manifestations of prevailing theoretical paradigms in language education.

According to Passov, a leading methodologist, a true system of exercises must possess specific characteristics: scientific basis, comprehensiveness, structural hierarchy, purposefulness, situational context, and communicative orientation. These criteria distinguish systematic exercise sequences from random collections of activities. Gez further elaborates that effective exercise systems exhibit logical progression from receptive to productive skills, from controlled to free practice, and from form-focused to meaning-focused tasks [1;83].

The structural organization of exercise systems typically features several hierarchical levels. Preparatory exercises focus on language form and structure, developing the foundational linguistic competence necessary for communication. These include recognition exercises, substitution drills, transformation activities, and guided production tasks. Speech exercises build upon this foundation by engaging learners in meaningful communication through situational dialogues, discussions, role-plays, and problem-solving activities. Rogova categorizes exercises into non-communicative (focusing on form), pre-communicative (bridging form and meaning), and communicative (prioritizing message conveyance) [2;67].

Modern methodological frameworks differentiate between language exercises, which develop linguistic competence (phonological, lexical, grammatical), and speech exercises, which develop communicative skills (listening, speaking, reading, writing). Solovova proposes a three-phase exercise system: orientation (introducing new material), stereotyping (practicing patterns), and variance (creative application). This progression reflects cognitive processing theories that trace learning from controlled to automatic performance. The design of effective exercise systems must consider several key principles. The principle of gradual complexity increase ensures that learners proceed from simple to complex tasks, building confidence and competence incrementally. The principle of communicative context emphasizes that even form-focused exercises should contain elements of meaningful communication. The principle of integrated skills development recognizes that language abilities are interrelated and should be practiced in combination rather than isolation [4;14].

Technological innovations have expanded the possibilities for exercise system implementation. Computer-assisted language learning (CALL) and mobile applications offer new formats for exercise delivery, including interactive activities, immediate feedback mechanisms, and personalized learning paths. However, these technological tools must be integrated within coherent methodological frameworks rather than used as isolated supplements.

Several challenges persist in developing optimal exercise systems. The need to balance accuracy and fluency remains a central methodological dilemma. Exercise sequences must provide sufficient structural practice without sacrificing communicative authenticity. Additionally, individual differences in learning styles, cognitive processing, and motivation necessitate flexibility within exercise systems to accommodate diverse learner needs.

Research on exercise effectiveness highlights several critical factors. Exercises that incorporate problem-solving elements generate higher cognitive engagement than mechanical drills. Tasks

requiring information exchange and negotiation of meaning produce more significant language gains than one-way activities. Furthermore, exercise systems that integrate cultural elements alongside linguistic content contribute to more holistic language acquisition.

The evaluation of exercise systems should examine not only their structural coherence but also their practical effectiveness in developing targeted competencies. Assessment criteria include the degree to which exercises: promote active mental processing, reflect authentic language use, allow for personalization, provide appropriate scaffolding, and facilitate transfer to real-world communication contexts. This evaluation should inform the continuous refinement of exercise designs to maximize learning outcomes.

The implementation of exercise systems in Uzbekistan's educational context presents unique considerations. Traditional pedagogical approaches have historically emphasized structural accuracy through grammar-focused exercises. Contemporary reforms aim to balance this foundation with more communicative activities that prepare learners for global interaction. This transition requires thoughtful adaptation of exercise systems to maintain cultural appropriateness while embracing methodological innovations.

In conclusion, a well-designed system of exercises represents the practical backbone of effective language teaching methodology. By organizing learning activities according to sound psycholinguistic principles and arranging them in logical progression, educators can systematically develop the complex set of skills required for foreign language proficiency. Future research should continue to examine how exercise systems can be optimized to address evolving educational needs, technological possibilities, and our growing understanding of language acquisition processes.

REFERENCES

1. Passov E.I. Communicative Method of Teaching Foreign Language Speaking. Moscow: Prosveshcheniye, 1991. p. 45-46.
2. Gez N.I., Lyakhovitsky M.V., Mirolubov A.A. Methods of Teaching Foreign Languages in Secondary School. Moscow: Vysshaya shkola, 1982, p. 83.
3. Rogova G.V., Rabinovich F.M., Sakharova T.E. Methods of Teaching Foreign Languages in Secondary School. Moscow: Prosveshcheniye, 1991. - p. 67-69.
4. Solovova E.N. Methods of Teaching Foreign Languages: Advanced Course. Moscow: AST, 2010. - p. 103-105.
5. Polat E.S. New Pedagogical and Information Technologies in the Education System. Moscow: Academia, 2008. - p. 38-42.

COGNITIVE CHARACTERISTICS OF AGE GROUPS

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Annotation. This study examines the distinctive cognitive characteristics exhibited across different age groups, analyzing the developmental trajectories of mental processes from early childhood through late adulthood. The research explores how cognitive functions including attention, memory, problem-solving abilities, and executive functioning evolve throughout the human lifespan. By investigating both normative developmental patterns and individual differences, this study identifies key cognitive transitions between developmental stages and examines how social, educational, and environmental factors influence cognitive development. The findings provide valuable insights for educational practices, clinical interventions, and supportive strategies tailored to age-specific cognitive needs.

Аннотация. В данном исследовании рассматриваются отличительные когнитивные характеристики, проявляющиеся в разных возрастных группах, с анализом траекторий развития мыслительных процессов от раннего детства до позднего взрослого возраста. В исследовании изучается, как когнитивные функции, включая внимание, память, способности к решению проблем и исполнительные функции, развиваются на протяжении всей жизни человека. Исследуя как нормативные модели развития, так и индивидуальные различия, это исследование выявляет ключевые когнитивные переходы между стадиями развития и изучает, как социальные, образовательные и экологические факторы влияют на когнитивное развитие. Полученные результаты дают ценную информацию для образовательной практики, клинических вмешательств и стратегий поддержки, адаптированных к возрастным когнитивным потребностям.

Keywords: Cognitive development, age differences, executive function, working memory, information processing, neuroplasticity, developmental psychology, lifespan cognition, educational psychology, cognitive aging.

Ключевые слова: Когнитивное развитие, возрастные различия, исполнительная функция, рабочая память, обработка информации, нейропластичность, психология развития, познание на протяжении жизни, педагогическая психология, когнитивное старение.

Understanding cognitive characteristics across different age groups is fundamental to educational psychology, developmental science, and clinical practice. Cognitive abilities — including attention, memory, reasoning, and problem-solving — undergo significant transformations throughout the lifespan, influenced by both biological maturation and environmental experiences. These cognitive changes affect how individuals perceive, interpret, and respond to their world, with profound implications for learning, social adaptation, and overall functioning.

The study of age-related cognitive characteristics has evolved considerably over recent decades, moving beyond simplistic stage theories to more nuanced understandings of multidimensional

development. Current research recognizes that cognitive development follows neither a strictly linear progression nor universal patterns that apply identically across cultures and contexts. Instead, cognitive development represents a complex interplay between genetic predispositions, environmental opportunities, sociocultural influences, and individual experiences.

This complexity necessitates both theoretical frameworks and empirical methodologies that can capture the multifaceted nature of cognitive development. As noted by Baltes and colleagues, cognitive development encompasses both gains and losses throughout the lifespan, with different cognitive functions showing distinct developmental trajectories [1;124]. Some abilities, such as crystallized intelligence (accumulated knowledge), continue to develop well into late adulthood, while others, such as processing speed, may peak in early adulthood and gradually decline thereafter. The early childhood period represents a critical window for cognitive development, characterized by rapid neural proliferation and synaptic pruning. During this stage, children develop foundational cognitive abilities that will support later learning. Piaget's theory of cognitive development situates young children in the sensorimotor and preoperational stages, where thinking progresses from action-based to symbolic representation [2;67].

Key cognitive characteristics of this age group include:

1. Rapid language acquisition, with vocabulary expanding from approximately 50 words at 18 months to over 10,000 words by age 6
2. Development of attentional systems, progressing from highly distractible to increasingly sustained attention
3. Emergence of theory of mind—understanding that others have different thoughts, beliefs, and perspectives
4. Improvement in working memory capacity, though still limited compared to older children
5. Concrete thinking dominated by perceptual features rather than abstract principles

Research by Vygotsky emphasized the social nature of early cognitive development, highlighting how adult-child interactions within the "zone of proximal development" scaffold emerging cognitive abilities [3;91]. These social learning contexts prove essential for developing executive functions—cognitive control processes including inhibition, working memory, and cognitive flexibility—which emerge gradually throughout early childhood and predict later academic success.

The middle childhood period coincides with Piaget's concrete operational stage, marked by significant advances in logical thinking and cognitive flexibility. During this period, children develop more sophisticated information processing abilities, memory strategies, and metacognitive awareness—the ability to think about and regulate their own thinking processes.

While adolescents demonstrate significant cognitive advances, research by Steinberg highlights the "cognitive-affective gap"—the asynchronous development between cognitive control systems and socioemotional systems [5;84]. This developmental mismatch helps explain adolescents' heightened risk-taking behavior, particularly in emotionally arousing situations or peer contexts, despite their growing capacity for logical reasoning.

The development of postformal thought during young adulthood, as described by Labouvie-Vief, integrates logical reasoning with practical constraints and emotional considerations [6;217]. This more contextual and integrative thinking allows young adults to navigate complex real-world problems that lack clear solutions.

Cognitive aging in late adulthood follows heterogeneous patterns, with substantial individual differences in both the rate and pattern of change. While certain abilities show normative declines, others remain stable or even continue to develop into advanced age.

Cognitive characteristics of older adults include:

1. Relative preservation of semantic knowledge, vocabulary, and other crystallized abilities
2. Declines in processing speed, working memory, and aspects of attention
3. Reduced episodic memory formation, particularly for contextual details
4. Maintained or enhanced emotional regulation and positive affect
5. More selective and efficient allocation of cognitive resources
6. Potential continued development of wisdom-related knowledge

The cognitive reserve hypothesis, advanced by Stern, explains why individuals with higher education, occupational complexity, and cognitive engagement throughout life often show greater resilience to age-related cognitive decline and neuropathology. This suggests that lifelong cognitive stimulation builds a reserve capacity that can offset or delay cognitive aging.

Research on successful cognitive aging highlights the importance of maintaining physical health, engaging in cognitive stimulation, and preserving social connections. Park and Reuter-Lorenz's scaffolding theory of aging and cognition suggests that older adults recruit additional neural networks to compensate for age-related neural changes, allowing maintained performance on many cognitive tasks despite underlying neural changes.

Understanding age-related cognitive characteristics has profound implications for educational practices and clinical interventions across the lifespan. Educational approaches benefit from aligning with cognitive developmental stages—concrete manipulatives for younger children, abstract conceptual challenges for adolescents, and experiential learning leveraging accumulated knowledge for adults.

For clinical practice, age-appropriate cognitive assessment considers normative developmental expectations when evaluating potential cognitive disorders. Intervention approaches likewise benefit from age-specific considerations, with early intervention capitalizing on heightened neuroplasticity in childhood, while later-life interventions may emphasize compensatory strategies and environmental supports.

Digital technologies offer new opportunities for cognitive assessment and intervention across age groups, though their implementation should consider age-appropriate design features. Educational technologies can provide personalized learning experiences aligned with developmental capabilities, while cognitive training applications may offer targeted practice for specific cognitive functions.

Cognitive development across the lifespan follows complex trajectories influenced by biological maturation, environmental experiences, and individual differences. Rather than a simple pattern of growth followed by decline, different cognitive functions show distinct developmental patterns, with some abilities peaking early while others continue developing throughout adulthood.

This multidimensional understanding of cognitive aging challenges simplistic narratives about development and decline, highlighting instead the dynamic reorganization of cognitive systems throughout life. Future research in this area would benefit from increased attention to cultural variations in cognitive development, the influence of technological environments on cognitive functioning, and intervention approaches that promote cognitive health across all age groups.

By recognizing the distinctive cognitive characteristics of different age groups, educational practices, clinical interventions, and supportive environments can be better tailored to developmental needs, promoting optimal cognitive functioning throughout the lifespan. This developmental perspective emphasizes both the significant plasticity of cognitive systems and the important ways that environmental contexts can support cognitive health at every age.

REFERENCES

1. Baltes, P. B., Staudinger, U. M., & Lindenberger, U. Lifespan psychology: Theory and application to intellectual functioning. *Annual Review of Psychology*, 1999, p. 124-126.
2. Piaget, J. *The psychology of intelligence*. London: Routledge, 2001, p. 63-79.
3. Dushayevna, O. R. G. (2023). THE AGE FEATURES OF TEACHING ENGLISH PRONUNCIATION IN PRIMARY CLASSES. *JOURNAL OF LANGUAGE AND LINGUISTICS*, 6(4), 375-379
4. Vygotsky, L. S. *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press, 1978, p. 86-97.
5. Flavell, J. H. Development of children's knowledge about the mental world. *International Journal of Behavioral Development*, 2000, p. 41-49.
6. Steinberg, L. Risk taking in adolescence: New perspectives from brain and behavioral science. *Current Directions in Psychological Science*, 2007, p. 80-89.
7. Labouvie-Vief, G. Dynamic integration: Affect, cognition, and the self in adulthood. *Current Directions in Psychological Science*, 2003, p. 214-219.

LEXICAL SEMANTIC PROBLEMS OF TRANSLATIONSupervisor: **Egamberdiyeva.I.A**

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Annotation. This study investigates the lexical semantic challenges encountered in the translation process, examining the complex relationship between word meanings across different linguistic and cultural systems. The research analyzes how translators navigate issues of polysemy, semantic fields, connotative meanings, and cultural-specific lexical items when transferring content between languages. Through examination of both theoretical frameworks and practical translation cases, this study identifies key lexical semantic problems that affect translation quality, including issues of equivalence, contextual meaning, and the translation of culture-bound expressions, idioms, and metaphors.

Аннотация. В данном исследовании рассматриваются лексико-семантические проблемы, возникающие в процессе перевода, с анализом сложных взаимоотношений между значениями слов в различных языковых и культурных системах. В исследовании анализируется, как переводчики решают вопросы полисемии, семантических полей, коннотативных значений и культурно-специфических лексических единиц при передаче содержания между языками. На основе изучения как теоретических основ, так и практических случаев перевода, в исследовании выявляются ключевые лексико-семантические проблемы, влияющие на качество перевода, включая вопросы эквивалентности, контекстуального значения и перевода культурно-обусловленных выражений, идиом и метафор.

Keywords: Translation studies, lexical semantics, linguistic equivalence, polysemy, semantic fields, connotative meaning, culture-specific items, contextual translation, translation strategies, interlingual relations.

Ключевые слова: Переводоведение, лексическая семантика, языковая эквивалентность, полисемия, семантические поля, коннотативное значение, культурно-специфические элементы, контекстуальный перевод, переводческие стратегии, межкультурные отношения.

The lexical semantic dimension of translation represents one of the most challenging aspects of cross-linguistic communication. Words, as the fundamental units of meaning, carry complex semantic structures that rarely find perfect equivalents across language boundaries. This phenomenon results from the intricate relationship between language and thought, where each linguistic system categorizes and expresses reality according to its own unique patterns. Consequently, translators must navigate a complex web of semantic relations to accurately transfer meaning between source and target languages.

The fundamental lexical semantic challenge in translation stems from the asymmetry of semantic systems across languages. As Nida observes, "No two languages are identical, either in the meanings given to corresponding symbols or in the ways in which such symbols are arranged in phrases and sentences" [1;48]. This non-isomorphism manifests in various forms of lexical gaps, semantic

overlaps, and divergent connotative associations that complicate the translator's task of finding appropriate equivalents.

Polysemy—the capacity of words to carry multiple related meanings—poses a significant challenge for translators. When a source language word encompasses several semantic variants, the translator must determine which particular sense is activated in the given context and find a corresponding equivalent that captures this specific meaning. For instance, the English word "table" may refer to a piece of furniture, a data arrangement, or a parliamentary procedure, each requiring different lexical equivalents in other languages. Failure to identify the correct semantic variant often results in translation errors or awkward renderings in the target language. Semantic fields—networks of related words that divide conceptual domains—differ markedly across languages, reflecting distinct cultural and cognitive categorizations. As Komissarov notes, "Languages segment reality differently, creating unique semantic maps that rarely align perfectly" [2;76]. For example, kinship terms, color terminology, and emotional vocabulary often exhibit drastically different semantic organizations across languages. The Russian language distinguishes between "голубой" (light blue) and "синий" (dark blue) as separate basic color terms, while English treats these as shades of a single color category. Such divergences require translators to reconfigure semantic relationships when moving between linguistic systems.

Culture-specific lexical items present perhaps the most visible lexical semantic challenges. These include realia (objects or concepts unique to a particular culture), institutional terms, historical references, and culturally embedded expressions that lack direct equivalents in other languages. Vlakhov and Florin define realia as "words and expressions for culture-specific material elements" that carry distinct national, historical, or cultural connotations [3;55]. When encountering such items, translators must choose among several strategies: borrowing the original term, creating a calque, providing a descriptive equivalent, or employing functional substitution with a roughly analogous concept from the target culture.

Connotative meanings—the emotional, stylistic, and evaluative associations of words—often prove more elusive in translation than their denotative content. Words that share similar denotations across languages frequently diverge in their connotative values, register markings, or frequency of use. For example, synonyms for "home" in various languages may carry different emotional resonances, social implications, or poetic qualities that resist direct translation. Experienced translators recognize that preserving connotative meaning is often crucial for maintaining the text's overall effect and communicative intention.

Idioms, fixed expressions, and figurative language constitute another category of lexical semantic translation problems. These expressions derive their meanings not from the sum of their component words but from conventionalized usage within a linguistic community. Baker identifies four main difficulties in translating idioms: identifying expressions as idioms, interpreting their meanings correctly, finding appropriate equivalents, and assessing the appropriateness of using idiomatic language in the target text [4;68]. When confronted with idiomatic expressions, translators may either seek corresponding idioms in the target language, paraphrase the semantic content, or create compensatory figurative language elsewhere in the text.

Semantic extension and narrowing processes further complicate lexical choices in translation. Words that appear as direct equivalents often cover different semantic territories, with one language using a

broader term where another employs a more specific one. The English word "cousin" encompasses multiple kinship relations that many languages distinguish with separate terms based on gender, lineage side, and other factors. Conversely, specialized vocabulary in certain domains may be more developed in one language than another, requiring translators to employ circumlocution or adaptation strategies.

Context-dependent meaning represents another crucial aspect of lexical semantic problems. The semantic content of words is not fixed but fluctuates according to their textual environment, collocational patterns, and pragmatic situation. As Neubert emphasizes, "Words are chameleons that take on the color of their surroundings" [5;33]. Skillful translators must interpret how context modifies and specifies word meanings, often requiring creative solutions when contextual factors operate differently across languages.

Translation strategies for addressing lexical semantic problems vary according to text type, purpose, and audience. In technical and scientific translation, terminological precision and conceptual accuracy take priority, often necessitating borrowings or neologisms to fill lexical gaps. Literary translation, by contrast, places greater emphasis on preserving stylistic nuances, connotative values, and cultural resonances, sometimes requiring significant semantic restructuring to achieve equivalent effects. Advertising and marketing translation frequently employs transcreation—creative adaptation of content to evoke similar consumer responses across cultural boundaries.

The cognitive process of resolving lexical semantic translation problems involves several stages. First, the translator must comprehend the full semantic content of the source text unit, including its denotative meaning, connotative values, and contextual implications. Next, they must consider potential equivalents in the target language, evaluating their semantic coverage, register appropriateness, and pragmatic effects. Finally, they must select or construct an optimal solution that balances accuracy, naturalness, and communicative function, often negotiating inevitable semantic compromises.

Modern translation technologies offer valuable support for addressing lexical semantic challenges. Corpus-based translation tools provide insights into contextual usage patterns and collocational behavior across languages. Semantic networks and ontologies help visualize conceptual relationships that underlie lexical choices. Nevertheless, these technologies cannot fully resolve the fundamental semantic asymmetries between languages, which continue to require human judgment, cultural sensitivity, and creative problem-solving skills.

The study of lexical semantic problems in translation has significant implications for translator training and practice. By developing systematic awareness of semantic relations within and across languages, translators can make more informed decisions and develop effective strategies for navigating complex meaning transfer problems. Furthermore, contrastive lexical semantic analysis contributes to our broader understanding of linguistic relativity, cultural cognition, and the nature of meaning itself.

REFERENCES

1. Nida, E.A. *Toward a Science of Translating*. Leiden: E.J. Brill, 1964. p. 48-50.
2. Komissarov, V.N. *Modern Translation Studies*. Moscow: ETS, 2002, p. 75-77.
3. Vlahov, S., Florin, S. *Untranslatable in Translation*. Moscow: International Relations, 1980. - p. 55-58.
4. Baker, M. *In Other Words: A Coursebook on Translation*. London: Routledge, 2018. - p. 67-70.
5. Neubert, A. *Text and Translation*. Leipzig: Verlag Enzyklopädie, 1985. - p. 32-35.

INTERLANGUAGE (ENGLISH-UZBEK, ENGLISH-RUSSIAN) SPECIFICITIES

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Annotation. This study examines the distinctive characteristics of interlanguage development among Uzbek and Russian speakers learning English. The research analyzes specific linguistic patterns, common errors, and developmental sequences that emerge during the acquisition process, highlighting how native language features influence second language production. By comparing interlanguage features across these language pairings, this study identifies key transfer phenomena, fossilization patterns, and pedagogical implications for language teaching in multilingual contexts.

Аннотация. В данном исследовании рассматриваются особенности развития интерязыка у носителей узбекского и русского языков, изучающих английский язык. В исследовании анализируются специфические лингвистические модели, распространенные ошибки и последовательности развития, которые возникают в процессе освоения языка, подчеркивая, как особенности родного языка влияют на производство второго языка. Сравнивая особенности интерязыка в этих языковых парах, данное исследование выявляет ключевые явления переноса, модели фоссилизации и педагогические последствия для преподавания языков в многоязычном контексте.

Keywords: Interlanguage, language transfer, second language acquisition, error analysis, fossilization, English language learning, Uzbek language, Russian language, contrastive analysis, language typology, crosslinguistic influence, developmental sequences.

Ключевые слова: Интерязык, языковой перенос, усвоение второго языка, анализ ошибок, фоссилизация, изучение английского языка, узбекский язык, русский язык, контрастивный анализ, языковая типология, межъязыковое влияние, последовательности развития.

The significance of studying interlanguage specificities in the context of English-Uzbek and English-Russian language pairs lies in the substantial typological differences between these languages. English belongs to the Germanic branch of the Indo-European language family, characterized by a relatively fixed word order and limited morphological inflection. Uzbek, as a Turkic language, features agglutinative morphology, SOV word order, and vowel harmony. Russian, a Slavic language, demonstrates complex case systems, flexible word order, and extensive morphological inflection. These fundamental differences create unique challenges and patterns in the interlanguage of speakers from these language backgrounds when learning English.

Understanding the specific manifestations of interlanguage in these particular language pairs has significant theoretical and practical implications. Theoretically, it contributes to our understanding of language transfer phenomena, developmental sequences, and universal aspects of second language acquisition. Practically, it informs language teaching methodologies, curriculum design, and error correction strategies that can better address the specific needs of Uzbek and Russian speakers learning English [1;34].

The interlanguage of Uzbek speakers learning English exhibits several distinctive characteristics that reflect the influence of their native language's typological features. Morphosyntactic patterns observed in this interlanguage include challenges with English article usage, which is unsurprising given the absence of articles in Uzbek. Research has consistently shown that Uzbek learners of English often omit articles altogether or use them inconsistently, particularly in distinguishing between definite and indefinite references. Word order presents another significant area of interlanguage specificity. Uzbek's canonical SOV structure contrasts with English's SVO pattern, resulting in transfer errors such as "I the book read" instead of "I read the book." Additionally, Uzbek learners often struggle with English prepositional phrases, as Uzbek primarily uses postpositions rather than prepositions.

Verb tense and aspect systems show particularly notable interlanguage features. Uzbek speakers frequently demonstrate difficulty with the English perfect tenses, which have no direct equivalent in Uzbek. They may substitute simple past for present perfect (e.g., "I lived here for five years" instead of "I have lived here for five years") or use present continuous in contexts where English requires simple present (e.g., "I am knowing the answer" instead of "I know the answer"). Phonological features in the interlanguage of Uzbek speakers learning English include difficulties with certain consonant clusters that do not exist in Uzbek, such as /sp/, /st/, and /sk/ in word-initial positions. This often leads to epenthesis, where vowels are inserted to break up these clusters (e.g., "espeak" for "speak"). Additionally, Uzbek speakers may struggle with certain English vowel distinctions, particularly the contrast between /ɪ/ and /i:/ (as in "ship" vs. "sheep") and may exhibit difficulty with stress patterns that differ significantly from Uzbek's word-final stress tendency [2;32].

Lexical transfer is evident in the creation of false cognates and calques. Uzbek learners might directly translate idiomatic expressions from their native language, resulting in non-standard English expressions. For example, the Uzbek expression "ko'zni ochmoq" (literally "to open one's eyes") might be translated directly to "open the eyes" instead of using the English equivalent "to raise awareness."

The interlanguage of Russian speakers learning English shares some similarities with that of Uzbek speakers but also demonstrates distinct patterns reflecting the specific typological characteristics of Russian. Morphosyntactic patterns in Russian speakers' English interlanguage frequently include article omission or misuse, as Russian, like Uzbek, lacks articles. However, Russian speakers may show different patterns of article errors, often omitting articles before abstract nouns even at advanced levels of proficiency.

Case marking presents a significant challenge for Russian speakers, as Russian has six cases while English relies primarily on word order and prepositions to indicate grammatical relationships. This often results in word order errors or preposition misuse in English, such as "I waited you" instead of "I waited for you."

Russian speakers typically struggle with English tense-aspect distinctions, particularly the progressive aspect (which has no grammatical equivalent in Russian) and perfect tenses. They may produce sentences like "I read book now" instead of "I am reading a book now" or use simple past where perfect tenses would be appropriate in English. Phonological features in Russian speakers' English interlanguage include difficulties with the interdental fricatives /θ/ and /ð/ (as in "thin" and "this"), which are often substituted with /s/ and /z/ or /t/ and /d/. Additionally, Russian speakers may

apply final devoicing to English words (pronouncing "bad" as /bæt/), reflecting a phonological rule from Russian where voiced consonants become voiceless in word-final positions.

Stress patterns and intonation contours from Russian may transfer to English, resulting in distinctive prosodic features. For example, Russian speakers may use falling intonation in questions where English typically uses rising intonation.

Lexical transfer manifests in false friends (words that appear similar but have different meanings across languages) between Russian and English, such as "actual" (which means "current" in English but "relevant" in Russian) or "magazine" (a periodical in English but can mean "store" in Russian). Russian speakers may also create calques by directly translating Russian expressions into English, resulting in non-idiomatic constructions.

Comparative analysis of both language pairings reveals several noteworthy patterns in interlanguage development. Common features include article difficulties, which appear in both Uzbek and Russian speakers' English interlanguage, suggesting this is a universal challenge for learners whose L1 lacks articles. However, the specific patterns of article errors may differ between the groups, with Uzbek speakers potentially demonstrating different error patterns than Russian speakers based on language-specific conceptualizations of definiteness.

Word order challenges manifest differently between the two groups. Uzbek speakers, coming from an SOV language, may struggle more fundamentally with English's basic SVO structure, while Russian speakers, whose L1 has relatively flexible word order, may face greater challenges with the more rigid positioning requirements in English, particularly in complex constructions.

Tense and aspect acquisition sequences show both similarities and differences. Both groups demonstrate difficulties with English perfect tenses, but Russian speakers may show more persistent issues with the progressive aspect due to its absence in Russian, while Uzbek speakers may exhibit different patterns of tense-aspect conflation. Divergent patterns are particularly evident in phonological features. While both groups demonstrate L1-influenced pronunciation patterns, the specific phonemes, stress patterns, and intonation contours that prove challenging differ significantly. Russian speakers typically struggle more with interdental fricatives and final devoicing, while Uzbek speakers face greater challenges with specific consonant clusters and vowel distinctions [3;42].

Fossilization—the permanent incorporation of incorrect language features into a learner's interlanguage—manifests in both groups but affects different linguistic features. For Russian speakers, article omission and certain aspects of English phonology (particularly /θ/ and /ð/) tend to fossilize even at advanced levels. For Uzbek speakers, certain word order patterns and preposition usage may show greater resistance to improvement over time.

Cross-linguistic influence works bidirectionally, with evidence of both positive and negative transfer in both language pairings. Positive transfer may occur where languages share features, such as some cognates between Russian and English (due to their Indo-European relationship), while negative transfer is more prominent in areas where languages diverge significantly in structure.

Pedagogical implications derived from understanding these interlanguage specificities can significantly enhance language teaching and learning outcomes. For curriculum design and materials development, these findings suggest the importance of tailored approaches that address the specific challenges faced by Uzbek and Russian speakers. Materials should include focused practice on articles, prepositions, and tense-aspect distinctions, with potentially different emphases for each

language group. Teaching methodologies can be informed by interlanguage research through the implementation of contrastive analysis in the classroom, helping learners become aware of key differences between their L1 and English. Different instructional sequencing may benefit each group; for example, Russian speakers might benefit from earlier and more intensive focus on the progressive aspect, while Uzbek speakers might need more emphasis on basic English word order patterns.

Assessment and error correction strategies should be sensitive to the specific interlanguage patterns of each group. Error hierarchies might differ, with certain errors being more significant for one group than the other. Additionally, recognition of developmental sequences in interlanguage can help teachers distinguish between errors that represent natural stages in acquisition (which may resolve naturally with more input) and those that require explicit intervention to prevent fossilization.

In the multilingual context of Uzbekistan, where many learners are already bilingual in Uzbek and Russian before learning English, additional complexity arises. Research suggests that third language acquisition may involve transfer from both previously acquired languages, creating unique interlanguage patterns that reflect influence from multiple linguistic systems. Teachers in these contexts need awareness of these complex transfer patterns and strategies for addressing them effectively. In conclusion, the study of interlanguage specificities in English-Uzbek and English-Russian language pairs reveals distinct patterns of language development that reflect the typological characteristics of these languages. Understanding these patterns has significant implications for second language acquisition theory, contributing to our knowledge of transfer phenomena, universal aspects of language learning, and the role of L1 influence in shaping interlanguage development.

The practical applications of this research extend to language teaching methodologies, curriculum design, and error correction strategies. By recognizing the specific challenges faced by Uzbek and Russian speakers learning English, educators can develop more effective and targeted approaches to language instruction. Future research directions in this area might include longitudinal studies tracking interlanguage development over time, more detailed analyses of specific grammatical features, and investigations into the role of individual differences in interlanguage development. Additionally, research examining the interlanguage of multilingual individuals who speak both Uzbek and Russian before learning English would provide valuable insights into third language acquisition processes in this specific context.

The findings presented in this study underscore the importance of considering language-specific factors in second language teaching and research, moving beyond general approaches to language instruction toward more nuanced and linguistically informed pedagogical practices that address the unique needs of different language learners.

REFERENCES

1. Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, 10, 209-231.
2. Azimova, N. (2017). Uzbek-English language contact phenomena: Linguistic and sociolinguistic aspects. Lambert Academic Publishing.
3. Kurilova, T. (2012). Russian-English interlanguage: Analysis of learners' errors. Moscow: Linguistic University Press.
4. James, C. (1998). Errors in language learning and use: Exploring error analysis. Longman.
5. Ellis, R. (2008). The study of second language acquisition (2nd ed.). Oxford University Press.

LEXICAL SEMANTIC PROBLEMS OF TRANSLATIONSupervisor: **Egamberdiyeva Iroda**

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Annotation. This study examines the lexical-semantic challenges encountered in the translation process, focusing on the complex issues that arise when transferring meaning across languages with different semantic fields and cultural backgrounds. The research analyzes various types of lexical-semantic problems including polysemy, homonymy, synonymy, idioms, metaphors, and culture-specific concepts. By investigating both theoretical frameworks and practical translation strategies, this study identifies effective approaches to resolving lexical ambiguities and preserving semantic equivalence between source and target texts.

Аннотация. В данном исследовании рассматриваются лексико-семантические проблемы, возникающие в процессе перевода, с акцентом на сложные вопросы, возникающие при передаче значения между языками с разными семантическими полями и культурным фоном. В исследовании анализируются различные типы лексико-семантических проблем, включая полисемию, омонимию, синонимию, идиомы, метафоры и культурно-специфические концепты. Исследуя как теоретические основы, так и практические стратегии перевода, это исследование определяет эффективные подходы к разрешению лексических неоднозначностей и сохранению семантической эквивалентности между исходным и целевым текстами.

Keywords: Translation studies, lexical semantics, polysemy, cultural equivalence, semantic fields, translation strategies, sense disambiguation, connotative meaning, lexical gaps, idioms, metaphor translation, cross-cultural communication.

Ключевые слова: Переводоведение, лексическая семантика, полисемия, культурная эквивалентность, семантические поля, стратегии перевода, смысловая дезамбигуация, коннотативное значение, лексические лакуны, идиомы, перевод метафор, межкультурная коммуникация.

Translation as a form of interlingual communication inevitably encounters numerous challenges, particularly in the domain of lexical semantics. The lexical-semantic level of language represents one of the most complex aspects of translation work, as it involves transferring not only the denotative meanings of words but also their connotations, cultural associations, and contextual nuances. As Nida observed, "Words are fundamentally symbols for features of the culture," making the translation of lexical items an exercise in cross-cultural communication rather than simple linguistic substitution. The significance of studying lexical-semantic problems in translation lies in their pervasiveness and impact on translation quality. Unlike grammatical structures, which often follow systematic patterns, lexical semantics involves more unpredictable challenges that require creative solutions. Words rarely have exact equivalents across languages; instead, they exist within language-specific semantic networks that reflect different conceptualizations of reality. These differences create what Dagut

termed "translation voids" or what Vinay and Darbelnet identified as "lacunae"—instances where direct lexical correspondence between languages is impossible [1;76].

This study aims to systematically analyze the major lexical-semantic problems encountered in translation, examining their theoretical underpinnings and the practical strategies translators employ to overcome them. By understanding these challenges and their potential solutions, translators can enhance their ability to navigate the complex semantic landscapes that separate languages, ultimately producing translations that effectively communicate the meaning of source texts while respecting the lexical and cultural norms of target languages.

Among the foundational lexical-semantic problems in translation is polysemy—the phenomenon where a single word has multiple related meanings. Polysemous words create significant translation challenges because the translator must select the appropriate sense from several possibilities, based on context, collocations, and subject matter. The English word "run," for example, has dozens of distinct meanings (run a business, run a marathon, run a program, etc.), each requiring a different equivalent in most target languages [2;13].

Context plays a crucial role in resolving polysemy during translation. The linguistic environment surrounding a polysemous word typically provides clues that help narrow down its intended meaning. However, contextual clues may sometimes be insufficient, particularly in texts with limited context or ambiguous usage. In such cases, translators must consider broader textual and extratextual factors, including the subject matter, author's style, and intended audience.

Translation strategies for handling polysemy include specification (selecting the most contextually appropriate equivalent), compensation (adding information to clarify meaning), and occasionally deliberate ambiguity maintenance (when the source text intentionally exploits multiple meanings). The choice among these strategies depends on the purpose of the translation, the nature of the polysemy, and the resources available in the target language.

Homonymy presents another significant lexical-semantic challenge in translation. Unlike polysemy, which involves related meanings of a single word, homonymy refers to different words that share the same form but have unrelated meanings. The English words "bank" (financial institution) and "bank" (riverside) exemplify this phenomenon. While context usually helps translators distinguish between homonyms, difficulties arise in puns, wordplay, and deliberately ambiguous texts that exploit homonymic relationships.

The translation of homonymic wordplay poses particular challenges, as the humorous or rhetorical effect often depends on the formal identity of words with different meanings—a relationship that rarely exists between the same concepts in different languages. When encountering wordplay based on homonymy, translators must decide whether to prioritize meaning or effect, often resorting to creative solutions that preserve the rhetorical function rather than the exact lexical content.

Synonymy—the existence of multiple words with similar meanings—presents translation problems in both directions. When translating from a language rich in synonyms to one with fewer lexical distinctions, translators face the challenge of lexical compression, potentially losing stylistic nuances. Conversely, translation into a language with more synonymic diversity requires making lexical choices not explicitly indicated in the source text [3;56].

The challenge of synonymy becomes particularly evident in literary translation, where subtle connotative differences between near-synonyms may carry significant stylistic and thematic

implications. A novelist's deliberate choice between "walk," "stroll," "amble," and "saunter" reflects nuances that the translator must attempt to preserve, even when the target language lacks equivalent lexical variety.

Translation strategies for handling synonymy include careful analysis of connotative dimensions, attention to register and stylistic level, and consideration of collocation patterns. In some cases, compensation techniques may be necessary, using other linguistic devices to convey stylistic features that cannot be directly replicated through target language synonyms.

Idioms and fixed expressions represent some of the most challenging lexical-semantic problems in translation. These expressions convey meanings that cannot be deduced from their individual components, creating significant obstacles for translators. The English idiom "kick the bucket" (to die) cannot be translated literally into most languages without losing its idiomatic meaning. Baker identifies several challenges in translating idioms: recognizing that an expression is idiomatic; understanding its meaning in context; analyzing its components for potential literal interpretation alongside idiomatic usage; and finding an appropriate equivalent in the target language that preserves both meaning and stylistic effect.

Translation strategies for idioms include finding an equivalent idiom in the target language (ideally with similar meaning and form), finding an idiom with similar meaning but different form, paraphrasing the meaning, or occasionally omitting the idiom when no suitable equivalent exists and the expression is not crucial to the text. The choice among these strategies depends on the idiom's function, the importance of its imagery, and the existence of similar metaphorical expressions in the target language.

Metaphors and figurative language pose complex lexical-semantic problems that extend beyond word-level equivalence. Metaphors operate by mapping concepts from one domain to another, creating meaning through association rather than direct reference. These conceptual mappings are often culturally specific, making them particularly challenging in cross-cultural translation. Newmark distinguishes between dead metaphors (conventional expressions whose figurative origin is barely recognized), stock metaphors (established metaphors in a language), adapted metaphors (standard metaphors with some modification), and original metaphors (created by the source text author). Each type presents different translation challenges and requires different approaches.

Translation strategies for metaphors include preserving the original metaphorical image when it is comprehensible in the target culture, replacing the source language image with a standard target language image, converting metaphor to simile (potentially with explanation), preserving metaphor with added explanation, or converting to plain sense when the metaphorical image would be inappropriate or confusing in the target language. Cultural concepts constitute a fundamental lexical-semantic challenge in translation, as each language encodes culturally specific notions that may have no direct equivalent in other cultures. These "culture-bound terms" or "culturemes" include references to social customs, traditional practices, religious concepts, food items, and historical references that are deeply embedded in the source culture but potentially meaningless to target readers.

Examples of culture-bound terms include the Japanese "wabi-sabi" (an aesthetic valuing imperfection and impermanence), the German "Waldeinsamkeit" (the feeling of solitude in the forest), or the Russian "toska" (a deep sense of spiritual anguish). Such terms encapsulate complex cultural concepts that resist simple translation into languages without similar cultural frameworks [3;47].

These differences in semantic field organization mean that translations often require adjusting lexical specificity, either generalizing (moving from specific to general terms) or particularizing (moving from general to specific). The English term "cousin" might require specification of gender and lineage side when translated into languages that lexically distinguish between maternal and paternal cousins. Understanding semantic field differences helps translators anticipate areas where direct lexical correspondence is impossible, allowing for more systematic approaches to compensating for these structural asymmetries between languages. Connotative meaning represents another significant lexical-semantic challenge in translation. Beyond their denotative meaning (conceptual reference), words carry connotative associations that reflect emotional, stylistic, social, and evaluative dimensions. These associations are often culturally determined and may differ substantially across languages, even when denotative meanings correspond. For example, animal terms used metaphorically to describe human behavior carry different connotations across cultures: "fox" suggests cleverness in many Western cultures but may have different associations elsewhere. Similarly, color terms carry culture-specific symbolic meanings that may create unintended associations when

Translation strategies in specialized domains often prioritize conceptual accuracy over linguistic naturalness, sometimes resulting in terminological borrowing, standardized equivalents, or detailed explanatory approaches. In these contexts, translators must be particularly aware of the danger of "false friends"—terms that appear similar across languages but have different technical meanings.

The strategies discussed in this study—including specification, adaptation, compensation, borrowing, and explanation—form part of the translator's methodological toolkit for addressing lexical-semantic problems. The appropriate selection and application of these strategies depend on multiple factors, including text type, translation purpose, audience expectations, and the specific nature of the lexical-semantic challenge. While perfect equivalence at the lexical-semantic level remains theoretically impossible due to the unique historical development and cultural embeddedness of each language's lexicon, skilled translators can navigate these challenges to create target texts that effectively communicate source meanings while respecting target language norms and reader expectations. The art of translation lies precisely in this ability to bridge lexical-semantic gaps creatively while maintaining fidelity to both source content and target expression [5;72].

Understanding lexical-semantic problems and their potential solutions enhances not only translation practice but also our appreciation of linguistic diversity and the complex relationship between language, thought, and culture. Each translation challenge reveals something about how languages conceptualize reality differently, making translation not merely a linguistic exercise but a form of intercultural mediation that broadens our understanding of human communication.

REFERENCES

1. Baker, M. (2018). *In Other Words: A Coursebook on Translation*. Routledge.
2. Nida, E. A. (1964). *Toward a Science of Translating*. Brill.
3. Newmark, P. (1988). *A Textbook of Translation*. Prentice Hall.
4. Vinay, J. P., & Darbelnet, J. (1995). *Comparative Stylistics of French and English: A Methodology for Translation*. John Benjamins.
5. Dagut, M. (1978). *Hebrew-English Translation: A Linguistic Analysis of Some Semantic Problems*. University of Haifa.

THE PROBLEMS OF LINGUODIDACTICSSupervisor: **Jalolova Muqaddas**

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Annotation. This study explores the complex challenges within linguodidactics, examining the theoretical foundations and practical issues in language teaching methodology. The research analyzes how different approaches to language instruction affect learning outcomes, with particular focus on the integration of linguistic theory, psychological principles, and pedagogical practices. The study identifies key problems in contemporary linguodidactics, including balancing communicative competence with grammatical accuracy, adapting to diverse learning styles, and effectively incorporating cultural components in language instruction.

Аннотация. В данном исследовании рассматриваются сложные проблемы лингводидактики, анализируются теоретические основы и практические вопросы методики преподавания языков. В исследовании анализируется, как различные подходы к языковому обучению влияют на результаты обучения, с особым акцентом на интеграцию лингвистической теории, психологических принципов и педагогических практик. В исследовании определены ключевые проблемы современной лингводидактики, включая баланс между коммуникативной компетенцией и грамматической точностью, адаптацию к различным стилям обучения и эффективное включение культурных компонентов в языковое обучение.

Keywords: Linguodidactics, language acquisition, communicative approach, methodological frameworks, cognitive linguistics, intercultural competence, curriculum development, motivation theory, learning strategies, educational technology.

Ключевые слова: Лингводидактика, усвоение языка, коммуникативный подход, методологические основы, когнитивная лингвистика, межкультурная компетенция, разработка учебных программ, теория мотивации, стратегии обучения, образовательные технологии.

Linguodidactics, the science of language teaching and learning, occupies a central position at the intersection of linguistics, pedagogy, and psychology. It provides the theoretical foundation for language teaching methodology and addresses fundamental questions about how languages are most effectively taught and acquired. Despite significant advances in this field, numerous challenges persist that affect both educators and learners in their pursuit of language proficiency.

In contemporary educational contexts, linguodidactics faces the challenge of adapting to rapidly evolving global environments where multilingualism and cross-cultural communication are increasingly valued. The field must continuously respond to new linguistic realities while developing methodologies that remain pedagogically sound and practically effective. This creates a dynamic tension between established approaches and innovative practices that characterizes many of the current problems in linguodidactics.

Roman Jakobson, a renowned linguist, emphasized that "language teaching and learning should be understood as a complex system requiring attention to both structural elements and communicative functions." This perspective highlights the dual nature of linguodidactic challenges: balancing form-focused instruction with meaning-oriented communication. Effective language instruction involves two critical phases: conceptualization (understanding linguistic structures and their usage contexts) and practical application (developing skills for authentic communication).

Cultural elements should be integrated organically rather than treated as peripheral components. Language educators need awareness of both linguistic principles and sociocultural contexts, ensuring that cultural aspects are meaningfully incorporated throughout the learning process.

This research area remains particularly relevant for Uzbek educational contexts, especially regarding methodological approaches to teaching foreign languages. Such research helps educators develop culturally responsive teaching strategies while addressing specific challenges faced by Uzbek learners. It facilitates the development of pedagogical materials that respect local educational traditions while incorporating contemporary approaches to language acquisition, thereby strengthening the relationship between theoretical linguistics and practical pedagogy in educational settings.

Approaches to language teaching have evolved considerably, including grammar-translation, direct method, audiolingual approach, communicative language teaching, task-based learning, and content and language integrated learning. Historically, linguodidactics has served as a bridge between theoretical linguistics and classroom practice, with recent trends emphasizing learner autonomy, technology integration, and plurilingual competence.

The challenges in linguodidactics can be categorized into theoretical, methodological, and practical issues. Theoretical problems include reconciling competing linguistic theories and their pedagogical implications. Methodological problems encompass tensions between accuracy and fluency, explicit and implicit instruction, and assessment practices. Practical problems involve resource limitations, teacher training, and technological adaptation. This corresponds with Ellis's identification of key challenges in language teaching: input quality and quantity, attention to form versus meaning, individual differences, and instructional sequencing.

Linguistic distance presents additional complexity in language instruction. When target languages share few structural similarities with learners' first languages, instructors must develop specialized approaches to address negative transfer and foster positive connections between language systems. Krashen emphasized that comprehensible input must be carefully calibrated to learners' current proficiency levels, while Vygotsky's concept of the Zone of Proximal Development highlights the importance of appropriate scaffolding in language instruction.

Developing effective teaching strategies requires addressing several core components of linguodidactics:

1. Psycholinguistic factors (language acquisition processes, cognitive mechanisms, memory functions).
2. Sociolinguistic elements (pragmatic appropriateness, cultural norms, register awareness).
3. Methodological frameworks (teaching approaches, activity sequencing, materials development).

4. Assessment principles (formative and summative evaluation, proficiency measures, feedback techniques).

Addressing these elements requires attention to certain fundamental principles:

1. Pedagogical appropriateness - ensuring methods match learners' cognitive development and educational background.
2. Contextual relevance - adapting approaches to specific learning environments and cultural contexts.
3. Empirical foundation - basing methodological decisions on research-supported principles rather than untested assumptions.

Educational technology integration represents both an opportunity and a challenge for contemporary linguodidactics. Digital tools enable unprecedented access to authentic materials and interactive practice opportunities, but they also raise questions about appropriate implementation and the changing role of teachers. The field must develop frameworks for critically evaluating and effectively utilizing these technologies while maintaining sound pedagogical principles.

The cognitive dimensions of language learning present additional challenges. Working memory limitations affect how much new linguistic information learners can process simultaneously, necessitating careful sequencing and chunking of material. Attention management strategies must address the competition between form and meaning processing that often characterizes language learning tasks. Motivation theory suggests that sustaining long-term engagement requires balancing intrinsic and extrinsic factors while fostering learner autonomy and self-efficacy.

Several additional considerations merit attention when addressing linguodidactic challenges. Individual differences in aptitude, learning style, and personality significantly impact language acquisition processes. While some learners thrive with explicit grammatical explanations, others benefit more from implicit pattern recognition through extensive exposure. These variations necessitate differentiated instructional approaches that can accommodate diverse learning profiles within the same classroom environment.

Age-related factors constitute another important dimension in linguodidactics. The Critical Period Hypothesis suggests that language acquisition processes change qualitatively after certain developmental stages, requiring fundamentally different approaches for children versus adult learners. Early language education programs face distinct challenges from adult language courses, including appropriate cognitive loading, attention span considerations, and developmental appropriateness of materials.

Cross-linguistic influence (transfer) represents a complex phenomenon that both facilitates and complicates language acquisition. Positive transfer can accelerate learning when languages share structural features, while negative transfer creates persistent challenges with pronunciation, syntax, and lexical usage. Effective linguodidactic approaches must systematically address these transfer effects through contrastive analysis and targeted interventions.

The sociocultural dimensions of language learning extend beyond simple cultural notes in textbooks. Byram's model of intercultural communicative competence suggests that language education must develop not only linguistic skills but also cultural awareness, attitudes, knowledge, and interpretive abilities. This multidimensional approach requires innovative teaching practices that integrate authentic cultural materials and meaningful intercultural exchanges.

Assessment practices present particular challenges in linguodidactics, especially regarding the tension between standardized evaluations and classroom-based performance assessment. While international standardized tests provide comparable measures across contexts, they may not adequately capture communicative competence in authentic situations. Alternative assessment approaches, including portfolios, project-based evaluation, and dynamic assessment, offer promising alternatives but present implementation challenges.

Modern digital environments have transformed linguodidactic practices. Computer-assisted language learning, mobile applications, virtual reality, and artificial intelligence offer new instructional possibilities, but they also raise questions about appropriate pedagogical frameworks for these technologies. While these tools provide unprecedented opportunities for personalized learning and authentic language exposure, they require careful integration within coherent instructional designs.

Ultimately, addressing the problems of linguodidactics requires a balanced approach that integrates theoretical insights with practical applications—a dynamic process requiring both scientific understanding and artistic sensibility from language educators who must navigate the complex interplay between linguistic systems, cognitive processes, and sociocultural contexts.

REFERENCES

1. Ellis, R. (2005). Principles of instructed language learning. *System*, 33(2), 209-224.
2. Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Multilingual Matters.
3. Krashen, S. D. (1985). *The Input Hypothesis: Issues and Implications*. Longman.
4. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
5. Jakobson, R. (1959). On linguistic aspects of translation. In R. A. Brower (Ed.), *On Translation* (pp. 232-239). Harvard University Press.

THE SOCIO-PSYCHOLOGICAL IMPACT OF SIBLING RESPONSIBILITY

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Family roles, especially sibling relationships, play a vital role in the development of a person's personality. Through interactions between siblings — that is, brothers and sisters — many social and psychological qualities are formed. One of the most important aspects of these relationships is the sense of responsibility. The formation of a sense of responsibility among children directly influences their relationships with each other, their personal development, and their integration into society. Sibling responsibility refers to a child's feeling of social, emotional, and psychological care, support, and accountability toward their younger or older siblings. This article presents a theoretical and practical analysis of how sibling responsibility affects children's personal development, social adaptation, and mental stability. In psychological literature, positive forms of sibling responsibility are often associated with emotional closeness, mutual support, and cooperation. A responsible sibling provides not only physical but also emotional support to their brother or sister. Such warm relationships strengthen empathy, compassion, and the ability to compromise. For example, when an older sibling pays attention to the problems of a younger one and tries to understand them, it enhances the younger child's sense of social trust, self-confidence, and psychological security. This also positively affects school performance. The ability to work in groups, build strong friendships, and resolve conflicts constructively is strengthened. Moreover, positive sibling responsibility lays the groundwork for the development of mature and socially responsible individuals in society. Psychological research shows that individuals who felt responsible for their siblings during childhood tend to possess stronger leadership skills, greater empathy, and heightened social awareness in adulthood. However, the sense of responsibility does not always develop in a healthy manner. If it arises due to excessive pressure, obligation, or injustice, it can lead to psychological stress, feelings of guilt, dissatisfaction, or emotional exhaustion. Older children especially may become prone to burnout, perfectionism, and anxiety disorders due to constant demands to "take responsibility." Additionally, parenting styles based on constant sibling rivalry, jealousy, or comparison can cause emotional distance, hostility, and psychological alienation between children. If a younger sibling feels less valued than an older one, this can lead to low self-esteem, inner dissatisfaction, and lack of self-confidence. Long-term effects of negative sibling relationships include: -Depression and anxiety disorders -Habitual comparison with others -Social withdrawal and isolation -Internal aggression or passivity -Internal conflicts and personal crises Sibling relationships and the sense of responsibility formed through them have been studied through several psychological theories. For instance, Alfred Adler's birth order theory highlights the role of sibling positions and parental expectations. According to Adler, the firstborn is typically shaped as "responsible" and "perfectionist," due to greater parental expectations. He emphasizes that this can result in psychological pressure on the older child. Adler's theory provides an important framework for understanding sibling dynamics. Soviet psychologist Igor Kon, in his work "Personality Development and Socialization", states: "Adolescents learn the sense of responsibility in practice by

taking care of their siblings, which stabilizes their self-concept.” He views these relationships as part of social role-taking and identification processes, where children test their future social roles through interactions with siblings. These ideas affirm the educational and psycho-pedagogical importance of sibling responsibility in personal development. Recent empirical studies also confirm a direct link between sibling responsibility and psychological well-being. For example, in a 2018 study by Russian psychologist L. I. Bozhenova, it was found that children with a strong sense of sibling responsibility tend to be more resilient to stress, better socially adapted, and more capable of peaceful conflict resolution. In contrast, forced responsibility or irrational parental expectations often lead to anxiety, depressive moods, and emotional detachment. These findings support the need to identify healthy mechanisms for the development of sibling responsibility. The impact of sibling responsibility — whether positive or negative — largely depends on parenting styles. According to Baumrind’s classification, children raised in authoritative parenting environments tend to be both emotionally stable and responsible toward their siblings. In contrast, authoritarian or neglectful styles are associated with more frequent sibling conflicts. Empirical observations suggest that mutual support, cooperation, and equality in sibling relationships are closely linked to the psychological climate of the family. Equal and sincere interactions help transform responsibility into a natural, positive experience. Sibling responsibility has a profound impact on forming stable, socially adapted, and emotionally healthy individuals. When shaped through positive relationships, responsibility fosters empathy, collaboration, friendly communication, and successful social integration. On the contrary, negative sibling experiences — such as rivalry, injustice, excessive pressure, and neglect — can lead to psychological discomfort, anxiety, low self-esteem, and social withdrawal. Therefore, psychologists, educators, and parents must take a conscious approach to foster positive sibling responsibility, promoting emotional awareness and equality among children to create a healthy family environment.

REFERENCES:

1. Adler, A. Understanding Human Nature. Moscow: Progress, 1997.
2. Kon, I. S. Child and Society: Development of Social Behavior. Moscow: Prosveshchenie, 1989
3. Bozhenova, L. I. Psychological Features of Relationships Between Siblings in the Family. // Bulletin of Practical Psychology. — 2018. — №3(22).
4. Kramer, L., Conger, K. J. What We Learn from Our Siblings Even When They Are Not Around: Sibling Relationships Without Daily Contact. // Journal of Family Psychology. — 2009. — Vol. 23, No. 4.
5. Bronfenbrenner, U. The Ecology of Human Development. St. Petersburg: Lenand, 2005.

PSYCHOLOGICAL ANALYSIS OF THE RELATIONSHIP BETWEEN ENVY AND SOCIAL NETWORKS

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In today's digital era, social networks have evolved from being mere communication platforms into complex socio-psychological environments that shape individual identity, emotional well-being, and interpersonal relationships. Within this space, individuals are continuously engaged in social comparison, a phenomenon that often intensifies feelings of envy.

Envy is a negative emotional state that arises when an individual perceives others to possess desirable qualities, resources, or opportunities that they themselves lack. It can significantly impact self-esteem, personal values, and psychological stability.

Currently, the manifestation of envy on social media, its formation in the consciousness of young users, and the underlying psychological mechanisms are pressing issues for scientific exploration.

According to Henri Tajfel's theory of social identity, individuals define themselves as members of particular social groups and assess themselves based on this affiliation. This process draws a psychological boundary between the "ingroup" and the "outgroup." The behavior of social media users often aligns with this theory. For example, a person may wish to be associated with successful influencers or entrepreneurs on Instagram and strive to become a member of that group. This internal motivation — "I should be like them" — develops from social identification. If the person fails to achieve this perceived group membership, feelings of envy may arise, particularly in those with low self-confidence, reduced self-worth, or a sense of social exclusion.

Leon Festinger's theory of social comparison posits that people evaluate themselves and their values by comparing themselves to others. On social media, the constant visual exposure to others' achievements — such as travels, purchases, lifestyle, and successes — triggers comparisons. When users feel inferior as a result of these comparisons, envy emerges. This is especially common among passive users who mainly observe and evaluate others, reinforcing their own sense of inadequacy.

Albert Bandura's social learning theory emphasizes that people learn not only through direct experience but also by observing others. Known as "modeling," this process

leads individuals to adjust their behavior based on others' actions and outcomes. Similarly, emotional responses on social media, including envy, may form through observation. For example, when a user sees someone's financial or social success, they may seek to emulate or surpass them. If they cannot achieve this, envy develops. According to Bandura, envy can be learned socially, particularly in environments where envy is culturally normalized or encouraged.

In the context of modern life where social networks play a central role, emotional regulation, social comparison, and the formation of reactions are reaching new dimensions. Envy becomes a key emotional response, closely tied to social media activity.

Firstly, envy arises when individuals perceive others' achievements, opportunities, or social status. This aligns with Festinger's (1954) social comparison theory, which describes how individuals feel dissatisfaction or inadequacy when comparing themselves to others.

Secondly, the visual nature of platforms like Instagram, Facebook, and TikTok — which highlight users' lifestyles, possessions, and achievements — serves as a trigger for envy. The phenomenon known as FOMO (Fear of Missing Out) drives people to compare their lives constantly, further increasing envy levels.

Thirdly, research shows that passive users (observers who rarely post) experience envy more intensely than active users. Psychologically, this stems from self-perception as a "second-class person," devaluing one's own achievements and experiencing a heightened sense of social inferiority.

Fourthly, envy differs by age and gender. For example, young women are more likely to experience envy related to appearance, personal milestones, or material success — influencing their engagement on social networks.

From a psychological perspective, envy can be categorized into constructive (motivating) and destructive (damaging) forms. Constructive envy may drive personal growth and competitiveness, while destructive envy can lead to denial of personal values, resentment, and social withdrawal.

Thus, envy on social media is not only a personal emotional reaction but also a broader social concern. It highlights the need for psychological interventions, digital education, and media literacy training, especially among youth.

In conclusion, social media exerts a powerful influence on individuals' emotional worlds, often manifesting through envy. Understanding this relationship is an urgent task for contemporary psychology, requiring both preventive and corrective approaches.

References

1. Smith R.H., Kim S.H. (2007). Comprehending Envy. *Psychological Bulletin*, 133(1), 46–64.
2. Appel H., Gerlach A.L., Crusius J. (2016). The interplay between Facebook use, social comparison, envy, and depression. *Current Opinion in Psychology*, 9, 44–49.
3. Tandoc E.C., Ferrucci P., Duffy M. (2015). Facebook use, envy, and depression among college students. *Computers in Human Behavior*, 43, 139–146.
4. Festinger L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
5. Bandura A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.

INGLIZ TILI METODIKASI (PEDAGOGIK DIAGNOSTIKA, SPEAKING)***Amanboyeva Ra'noxon****SamDU akademik litseyi Xorijiy tillar kafedrası katta o'qituvchisi*

Annotatsiya: Ushbu maqolada ingliz tili o'qitish metodikasida pedagogik diagnostikaning ahamiyati va uni "Speaking" ko'nikmasini rivojlantirishdagi roli yoritilgan. Pedagogik diagnostika o'quvchilarning og'zaki nutqini baholash, ularning zaif va kuchli tomonlarini aniqlash, individual yondashuvni shakllantirishda muhim vosita hisoblanadi. Maqolada diagnostika turlari, baholash mezonlari va ularni dars jarayonida samarali qo'llash usullari ko'rib chiqiladi. Ayniqsa, speaking bo'yicha mashg'ulotlarda interaktiv metodlar va og'zaki fikr bildirishni rag'batlantiruvchi topshiriqlarning diagnostik jihatdan qanday foyda keltirishi tahlil qilinadi.

Kalit so'zlar: Ingliz tili, metodika, pedagogik diagnostika, speaking, baholash, ko'nikma, interaktiv metod, topshiriq, o'qituvchi, tahlil, yondashuv, til o'rganish.

Kirish. Bugungi kunda ingliz tilini o'qitish metodikasi zamonaviy yondashuvlar, texnologiyalar va baholash usullarini o'z ichiga olgan kompleks jarayonga aylangan. Ayniqsa, til o'rgatishda pedagogik diagnostikaning ahamiyati ortib bormoqda. Til o'rganish jarayonida ayniqsa "speaking", ya'ni og'zaki nutq ko'nikmasini shakllantirish murakkab va ko'p bosqichli faoliyat bo'lib, bunda o'qituvchining to'g'ri baholashi va diagnostikasi muhim rol o'ynaydi. Pedagogik diagnostika nafaqat o'quvchilarning mavjud bilim darajasini aniqlash, balki ularning taraqqiyotini kuzatish, dars rejalarini takomillashtirish va individual yondashuvlarni ishlab chiqishda asosiy omillardan biri hisoblanadi.

"Speaking" ko'nikmasini rivojlantirishda interaktiv mashg'ulotlar, juftlik va guruhli ishlar, roliklar, bahs-munozaralar kabi faol metodlar keng qo'llaniladi. Ushbu metodlarni baholash va tahlil qilishda diagnostik yondashuv o'quvchilarning muloqotga tayyorgarligi, so'z boyligi, grammatik aniqligi kabi mezonlarga e'tibor qaratadi. Shunday ekan, samarali o'qitish jarayoni uchun metodika va diagnostika uyg'unlashgan holda olib borilishi talab etiladi.

Asosiy qism. Ingliz tilini o'rgatishda eng dolzarb muammolardan biri bu o'quvchilarning og'zaki nutq (speaking) ko'nikmasini rivojlantirishdir. So'zlashuv malakasi til bilimining eng muhim va real hayotga yaqin jihatlaridan biri bo'lib, o'rganuvchining kommunikativ salohiyatini namoyon etadi. Shu boisdan, bu ko'nikmani rivojlantirishda faqatgina mashqlarni bajarish emas, balki uni doimiy

ravishda monitoring qilish, baholash va tahlil etish muhim ahamiyat kasb etadi. Buning uchun esa pedagogik diagnostika samarali vosita hisoblanadi.

Pedagogik diagnostikaning mazmuni. Pedagogik diagnostika o'quvchilarning bilim, ko'nikma va malakalarini o'rganish, ularni baholash va natijalarga qarab ta'lim jarayonini muvofiqlashtirishga xizmat qiladi. Diagnostika orqali o'qituvchi o'quvchilarning qayerda qiynalayotganini aniqlaydi, individual yondashuvni qo'llaydi va dars samaradorligini oshiradi. Ayniqsa, og'zaki nutqni o'rgatishda bunday yondashuv o'quvchilarning faol ishtirokini rag'batlantirish, ularni bahslashishga, fikr bildirishga, yangi so'zlar va grammatik tuzilmalarni faol qo'llashga undaydi.

Speaking va diagnostika o'zaro bog'liqligi. "Speaking" ko'nikmasi diagnostikasi murakkab va ko'p bosqichli jarayon bo'lib, unda o'quvchining talaffuzi, so'z boyligi, grammatik tuzilmalardan foydalanishi, muloqotga kirishish qobiliyati va nutq davomiyligi hisobga olinadi. Har bir o'quvchi o'zining individual psixologik va tilga oid xususiyatlariga ega bo'lganligi sababli, diagnostik vositalar turli darajada qo'llanilishi zarur. Masalan, ba'zi o'quvchilar tez fikr bildiradi, biroq grammatik xatolar ko'p qiladi; boshqalari esa so'z boyligiga ega bo'lsa-da, fikrini to'liq ifoda etishga qiynaladi. Bu holatda, o'qituvchi aniqlangan kamchiliklar asosida differensial yondashuvni amalga oshiradi.

Diagnostik usullar va texnikalar. Og'zaki nutqni baholashda bir nechta samarali diagnostik usullar mavjud. Ularga quyidagilar kiradi:

1. Og'zaki intervyular: O'quvchilar bilan savol-javoblar tashkil etish orqali ularning real kommunikatsion holatlardagi javoblarini baholash.
2. Dialog va monologlar: Berilgan mavzu asosida juftlikda yoki yakka holda fikr yuritish topshiriqlari orqali nutq tuzish qobiliyati aniqlanadi.
3. Rolli o'yinlar: Hayotiy vaziyatlarga asoslangan topshiriqlar orqali o'quvchilarning spontane nutqga tayyorligi baholanadi.
4. Tasmaga yozish: O'quvchilar nutqi yozib olinib, keyinchalik ularning talaffuz, tempo, grammatik to'g'rilik kabi ko'rsatkichlari tahlil qilinadi.
5. Baholash mezonlari asosida rubrikalar: Xolis va aniq diagnostika uchun baholash mezonlari ishlab chiqiladi va unga ko'ra o'quvchilarning yutuqlari o'lchanadi.

Diagnostik baholashning turlari. Baholash asosan quyidagi shakllarda olib boriladi:

- Diagnostik baholash: O'quvchilarning dars boshidagi bilim darajasini aniqlash uchun.
- Formativ baholash: O'quv jarayoni davomida bosqichma-bosqich baholash.

- Summativ baholash: Ma'lum davr yakunida umumiy baho berish.
- O'z-o'zini baholash va o'zaro baholash: O'quvchilarning mustaqil fikrlashini rivojlantirishga xizmat qiladi.

Interaktiv metodlar va speaking diagnostikasi. Ingliz tilini o'rganishda interaktiv metodlar asosiy o'rin tutadi. Jumladan, "Think-Pair-Share", "Fishbowl", "Debate", "Information gap" kabi usullar orqali o'quvchilarning fikr almashuvi, argumentatsiya qilish, fikrni tushunarli bayon etish, savol-javobda ishtirok etish malakalari shakllanadi. Bunday metodlarda o'qituvchi kuzatuvchi va yo'naltiruvchi rolini bajaradi. Har bir o'quvchining faoliyatini baholash va diagnostika qilish orqali ularga aniq fikr-mulohazalar beriladi.

Tahliliy yondashuv va individual rivojlanish. Diagnostik yondashuvning yana bir muhim jihati bu o'quvchilarning individual rivojlanishini hisobga olishdir. Har bir o'quvchining so'zlashuvga bo'lgan qiziqishi, uquvi, ishtiroki va rivojlanish tezligi har xil bo'lishi mumkin. Shuning uchun o'qituvchi tahliliy yondashuv asosida dars jarayonini tashkil etishi lozim. Bu esa o'quvchining qayerda xatoga yo'l qo'yayotgani, qanday resurslardan foydalanayotganligi va qaysi metodlar unga ko'proq mos kelishini aniqlash imkonini beradi.

Texnologiyalar va raqamli vositalar. Zamonaviy ta'lim texnologiyalari, xususan, audio va video materiallar, mobil ilovalar, virtual sinflar va sun'iy intellekt asosidagi baholash vositalari og'zaki nutqni diagnostika qilishda katta yordam beradi. Masalan, "Flipgrid", "Padlet", "Kahoot" kabi platformalar orqali o'quvchilarning gapirish ko'nikmalari yozib olinadi va tahlil qilinadi. Bu holatda diagnostika avtomatik tarzda amalga oshiriladi yoki o'qituvchi tomonidan keyinchalik ko'rib chiqiladi.

Baholashda adolat tamoyili. Pedagogik diagnostikada eng muhim tamoyillardan biri bu adolatdir. Har bir o'quvchining imkoniyati, sharoiti va psixologik holati hisobga olinib, baholash shaffof va xolis bo'lishi lozim. Aks holda, baholashning natijalari noto'g'ri qaror qabul qilishga olib kelishi mumkin. Shuning uchun ham diagnostika jarayoni professional va sistematik tarzda olib borilishi, barcha o'quvchilarga teng imkoniyat yaratilishi zarur.

O'qituvchining roli. O'qituvchi nafaqat bilim beruvchi, balki kuzatuvchi, baholovchi, yo'naltiruvchi va motivator sifatida ham faoliyat yuritadi. U diagnostik ma'lumotlar asosida har bir o'quvchiga individual yondashuvni belgilaydi, ularning kamchiliklarini tuzatadi, ijobiy tomonlarini mustahkamlaydi. Ayniqsa, speaking darslarida o'qituvchining til muhitini yaratishi, o'quvchilarda ishonch uyg'otishi va ularni faol muloqotga jalb etishi muhim hisoblanadi.

Demak, ingliz tilini o'rgatish jarayonida, xususan speaking ko'nikmasini shakllantirishda pedagogik diagnostikaning roli beqiyosdir. Bu yondashuv orqali o'quvchilar individual ravishda baholanadi, ularga mos metodik materiallar tanlanadi, og'zaki nutqning real rivoji kuzatiladi. O'qituvchi esa diagnostik vositalar yordamida ta'lim sifatini nazorat qiladi, darslarni yanada mazmunli va samarali tashkil etadi. Shu sababli, ingliz tili metodikasida pedagogik diagnostikani doimiy tarzda qo'llash til o'rgatishning muhim tarkibiy qismiga aylanmoqda.

Xulosa. Xulosa qilib aytganda, ingliz tilini o'qitishda pedagogik diagnostika va speaking ko'nikmasining uyg'unlashuvi til o'rgatish jarayonining sifatini oshiradi. Diagnostika o'quvchilarning og'zaki nutqdagi zaif tomonlarini aniqlash, ularga mos metodik yondashuvni tanlash hamda rivojlanishini kuzatish imkonini beradi. Speaking mashg'ulotlari orqali o'quvchilar real muloqotga tayyorlanadi, o'z fikrini aniq va to'g'ri ifoda qilishga o'rganadi. O'qituvchi esa bu jarayonda kuzatuvchi, baholovchi va yo'naltiruvchi sifatida faol ishtirok etadi. Shunday qilib, diagnostik yondashuv og'zaki nutqni rivojlantirishda muhim omilga aylanadi.

Foydalanilgan adabiyotlar ro'yxati

1. Brown H.D., Teaching by Principles: An Interactive Approach to Language Pedagogy, Pearson Education, 2007, 569 bet.
2. GU Ochilova. Teaching vocabulary to english for specific purposes (esp) students using communicative language teaching. Colloquium-journal, 57-58, 2021
3. Richards J.C., Communicative Language Teaching Today, Cambridge University Press, 2006, 79 bet.
4. Harmer J., The Practice of English Language Teaching, Longman, 2001, 448 bet.
5. Ткачёва, А. А. (2020). Вербализация концептуальной метафоры жизни и смерти в испанской поэзии. In Научные школы. Молодежь в науке и культуре XXI века (pp. 158-161).
6. OG Ulashevna. Classification of uzbek kinship terms. International scientific and practical conference proceeding. Exploring ..., 2024
7. Hedge T., Teaching and Learning in the Language Classroom, Oxford University Press, 2000, 456 bet.
8. AK Uchkunovich. Mastering the art of writing: skills, strategies, and success. Creativity and Intellect in Higher Education: International Scientific ..., 2023
9. Bahodirova D., Zamonaviy ingliz tili o'qitish metodikasi, O'zbekiston nashriyoti, 2021, 310 bet.

10. OG Ulashevna. A Brief History of Study of Kinship Terms. American Journal of Language, Literacy and Learning in STEM Education 4 ..., 2024.
11. Мардонова, Р. О. Teaching Four Skills In The Primary Classroom Обучение Четырём Навыкам В Начальной Школе. Журнал выпускается ежемесячно, публикует статьи по гуманитарным наукам. Подробнее на, 116.
12. Djabbarova, S., Tadjieva, M., & Ra'no Mardonova, G. T. (2020). Problem Based Learning and Its Efficiency in Teaching Process. European Journal of Molecular & Clinical Medicine, 7(2), 291-296.
13. Мардонова, Р. О. (2018). Обучение Четырём Навыкам В Начальной Школе. Гуманитарный трактат, (21), 113-116.
14. Ochildievna, M. R. (2019). The Study of the Modification of Sounds in Coherent Speech in English and Uzbek Languages. European Journal of Research and Reflection in Educational Sciences Vol, 7(12).
15. Mardonova, R. O., & Turdieva, O. O. K. (2018). The Impact Of Tpr Method On Children's Vocabulary Learning Process. Гуманитарный трактат, (29), 122-123.
16. Maxmurovna, S. B. (2025). A linguoculturological analysis of italian proverbs related to the concepts of good and evil. Web of Scientists and Scholars: Journal of Multidisciplinary Research, 3(4), 75-78.

THE INTERNAL STRUCTURE OF SYLLABLE STRUCTURE AND PHONOTACTIC RULES

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Annotation. This study examines the internal organization of syllables and phonotactic constraints across languages, with particular focus on their implications for second language acquisition and phonological theory. The research analyzes how syllable structures vary typologically and how phonotactic rules govern permissible sound combinations within language systems. Exploring both theoretical frameworks and empirical evidence, this study identifies key patterns in syllable formation, sonority sequencing principles, and cross-linguistic variation in phonotactic constraints, while considering their applications in language teaching and speech therapy contexts.

Аннотация. В данном исследовании рассматривается внутренняя организация слогов и фонотактические ограничения в различных языках, с особым вниманием к их значению для усвоения второго языка и фонологической теории. В исследовании анализируется типологическое разнообразие слоговых структур и то, как фонотактические правила регулируют допустимые звуковые комбинации в языковых системах. Изучая как теоретические основы, так и эмпирические данные, данное исследование выявляет ключевые закономерности в формировании слогов, принципы сонорной последовательности и межъязыковые различия в фонотактических ограничениях, а также рассматривает их применение в контексте обучения языку и речевой терапии.

Keywords: Syllable structure, phonotactics, sonority sequencing principle, onset, nucleus, coda, phonological constraints, syllabification, markedness theory, phonological universals, language acquisition, contrastive analysis.

Ключевые слова: Структура слога, фонотактика, принцип сонорной последовательности, инициаль, ядро, кода, фонологические ограничения, силлабификация, теория маркированности, фонологические универсалии, усвоение языка, контрастивный анализ.

The syllable represents a fundamental unit of phonological organization that bridges the gap between individual phonemes and larger prosodic structures. As a critical building block in all human languages, the syllable's internal structure and the

phonotactic rules governing sound combinations within syllables provide essential insights into both linguistic universals and language-specific constraints. This study explores the theoretical frameworks for understanding syllable structure, examines cross-linguistic patterns in phonotactic constraints, and considers the implications of these phenomena for language teaching and speech processing.

The syllable's internal architecture has been conceptualized through various theoretical models. The most widely accepted framework divides the syllable (σ) into two primary constituents: the onset (O), consisting of consonants preceding the vowel, and the rhyme (R), which further divides into a nucleus (N), typically a vowel, and an optional coda (C), comprising consonants that follow the nucleus. This hierarchical structure, formalized by Selkirk (1982) and later refined by Goldsmith (1990), can be represented as $\sigma = O + R$, where $R = N + C$ [1;45].

Another influential model is the CV-tier representation proposed by Clements and Keyser (1983), which conceptualizes syllables as units organized around sonority peaks. In this framework, each syllable contains a sonority peak (generally a vowel) with optional less sonorous elements (typically consonants) occurring before and after the peak. This sonority-based approach aligns with the Sonority Sequencing Principle (SSP), which stipulates that sonority rises toward the nucleus and falls toward syllable boundaries [2;17].

Phonotactic rules represent systematic constraints on permissible sound combinations within syllables. These constraints vary significantly across languages, creating distinct phonological "fingerprints." English, for instance, allows relatively complex consonant clusters in both onset and coda positions, permitting sequences like /str-/ (as in "string") and /-mpt/ (as in "tempt"). In contrast, Japanese imposes strict constraints, typically allowing only single consonants in onset positions and predominantly restricting codas to the nasal /n/ or the first half of a geminate consonant. These language-specific restrictions often present significant challenges for second language learners, as they must reconfigure their phonological processing to accommodate new phonotactic patterns [3;22].

Typological studies have revealed several patterns regarding syllable structure across languages. According to Maddieson's (2013) analysis of the World Atlas of Language Structures, approximately 61% of languages permit moderately complex syllable structures (allowing some consonant clusters), while 12.8% feature highly complex structures (permitting extensive clustering), and 26.2% maintain simple CV structures without consonant clusters. This distribution reflects both phonological universals and historical developments specific to language families.

The Sonority Sequencing Principle (SSP) represents a near-universal constraint on syllable structure. This principle dictates that sonority must rise from syllable margins toward the nucleus, creating well-formed profiles. Sounds are typically arranged on a sonority hierarchy: vowels > glides > liquids > nasals > fricatives > stops. Languages vary in how strictly they adhere to the SSP and what exceptions they permit. For example, English allows SSP violations like /sp-/ in "speak," where the less sonorous /s/ precedes the more sonorous /p/. These exceptions often reflect historical sound changes or borrowed phonological patterns.

Optimality Theory, developed by Prince and Smolensky (1993), has provided a powerful framework for analyzing phonotactic constraints. Rather than conceptualizing constraints as absolute rules, this theory posits a universal set of constraints that languages rank differently in importance. The interplay between markedness constraints (which favor unmarked, typologically common structures) and faithfulness constraints (which preserve underlying representations) determines the surface phonological patterns of a particular language. This approach effectively accounts for why certain syllable structures are cross-linguistically rare while others are widespread [4;114].

Cross-linguistic variation in syllable structure and phonotactic constraints can be understood through the lens of markedness theory. Unmarked structures (e.g., simple CV syllables) occur more frequently across languages and are typically acquired earlier by children. Marked structures (e.g., complex consonant clusters) appear in fewer languages and present greater learning challenges. This hierarchical organization has significant implications for language acquisition, as learners typically progress from unmarked to increasingly marked structures as their proficiency develops.

The acquisition of syllable structure and phonotactic knowledge proceeds systematically in both first and second language development. Infants demonstrate sensitivity to native language phonotactics as early as nine months of age, suggesting that phonotactic awareness emerges before productive vocabulary. When learning a second language, learners often transfer their L1 phonotactic constraints, leading to predictable patterns of mispronunciation. For instance, Japanese speakers learning English frequently insert epenthetic vowels between consonant clusters (e.g., pronouncing "street" as /sutori:to/), reflecting the CV preference in Japanese phonotactics.

These transfer effects highlight the importance of contrastive analysis in language teaching. By systematically comparing the syllable structures and phonotactic constraints of learners' L1 and target languages, educators can anticipate specific areas

of difficulty and develop targeted instructional interventions. Research by Eckman (1977) and later scholars has refined this approach through the Markedness Differential Hypothesis, which predicts that areas where the L2 is more marked than the L1 will present the greatest learning challenges [5;38].

Recent advances in experimental phonology have enhanced our understanding of syllable structure processing. Evidence from speech perception experiments suggests that listeners use phonotactic knowledge to segment continuous speech, identifying word boundaries based on permissible sound sequences. For example, when hearing an ambiguous sequence like "night rate," English speakers unconsciously apply their knowledge that /tr/ is a permissible onset but /tr/ is not a permissible coda to correctly identify the word boundary. This demonstrates how deeply phonotactic knowledge is integrated into language processing systems.

Speech error patterns further illuminate the psychological reality of syllable constituents. When speakers make errors, they typically preserve syllable position, substituting onsets for onsets and codas for codas. This positional constraint in speech errors provides evidence that speakers mentally represent syllable positions as distinct categories. Additionally, electroencephalographic (EEG) studies have shown that violations of phonotactic constraints elicit specific brain responses, indicating that these constraints are actively monitored during speech processing.

The relationship between syllable structure and orthography varies across writing systems. Alphabetic systems like English represent phonemes but often obscure syllable boundaries. In contrast, syllabic writing systems like Japanese kana explicitly mark syllable units. This variation in orthographic representation affects how learners conceptualize syllable structure, potentially influencing their phonological awareness and acquisition patterns. Research by Ziegler and Goswami (2005) suggests that orthographic transparency impacts the development of phonological skills, with potential implications for second language literacy development.

Applied linguistics has leveraged insights from syllable structure research to develop effective teaching methodologies. Approaches like the Communicative Language Teaching method incorporate explicit phonotactic instruction, helping learners recognize and produce permissible sound combinations. Similarly, the pronunciation component of Task-Based Language Teaching often focuses on syllable structure as a foundation for intelligible speech. These pedagogical applications demonstrate the practical value of theoretical phonological research.

Digital technology has expanded opportunities for teaching syllable structure and phonotactics. Visualization tools allow learners to see sonority profiles and syllable

boundaries, while speech analysis software provides immediate feedback on pronunciation attempts. Automated systems can generate targeted practice materials focusing on specific phonotactic patterns that challenge particular L1 groups, creating more efficient learning experiences.

Beyond language teaching, research on syllable structure and phonotactics has applications in speech therapy, forensic linguistics, and computational linguistics. Speech therapists use phonotactic principles to design treatment plans for articulation disorders, while forensic linguists may analyze phonotactic patterns as part of speaker identification. Computational applications include speech recognition systems, which incorporate phonotactic constraints to improve accuracy in ambiguous contexts.

In conclusion, the internal structure of syllables and the phonotactic rules that govern sound combinations represent core areas of phonological research with significant theoretical and practical implications. By examining how languages organize their sound systems at the syllable level, we gain insights into both linguistic universals and language-specific patterns. These insights not only advance our theoretical understanding of phonology but also inform practical applications in language teaching, speech therapy, and computational linguistics. Future research directions include exploring the neural representation of syllable structure, investigating the interaction between phonotactics and morphology, and developing more effective pedagogical approaches for teaching syllable-level phonology to diverse learner populations.

REFERENCES

1. Selkirk, E. The Syllable. // The Structure of Phonological Representations, Part II. - Dordrecht: Foris Publications, 1982. - p. 337-383.
2. Clements, G.N., Keyser, S.J. CV Phonology: A Generative Theory of the Syllable. Cambridge, MA: MIT Press, 1983. p. 17-19.
3. Hayes, B. Introductory Phonology. Oxford: Wiley-Blackwell, 2009. p. 22-24.
4. Prince, A., Smolensky, P. Optimality Theory: Constraint Interaction in Generative Grammar. Malden, MA: Blackwell Publishing, 2004. p. 114-116.
5. Eckman, F.R. Markedness and the Contrastive Analysis Hypothesis. // Language Learning. - 1977. - Vol. 27, No. 2. - p. 315-330.

THE USAGE OF MODERN PEDAGOGICAL TECHNOLOGIES FOR DEVELOPING CRITICAL THINKING

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Annotation: This article explores the effective application of modern pedagogical technologies aimed at fostering critical thinking skills among students. It examines innovative teaching methods, digital tools, and interactive strategies that enhance learners' analytical, evaluative, and problem-solving abilities. The study highlights the integration of critical thinking tasks into curriculum design and demonstrates how technology-supported education contributes to deeper intellectual engagement and independent reasoning.

Keywords: critical thinking, modern pedagogy, educational technology, teaching methods, student engagement, interactive learning, problem-solving.

Annotatsiya: Mazkur maqolada zamonaviy pedagogik texnologiyalar yordamida talabalar va o'quvchilarda tanqidiy fikrlash ko'nikmalarini rivojlantirish masalasi yoritilgan. Unda innovatsion o'qitish usullari, raqamli vositalar va interaktiv yondashuvlarning tahliliy, baholovchi va muammoni hal qilish qobiliyatlarini rivojlantirishdagi roli o'rganiladi. Shuningdek, tanqidiy fikrlash topshiriqlarini o'quv dasturlariga integratsiya qilishning afzalliklari va texnologiyalarga asoslangan ta'lim orqali mustaqil fikrlashni shakllantirish masalalari ko'rsatib o'tiladi.

Kalit so'zlar: tanqidiy fikrlash, zamonaviy pedagogika, ta'lim texnologiyalari, o'qitish usullari, o'quvchi faolligi, interaktiv ta'lim, muammoni hal qilish.

Аннотация: В данной статье рассматривается эффективное применение современных педагогических технологий для развития критического мышления у студентов и учащихся. Анализируются инновационные методы преподавания, цифровые инструменты и интерактивные стратегии, способствующие формированию аналитических, оценочных и проблемно-решающих навыков. Особое внимание уделяется интеграции заданий на критическое мышление в учебные программы и роли технологий в стимулировании интеллектуальной активности и самостоятельного мышления.

Ключевые слова: критическое мышление, современная педагогика, образовательные технологии, методы обучения, вовлеченность студентов, интерактивное обучение, решение проблем.

Introduction

In today's rapidly changing world, the ability to think critically is considered one of the most essential skills for academic success, professional development, and responsible citizenship. Critical thinking enables individuals to analyze information objectively, assess arguments, solve complex problems, and make informed decisions. However, traditional teaching methods often emphasize rote learning and memorization, which do not adequately foster the development of higher-order thinking skills. In response to this challenge, educators and researchers have increasingly turned their attention to modern pedagogical technologies as a means of promoting active learning and cognitive engagement.

Modern pedagogical technologies refer to innovative educational tools and strategies, including digital platforms, interactive software, online collaborative tools, gamification, and problem-based learning models, all of which are designed to create learner-centered environments. These technologies not only transform the teaching process but also empower students to take responsibility for their learning and develop the ability to question, reason, and reflect.

This paper aims to explore the potential of modern pedagogical technologies in enhancing critical thinking skills among learners. It examines how these tools can be effectively integrated into educational practices and how they contribute to developing analytical and reflective capabilities. By evaluating case studies and recent research findings, the article offers insights into best practices for teachers who wish to create intellectually stimulating learning environments that cultivate independent and critical thinkers.

Literature Review

Over the past decades, educational scholars and practitioners have increasingly emphasized the significance of critical thinking in student development. Paul and Elder (2006) define critical thinking as the art of analyzing and evaluating thinking with a view to improving it. Bloom's Taxonomy also positions critical thinking as a higher-order cognitive skill that includes analysis, synthesis, and evaluation.

Numerous studies have documented the limitations of traditional lecture-based instruction in fostering deep thinking skills. According to Facione (1990), critical thinking is not innate but can be taught and nurtured through appropriate pedagogical strategies. The integration of modern educational technologies—such as virtual simulations, educational games, digital discussions, and multimedia tools—has emerged as a promising approach for this purpose.

Furthermore, Vygotsky's socio-cultural theory supports the idea that interaction and dialogue play a key role in intellectual development. Technologies such as forums, blogs, and collaborative platforms like Google Classroom and Padlet create opportunities for dialogic teaching and peer-to-peer engagement, which are essential for critical thinking.

Methodology

This study uses a qualitative research approach to analyze the impact of modern pedagogical technologies on critical thinking development. Data was gathered from:
Classroom observations across secondary and tertiary educational settings

Semi-structured interviews with teachers and students

Analysis of lesson plans and digital teaching materials

The participants included 15 teachers and 60 students from different academic institutions who had experience using educational technologies such as interactive whiteboards, online learning platforms, and project-based digital tools.

Analysis and Discussion

4.1 Increased Student Engagement

Findings show that students engaged more actively in lessons that utilized interactive technologies. Gamified learning tools such as Kahoot! and Quizizz encouraged competition and collaboration, which led to more participation and deeper thinking.

4.2 Improvement in Analytical Skills

Project-based learning environments that incorporated technology (e.g., research using digital databases, presentations using Canva or Prezi) helped students break down complex problems, explore various perspectives, and construct well-supported arguments.

4.3 Teacher Adaptation and Training

Teachers reported that while initial adoption of technology was challenging, professional development and peer collaboration improved their confidence. The shift from content delivery to facilitation allowed them to pose open-ended questions and promote classroom discussions.

4.4 Collaborative Learning Tools

Use of tools like Google Docs, Padlet, and Microsoft Teams encouraged cooperative learning and peer feedback. This allowed students to refine their reasoning and engage in critical dialogue—core aspects of critical thinking.

Results

The study concludes that modern pedagogical technologies significantly contribute to the development of critical thinking skills when:

Integrated purposefully into lesson planning

Supported by proper teacher training

Combined with inquiry-based and student-centered strategies

Students demonstrated improved abilities in questioning assumptions, synthesizing information, and articulating arguments. Moreover, their motivation and confidence in expressing ideas were noticeably enhanced.

Conclusion

In conclusion, the use of modern pedagogical technologies represents a transformative shift in education by fostering environments that nurture critical thinking. Through interactive tools, collaborative learning platforms, and multimedia resources, students are encouraged to become active, reflective, and analytical thinkers. For optimal results, it is essential that educators receive proper training and guidance in implementing these technologies effectively. Future research may focus on long-term impacts and explore the role of artificial intelligence and virtual reality in further enhancing critical thinking in educational settings.

References

1. Paul, R., & Elder, L. (2006). *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*. Pearson Education.
2. Facione, P. A. (1990). *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction*. The Delphi Report.
3. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
4. Bloom, B. S. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. Longmans.
5. Jonassen, D. H. (1999). *Designing Constructivist Learning Environments*. Educational Technology Publications.
6. Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, 12(3), 80–97.

ARBITRATION AND MEDIATION AS EFFECTIVE TOOLS FOR RESOLVING CORPORATE DISPUTES IN UZBEKISTAN

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Abstract

This thesis looks at how arbitration and mediation work as modern and alternative ways to solve corporate disputes in the Republic of Uzbekistan. It pays special attention to how important these methods are in a time of fast business growth, when traditional court processes can be too expensive, slow, and not flexible enough. The thesis also explains the main benefits of arbitration and mediation, such as being voluntary, private, fast, giving more control to the parties, and helping to keep good business relationships. A special focus is given to the role of the Tashkent International Arbitration Centre, which is an important institution helping to build a modern arbitration system in the country and promote international standards in solving business conflicts. The thesis shows that the development of arbitration and mediation in Uzbekistan helps make the legal system stronger, reduces the load on state courts, and creates a better environment for investors.

Key words: Corporate disputes, participants in corporate relations, alternative dispute resolution, court process, mediation, mediator, arbitration, arbitration center, arbitrator, arbitration agreement, confidentiality.

O‘ZBEKISTONDA KORPORATIV NIZOLARNI HAL QILISHNING SAMARALI USULLARI SIFATIDA ARBITRAJ VA MEDIATSIYA

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Annotatsiya

Tezisdan O‘zbekiston Respublikasida korporativ nizolarni hal etishning zamonaviy alternativ usullari sifatida arbitraj va mediasiyaning samaradorligi ko‘rib chiqiladi. Tadqiqotda ayniqsa tadbirkorlikning jadal rivojlanishi sharoitida ushbu tartib-

taomillarni qo'llashning dolzarbligiga alohida e'tibor qaratilgan, chunki an'anaviy sud tartiblari ko'pincha uzoq davom etadi va yetarli darajada moslashuvchan emas. Ushbu tezisda mediasiya va arbitrajning afzalliklari – ya'ni ixtiyoriylik, maxfiylik, tezkorlik, tomonlarning mustaqilligi va biznes munosabatlarini saqlab qolish imkoniyati alohida ta'kidlanadi. Shuningdek, Toshkent xalqaro arbitraj markazining mamlakatda zamonaviy arbitraj muhitini shakllantirish va korporativ nizolarni hal etishda xalqaro standartlarni ilgari surishdagi asosiy institut sifatidagi o'rniga katta e'tibor qaratilgan. Xulosa o'rnida, arbitraj va mediasiya institutlarini rivojlantirish O'zbekistonda huquqiy barqarorlikni mustahkamlashga, davlat sudlarining yukini kamaytirishga va investitsiyaviy muhitni yaxshilashga xizmat qilishi asoslab berilgan.

Kalit so'zlar: Korporativ nizolar, korporativ munosabatlar ishtirokchilari, nizolarni alternativ hal etish, sud jarayoni, mediatsiya, mediator, arbitraj, arbitr, arbitraj kelishuvi, maxfiylik.

«АРБИТРАЖ И МЕДИАЦИЯ КАК ЭФФЕКТИВНЫЕ СПОСОБЫ РАЗРЕШЕНИЯ КОРПОРАТИВНЫХ СПОРОВ В УЗБЕКИСТАНЕ»

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Аннотация

В тезисе рассматривается эффективность арбитража и медиации как современных альтернативных методов разрешения корпоративных споров в Республике Узбекистан. Особое внимание уделяется актуальности применения данных процедур в условиях стремительного роста предпринимательства, когда традиционные судебные методы часто оказываются затратными, длительными и недостаточно гибкими. Отдельно рассматриваются преимущества медиации и арбитража, включая добровольность, конфиденциальность, оперативность, автономию сторон и сохранение деловых отношений. Значительное внимание уделено роли Ташкентского международного арбитражного центра как ключевого института в формировании современной арбитражной среды в стране и продвижении международных стандартов в разрешении корпоративных конфликтов. Тезис обосновывает, что развитие института арбитража и медиации в Узбекистане способствует укреплению правовой стабильности, снижению

нагрузки на государственные суды и формированию благоприятной инвестиционной среды.

Ключевые слова: Корпоративные споры, участники корпоративных отношений, альтернативное разрешение споров, судебный процесс, медиация, медиатор, арбитраж, арбитражный центр, арбитр, арбитражное соглашение, конфиденциальность.

With the development of the market economy in Uzbekistan and the active growth of business activities, the need for effective legal ways to solve corporate disputes is increasing. These disputes can happen in different situations, such as conflicts between founders, shareholders, or company managers.

Usually, the reasons for disputes include:

- Violations of the charter and corporate agreement;
- Abuse of power;
- Violation of shareholders' rights;
- Lack of trust in the management;
- False or incorrect reporting;
- Denial of access to information.

It is important to note that such disputes affect important business interests and can harm the company's stability or even lead to its closure.

According to the Economic Procedural Code of the Republic of Uzbekistan, corporate disputes are handled by economic courts. However, solving these conflicts in court can take a long time, cost a lot of money, and may not always bring good results. Also, the court cannot always help keep good relations between the parties, which is especially important in business. Because of this, alternative ways to resolve disputes are becoming more important.

As everyone knows, alternative dispute resolution means a group of legal procedures through which parties in conflict can solve their dispute without going to a state court. The main types of alternative dispute resolution are arbitration and mediation. It is important to say that these forms are different from court trials because they are based on agreement, quick results, and business needs. This is especially useful in corporate relations, where speed, privacy, and keeping partnerships are very valuable.

The practice of mediation in Uzbekistan started with the Law of the Republic of Uzbekistan «On Mediation» from July 3, 2018. This law defines the legal basis of the procedure, the role of the mediator, how mediation is done, and the legal power of the mediation agreement. According to this law, mediation is a procedure to solve a dispute

with the help of a neutral third person – a mediator – based on the voluntary agreement of the parties, to find a solution acceptable for both sides [1].

The law provides a flexible approach to mediation. It can be used:

- Before going to court;
- During the court process, until the final decision is made;
- After the court decision, during the enforcement stage.

According to the Law of the Republic of Uzbekistan «On Mediation», the parties can choose the mediator themselves, and decide on the conditions, rules, and length of the procedure. Usually, mediation takes up to 30 days, but this can be extended for another 30 days if both sides agree.

The Law of the Republic of Uzbekistan «On Mediation» clearly sets out the main principles of the process:

«Voluntariness» – the parties decide freely whether to use mediation, whether to continue the process, and they can leave it at any time;

«Confidentiality» – all information received during mediation cannot be shared or used in court without both parties agreeing;

«Neutrality and independence of the mediator» – the mediator cannot make decisions, give advice, or take sides;

«Equality of the parties» – both sides have equal rights to share their views and propose the terms of the agreement.

Along with mediation, arbitration is also becoming more important. Its main advantages – such as quick results, professional arbitrators, and confidentiality – make it an attractive way to resolve difficult corporate disputes. It is especially important that in recent decades arbitration has become one of the main ways to solve corporate disputes, especially in international business. This is because arbitration helps avoid state courts and gives parties the chance to choose a neutral place to resolve their conflict, especially in cases between residents of different countries [2].

A big step in developing arbitration was the adoption of the Law of the Republic of Uzbekistan «On International Commercial Arbitration» in February 2021. This law sets the rules for making an arbitration agreement, how to choose arbitrators, and how the arbitration process works.

According to the Law of the Republic of Uzbekistan «On International Commercial Arbitration», «Arbitration» is defined as a way to solve a dispute that can be done by a permanent arbitration institution or an arbitration court made for one specific case. An «Arbitrator» is a person chosen by both sides to resolve the dispute under the arbitration procedure [3].

About the arbitration agreement – according to the Law of the Republic of Uzbekistan «On International Commercial Arbitration», the arbitration agreement is a contract where both parties agree to send all or some disputes to arbitration. The main condition for this agreement to be valid is that it must be in writing. The law also gives parties freedom to decide the main rules of the arbitration. For example, they can choose the number of arbitrators. If there is no agreement, the arbitration court will have three arbitrators by default. Also, each side has the right to challenge an arbitrator if they think the person may not be fair or independent [4]. This rule helps make sure the process is fair and trusted.

The law also talks about where the arbitration takes place and what language it uses. If the parties do not agree on this, the arbitration court will decide based on the situation. The parties can choose one or more languages for the process, which is especially important for international cases.

An important step for developing arbitration in Uzbekistan was the creation of the «Tashkent International Arbitration Centre» (TIAC) at the Chamber of Commerce and Industry of the Republic of Uzbekistan. This centre was created based on the Presidential Decree of the Republic of Uzbekistan «On measures for further development of alternative ways to resolve disputes» from June 17, 2020, № PP-4754 [5].

The main task of TIAC is to build a modern, clear, and effective arbitration system that follows the best international standards. This centre is made not only to provide high-quality arbitration for commercial disputes but also to create a good environment to attract foreign investors[6].

TIAC works under its own rules, which allow fast and effective resolution of cases, including corporate disputes[7]. The centre lets parties choose arbitrators from well-known national and international experts, uses modern digital tools, allows multi-language proceedings, and keeps high standards of fairness.

One of the main advantages of TIAC is that it focuses on business needs. Its rules allow for fast procedures, online participation, and confidentiality. This makes the centre a good choice for solving corporate disputes between residents and non-residents of Uzbekistan[8]. It is also important to say that TIAC actively works with international experts and institutions, bringing in the best arbitration practices from around the world.

So, arbitration in Uzbekistan is becoming a stable and trusted way to solve corporate disputes[9]. It helps improve legal certainty in business and reduces the load on state courts.

Based on everything said above, we can say that alternative ways to resolve corporate disputes – arbitration and mediation – have shown their usefulness in the business practice of Uzbekistan. Now let's list the benefits of arbitration and mediation in corporate disputes:

1. «Voluntariness and flexibility» – both methods are based on agreement, so the procedures can be adapted to each situation.
2. «Confidentiality» – very important for corporate cases with trade secrets. Arbitration and mediation help avoid publicity and reputation risks.
3. «Speed» – compared to state courts, arbitration and mediation resolve disputes faster, especially with fast-track procedures.
4. «Cost-effectiveness» – no state fees, lower costs for lawyers, and fewer expenses make these procedures more affordable.
5. «Keeping business relationships» – alternative dispute resolution helps reduce conflict, not make it worse, which is very important for long-term cooperation.

In conclusion, we can confidently say that arbitration and mediation, as alternative ways to solve corporate disputes, have become well-established in the legal practice of Uzbekistan. They have shown to be effective, flexible, and suitable for the needs of modern business.

«Mediation» is especially useful in corporate cases because it lets the parties come to a win-win solution with the help of a neutral person – the mediator. The Law of the Republic of Uzbekistan «On Mediation» gives the parties the right to choose the mediator, the time, and the rules, and most importantly, to do it in a confidential and trusting atmosphere. This is very important for companies where keeping the business relationship even after the conflict is essential. Because mediation is flexible, it can be used before, during, or after a court case[10].

«Arbitration», in turn, is a more formal but still fast and effective way to solve disputes. The parties choose the arbitrators, set the rules, and can be sure that the process is confidential. It is especially important that arbitration is suitable for international disputes where the parties are in different countries. The Law «On International Commercial Arbitration», adopted in Uzbekistan in February 2021, was a big step in growing the system. It clearly explains how the arbitration should work, what rights the parties have, and how the independence of arbitrators is protected.

It is also worth mentioning the creation of the «Tashkent International Arbitration Centre», which became an important platform for solving disputes using international standards. This centre already works with global organizations and helps build an arbitration system in Uzbekistan that meets world-level examples.

To sum up, arbitration and mediation really are effective tools for solving corporate disputes in Uzbekistan. They help businesses resolve problems quickly, flexibly, with less money, and without damaging their working relationships. Legal reforms in recent years, the creation of special centres, and the use of international experience are building a strong foundation for further development of these methods. All of this helps strengthen the business environment in the country, reduce the burden on courts, and increase trust between business partners.

BIBLIOGRAPHIC REFERENCES:

1. Law of the Republic of Uzbekistan «On mediation» dated July 3, 2018, № ZRU–482.
2. K.Omonjonova, L.Achilova. «The Effectiveness of Alternative Methods of Resolving Commercial Disputes: A Comparative Analysis of Arbitration and Mediation» // Society and Innovation, 2024, Vol. 5, No. 3/S, pp. 125–130;
3. Law of the Republic of Uzbekistan «On international commercial arbitration» dated February 16, 2021, № ZRU–674;
4. Ergashev A.B. The Importance of Alternative Dispute Resolution Methods for the Investment Attractiveness of Uzbekistan // Issues of Law and Economics. – 2022. – No. 4. – Pp. 87–92.
5. The decree of the President of the Republic of Uzbekistan «On Measures for the Further Development of Alternative Dispute Resolution Methods» dated June 17, 2020, № PP–4754.
6. Ilhomovna, A. L. (2023). Genesis of Sources of Legal Regulation of Relations in the Provision of Tourist Service. New Scientific Trends and Challenges (ITALY), 49-53
7. Ачилова, Л. (2020). Влияние covid-19 на гостиничные услуги: национальный и зарубежный опыт. *Review of law sciences*, (2), 96-101.
8. Рузиназаров Ш., Ачилова Л. Тенденции и развитие правового регулирования иностранных инвестиций в Республике Узбекистан // Юрист ахборотномаси. - 2020. - № 1.4. - С. 71-75.
9. Burkhanova, L., Achilova, L., & Shorahmetova, U. (2023, June). Features of determining the legal nature and issues of improving the power supply contract as the basis of the production and maintenance infrastructure of the economy of the Republic of Uzbekistan. In AIP Conference Proceedings (Vol. 2789, No. 1). AIP Publishing.

10. Bekzod o'g'li, J. F. (2024). Kriminalistik huquq va jinoyatlarning oldini olish. International innovation and researches, 1(3), 53-55.
11. Ruzinazarov, S. N., & Achilova, L. I. (2021). A new stage in the development of the civil code of the Republic of Uzbekistan in the context of digital reality. International Relations: Politics, Economics, Law, 2020(1), 58-65.

LEGAL ASPECTS AND PROSPECTS FOR IMPROVING DIGITAL COMMERCE

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Abstract: Digital commerce has become a key driver of economic growth and social transformation worldwide. For developing countries such as Uzbekistan, it presents new opportunities for entrepreneurship, job creation, and integration into global markets. This article explores the key legal aspects of e-commerce, including the legal status of electronic contracts, digital signatures, and the regulation of online platforms. Special attention is given to the reforms in Uzbekistan: the “Digital Uzbekistan – 2030” strategy, the development of digital infrastructure, support for local marketplaces, and integration into international e-commerce networks. The article also examines challenges in implementing legislation, digital literacy, consumer trust, and international cooperation. It emphasizes the need for balanced legal policies and institutional development to successfully implement digital commerce in a transitional economy.

Keywords: digital commerce, e-commerce, electronic contract, Uzbekistan, digital transformation, legal regulation, online platforms, digital signature, consumer trust, international trade, UNCITRAL, WTO, e-commerce infrastructure.

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Аннотация: Цифровая торговля стала важнейшим двигателем экономического роста и социальной трансформации во всём мире. Для развивающихся стран, таких как Узбекистан, она открывает новые возможности для предпринимательства, создания рабочих мест и интеграции в глобальные рынки. В статье рассматриваются ключевые правовые аспекты электронной коммерции, включая правовой статус электронных договоров, цифровые подписи и регулирование онлайн-платформ. Особое внимание уделяется реформам в Узбекистане: стратегия «Цифровой Узбекистан – 2030», развитие цифровой инфраструктуры, поддержка локальных маркетплейсов и интеграция в

международные e-commerce сети. Также анализируются проблемы реализации законодательства, цифровой грамотности, доверия потребителей и международного сотрудничества. Работа подчёркивает необходимость сбалансированной правовой политики и институционального развития для успешного внедрения цифровой торговли в переходной экономике.

Ключевые слова: цифровая торговля, электронная коммерция, электронный контракт, Узбекистан, цифровая трансформация, правовое регулирование, онлайн-платформы, цифровая подпись, доверие потребителей, международная торговля, UNCITRAL, WTO, инфраструктура e-commerce.

Digital commerce – the buying and selling of goods and services through electronic platforms – has become a powerful driver of economic growth and social change. In 2021 alone, 2.3 billion people shopped online (a 68% increase from 2017), and e-commerce sales across 43 major economies reached nearly \$27 trillion in 2022, up 10% from the previous year [1]. This explosive growth, accelerated by global digitalization and the COVID-19 pandemic, underscores the importance of online trade as an integral part of the global economy. For developing countries, digital commerce offers immense opportunities for entrepreneurship, job creation, and inclusion into global markets [1].

At the heart of digital commerce lies the basic question of how traditional contract law applies online. An electronic contract – whether formed by clicking an “I Agree” button or exchanging emails – must typically satisfy the same legal requirements as a paper contract (offer, acceptance, intent, consideration). Many jurisdictions have updated their laws to recognize electronic contracts and records as functionally equivalent to their paper counterparts. The principle of “functional equivalence”, championed by the United Nations Commission on International Trade Law (UNCITRAL), ensures that a contract or signature is not denied legal effect solely because it is in electronic form [2]. For example, Uzbekistan’s recent Law on Electronic Commerce explicitly allows online contracts and grants them the same legal status as paper documents, reflecting this global principle. To facilitate electronic contracting, laws often clarify that electronic messages can satisfy any “writing” or “signature” requirements, as long as they are accessible for later reference and reliably linked to the signer.

Digital signatures (a subset of electronic signatures that use encryption for authentication) play a crucial role in verifying parties’ identities and securing online agreements. Many countries have enacted legal frameworks for digital signatures, again influenced by UNCITRAL’s Model Law on Electronic Signatures (2001) [2].

Another fundamental legal aspect is the regulation of online platforms – the marketplaces, app stores, social networks, and other intermediaries that host digital transactions. A key question is the extent to which these platforms should be held liable for illegal or harmful activities that occur on them, such as the sale of counterfeit goods, fraud, or the posting of unlawful content. Early e-commerce law often treated platforms as neutral conduits: for example, the EU's e-Commerce Directive (2000) provided safe harbor immunity to intermediaries for user-supplied content, so long as they had no active role and removed illegal content upon notice. Similarly, in the United States, Section 230 of the Communications Decency Act shields online services from liability for most user content. However, with the massive growth of platform-based commerce, there is a global trend toward increasing platform accountability [3].

In the case of Uzbekistan, Uzbekistan provides a compelling case study of how a country can modernize its legal framework to foster digital commerce while grappling with practical challenges. As a transitioning economy with ambitious digital development goals, Uzbekistan has in recent years introduced significant legal reforms in e-commerce, identified new opportunities for growth and inclusion, and confronted various implementation challenges on the path to a robust digital marketplace.

The reforms are part of a broader government vision to harness e-commerce for economic development. The Digital Uzbekistan-2030 Strategy, adopted in 2020, lays out plans to expand nationwide broadband access, digitize public services, and cultivate IT talent. By improving infrastructure – for example, extending fiber-optic networks and achieving near-universal mobile internet coverage – the government is reducing barriers for online business. Indeed, as of January 2023, Uzbekistan had about 31 million internet users (out of ~36 million population), thanks to rapid growth in mobile connectivity [4]. E-commerce has been growing at an impressive pace: in 2021, Uzbekistan's e-commerce market revenue was estimated at \$1.39 billion. Although this was only around 3.9% of total consumer spending (low by global standards), the sector is projected to expand almost 19% annually through 2025 [4]. Local businesses and entrepreneurs are increasingly moving online, selling electronics, fashion, furniture and more – categories which Uzbek consumers have eagerly purchased via e-commerce (electronics comprised ~31% of online purchases, fashion ~29%). The government has actively encouraged this migration to digital markets. A notable initiative was the launch of the National Online Trading Platform (Unisavdo) by the state postal service in March 2021. This platform allows entrepreneurs to auction products online, with the postal service providing delivery and acting as guarantor of transactions. The state has invested in expanding logistics centers for e-commerce

(from 4 centers in 2021 to a planned 30 by 2025) and massively increasing the number of products and merchants on the platform [4]. Another opportunity seized is integration with global e-commerce networks: the Uzbekistan Export Promotion Agency partnered with Alibaba in 2020 to create a “Made in Uzbekistan” portal on Alibaba.com, helping hundreds of local firms reach international buyers. In 2023, it was even announced that Alibaba would open a regional center in Namangan, Uzbekistan [4] – a sign of the country’s growing attractiveness in digital trade. Over 50 online marketplaces now operate in Uzbekistan; domestic platforms like Uzum Market have become very popular, handling over a million orders a month [5]. According to government figures, these marketplaces currently have an annual turnover of about \$300 million and are projected to reach \$1 billion by 2027. The overall e-commerce market volume grew from an estimated \$201 million in 2021 to \$543 million in 2023, a nearly three-fold increase in two years [5].

Despite the positive outlook, Uzbekistan faces several challenges in fully realizing the benefits of digital commerce. One challenge is infrastructure and access, though improving, still lags in certain areas. Internet speeds in Uzbekistan are below global averages (mobile internet ranked 112th globally in 2023 and rural areas have had lower 4G coverage (43% of the population as of 2019, though increasing). The government is investing heavily to close these gaps (e.g. extending fiber network to every town, aiming for 100% high-speed coverage by 203), but until complete, some citizens and small businesses will remain offline or with limited connectivity, thus excluded from e-commerce. Another challenge lies in enforcing and operationalizing the new laws and regulations. Passing modern e-commerce legislation is only the first step; implementing it requires awareness, institutional capacity, and sometimes-cultural change. For instance, the requirement that foreign e-commerce platforms register locally by 2025 will need effective administration – ensuring that global companies either incorporate or cease operations by the deadline, and that new local entities comply with consumer protection and data rules. There is a risk that overly stringent local requirements could deter international investment or limit Uzbek consumers’ access to foreign marketplaces; thus, regulators must balance enforcement with openness. Additionally, consumer trust and digital literacy need strengthening. Many Uzbeks are first-time online shoppers and may be wary due to fear of frauds or lack of familiarity. Building trust will require visible enforcement of consumer rights (e.g. penalties for fraud, easy dispute resolution) and public education on the protections available. The introduction of escrow services and the legal requirement for seller transparency are positive steps, but consumers must be made aware of these safeguards.

Another area for improvement is the integration of Uzbekistan's e-commerce with global markets. Efforts like the Alibaba partnership and discussions to join the WTO's Information Technology Agreement hint at a desire to plug into global value chains. Yet, Uzbekistan is not currently part of the WTO's e-commerce JSI negotiations (it is a WTO observer on that matter), and its laws on cross-border data flows are relatively strict. Harmonizing standards with international frameworks (for example, considering accession to the UNCITRAL Electronic Communications Convention or aligning with Eurasian Economic Union e-commerce regulations if it moves toward that bloc) could enhance cross-border trade. Implementation of international logistics standards and customs facilitation (like de minimis rules for low-value shipments) will also help Uzbek small sellers reach foreign customers. Finally, capacity building is needed for institutions and businesses. The WTO discussions in 2025 underscored that developing countries benefit from training in how to construct and enforce e-commerce laws [6]. Uzbekistan's judiciary, consumer protection agencies, and trade officials might similarly require updated skills and knowledge to handle e-commerce disputes, cybersecurity incidents, and international cooperation requests. On the business side, small enterprises may need support to digitalize operations and comply with new legal requirements (for example, retaining e-documentation, or following advertising rules online).

Looking ahead, Uzbekistan's prospects in digital commerce are bright if these challenges are managed. Practical reforms that could further improve the landscape include: updating consumer protection law to specifically address online shopping (for instance, clear return/refund rights, and joining ICPEN for cross-border fraud cooperation), strengthening cybersecurity frameworks to protect e-commerce infrastructure from attacks, and fostering competition in the digital marketplace, so that no single platform monopolizes the market, keeping it open for new entrants. The authorities might also consider streamlining taxation for e-commerce – simplifying VAT and import duties for online transactions – to encourage more participation and foreign investment. Uzbekistan's experience illustrates the importance of a holistic approach: legal reforms must go hand in hand with infrastructure upgrades, education, and international engagement. By continuing on this path, Uzbekistan can leverage digital commerce as a pillar of its development, connecting its vibrant entrepreneurial population with the global digital economy.

In conclusion, digital commerce has transformed from a novel convenience into a central component of modern trade, bringing with it both tremendous opportunities and intricate legal challenges.

The case of Uzbekistan demonstrates both the progress and the practical difficulties in improving digital commerce through legal reform. Uzbekistan has proactively updated its laws to create an enabling legal environment for e-commerce – recognizing online contracts, instituting consumer protections, legalizing new digital services like escrow, and safeguarding personal data [7]. These steps, combined with investments in infrastructure and skills, have spurred rapid growth in the sector, suggesting that sound policy can unlock the potential of digital markets in emerging economies [11]. However, Uzbekistan also faces implementation challenges common to many countries: bridging the urban-rural digital divide, ensuring that laws on paper translate to enforcement on the ground, and balancing openness with regulation. The Uzbek experience underscores that legal improvement is an ongoing process requiring adjustments and stakeholder engagement [12].

What practical reforms and future directions can be suggested moving forward? Continuous modernization of the legal framework is essential. Governments should periodically review e-commerce laws to address new technologies (such as AI-driven commerce, Internet of Things transactions, and digital currencies in payments) and new threats (like sophisticated cyber fraud). For example, adopting legal provisions for automated contracts and smart contracts, as UNCITRAL's latest model law provides [2], can preempt uncertainties as AI plays a bigger role in commercial decision-making. Harmonization with international standards is another important direction. Countries could align their electronic transactions laws with UNCITRAL texts, seek adequacy or mutual recognition agreements in data protection, and join emerging plurilateral agreements on e-commerce to ensure their businesses operate in a predictable international environment. In practical terms, Uzbekistan and similar countries might consider joining the WTO Information Technology Agreement (to reduce tariffs on ICT goods) and the eventual WTO digital trade agreement, while also engaging in regional digital market initiatives [8] (for instance, a Central Asian digital economy cooperation platform) to facilitate cross-border e-commerce in their neighborhood. From a regulatory practice perspective, strengthening institutions and cooperation will improve outcomes. Creating dedicated e-commerce or digital economy units within ministries can help coordinate policy and respond quickly to market developments [9]. Training judges, arbitrators, and consumer protection officials in digital commerce issues will ensure that disputes are resolved efficiently and fairly – whether it's an online fraud case or a contract breach involving an overseas seller. Internationally, sharing best practices (as WTO members discussed with a possible compendium [6] and technical assistance (such as UNCTAD's eTrade Readiness Assessments) should

be expanded, so that all countries have the knowledge to implement effective legal measures [10].

Another critical area is empowering users and businesses through awareness. Even the best laws mean little if users do not know their rights or businesses their obligations. Finally, the future of digital commerce law will likely involve tackling new frontiers where technology and commerce intersect. Issues such as the legal status of digital assets (NFTs, cryptocurrencies used in commerce), the regulation of market-dominant tech firms to prevent anti-competitive practices in online marketplaces (many jurisdictions are enacting digital competition laws), and the ethics of algorithmic pricing or AI recommendation systems will demand attention. Ensuring that the digital marketplace remains fair, inclusive, and safe will be an evolving challenge.

By continually refining laws in line with technological innovation and societal values, and by fostering international consensus on key norms, we can create an environment where digital commerce thrives – driving economic growth and innovation – while upholding the rights and interests of all participants. The journey is ongoing, but with each legal update, capacity-building initiative, or international agreement, we move closer to a seamless and trusted global digital marketplace that benefit everyone.

Sources:

[1] UNCTAD, Making e-commerce and the digital economy work for all (2024), e-commerce statistics ([Making e-commerce and the digital economy work for all | UN Trade and Development \(UNCTAD\)](#)) ([Making e-commerce and the digital economy work for all | UN Trade and Development \(UNCTAD\)](#));

[2] **Electronic Commerce** - [https://uncitral.un.org/en/texts/ecommerce#:~:text=adopted%20in%20over%20100%20States,the%20use%20of%20electronic%20signatures](https://uncitral.un.org/en/texts/ecommerce#:~:text=adopted%20in%20over%20100%20States,the%20use%20of%20electronic%20signatures;);

[3] **CookieScript.com**, What is the Digital Services Act? (Oct 2022), summary of DSA obligations for platforms - [What is the Digital Services Act?](#);

[4] **Trade.gov** (U.S. International Trade Administration), **Uzbekistan – eCommerce** (Dec 2023), **Uzbekistan’s digital market data and laws** - [https://www.trade.gov/country-commercial-guides/uzbekistan-ecommerce#:~:text=should%20provide%20customers%20with%20the,when%20agreeing%20on%20its%20terms](https://www.trade.gov/country-commercial-guides/uzbekistan-ecommerce#:~:text=should%20provide%20customers%20with%20the,when%20agreeing%20on%20its%20terms;);

[5] **“Development of e-commerce will affect the whole business of Uzbekistan”** - **Deputy Director of the National Agency of Perspective Projects of Uzbekistan Davron Maksudov**;

- [6] WTO news, Members review legal and regulatory frameworks for e-commerce (Feb 2025), emphasis on capacity building - <https://etradeforall.org/news/members-review-legal-and-regulatory-frameworks-e-commerce#:~:text=Members%20emphasized%20the%20need%20for,commerce%20regulatory%20frameworks;>
- [7] Vakhidov Law Firm, News of the legislation on E-Commerce (Oct 2022), summary of Uzbekistan's Law on Electronic Commerce 2022 (News of the legislation on E-COMMERCE) (News of the legislation on E-COMMERCE).
- [8] Achilova, L. (2020). Genesis of sources of legal regulation of relations in the provision of hotel services. Результаты научных исследований в условиях пандемии (COVID-19), 1(06), 101-106.
- [9] Ачилова, Л. И. (2020). Современное состояние соблюдения прав и интересов граждан и юридических лиц при обеспечении развития инновационного цифрового образования. In Трансформация права и правоохранительной деятельности в условиях развития цифровых технологий в России, странах СНГ и европейского союза: проблемы законодательства и социальной эффективности (pp. 18-28).
- [10] Ачилова, Л. (2021). Туризм ва меҳмонхона саноатида рақамли иқтисодиёт: қиёсий таҳлил. Юрист ахборотномаси, 2(6), 92-98.
- [11] Ruzinazarov, Sh, and L. Achilova. "Actual issues of improving legislation on commitments causes of harm." Review of law sciences 1.1 (2017): 21.
- [12] Bekzod o'g'li, J. F. (2024). Kriminalistik huquq va jinoyatlarning oldini olish. International innovation and researches, 1(3), 53-55.
- [13] Рузиназаров, Ш., & Ачилова, Л. (2017). Актуальные вопросы совершенствования законодательства по обязательствам причинения вреда. Review of law sciences, 1(1), 134-141.

CBL (CONTENT-BASED LEARNING) IS THE LANGUAGE LEARNING TASK.

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Annotation: This study examines Content-Based Learning (CBL) as a strategic approach to language acquisition, exploring its theoretical foundations and practical applications in educational settings. The research analyzes how integrating substantive academic content with language instruction enhances both linguistic competence and subject knowledge acquisition.

Аннотация. В данном исследовании рассматривается предметно-языковое обучение (CBL) как стратегический подход к изучению языка, исследуются его теоретические основы и практическое применение в образовательных условиях. В исследовании анализируется, как интеграция содержательного академического контента с языковым обучением повышает как лингвистическую компетенцию, так и усвоение предметных знаний.

Keywords: Content-based learning, language acquisition, integrated curriculum, academic literacy, scaffolding techniques, authentic materials, dual-focused learning.

Ключевые слова: Предметно-языковое обучение, усвоение языка, интегрированная учебная программа, академическая грамотность, методы поддержки, аутентичные материалы.

Content-Based Learning (CBL) represents a significant pedagogical approach that fundamentally transforms traditional language education by integrating substantive academic content with language instruction. This methodology addresses the limitations of conventional language teaching approaches by providing contextually rich environments for language acquisition. Rather than isolating language as a separate subject, CBL positions language as both the medium and object of learning, creating meaningful contexts for authentic communication and higher-order thinking. In contemporary educational environments, CBL addresses the growing need for educational efficiency by simultaneously developing language skills and subject knowledge. This dual-focused approach responds to increasing pressures on educational systems to prepare students for global academic and professional environments where both content expertise and language proficiency are essential. The

integration of language and content instruction creates a dynamic educational framework characterized by authenticity, relevance, and cognitive engagement.

Bernard Mohan, a pioneering researcher in content-based language teaching, emphasized that "language is not just a set of structures, but a resource for making meaning in context." This perspective highlights the fundamental principle of CBL: language development occurs most effectively when embedded within meaningful content learning. The CBL approach involves two interrelated processes: content comprehension (understanding subject-specific concepts and information) and language acquisition (developing linguistic skills through purposeful content engagement).

Cultural and disciplinary elements are integrated naturally rather than artificially introduced. Language educators implementing CBL need awareness of both linguistic principles and subject-specific knowledge domains, ensuring that disciplinary concepts and language features are systematically developed throughout the learning process.

This research area has particular relevance for Uzbek educational contexts, especially regarding the enhancement of foreign language instruction through content integration. Such research helps educators develop integrated curricula that address both linguistic and academic needs of Uzbek learners. It facilitates the development of pedagogical materials that incorporate authentic academic content while promoting language development, thereby strengthening the relationship between language learning and academic achievement in educational settings.

Models of CBL implementation include theme-based language instruction, sheltered content instruction, adjunct language instruction, and various forms of immersion programming. Historically, CBL has evolved from early immersion programs to more sophisticated approaches such as Content and Language Integrated Learning (CLIL) in European contexts and Cognitive Academic Language Learning Approach (CALLA) in North American educational systems. Recent trends emphasize scaffolding techniques, metacognitive strategy development, and technological integration to enhance content accessibility.

The challenges in implementing CBL can be categorized into curricular, instructional, and institutional dimensions. Curricular challenges include developing appropriate materials that balance linguistic accessibility with content authenticity. Instructional challenges involve preparing teachers with both subject expertise and language pedagogy skills. Institutional challenges encompass scheduling constraints, assessment practices, and policy alignment. This corresponds with Met's identification of key

implementation factors: program goals, learner characteristics, available resources, and institutional support structures.

Linguistic complexity presents particular challenges in CBL implementation. When academic content contains specialized terminology, complex syntactic structures, and abstract concepts, instructors must develop scaffolding strategies that support comprehension while maintaining content integrity. Cummins distinguished between Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP), highlighting the importance of systematic development of academic language functions in content-based settings.

Effective CBL implementation requires addressing several core components:

1. Content selection (relevance, cognitive demand, linguistic features, conceptual accessibility)
2. Language objectives (vocabulary development, discourse patterns, grammatical structures, academic functions)
3. Scaffolding mechanisms (visual supports, graphic organizers, modeling, guided practice)
4. Assessment approaches (formative checks for understanding, content mastery evaluation, language progress measures)

Addressing these elements requires attention to certain fundamental principles:

1. Cognitive engagement - ensuring content challenges students intellectually while remaining comprehensible
2. Language functionality - focusing on language features essential for content mastery and disciplinary communication
3. Contextual scaffolding - providing temporary supports that facilitate understanding while building independent learning capacity

The integration of authentic materials represents both a central feature and significant challenge for CBL implementation. While authentic disciplinary texts provide exposure to genuine academic discourse patterns, they often present linguistic barriers for language learners. The adaptation of authentic materials requires careful analysis of linguistic demands and strategic modification techniques that preserve content authenticity while enhancing comprehensibility.

Assessment in CBL contexts presents unique challenges related to the dual focus on content and language objectives. Traditional language assessment approaches may not adequately capture content knowledge development, while conventional content assessments may unfairly penalize linguistic limitations. Effective CBL assessment

frameworks must balance attention to content mastery with language development progress, often requiring multiple assessment formats and modified evaluation criteria. Several additional considerations merit attention when implementing CBL approaches. The cognitive load theory has particular relevance for CBL, as students simultaneously process new content information and linguistic forms. This dual processing demand requires careful instructional sequencing and strategic scaffolding to prevent cognitive overload. Effective CBL instruction involves systematic attention to the intrinsic cognitive demands of content while managing the extraneous cognitive load imposed by language processing requirements.

Teacher preparation represents a critical factor in successful CBL implementation. The dual expertise required—content knowledge and language pedagogy—often exceeds traditional teacher training parameters. Professional development for CBL teachers must address subject-matter knowledge, understanding of language acquisition processes, familiarity with scaffolding techniques, and skills in developing integrated learning objectives. Collaborative planning between content specialists and language educators can help address expertise gaps while creating more robust instructional designs.

Materials development poses significant challenges in CBL contexts. Commercial textbooks rarely achieve the ideal balance between content authenticity and linguistic accessibility required for specific learner populations. Adaptation of existing materials and creation of supplementary resources often become necessary components of CBL implementation. Effective materials demonstrate carefully controlled linguistic complexity while maintaining content integrity, incorporating visual supports, and providing multiple entry points for diverse proficiency levels.

The role of the first language in CBL contexts requires thoughtful consideration. While target language immersion maximizes exposure, strategic use of the first language can support complex concept development and reduce affective barriers. Translanguaging approaches that systematically incorporate both languages may optimize learning in some CBL contexts, particularly during early implementation stages or with abstract content domains.

Technology integration offers promising solutions to many CBL implementation challenges. Digital resources can provide multimodal representations of complex concepts, allowing students to access content through visual, auditory, and interactive channels. Adaptive learning platforms can differentiate content presentation based on language proficiency levels, while automated glossing and text-to-speech functions

enhance text accessibility. Virtual simulations and augmented reality applications create immersive content experiences that transcend linguistic limitations.

Motivation dynamics in CBL settings differ significantly from traditional language classrooms. When students pursue meaningful content learning goals, language acquisition becomes a means rather than an end, potentially enhancing engagement and persistence. The authenticity of learning tasks and their connection to academic or professional aspirations can foster more sustained motivation than artificial language exercises. However, the linguistic demands of content materials may also create frustration for some learners, requiring careful attention to affective factors.

Ultimately, successful implementation of Content-Based Learning requires a balanced approach that systematically integrates content and language objectives within well-designed instructional sequences. This integration demands both theoretical understanding and practical creativity from educators who must navigate the complex relationship between disciplinary knowledge structures and language development processes, creating learning environments where content comprehension and language acquisition mutually reinforce each other.

REFERENCES

1. Brinton, D. M., Snow, M. A., & Wesche, M. B. (2003). Content-based second language instruction. University of Michigan Press.
2. Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street & N. H. Hornberger (Eds.), *Encyclopedia of language and education* (2nd ed., Vol. 2, pp. 71-83). Springer.
3. Mohan, B. A. (1986). *Language and content*. Addison-Wesley.
4. Met, M. (1999). *Content-based instruction: Defining terms, making decisions*. NFLC Reports. Washington, DC: The National Foreign Language Center.
5. Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. John Benjamins Publishing.

**THE TASK OF LANGUAGE LEARNING: PROJECT-BASED LEARNING (PBL) AND
CONTENT-BASED LEARNING (CBL)**

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Annotation. *This study examines two contemporary approaches to language teaching and learning: Content-Based Learning (CBL) and Project-Based Learning (PBL). The research explores how these methodologies integrate language acquisition with meaningful content and authentic tasks, analyzing their theoretical foundations, implementation strategies, and effectiveness in various educational contexts.*

Аннотация. *В данном исследовании рассматриваются два современных подхода к преподаванию и изучению языка: предметно-языковое интегрированное обучение (CBL) и проектно-ориентированное обучение (PBL). В исследовании анализируется, как эти методологии интегрируют овладение языком с содержательным контекстом и аутентичными задачами, рассматриваются их теоретические основы, стратегии реализации и эффективность в различных образовательных контекстах.*

Keywords: *Language acquisition, content-based learning, project-based learning, integrated approaches, authentic materials, communicative competence, learner autonomy, task-based instruction, cross-curricular connections, experiential learning.*

Ключевые слова: *Овладение языком, предметно-языковое интегрированное обучение, проектно-ориентированное обучение, интегрированные подходы, аутентичные материалы, коммуникативная компетенция, автономность учащихся, задачно-ориентированное обучение, междисциплинарные связи, эмпирическое обучение.*

In contemporary language education, finding effective methodologies that engage learners while developing practical language skills remains a central concern. Traditional approaches to language teaching often separated language from meaningful contexts, resulting in students who could recite grammar rules but struggled with authentic communication. Content-Based Learning (CBL) and Project-Based Learning (PBL) have emerged as powerful alternatives that integrate language acquisition with meaningful subject matter and authentic tasks, addressing the limitations of conventional methods.

Language learning is not merely about acquiring vocabulary and grammar rules but about developing the ability to communicate effectively in real-world contexts. CBL and PBL represent innovative approaches that recognize this fundamental principle, embedding language learning within substantive content and purposeful activities. These methodologies align with constructivist theories of education, which emphasize that knowledge is actively constructed through meaningful experiences rather than passively received.

The significance of researching these approaches lies in their potential to transform language education by creating more engaging, relevant, and effective learning environments. As Stryker and Leaver note, "When language becomes the medium rather than the object of instruction, students are empowered to use it for authentic purposes" [1;5]. This perspective represents a paradigm shift from traditional language-focused instruction toward more holistic, integrated approaches.

Both CBL and PBL have gained significant attention in educational research, yet their specific implementations, challenges, and outcomes in various contexts warrant further investigation. This study aims to analyze these methodologies, exploring their theoretical foundations, implementation strategies, and effectiveness in developing language proficiency alongside content knowledge and practical skills. Content-Based Learning (CBL) represents an approach to language instruction where language and subject matter are integrated, with content serving as the organizing principle for curriculum design. According to Brinton, Snow, and Wesche, CBL involves "the concurrent teaching of academic subject matter and second language skills" [2;47]. This approach shifts the focus from language as an isolated subject to language as a medium for acquiring meaningful content knowledge.

The theoretical foundations of CBL draw from several key principles in second language acquisition. Krashen's Input Hypothesis suggests that language acquisition occurs when learners are exposed to comprehensible input slightly beyond their current proficiency level [3;20]. CBL provides this input naturally through content materials, creating a context where language learning becomes incidental yet purposeful. Additionally, Cummins distinction between Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) highlights the importance of developing academic language skills, which CBL effectively addresses by immersing learners in subject-specific discourse.

Several models of CBL exist, ranging from theme-based language courses to full immersion programs. Theme-based courses integrate language objectives with content-related topics, while sheltered content instruction involves modified content delivery

to accommodate language learners' needs. Adjunct models pair language courses with regular content courses, creating explicit connections between language and content learning. At the far end of the spectrum, immersion programs deliver most or all instruction in the target language.

The implementation of CBL requires careful consideration of several factors. Material selection must balance linguistic accessibility with cognitive challenge, ensuring content is comprehensible yet stimulating. Instructional strategies typically involve scaffolding techniques such as visual aids, graphic organizers, and controlled vocabulary to support understanding. Assessment in CBL addresses both content mastery and language development, requiring criteria that recognize progress in both dimensions.

Research has identified numerous benefits of CBL. Studies by Grabe and Stoller demonstrate that CBL enhances motivation by focusing on interesting and relevant content rather than abstract language rules [4;19]. Met's research indicates that CBL promotes deeper cognitive engagement as students process content information while acquiring language skills [5;38]. Furthermore, CBL develops academic language proficiency, preparing students for educational or professional contexts where specialized language is required.

However, CBL also presents challenges. Teachers must possess expertise in both content and language pedagogy—a dual competence that traditional teacher education programs may not adequately develop. Additionally, finding or creating appropriate materials that balance content complexity with language accessibility remains challenging. Finally, assessment practices must evolve to evaluate both content knowledge and language development without allowing limitations in one area to mask achievements in the other.

Project-Based Learning (PBL) represents another innovative approach that integrates language learning with authentic tasks and real-world problems. According to Thomas, PBL involves "complex tasks based on challenging questions or problems that involve students in design, problem-solving, decision-making, or investigative activities" [6;32]. This approach emphasizes learning through doing, with language serving as both the medium and the object of instruction.

The theoretical underpinnings of PBL draw from constructivist and social constructivist theories of learning. Dewey's experiential learning theory emphasizes the importance of learning through meaningful experiences and reflection, while Vygotsky's concept of the Zone of Proximal Development highlights the role of

collaboration and scaffolded support in learning [7;15]. These principles align perfectly with PBL's emphasis on authentic tasks, collaboration, and guided inquiry.

Key characteristics of PBL include driving questions that frame the project and give it purpose, student autonomy in planning and executing the project, collaborative work that necessitates communication, and tangible products that demonstrate learning. In language education, PBL creates authentic contexts for language use as students research, plan, create, and present their projects.

Implementation of PBL in language classrooms involves several phases. Initially, teachers introduce a driving question or problem that establishes the project's purpose. Planning phases involve collaborative decision-making about research methods, resource needs, and task distribution. During the execution phase, students engage in research, information gathering, and product development, with ongoing feedback and language support from the teacher. The culmination typically involves presentations, exhibitions, or other forms of public sharing, followed by reflection on both the product and the process.

Research has documented numerous benefits of PBL for language learners. Beckett and Miller found that PBL enhances intrinsic motivation by connecting language learning to personally meaningful outcomes [8;45]. Stoller's studies indicate that PBL develops all four language skills (reading, writing, listening, speaking) in integrated, purposeful ways [9;27]. Additionally, PBL fosters learner autonomy, critical thinking, and problem-solving skills as students take ownership of their learning process.

Despite these benefits, PBL presents challenges in implementation. Teachers must balance structure and guidance with student autonomy, providing sufficient scaffolding without limiting creativity. Time management presents another challenge, as projects often require extended periods and flexible scheduling that may conflict with institutional constraints. Assessment complexity increases with PBL, requiring rubrics and criteria that evaluate both product quality and language development throughout the process.

Comparing CBL and PBL reveals both similarities and differences that inform their application in language education. Both approaches integrate language with meaningful content or tasks, viewing language as a medium rather than solely as the object of study. Both emphasize authentic materials and real-world relevance, creating contexts where language serves genuine communicative purposes. However, they differ in their organizing principles: CBL structures learning around content knowledge, while PBL organizes learning around driving questions and tangible outcomes.

The choice between CBL and PBL—or their integration—should consider learner characteristics, educational objectives, and institutional contexts. Younger learners with developing cognitive abilities may benefit from more structured CBL approaches, while older learners with greater autonomy may thrive with PBL's emphasis on self-direction. Educational objectives focusing on academic language development might favor CBL, while goals emphasizing practical communication skills might suggest PBL. Institutional factors such as curriculum requirements, assessment practices, and resource availability also influence implementation decisions.

Several innovative practices combine elements of both approaches. For example, content-based projects integrate subject-matter learning with project outcomes, while task-based content instruction embeds structured tasks within content-focused curricula. Technology integration enhances both approaches, with digital tools supporting research, collaboration, and product creation in language learning contexts. Future research directions include longitudinal studies examining the long-term impact of CBL and PBL on language proficiency and content knowledge. Comparative studies evaluating different models of implementation would provide valuable insights for practitioners. Additionally, research on assessment practices that effectively capture both language and content/project outcomes would address a significant need in the field.

In conclusion, CBL and PBL represent powerful approaches to language education that align with contemporary understanding of how languages are most effectively learned—through meaningful engagement with content and authentic tasks. By integrating language acquisition with substantive subject matter or real-world projects, these approaches create learning environments where language serves genuine communicative purposes rather than existing as an isolated subject of study. While implementation challenges exist, the potential benefits in terms of motivation, cognitive engagement, and practical language skills make CBL and PBL worthy of continued exploration and refinement by language educators and researchers.

REFERENCES

1. Stryker, S. B., & Leaver, B. L. (1997). Content-based instruction in foreign language education: Models and methods. Georgetown University Press.
2. Brinton, D., Snow, M. A., & Wesche, M. B. (2003). Content-based second language instruction. University of Michigan Press.
3. Krashen, S. D. (1985). The input hypothesis: Issues and implications. Longman.

4. Grabe, W., & Stoller, F. L. (1997). Content-based instruction: Research foundations. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 5-21). Longman.
5. Met, M. (1999). Content-based instruction: Defining terms, making decisions. NFLC Reports. The National Foreign Language Center.
6. Thomas, J. W. (2000). A review of research on project-based learning. The Autodesk Foundation.

DIAGNOSTIK IZLANISHLAR TASNIFI VA AHAMIYATI.

Toshkent tibbiyot akademiyasi

Termiz filiali o'qituvchisi

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Suyunova Tumaris Abror qizi

Annotatsiya: Ushbu maqolada diagnostik izlanishlar tasnifi klassifikatsiasi bo'lib unda barcha diagnostik izlanishlar keng bayon qilib berilgan, diagnostika yunoncha diagnostikos — aniqlashga qodir manisini anglatadi, klinik tibbiyot va veterinariyaning kasallikni aniqlash, uni davolash va oldini olish tadbirlarini ishlab chiqish maqsadida organizmni tekshirish usullarini o'rganadigan bo'limi xisoblanadi. Diagnostika fan sifatida uch asosiy qismga bo'linadi: 1.bemorning shikoyatlarini yig'ish va o'rganish metodikasi, kasallanish va hayot tarixi, shuningdek, diagnostik texnika, ya'ni bemorni tekshirish usullari; 2.kasalliklarda kuzatiladigan har xil belgilar simptomlar haqidagi ta'limot 3.bemorni tekshirib, olingan ma'lumotlarni tanqidiy nuqtai nazardan baholab, tashxis qo'yish uchun vrachning muhokama yuritish metodikasi, ya'ni tashhis metodikasi xisoblanadi.

Kalit so'zlar: diagnostika, izlanishlar, odamning sog'lig'i, testlar, ma'lumotlar, laboratoriya, zamonaviy qurilmalar, Patologik, funktsional, epidemiyalar.

Аннотация: В данной статье представлена классификация диагностических тестов, которая в общих чертах описывает все диагностические тесты. Диагностика происходит от греческого слова *diagnosikos*, что означает «способный определять». Это раздел клинической и ветеринарной медицины, изучающий методы исследования организма с целью диагностики, лечения и профилактики заболеваний. Диагностика как наука делится на три основные части: 1. методика сбора и изучения жалоб больных, анамнеза болезни и жизни, а также диагностические приемы, то есть методы обследования больного; 2. учение о различных признаках и симптомах, наблюдаемых при болезнях; 3. Методология врачебного обсуждения вопроса обследования пациента, критической оценки полученной информации и постановки диагноза, т. е. диагностическая методика.

Ключевые слова: диагностика, исследования, здоровье человека, тесты, данные, лаборатория, современные приборы, патологический, функциональный, эпидемии.

Diagnostic tadqiqotlar natijalari bemorga yordam berish, terapevtga va tadqiqotchiga qarorlarni qabul qilish uchun zarur ma'lumotlarni taqdim etish uchun ma'lumot berish uchun ishlatilishi mumkin.

Tibbiy diagnostika - bu tashxis qo'yish, ya'ni qabul qilingan tibbiy terminologiyada ifodalangan kasallikning mohiyati va bemorning ahvoli to'g'risida xulosa. Xuddi shu atama klinik tibbiyotning kasalliklarni yoki maxsus fiziologik sharoitlarni aniqlash jarayonining mazmuni, usullari va ketma-ketlik bosqichlarini o'rganadigan bo'limiga ham tegishli.

Diagnostic tadqiqotlarning asosiy vazifalari

Diagnostika - namuna tahlili singari, u turli xil dasturlarda qo'llaniladi. Sinov va ishlatilgan usullarga qarab diagnostik tadqiqotlar o'tkazilishi mumkin:

- ixtisoslashtirilgan laboratoriyada;
- tibbiy kasalxonada;
- terapevt xonasi;
- tibbiy klinikada;
- ish joyida yoki uyda.

Diagnostika sog'liqni saqlashning eng samarali yo'nalishi hisoblanadi, chunki u tibbiyotdagi barcha qarorlarning 70 foizdan ko'pini belgilaydi, shu bilan birga iqtisodiy nuqtai nazardan eng kam xarajat talab qiladi.

Diagnostic izlanishlar va testlar odamning sog'lig'i va uning tanasining holati to'g'risida ob'ektiv ma'lumot beradi. Ushbu ma'lumot turli maqsadlar va maqsadlarda ishlatilishi mumkin. Ba'zi laboratoriya natijalari terapiya usullarini qo'llash natijasida xavf darajasini baholash va tananing holatini taxmin qilish uchun ishlatiladi. Boshqa, kasallikning borishini kuzatish, terapevtik protseduralarga organizmning ta'sirini baholash va diagnostika va davolashning keyingi vositalarini tanlash uchun ma'lumot manbai bo'lib xizmat qiladi. Ko'pincha laboratoriya diagnostikasi natijalari ma'lumot beradi, bu kasallik tarixi va boshqa tibbiy ma'lumotlar bilan birgalikda terapevtga bemor bilan ishlashda yordam beradi, keyingi diagnostika va terapevtik vositalarni tanlashni belgilaydi. Ba'zi hollarda terapevt tanlangan muolajalarning samaradorligiga ishonch hosil qilish uchun bitta testdan olingan ma'lumotlar, boshqalarda esa terapevtik aralashuvni to'xtatish kifoya. Diagnostic testlar bemorning haqiqiy ahvoli, kasallik borligi yoki yo'qligi, rivojlanish yoki remissiya to'g'risida ma'lumot beradi. Bunday

ma'lumotlarga asoslanib, ma'lum bir bemor uchun ma'lum bir vaqtda optimal bo'lgan terapiya rejimi tanlanadi. Klinik laboratoriya diagnostikasi umumiy aholi va individual bemorning sog'lig'ini belgilaydigan ma'lumotlarni baholashga yordam beradi. Tadqiqot yordamida antibiotiklarga chidamliligi, toksik moddalar ta'sirini baholash va kimyoviy va biologik tahdidlarni aniqlash uchun foydalanish mumkin. Sinovlar favqulodda vaziyatlarda nazorat qiluvchi organlarga dolzarb ma'lumotlarni taqdim etish uchun ishlatilishi mumkin, bemorlarning tez yurishi, yuqumli kasalliklar rivojlanishini tasdiqlash va boshqalar. Ko'pincha diagnostika terapevtik chora-tadbirlar sifatini baholash, bemorlarga g'amxo'rlik qilish va og'ir kasalliklarning rivojlanishini nazorat qilish uchun ishlatiladi.

Ko'p yillar davomida texnologik yutuqlar va avtomatizatsiya diagnostika tadqiqot usullarini tadqiqot natijalarini olishning aniqroq vositalari bilan ta'minladi va sinov vaqtini sezilarli darajada qisqartirdi.

Laboratoriya diagnostikasi usullarini rivojlantirishning yana bir muhim natijasi - bu insonning genomiga oid bilimlarning rivojlanishi, bu shaxsiy terapevtik yondashuv uchun eshiklarni ochib beradi. Shunday qilib, tibbiy muolajalarni zamonaviy tibbiyot tamoyilini o'zgartirib, bemorning shaxsiy ehtiyojlari va xususiyatlariga imkon qadar aniqroq moslashtirish mumkin.

Zamonaviy diagnostikada allaqachon 4 mingdan ortiq turli xil testlar mavjud. Diagnostika uchun zamonaviy muhit innovatsiyalarni rivojlantirish, eng zamonaviy va samarali vositalar va texnologiyalarni joriy etishni rag'batlantiradi.

1. Strukturaviy diagnostika - organlar va to'qimalarning tuzilishidagi o'zgarishlarni aniqlaydigan usullar (rentgen, ultratovush, issiqlik bilan ko'rish, endoskopiya - gastroskopiya, bronxoskopiya, kolonoskopiya va boshqalar).

2. Funktsional diagnostika (FD) - organizmning turli xil tizimlari, organlari va to'qimalarining dam olish va stress holatida funktsional holatini ob'ektiv baholash uchun bemorlarni tekshirish uchun instrumental va laboratoriya usullaridan foydalanishga asoslangan diagnostika bo'limi. davolash ta'sirida yuzaga keladigan funktsional o'zgarishlar dinamikasini kuzatishga kelsak,

hozirgi vaqtda bu eng keng tarqalgan qurilmalar va apparatlar guruhi bo'lib, ularning yordamida axborotni idrok etish (aniqlash, o'lchash, ro'yxatdan o'tkazish, yodlash) va bioelektrik, biomagnitik, termal, optik, taktil, yorituvchi, biokimyoviy va radiatsion signallarni qayta ishlash amalga oshiriladi.

1.

Funktsional diagnostika tasnifining umumiy sxemasi.

3. Laboratoriya diagnostikasi - biologik va boshqa biomateriallarning hujayra va kimyoviy tarkibidagi o'zgarishlarni aniqlash usullari. Laboratoriya diagnostikasi - bu

turli xil maxsus uskunalar yordamida o'rganilayotgan materialni tahlil qilishga qaratilgan usullar to'plami. Laboratoriya diagnostikasi quyidagi sinflarga bo'linadi, ya'ni:

1. Sanitariya-gigienik laboratoriya diagnostikasi: 1.1 Gigienik tadqiqotlar;
- 1.2 Sanitariya va mikrobiologik tadqiqotlar;
- 1.3 Sanitariya va toksikologik tadqiqotlar.
2. Klinik laboratoriya diagnostikasi.

Ushbu turdagi tashxisning asosiy vazifasi patologik mavjudligini aniqlash yoki tasdiqlashdir, uni organoleptik tadqiqot usullari bilan aniq tasdiqlash yoki rad etish mumkin emas. Buning uchun turli xil yordamchi usullardan foydalanish mumkin. Ularni shartli ravishda quyidagi guruhlariga bo'lish mumkin:

- Odamning idrok etish qobiliyatini yaxshilaydigan usullar, masalan, optik mikroskop.
- Tadqiq qilingan organizmning xarakterli biokimyoviy xususiyatlaridan foydalanadigan usullar, ushbu guruh barcha serologik diagnostika usullarini o'z ichiga oladi.
- Patologik razvedka xususiyatlaridan foydalanadigan usullarga biologik va madaniy tadqiqot usullari kiradi.

Tadqiqot maqsadiga qarab, u yoki bu usullar to'plami ishlab chiqariladi, bu esa berilgan savolga eng to'liq va aniq javobni olishga imkon beradi. Klinik laboratoriya diagnostikasi shifokori har bir tahlilning o'rnatilishi va to'g'ri natijasi uchun javobgardir.

3. Qon testlari, ular o'z navbatida quyidagilarga bo'linadi:

- 3.1 Bakteriologik qon tekshiruvi;
- 3.2 Qonning biokimyoviy tekshiruvi;
- 3.3 Klinik tekshiruv;
- 3.4 Fermentlarni immunoassaylash.

Qonni biokimyoviy tahlil qilish - bu inson tanasi tizimlari va to'qimalarining funktsional holatini aniqlash uchun klinik amaliyotda qo'llaniladigan laboratoriya diagnostika usuli. Biokimyasal tahlil jigar va buyrak faoliyati buzilganligini, oqsil, lipid va uglevod metabolizmining buzilishini aniqlashga, revmatik, shu jumladan suv va elektrolitlar almashinuvining turli xil buzilishlarini va izlarning nomutanosiblik darajasini faol yallig'lanish jarayonini aniqlashga yordam beradi. elementlar. Shunday qilib, biokimyoviy qon tekshiruvi nafaqat patologiyani aniqlashga, balki yallig'lanish jarayonining og'irligini aniqlashga, davolashni tayinlash yoki sozlashga imkon beradi. Klinik qon tahlili - bu nafaqat gemoglobin miqdori va eritrotsitlar cho'kindi jinsi (ESR) ni, balki eritrotsitlar sonini, rang indeksini, leykotsitlar sonini va trombositlarning

leykotsit formulasini baholashga imkon beradigan tibbiy laboratoriya tahlilidir. Ushbu tahlil

- anemiya mavjudligini, shuningdek yallig'lanish jarayonini va qon tanachalarining neoplazmalarini aniqlashga imkon beradi.
- PCR (Polimeraza zanjiri reaksiyasi) bilan qonni sinash - bu biologik materialdagi (namunadagi) nuklein kislota (DNK) ning ayrim qismlarining kichik kontsentratsiyasini sezilarli darajada oshirishga imkon beradigan molekulyar biologiya usuli. Bu sizga DNK, patogen mikroorganizmlarning RNK-sini, odam va hayvonlarning somatik hujayralaridagi mutatsiyalarni, o'simliklarni, mikroorganizmlarni aniqlashga imkon beradi va yuqumli kasalliklar, odam genetikasi, reproduktologiya, o'zaro munosabatlarni o'rnatish va boshqalarda faol qo'llaniladi. COVID-19 borligi, bu usul laboratoriya diagnostikasining eng talab qilinadigan usuli bo'lgan va hisoblanadi.
- Immunoassay - bu ma'lum bir antigen-antikor reaksiyasiga asoslangan turli xil past molekulyar birikmalarni, makromolekulalarni, viruslarni va boshqalarni sifatli yoki miqdoriy aniqlash uchun laboratoriya immunologik usuli.

Zamonaviy tibbiy diagnostikada qo'llaniladigan tadqiqotlar va usullar:

- Diagnostik tekshiruvda asosiy va ehtimol asosiy usul bo'lgan qon tekshiruvi. Shu bilan birga, shifokor ushbu tahlillar natijalariga ko'ra tanada yallig'lanish jarayoni bor-yo'qligini, qondagi ba'zi moddalarning miqdori qanday ekanligini aniqlashi, kasallikning rasmini belgilashi mumkin;
 - kardiografik tadqiqotlar rivojlanishi bilan yurak faoliyatini kuzatish mumkin bo'ldi;
 - Zamonaviy qurilmalar yordamida siz odamning ovqat hazm qilish traktiga qarashingiz mumkin;
 - Siz bemorni tug'ilishidan oldin ham tekshirishingiz mumkin - bu sizga ultratovush tekshiruvini o'tkazishga imkon beradi; MRI, ultratovush tekshiruvi, KT - bularning barchasi sizga ichki organlarning holatini baholash, patologiyalar yoki shikastlanishlar natijasida shikastlanishlarni ko'rib chiqish imkonini beradi.
- 1.3. Diagnostik tadqiqotlar o'tkazish uchun umumiy talablar.

Bemorning shikoyatlari va anamnezi bilan tanishgandan so'ng, ular bemorning ahvolini o'rganish, palpatsiya, perkussiya va auskultatsiyani o'z ichiga olgan boshqa klinik tekshiruv usullaridan foydalangan holda o'rganishga kirishadilar. Pulsning tezligini aniqlang, qon bosimini o'lchang, agar kerak bo'lsa – bo'yi, tana vazni va hk. Bemorning individual xususiyatlariga (jismoniy, ruhiy holat, o'zini tutish va boshqalar) alohida e'tibor bering. Bundan tashqari, aniqlangan alomatlar va taxmin qilingan tashxisga asoslanib, tashxisni ob'ektiv tasdiqlash, kasallikning sababini

aniqlash, kasallikning joylashuvi va tabiati uchun zarur bo'lgan qo'shimcha diagnostika testlari (laboratoriya, rentgenologik va boshqalar) belgilanadi. Bemorni tekshirgandan so'ng (masalan, diffuz toksik guatr, tug'ma yurak kasalligining ayrim shakllari) asosiy kasallik tashxisi qo'yilgan holatlarda ham, bemorning uslubini o'rganish uchun tananing holatini tushunish kerak. bir butun va to'g'ri davolashni tanlash uchun. Tadqiqot davolanish choralarini tanlashni aniqlaydigan aniq tashxis bilan yakunlanishi kerak.

Kasallikni tan olganda, avvalambor, ma'lum bir yoshda tez-tez uchraydigan kasalliklar haqida o'ylash kerak, shuningdek, gripp, yuqumli kasalliklar xususiyatlari, bemorning yashash joyi, sanoat faoliyati sharoitlari kabi epidemiyalar mavjudligini hisobga olish kerak (kasbiy xavflar va boshqalar). Ochiqlik printsipligiga ko'ra, bemorga qo'yilgan tashxis kasallikning rivojlanishini kuzatish jarayonida to'ldirilishi va takomillashtirilishi mumkin.

Shok, o'tkir qorin va hokazo kabi favqulodda vaziyatlarga olib keladigan og'ir kasalliklarda va bemorni har tomonlama tekshirish imkoniyatlari cheklangan bo'lsa, qoida, avvalambor, hayotiy organlarni ularning faoliyatidagi buzilishlar darajasini va ushbu buzilishlarning umr bo'yi prognozga ta'siri. Bunday hollarda, faqat dastlabki tashxis asosida, shifokor (yoki uning funktsiyalarini bajaradigan feldsher), shoshilinch ko'rsatmalar mavjud bo'lganda, darhol terapevtik harakatlarga o'tadi.

Kuzatilgan alomatlarini aniqlashning aniqligini ta'minlashning ikki yoki uch baravarligi qoidasi juda muhimdir, har bir alomat, belgi yoki o'lchov yana, turli usullar bilan tekshiriladi; natijalarning tasodifiyligi simptomning ishonchliligini oshiradi.

Diagnostik tadqiqotlarni tashkil qilish, agar kerak bo'lsa, turli mutaxassislikdagi shifokorlarning maslahatlarini o'z ichiga olishi kerak, ba'zan esa murakkab diagnostika masalalarini hal qilish kengashga taqdim etiladi.

Kasalliklarni erta tashxislash ayniqsa muhimdir, uning natijasi davolanishning o'z vaqtida bajarilishiga bog'liq (masalan, saraton, sil kasalligi). Erta tashxis qo'yish muammosini hal qilish usullaridan biri bu amalda sog'lom odamlarni dispanser tekshiruvidan o'tkazishdir.

Hozirgi vaqtda laboratoriya diagnostikasi shifokorlari tomonidan qo'llaniladigan bemorni tekshirishning eng keng tarqalgan usuli hisoblanadi. Har qanday jarrohlik aralashuvidan oldin, shuningdek, jarrohlik davolashga qarshi ko'rsatmalarni aniqlash uchun tanani tashxislash kerak. O'rganilgan ma'lumotlarga ko'ra, xulosa qilish mumkinki, belgilangan testlar doirasi taniqli klinik qon testidan tortib o'simta belgilari yoki antikorlarni aniqlashning noyob usullariga qadar o'zgarib turadi. Faqatgina

mutaxassis bemorning ahvoli va anamnez ma'lumotlariga e'tibor qaratib, muayyan holatda optimal tekshiruv rejasini tuzishi mumkin.

Klinik laboratoriya testlari ro'yxatiga quyidagilar kiradi.

- Umumiy va biokimyoviy qon tekshiruvi;
- Gormonal holatni aniqlash;
- qon zardobida o'sma belgilarini aniqlash;
- siydikni umumiy tahlili;
- OITS va gepatit viruslariga, shuningdek boshqa yuqumli kasalliklarga qarshi antikorlar uchun qon tekshiruvi;
- immunologik holatni aniqlash;
- Sifilis diagnostikasi;
- Gemostaz uchun qon tekshiruvi.

Bundan tashqari, mutaxassis muayyan vaziyatda zarur bo'lgan boshqa testlarni buyurishi mumkin. Eng ko'p buyurilgan laboratoriya tekshiruvi klinik qon testidir. U gemoglobin, leykotsitlar, trombotsitlar va ESR darajasini baholashni o'z ichiga oladi. Bu omillarning barchasi ko'plab patologiyalarni tashxislashda katta ahamiyatga ega.

Xulosa

Ob'ektiv tekshirishda bemor ko'zdan kechirimli va palpatsiya, perkussiya, auskultatsiya usullari qo'llaniladi. Nerv tizimi va sezgi a'zolarini tekshirishda reflekslar, sezuvchanlikning har xil turlari, ko'ruv va eshituv, ta'm va hid biluv o'tkirligini aniqlash uchun maxsus usullar tatbiq etiladi. Oliy nerv faoliyatini o'rganish diagnostikaning muhim vzifalaridandir. Bundan tashqari, tana harorati va qismlari o'lchanadi (termometriya va antropometriya), ichkariroqda joylashgan a'zolari tekshirishda har xil ko'zgular (quloq, burun, hiqildoq, qin ko'zgulari) va optik asboblari (ko'zni tekshirishda – oftalmoskop, qizilo'ngachni ko'rishda – ezofagofibroskop, me'da-ichak yo'llarini tekshirishda – gasroduodenofibroskop, kolonoskop va h. k.)dan foydalaniladi. Yurak va tomir harakatlarini qog'ozga yoki fotoplyonkaga yozib olish (kardiografiya va sfigmografiya)ning ahamiyati katta. Yurak va miyadagi elektr potentsiallarining o'zgarishlarini qayd qilish (elektrokardiografiya va elektroentsefapografiya), ayniqsa, qimmatli usuldir. Ba'zi kasalliklarni aniqlashda radioaktiv izotoplar tatbiq etiladi. Bunda nafas olish, qon aylanish, ajratish a'zolari va endokrin tizimlar holati, shuningdek, moddalar almashinuvining buzilishi aniqlanadi. Laboratoriyada qon, siydik, axlat, balg'am, shuningdek, ko'mik, jigar, taloq, limfa tugunlarini punktsiya qilib olingan materiallar mikroskopik, fizik va kimyoviy tekshirishdan o'tkaziladi (q. Biopsiya). Kasallikni qo'zg'atgan mikroblar va

immunitetni aniqlash maqsadida o'tkaziladigan bakteriologik, immunologik va serologik usullar diagnostika uchun katta ahamiyatga ega.

Foydalanilgan adabiyotlar ro'yxati

1. "Diagnostika". - qisqacha tibbiy entsiklopediya. - M.: Sovet Entsiklopediyasi, 1989 y.
2. <https://xreferat.com/55/5801-1-klassifikaciya-osnovnyh-metodov-medicinskih-issledovaniy-laboratornye-metody-issledovaniy.html>.
3. Laboratoriya tekshiruvlari natijalarini klinik baholash "// G. I. Nazarenko, A. A. Kishkun. Moskva, 2005 yil
4. Tibbiy mikrobiologiya, virusologiya, immunologiya "/ O'quv qo'llanma (4-nashr) // LB. Borisov. M.: "IIV", 2005 yil - 736 bet. ISBN 5-89481-278-X.
5. Klinik laboratoriya analitikasi. Klinik laboratoriya tahlillari asoslari V.V.Menshikov, 2002 y.

TRANSLATION IMPACT, IDEOLOGY AND TECHNOLOGY

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Annotation. *This research examines the interrelationship between translation impact, ideological frameworks, and technological advancements in contemporary translation studies. The study explores how translation practices are shaped by and simultaneously shape ideological perspectives, while analyzing the transformative role of emerging technologies in the translation process. The research investigates theoretical foundations, practical applications, and future implications of these interconnected dimensions.*

Аннотация. *В данном исследовании рассматривается взаимосвязь между влиянием перевода, идеологическими рамками и технологическими достижениями в современном переводоведении. В исследовании анализируется, как практики перевода формируются идеологическими перспективами и одновременно формируют их, а также исследуется преобразующая роль новых технологий в процессе перевода. Исследование изучает теоретические основы, практические применения и будущие последствия этих взаимосвязанных измерений.*

Keywords: *Translation studies, cultural transfer, ideological frameworks, translation technology, machine translation, computer-assisted translation, cultural hegemony, linguistic power dynamics, digital transformation, translation ethics, localization, globalization.*

Ключевые слова: *Переводоведение, культурный перенос, идеологические рамки, технологии перевода, машинный перевод, автоматизированный перевод, культурная гегемония, лингвистическая динамика власти, цифровая трансформация, этика перевода, локализация, глобализация.*

In contemporary translation studies, understanding the complex interplay between translation impact, ideological frameworks, and technological advancements has become increasingly vital. Traditional approaches to translation often viewed the process as a neutral linguistic transfer, overlooking how translations are embedded within social, political, and cultural contexts. The fields of translation impact studies,

ideological analysis, and translation technology have emerged as critical frameworks that challenge this simplistic view, revealing how translation both reflects and shapes power relations across languages and cultures.

Translation is not merely a linguistic bridge between languages but a transformative act with profound implications for cultural exchange, knowledge dissemination, and ideological transfer. As Venuti argues, "Translation wields enormous power in constructing representations of foreign cultures". This perspective emphasizes that translation decisions—from text selection to linguistic choices—carry ideological implications that can reinforce or challenge existing power structures. Simultaneously, technological innovations have revolutionized translation practices, creating new possibilities while raising important questions about authenticity, agency, and access. The significance of researching these interconnected dimensions lies in their potential to deepen our understanding of translation as a complex socio-cultural practice shaped by ideological considerations and technological capabilities. As Baker notes, "Translations are never produced in a vacuum; they are part of an ongoing ideological and cultural conversation" [1;23].

This recognition necessitates a multidimensional approach that examines how ideological frameworks influence translation strategies and how technologies transform translation processes. Both ideological analysis in translation and the study of translation technologies have gained significant attention in research, yet their intersection and mutual influence warrant further investigation. This study aims to analyze these dimensions, exploring their theoretical foundations, practical manifestations, and implications for translation theory and practice.

Translation impact refers to the effects that translated texts have on target cultures, knowledge systems, and power relations. According to Lefevere, translation represents "rewriting of an original text" that reflects particular ideological positions and cultural constraints. This perspective recognizes that translation choices—from text selection to specific linguistic strategies—shape how target audiences perceive source cultures and ideas.

The theoretical foundations of translation impact studies draw from several key concepts in cultural and postcolonial theory. Polysystem theory, developed by Even-Zohar, positions translations within broader literary and cultural systems, examining how translated works interact with indigenous literature. Similarly, Spivak's postcolonial critique highlights how translations can either perpetuate or challenge colonial power dynamics by privileging certain voices and silencing others. Several dimensions of translation impact deserve attention. Political impact manifests when

translations introduce new ideologies or reinforce existing power structures in target cultures. As Tymoczko demonstrates, translations have historically served as vehicles for resistance against oppression or as tools for cultural domination. Cultural impact occurs through the introduction of new literary forms, concepts, and cultural practices via translation, potentially transforming target culture aesthetics and values. Economic impact emerges through translation industries that shape global knowledge flows, often privileging economically dominant languages and cultures.

Research has identified numerous patterns in translation impact. Venuti distinguishes between "domesticating" approaches that assimilate foreign texts into target culture norms and "foreignizing" strategies that preserve cultural difference. The former often reinforces existing cultural hegemonies, while the latter can challenge them by introducing unfamiliar perspectives. Additionally, Bourdieu's concept of "cultural capital" helps explain how translations of certain texts confer prestige within intellectual fields, creating imbalances in global knowledge exchange.

However, measuring translation impact presents methodological challenges. Quantitative approaches examining citation patterns or sales figures capture only surface-level effects, while qualitative analyses of reception and influence require nuanced cultural and historical contextualization. Furthermore, the long-term impacts of translations often unfold over generations, making comprehensive assessment difficult.

Ideology in translation represents another crucial dimension that shapes translation practices and outcomes. According to Calzada Pérez, ideology refers to "a set of ideas, values, and beliefs that govern a community by virtue of being regarded as the norm". In translation contexts, ideology manifests in various ways, from explicit propaganda to subtle cultural assumptions embedded in linguistic choices. The theoretical underpinnings of ideological analysis in translation draw from critical discourse analysis, which examines how language reproduces power relations, and cultural studies, which investigates how cultural products reflect and challenge dominant ideologies. Fairclough's three-dimensional model of discourse analysis provides a framework for examining ideological dimensions in translated texts, considering textual features, discursive practices, and sociocultural contexts.

Key manifestations of ideology in translation include text selection, determining which works are deemed worthy of translation; paratextual framing through introductions, footnotes, and marketing materials that guide interpretation; and linguistic choices that reflect particular worldviews or political positions. As Álvarez and Vidal argue, "Every translation is, at least potentially, an act of ideological manipulation". Research has

documented numerous examples of ideological intervention in translation. Historical studies by Bilodeau reveal how translations during colonial periods systematically misrepresented indigenous cultures to justify imperial expansion. Contemporary research by Tymoczko examines how translations during political conflicts serve partisan interests through selective representation and linguistic manipulation. Additionally, feminist translation scholars like Simon have demonstrated how translations can either reinforce or challenge patriarchal language structures.

Ethical considerations arise from recognizing translation's ideological dimensions. Translators face dilemmas regarding their responsibility to source texts, target audiences, and their own ethical positions. While complete neutrality remains impossible, translation ethics demand transparency about ideological positioning and awareness of translation's potential consequences.

Technology represents the third critical dimension transforming contemporary translation practices. According to Cronin, translation technologies encompass "the range of tools that assist in the performance of translation tasks", from early dictionaries to sophisticated neural machine translation systems. These technologies have fundamentally altered translation processes, capabilities, and professional identities.

The theoretical foundations of translation technology studies draw from several disciplines. Computer science provides the technical infrastructure for machine translation and computer-assisted tools, while cognitive science examines how technology alters translation processes and decision-making. Additionally, science and technology studies offer frameworks for understanding how technologies both shape and are shaped by social contexts.

The evolution of translation technologies spans several phases. Early electronic tools included terminology databases and simple memory systems that stored and retrieved previously translated segments. Computer-assisted translation (CAT) tools introduced more sophisticated features like fuzzy matching, concordance searches, and quality assurance functions. Most recently, neural machine translation has achieved remarkable fluency through deep learning approaches, challenging traditional notions of human translation expertise.

Implementation of translation technologies varies across contexts. Commercial translation agencies have widely adopted productivity-enhancing tools, while literary translators often rely more on human judgment and creativity. Specialized domains like legal and medical translation employ hybrid approaches combining technological assistance with human expertise. Additionally, open-source initiatives and crowd-

sourced translation platforms have democratized access to translation resources beyond professional contexts.

Research has identified numerous impacts of translation technologies. Kenny's studies demonstrate productivity gains from CAT tools but also note changes in translation cognitive processes. Moorkens' research examines how machine translation post-editing alters translator agency and professional identity. Additionally, studies by Olohan investigate how technological interfaces shape translation decisions through their design and functionality.

Despite their benefits, translation technologies present significant challenges. Quality concerns persist, particularly regarding machine translation's handling of cultural nuances, ambiguity, and creative language. Professional implications include changing skills requirements, compensation models, and market dynamics. Ethical issues emerge regarding data privacy, intellectual property, and the potential reinforcement of linguistic inequalities through algorithmic bias.

Comparing the dimensions of translation impact, ideology, and technology reveals significant intersections that illuminate contemporary translation practice. All three dimensions recognize translation as a situated practice embedded in specific social, political, and economic contexts rather than a neutral linguistic transfer. All three challenge traditional notions of translator invisibility by highlighting the active role translators and translation systems play in shaping cross-cultural communication.

However, these dimensions differ in their primary focuses. Translation impact studies emphasize outcomes and effects on target cultures; ideological analysis concentrates on power relations and representational practices; and technology studies examine process transformations and new capabilities. These complementary perspectives provide a more comprehensive understanding of translation's complexity.

The interrelationships between these dimensions merit further exploration. Technology shapes translation's ideological dimensions by embedding cultural assumptions in algorithms and interfaces, while ideological frameworks influence which technologies are developed and how they're implemented. Meanwhile, both ideology and technology affect translation impact by determining which texts are translated, how they're presented, and who has access to them.

Several innovative practices emerge at these intersections. Critical technology approaches examine how translation tools encode particular values and biases, while accessible translation initiatives use technology to challenge linguistic hierarchies. Activist translation practices consciously employ both ideological awareness and technological tools to promote social justice through translation. Additionally, ethical

machine translation development incorporates diverse cultural perspectives and values linguistic diversity.

Future research directions include empirical studies examining how different technological tools influence ideological aspects of translation products. Interdisciplinary collaborations between translation scholars, computer scientists, and critical theorists could develop more culturally responsive translation technologies. Additionally, longitudinal studies tracking how technological translations impact cultural development would address significant gaps in current knowledge.

In conclusion, understanding the complex interrelationships between translation impact, ideology, and technology provides crucial insights into contemporary translation practices. By recognizing how these dimensions interact—how ideological frameworks shape and are shaped by technological capabilities, and how both influence translation's cultural impact—we gain a more nuanced appreciation of translation's role in global communication. While challenges remain in balancing technological efficiency with cultural sensitivity and ethical responsibility, the potential for technology to democratize translation while respecting ideological diversity offers promising directions for the field's future. As translation studies continues to evolve, this integrated perspective will become increasingly essential for both theoretical advancement and practical innovation.

REFERENCES

1. Venuti, L. (2008). *The Translator's Invisibility: A History of Translation*. Routledge.
2. Baker, M. (2006). *Translation and Conflict: A Narrative Account*. Routledge.
3. Lefevere, A. (1992). *Translation, Rewriting and the Manipulation of Literary Fame*. Routledge.
4. Even-Zohar, I. (1990). Polysystem Studies. *Poetics Today*, 11(1), 1-268.
5. Spivak, G. C. (2000). The Politics of Translation. In L. Venuti (Ed.), *The Translation Studies Reader* (pp. 397-416). Routledge.
6. Tymoczko, M. (2010). *Translation in a Postcolonial Context*. Routledge.
7. Venuti, L. (1995). *The Translator's Invisibility: A History of Translation*. Routledge.

TEACHING ENGLISH TO YOUNG LEARNERS AND THE FEATURES OF ELT TO ADOLESCENTS

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Annotation: This study investigates the distinctive characteristics and methodological approaches in teaching English to young learners and adolescents, examining both theoretical frameworks and practical implications for classroom instruction. The research analyzes how age-specific developmental factors influence language acquisition processes and teaching strategies, with particular focus on the integration of cognitive development theory, second language acquisition principles, and age-appropriate pedagogical practices.

Аннотация: В данном исследовании рассматриваются отличительные характеристики и методологические подходы в обучении английскому языку младших учащихся и подростков, анализируются как теоретические основы, так и практические последствия для классного обучения. В исследовании анализируется, как возрастные факторы развития влияют на процессы усвоения языка и стратегии обучения, с особым акцентом на интеграцию теории когнитивного развития, принципов усвоения второго языка и соответствующих возрасту педагогических практик.

Keywords: Young learners, adolescents, age-appropriate methodology, cognitive development, language acquisition, motivation, learner autonomy.

Ключевые слова: Младшие учащиеся, подростки, возрастно-соответствующая методология, когнитивное развитие, усвоение языка, мотивация, учебная автономия.

Teaching English to learners of different age groups represents one of the most nuanced challenges in language education, requiring educators to adapt their methodologies to suit the cognitive, emotional, and social developmental characteristics of their students. The field of English Language Teaching (ELT) has increasingly recognized that young learners (typically ages 5-11) and adolescents (ages 12-18) present fundamentally different learning profiles, necessitating distinct approaches to instruction, materials design, classroom management, and assessment. This recognition has led to the

emergence of specialized subfields within ELT focused on age-appropriate methodology and developmental considerations.

In contemporary educational contexts, ELT practitioners must navigate the complex interplay between universal principles of language acquisition and age-specific learning characteristics. The field must continuously respond to emerging research in developmental psychology, neurolinguistics, and second language acquisition while developing pedagogical approaches that remain theoretically sound and practically effective. This creates a dynamic tension between general language teaching principles and specialized age-appropriate methodologies that characterizes many of the current approaches to teaching English across developmental stages.

Lev Vygotsky, whose sociocultural theory has profoundly influenced educational practice, emphasized that "learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers." This perspective highlights the socially embedded nature of language learning and the critical role of scaffolded interaction in supporting linguistic development. Effective English instruction across age groups involves two complementary dimensions: understanding developmental readiness (recognizing cognitive, emotional, and linguistic capabilities at different stages) and providing appropriate environmental support (creating learning experiences that optimize acquisition within these developmental parameters).

Age-appropriate methodologies should be implemented systematically rather than treated as optional enhancements. Language educators need awareness of both developmental psychology and second language acquisition principles, ensuring that instructional approaches are meaningfully aligned with learners' capabilities at different developmental stages.

This research area remains particularly relevant for Uzbek educational contexts, especially regarding national initiatives to introduce English from earlier grades and recent reforms in secondary English education. Such research helps educators develop contextually appropriate teaching strategies while addressing specific challenges faced by Uzbek young learners and adolescents. It facilitates the development of instructional materials that respect local educational traditions while incorporating contemporary approaches to age-appropriate language teaching, thereby strengthening the relationship between theoretical understanding and practical pedagogy in ELT settings. Approaches to teaching English to different age groups have evolved considerably, including Total Physical Response, the Natural Approach, the Lexical Approach, task-based language teaching, Content and Language Integrated Learning, and multiple

intelligences theory. Historically, age-appropriate ELT has served as a proving ground for innovative methodologies, with recent trends emphasizing play-based learning for young learners, technology integration for adolescents, and learner autonomy across developmental stages.

The distinctive features of ELT to young learners and adolescents can be categorized into cognitive, affective, and social dimensions. Cognitive differences include attention span, abstract thinking capacity, and metalinguistic awareness. Affective differences encompass motivation types, anxiety patterns, and identity concerns. Social differences involve peer relationships, authority perceptions, and collaborative learning capabilities. This corresponds with Cameron's identification of key considerations in young learner teaching: concrete thinking, limited attention span, holistic learning, and the need for physical activity; and with Harmer's characterization of adolescent learners as developing abstract thinking, searching for identity, requiring peer approval, and testing boundaries.

Developmental psychology insights present additional complexity in age-appropriate ELT. Piaget's cognitive developmental stages suggest that young learners in the concrete operational stage learn language differently from adolescents in the formal operational stage, necessitating distinct instructional approaches. Young learners typically benefit from concrete, hands-on language experiences connected to their immediate environment, while adolescents can engage with more abstract language concepts and hypothetical situations. Brown highlights that "age is one of the most important factors affecting language acquisition processes," while Ellis notes that "different age groups present different windows of opportunity for language development."

Developing effective teaching strategies for different age groups requires attention to several core components:

1. Input characteristics (complexity, contextual support, multimodal presentation).
2. Interaction patterns (teacher-student, peer-to-peer, collaborative configurations).
3. Task design (cognitive demands, relevance to learners' lives, scaffolding levels).
4. Classroom management (rules, routines, behavioral expectations, grouping strategies).

Implementing age-appropriate ELT requires adherence to certain fundamental principles:

1. Developmental alignment - ensuring activities match learners' cognitive capabilities.

2. Affective appropriateness - addressing emotional needs specific to different developmental stages.

3. Engagement focus - creating learning experiences that capture age-specific interests and motivations.

Young learner ELT presents distinct methodological requirements. Children's natural curiosity and openness to language learning must be harnessed through multisensory activities that engage visual, auditory, and kinesthetic learning channels. Their shorter attention spans necessitate frequent activity changes, typically every 5-10 minutes, and a variety of short activities that maintain engagement. Additionally, young learners benefit significantly from routine and repetition, which provide security and reinforce language patterns through predictable classroom structures and recycled language presentations.

The role of play cannot be overstated in young learner contexts. Through games, songs, storytelling, and dramatic play, children engage with language in meaningful contexts that simulate natural acquisition processes. These activities support what Halliwell describes as children's "instinct for play and fun," allowing them to absorb language incidentally while focused on enjoyable tasks. Additionally, Total Physical Response (TPR) activities that connect language with movement capitalize on young learners' need for physical activity while creating strong memory links between language and action.

Several additional considerations merit attention when addressing young learner ELT. Classroom management requires specific approaches with this age group, including clear visual signals, consistent routines, positive reinforcement systems, and engaging transitions between activities. Effective teachers establish developmentally appropriate rules and expectations while maintaining a nurturing environment that makes young learners feel emotionally safe in expressing themselves in a new language.

Assessment practices for young learners should differ fundamentally from those used with older students. Formative, observation-based assessment that focuses on participation and task completion often proves more appropriate than formal testing. When assessment is necessary, it should be integrated into regular classroom activities, incorporate familiar formats, and focus on what children can do rather than highlighting deficiencies.

Literacy development represents a critical consideration in young learner programs. When children are still developing literacy in their first language, approaches to reading and writing in English must be carefully sequenced. Phonics instruction, shared reading experiences, and developmental writing activities should be introduced

gradually and systematically, with attention to potential interference from first language literacy patterns.

Adolescent ELT presents a distinctly different profile of needs and approaches. Identity formation constitutes a central developmental task during this period, and language learning becomes intertwined with students' emerging sense of self. Successful adolescent ELT acknowledges this by creating opportunities for personalization, choice, and authentic self-expression through the target language. Topics and materials must address adolescents' expanding interests and concerns while respecting their sensitivity to activities that might seem childish or irrelevant.

Cognitive development during adolescence enables more abstract thinking about language. Teenagers can benefit from explicit grammar instruction, metalinguistic awareness activities, and analytical approaches to language learning that would be inappropriate for younger learners. However, these activities must be balanced with communicative practice that connects abstract knowledge to practical language use.

Motivation patterns shift significantly during adolescence. While young children often display intrinsic motivation for novel learning experiences, adolescents increasingly respond to social motivations and future-oriented goals. Effective adolescent ELT connects language learning to students' aspirations, peer relationships, and developing interests, creating both immediate relevance and connections to future academic and professional opportunities.

Technological integration presents particular opportunities in adolescent language classrooms. Digital natives respond positively to thoughtfully implemented technology that enhances authentic language use through social media projects, multimedia production, online exchanges with English speakers, and digital storytelling. These approaches capitalize on adolescents' technological fluency while extending language learning beyond classroom boundaries.

Autonomy development represents a crucial goal in adolescent language education. As students develop capacity for independent thinking, ELT approaches should gradually increase responsibility for learning through strategy instruction, self-assessment practices, project-based learning, and collaborative activities that develop both linguistic competence and learning skills. This supports not only immediate language development but also prepares students for lifelong language learning.

Assessment approaches for adolescents should balance traditional evaluation with alternative formats that respect their developing identities and need for self-expression. Portfolio assessment, project evaluation, peer assessment, and self-reflection activities

can complement more formal testing, providing a more comprehensive picture of language development while engaging students in the evaluation process.

Critical thinking integration represents a natural extension of adolescents' developing cognitive capabilities. Language activities that require analysis, evaluation, synthesis, and creative problem-solving engage teenagers' intellectual curiosity while developing higher-order thinking skills alongside language proficiency. This integration supports what Puchta terms "multiple literacies"—the ability to interpret, create, and critically evaluate different types of texts and media.

Teacher-student relationships require careful calibration during adolescence. While young learners often form close attachments to teachers, adolescents navigate complex feelings about authority figures as they develop independence. Successful teachers of adolescent language learners establish themselves as supportive guides rather than directive authorities, showing respect for students' developing autonomy while maintaining necessary structure and expectations.

Modern educational systems increasingly recognize the need for transitional approaches between primary and secondary ELT. The shift from young learner to adolescent methodologies should not be abrupt but should gradually adapt to students' changing developmental profiles. This transitional period (often in upper primary or middle school) presents unique challenges as students experience rapid developmental changes that affect their language learning processes and preferences.

Ultimately, effective English language teaching across developmental stages requires a sophisticated understanding of age-related learning characteristics combined with sound principles of language acquisition—a dynamic process requiring both scientific knowledge and pedagogical artistry from educators who must navigate the complex interplay between developmental stages, individual differences, and the common mechanisms underlying all language learning.

REFERENCES

1. Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge University Press.
2. Harmer, J. (2007). *The Practice of English Language Teaching*. Pearson Education Limited.
3. Brown, H. D. (2014). *Principles of Language Learning and Teaching*. Pearson Education.
4. Ellis, R. (2015). *Understanding Second Language Acquisition*. Oxford University Press.

5. Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.
6. Halliwell, S. (1992). Teaching English in the Primary Classroom. Longman.
7. Puchta, H. (2012). Critical Thinking in the ELT Classroom. Helbling Languages.

PSYCHOLOGICAL DIFFERENCES BETWEEN CHILDREN WITH MANY CHILDREN IN A FAMILY AND ONLY CHILDREN

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Adolescents from families with different children are all considered leaders in solving problems, but their methods are different. While adolescents from large families are based on cooperation and mutual understanding, adolescents with only one child require support from those around them.

Considering the environment in large families, most researchers conclude that the personality traits of a child depend on the size of the family. The size of the family, the order of birth of the child determine the important characteristics of the child's personality[1].

Children growing up in large families are inflexible, have difficulty finding their bearings in uncertain conditions, and develop conformity rather than independent thinking. They are more anxious, sensitive, and need constant encouragement. They have a lower level of self-awareness, higher levels of self-control, higher levels of organization, and leadership qualities, as well as high rates of hostility and suspicion of others.

Children with siblings are more resilient, less selfish, tend to cooperate with other children, and respect their parents. Children from middle-sized families are distinguished by their emotionality and extroversion.

Children from large and small families develop various personality changes and deviations. They are prone to suicide and a high level of delinquency. As they grow up, they commit serious crimes, drink and smoke. Girls from families with four or more children begin to have early sexual life and have problems with pregnancy. Children from single-child families have a high level of anxiety, which can develop into high neuroses.

Kindergarten children from large families are often frustrated in emotional and stressful situations. School children (younger schoolchildren) are characterized by such characteristics as thoughtfulness, calmness, caution, and seriousness. Only children are

more playful, active, cheerful, prone to risk-taking, and they overestimate their own capabilities.

Second-grade children from large families are characterized by emotional stability, sociability, and composure. By the sixth grade, the characteristics of the children change. They become reactive, excitable, impulsive, irritable, emotionally unstable, and have low self-confidence[2]. Only children, on the contrary, are very excitable and impulsive in their younger school years, but become emotionally stable and composure in adolescence.

Senior students from large families are submissive, obedient, benevolent, polite, intrapunitive, impulsive, but at the same time proactive, realistic, and insightful. Only children are diligent, self-confident, stubborn, extrapunitive, prone to conflicts, as well as sentimental, emotional, and intuitive.

Senior students from large families have higher levels of responsibility and tolerance, they feel full responsibility for their actions and deeds, and are able to provide impartial, disinterested assistance to those around them[3]. Senior only children have higher levels of independence, need for dominance, suspicion, and distrust.

Adolescents from large families demonstrate higher levels of self-confidence on the scales of character and dexterity.

Children from large families are exposed to cooperation, mutual assistance, and compromise with many family members from childhood, which is why they develop socially adaptive personality traits, which can lead to a positive assessment of their own character[2]. It is common for children from large families to be involved in household problems and tasks in life. This is the basis for the development of their work skills and qualifications and a high assessment of their own skills.

Emotional reactions in frustrating situations differ between children from large families and single children. Students from large families are characterized by an intrapunitive ego-protective reaction[3].

Extrapunitive and intrapunitive orientations depend on the age of the students and the type of family. Second-graders from large families react to frustrating situations in an extrapunitive manner, while their teenagers often react in an impulsive manner[1].

Thus, in emotionally stressful situations, children from large families try to protect their "I" through self-blame, remorse, and guilt. At a younger school age, they begin to make high demands on those around them. In adolescence, they try to resolve the situation in a compromise way, solving the problem through mutual understanding and concessions. Younger school-age single children are characterized by an approach of cooperation and compromise, and in their opinion, any dispute will eventually lead to

a solution. Older schoolchildren are characterized by external accusations and high demands on the people around them.

List of used literature

1. Семенов, Г. Социально-педагогическая работа с многодетными семьями/ Г. Семенов // Воспитание школьников - 2010.- №1- 28-35 с.
2. Силина, Е.А. Личностные особенности детей из многодетных и однопородных семей / Е.А.Силина // Фундаментальные исследования. - 2013. - № 8-5. - с. 1243-1246; (Силина)
3. Картышевская, С.В. Педагогические основы воспитания детей в многодетных семьях / С.В. Картышевская // Наука-2008: сборник научных статей. - Гродно, 2008. -101-105 с.

LAPAROSCOPIC SLEEVE RESECTION OF THE STOMACH – HOW TO CHOOSE A BALANCE BETWEEN THE RESULT AND COMPLICATIONS

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The present study is devoted to a comparative analysis of two tactical and technical approaches to laparoscopic sleeve resection of the stomach in patients with morbid obesity: the classical technique (Classic) and a modified version with enhanced restriction (Hard). The study included 785 patients operated on from 2019 to 2022, with follow-up for at least 36 months. Early and late surgical and metabolic complications, body weight dynamics, and the frequency of repeated weight gain were evaluated.

The results of the study, which included 785 patients with morbid obesity, revealed the convincing superiority of the Hard LSG technique over the classical method in a number of key parameters. The enhanced technique, based on the formation of a narrower gastric tube (32 Fr), a high resection line and extended mobilization of the Gis angle, made it possible to achieve faster and more pronounced weight loss in the early stages after surgery. After 3 months, the average body weight in the Hard group decreased to 98.7 ± 24.6 kg, while in the Classic group it was 108.7 ± 26.1 kg ($p < 0.0001$). At the 12th month after surgery, the average BMI in the Hard group was 22.4 ± 3.8 kg/m² versus 24.6 ± 3.9 kg/m² in the Classic group ($p < 0.0001$). Especially important is the fact that the proportion of patients who reached a normal body mass index after one year was 70.7% in the Hard group and only 42.2% in the Classic group. Moreover, it was the Hard technique that showed significantly greater stability of the result in the long term.: At the age of 12 to 36 months, the normal body mass index was maintained in 59.3% of patients, whereas in the Classic group — only in 20.4%. Repeated weight gain was recorded in 24.7% of patients after Hard LSG, compared with 62.4% in the Classic group ($p < 0.001$). Thus, increased restriction provides both deep weight reduction and a high probability of long-term weight control.

However, these advantages are achieved at the cost of increased complications. The incidence of early metabolic disorders in the Hard group was 64.3% versus 25.7% in the Classic group ($p < 0.001$), including hypovolemia, hypercoagulation, and metabolic acidosis. The incidence of late surgical complications in the Hard group reached 10.4%, including gastroesophageal reflux disease (9.2%), gastric tube stenosis,

dumping syndrome, and even isolated cases of gastro-colic fistulas. Late metabolic disorders such as micronutritionality, vitamin B12, iron and calcium deficiency were observed in 6.8% of cases, which is 5 times higher than in the Classic group. In addition, a significantly higher proportion of psychological disorders was registered - 21.5% versus 15.0%, including anxiety and depression, eating disorders and social maladjustment.

Thus, the answer to the dilemma cannot be unambiguous. If the priority in a particular clinical situation is a rapid and profound reduction in body weight in a patient with high metabolic risk, the choice in favor of the Hard technique may be justified. However, in cases where safety, metabolic stability and a reduced risk of complications are more important, the Classic method remains preferred.

OLIY TA'LIM BITIRUVCHILARINING DUNYO MEHNAT BOZORIDAN XABARDORLIGINI OSHIRISHNING SAMARADORLIGI.

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Anotatsiya: Kasbiy faoliyat sohasini tanlash to'g'risidagi savolga har uchinchi bitiruvchi kelajakdagi ishi tadbirkorlik bilan bog'liq bo'lishini istashini bildiradi, bu esa talabalarda ishbilarmonlikka ishtiyoqning keng tarqalganini bildiradi. Boshqa talabalar qismi xizmat ko'rsatish sohasida, ishlab chiqarishda, davlat xizmatida, ta'lim va fan sohasida ishlashni rejalashtirganini ta'kidlaydi. Ushbu maqolamizda „Oliy ta'lim bitiruvchilarining mehnat bozoridan xabardorligi va ishga joylashishi“ haqida so'z boradi.

Kalit so'z: Mehnat bozori, tadbirkorlik, iqtisodiyot, raqobatbardosh bitiruvchilar.

Kasbiy faoliyat sohasini tanlash to'g'risidagi savolga har uchinchi bitiruvchi kelajakdagi ishi tadbirkorlik bilan bog'liq bo'lishini istashini bildiradi, bu esa talabalarda ishbilarmonlikka ishtiyoqning keng tarqalganini bildiradi. Boshqa talabalar qismi xizmat ko'rsatish sohasida, ishlab chiqarishda, davlat xizmatida, ta'lim va fan sohasida ishlashni rejalashtirganini ta'kidlaydi. Bitiruvchilarning katta qismi (57%) agar ishga oson joylashish masalasida muammo bo'lmasa, o'z ixtisosligi bo'yicha mehnat qilish niyati mavjudligini va o'z mutaxassisligini raqobatbardosh, martabaga erishish va yuqori maosh olishga imkon beradigan kasb ekanini e'tirof qildi. Bu esa, ularning tanlangan kasbidan qoniqish hosil qilayotganini bildiradi. Bitiruvchilarning uchinchi qismi (29%)ni mutaxassisligi bo'yicha ishlashni rejalashtirmayapti, ular mehnat faoliyatining ehtimoliy ko'rinishlari, masalan, yaxshi daromadli ish bilan ijtimoiy ahamiyati katta, lekin nisbatan kam daromadli ishdan birini tanlash jarayonini boshidan kechirmoqda, deb taxmin qilish mumkin. Qolgan – 14%i - javob berishda qiynaldi, ya'ni ular sharoitga qarab harakat qilishadi.

Aksariyat bitiruvchilar (85%) mehnat bozorida mutaxassisligi bo'yicha talab mavjud deb hisoblaydi, 7%i - o'z mutaxassisligini talabgir emas deb biladi, 8%i - javob berishda qiynaldi.

Ish qidirish yo'llari to'g'risidagi savollarga javob berarkan, bitiruvchilar, birinchi navbatda qarindoshlar, do'stlar va tanishlarining yordamiga tayanishlarini bildirishdi

(33%). Ish izlashning boshqa usullari, ularning nazarida, kam samaralidir. OAVdagi e'lonlar orqali ish qidirish masalasini 19% bitiruvchi yoqladi, kadrlar agentligi yordamiga umid qilayotganlar 21%, internetdan foydalanib ishga kirmoqchi bo'lganlar 11%, OTMning ishga joylashtirishda ko'maklashuvchi markazi xizmatidan foydalanmoqchi bo'lgan 12% respondentni tashkil qildi, qolganlar (4%) ish izlash usullarini bilmasligini ta'kidlagan.

OTMni tugatganidan so'ng 32% respondent bo'sh ish o'rinlari to'g'risida ma'lumot olish uchun faqatgina bir manbadan, 39%i - 2, 6%i - 3, 11%i - 4 manbadan foydalanishini bildirdi. Faqatgina 9% respondent bo'sh ish o'rinlari haqida ma'lumot olish uchun mavjud usullarning hammasini qo'llashini aytgan.

Bitiruvchi kurs talabalarining kattagina qismi (37%) o'zining ixtisosligi bo'yicha ish tajribasiga ega, deb hisoblaydi. Bu ijobiy holat hisoblanib, bu ularga raqobatda ustunlik beradi; 30% o'qishdan bo'sh paytida qo'shimcha bandlik sohasida ishlab tajriba orttirgan. Har uchinchi bitiruvchi (33%) mehnat bozoriga chiqishni o'qishni tugatgandan keyingi davrga qoldirgan. Amaliy tayyorgarlik ko'nikmasi, ish tajribasiga ega bo'lmagan bitiruvchilar ishga joylashishning qoniqarli shartlariga rozi bo'lishadi yoki ijtimoiy kapitaldan (do'stlar, qarindoshlar) yordam kutishadi.

Har beshinchi bitiruvchi (21%) ta'limning so'nggi bosqichida mutaxassisligi bo'yicha o'qish va ishlashni birga olib boradi, taxminan shunchasi (19%) o'qishdan tashqari ixtisosligiga daxli bo'lmagan sohada mehnat qiladi. Ham o'qish, ham ishlash ta'lim sifatiga salbiy ta'sir ko'rsatishi mumkin, balki shuning uchun bitiruvchi bosqich talabalarining aksariyati (60%i) umuman ishlamaydi.

Mehnat faoliyatining ehtimoliy turlaridan birini tanlashda qo'yiladigan maqsadlar tahlili oylik maosh me'yori va "karyera qilish" imkoniyati birinchi o'rinda turishini ma'lum qildi, bu sifatlarning moddiy turmush farovonligini qisqa muddatda ta'minlashga qodir ekani e'tirof etildi. Kasbga moyillik, mehnat sharoitlari, korxona obro'si kamroq ahamiyatga egaligi aniqlandi.

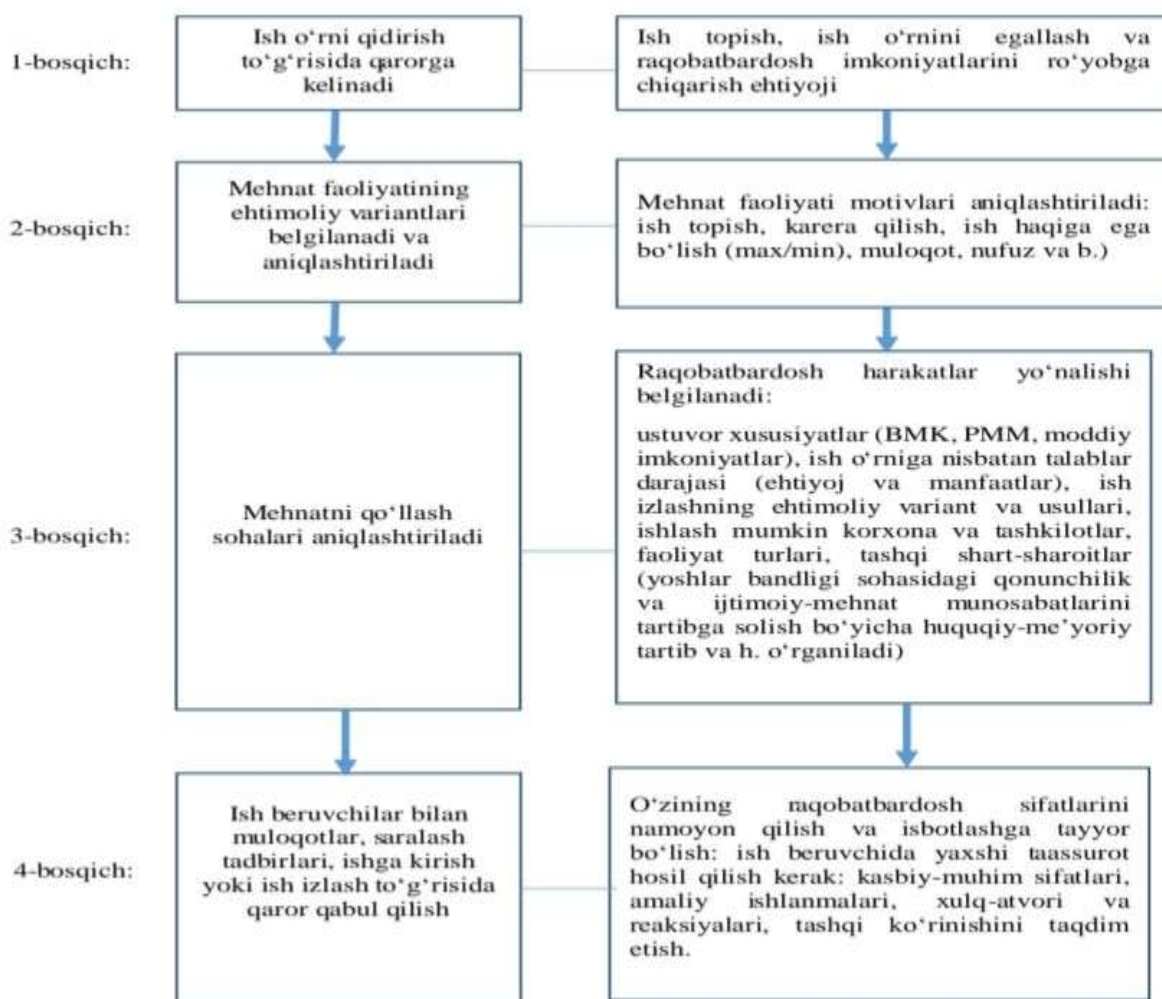
OTM bitiruvchilari o'rtasida o'tkazilgan so'rovlar ularning ish o'rniga nisbatan talablari (maqsadlari) quyidagi tartibda joylashganini ko'rsatdi: ish haqi darajasi – 1-o'rin; karyera qilish imkoniyati – 2-o'rin; mutaxassisligi bo'yicha ishlash, qiziqarli kasb – 3-o'rin; obro'-e'tibor – 4-o'rin; mehnat sharoiti (qulaylik) - 5-o'rin

Bitiruvchining raqobatbardoshligi OTMda o'qish jarayonida shakllanadi va rivojlanadi, ishga joylashish va moslashish asnosida raqobatbardoshlikni ro'yobga chiqarish imkoniyatiga ta'sir ko'rsatadi, shuningdek, undan boshqa faoliyat turlari, masalan, uy xo'jaligini yuritish, farzandlarni tarbiyalashda foydalanish mumkin. Shu

sababli biz bitiruvchining ishga joylashish yoki boshqa faoliyati turlari bilan shug‘ullanayotganda raqobatbardoshlikni namoyon qilish talablariga javob beradigan xatti-harakatlari to‘g‘risida so‘z yuritamiz. Ishga joylashish va mehnat faoliyatiga moslashish “shaxsning muhitning turli ta’sirlariga tegishli ravishda munosabat bildirish va harakat qilishga tayyorligi”ni nazarda tutadi. OTMning bitiruvchilarda muayyan malaka va xulq-atvorni shakllantirish hamda rivojlantirishga qaratilgan faoliyati, birinchidan, ishga joylashish jarayonidagi psixologik tabiatga ega muammolarni bartaraf qiladi, ikkinchidan, ish izlash muddatini qisqartiradi va umuman olganda, ishga joylashish samaradorligini oshiradi. Shu nuqtayi nazardan, biz tomonimizdan oliy ta’lim muassasalari bitiruvchilari raqobatbardoshligini ularning ishga joylashish jarayonida ro‘yobga chiqarishning to‘rt bosqichli modeli ishlab chiqildi.

Kasbiy tayyorgarligini namoyish qilish jarayonida bitiruvchi raqobatchiga xos xatti-harakatlarni amalga oshiradi va ularni to‘rt bosqichdan iborat shaklda tasavvur qilish mumkin. Shaxsning mehnat bozoridagi iqtisodiy harakati subyektlarning mehnat bozoridagi o‘z mavqeiga nisbatan tanlovidan boshlanadi. Bitiruvchi tomonidan ishga joylashish uchun o‘rin qidirish yoki boshqa faoliyati turi bilan shug‘ullanish to‘g‘risida qaror qabul qilinadi.

Ikkinchi bosqich. Mehnat faoliyatining ehtimoliy variantlari belgilanadi va aniqlashtiriladi. Bu variantlar shaxsning ijtimoiy-iqtisodiy holati (moddiy, ash-yoviy va tashkiliy-iqtisodiy sharoitlar) va boshqa subyektlarning qiziqishiga obyektiv darajada bog‘liq bo‘lib, ularni o‘z manfaatlarini shu jarayondagi boshqa subyektlar ehtiyojlari bilan kelishtirish orqali belgilash va aniqlashtirish mumkin. Subyekt tomonidan uning holatini yaxshilaydigan yoki yomonlashtiradigan, maosh nuqtayi nazaridan qiziqish va ehtiyojlarini qondiradigan, karyera qilish, hamkasblar bilan suhbatlar uyushtirishga, qiziqarli ish o‘rni va obro‘-etibor va hokazolarga erishishga imkon beradigan mehnat faoliyatining ehtimoliy yo‘nalishlari aniqlashtiriladi.



OTM bitiruvchilari raqobatbardoshligini ro'yobga chiqarish bosqichlari

Uchinchi bosqich. Mehnat qilish sohalari yanada aniq belgilanadi. Tanlov asosida shaxsiy-subyektiv me'yorlar (maqsadlar) yotadi, ularni ehtiyojlarni qondirishning yuksak ko'rinishi sifatida ta'riflash odat tusiga kirgan. Shaxs ularga tayanib, o'z xatti-harakatlarini izohlaydi va asoslaydi, xususi qiziqishlari bilan shu jarayonda qatnashayotgan boshqa subyektlarning manfaatlarini o'zaro kelishtiradi, qiyoslash va tanlash orqali keyingi harakatlar yo'nalishini belgilaydi.

OTM bitiruvchilari o'rtasida o'tkazilgan so'rovlar ularning ish o'rniga nisbatan talablari (maqsadlari) quyidagi tartibda joylashganini ko'rsatdi:

ish haqi darajasi – 1-o'rin;

karyera qilish imkoniyati – 2-o'rin;

mutaxassisligi bo'yicha ishlash, qiziqarli kasb – 3-o'rin;

obro'-e'tibor – 4-o'rin;

mehnat sharoiti (qulaylik) - 5-o'rin

To'rtinchi bosqich. Bitiruvchining ish beruvchi bilan suhbat, saralash tadbirlari va ishga qabul qilish to'g'risida qaror qabul qilish-ishga kirish jarayonining so'nggi bosqichidir.

Bu bosqichda bitiruvchining mehnat sharoitiga nisbatan talablari va ish beruvchining xodim kasbiy malakasi va boshqa muhim sifatlariga nisbatan istaklari o'zaro kelishiladi. Shuning uchun bitiruvchi o'zining boshqa nomzodlardan afzal raqobat xususiyatlarini namoyon qilish va isbotlashni bilishi kerak.

Foydalanilgan adabiyotlar ro'yxati:

1. Oliy ta'lim muassasalarida ta'lim sifatini oshirish va ularning mamlakatda amalga oshirilayotgan keng qamrovli islohotlarda faol ishtirokini ta'minlash bo'yicha qo'shimcha chora-tadbirlar to'g'risidagi O'zbekiston Respublikasi Prezidentining qarori. 05.06.2018-yildagi PQ-3775-son. Kuchga kirish sanasi 06.06.2018
2. Oliy va o'rta maxsus ta'lim tizimiga boshqaruvning yangi tamoyillarini joriy etish choratadbirlari to'g'risidagi O'zbekiston Respublikasi Prezidentining qarori. 11.07.2019-yildagi PQ-4391-son.
3. "Oliy ta'lim: muammo va yechimlar" mavzusidagi respublika ilmiy-amaliy anjumani, ilmiy maqola va tezislari to'plami. 2020-yil 25-may. –310 b.
4. Болонская декларация "О Европейском регионе высшего образования". г.Болонья, Италия. 1999.
5. Usmonov B.Sh., Xabibullaev R.A. Oliy o'quv yurtlarida o'quv jarayonini kreditmodul tizimida tashkil qilish. – Toshkent, 2020.
6. Mustafaqulov Sh., Sultonov M. Kredit-modul tizimiga o'tish nima uchun kerak? Maqsad, mohiyat va afzallik. [http:// xs.uz/uzkr/post/ kredit-modul-tizimiga-otish-nimauchun-kerak-maqsad-mohiyat-va-afzallik](http://xs.uz/uzkr/post/kredit-modul-tizimiga-otish-nimauchun-kerak-maqsad-mohiyat-va-afzallik).

O'SPIRIN YOSHIDAGI O'QUVCHILARNI KASBIY SHAKLLANISHIDA PSIXOLOGIK XIZMATNING ROLI

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Annotation: Ushbu maqolada o'spirin yoshidagi o'quvchilarning kasbiy shakllanish jarayonida psixologik xizmatlarning o'rni va ahamiyati tahlil qilinadi. Muallif ushbu jarayonning psixologik, pedagogik va ijtimoiy omillarini chuqur o'rganib, maktab psixologlarining kasbiy yo'naltirishdagi asosiy vazifalarini aniqlaydi. Mavzuga doir O'zbekiston Respublikasi Prezidentining tegishli farmonlari, ta'lim sohasidagi islohotlar hamda xalqaro tajribalar tahlil qilinib, psixologik xizmatning zamonaviy modelini taklif etish zarurligi asoslab beriladi. Maqolada o'quvchilarning kasbiy qiziqishlarini shakllantirish, motivatsiyani oshirish va ongli kasb tanloviga yo'naltirishda psixologik yondashuvning amaliy jihatlari yoritilgan.

Kalit so'zlar: *raqobat muhiti, mustaqil fikr yuritish, psixologik xizmatlar, yaqin rivojlanish zonasi, kasbiy yo'naltirish maktabi.*

KIRISH

Yosh avlodning barkamol va har tomonlama yetuk shaxs sifatida shakllanishi, ayniqsa ularning kelajakdagi kasbiy yo'nalishini to'g'ri tanlashlari, har qanday jamiyat taraqqiyotining eng muhim omillaridan biridir. Bugungi globallashuv va raqobat muhitida har bir insonning o'z qiziqishi va qobiliyatlariga mos kasb egallashi nafaqat ularning shaxsiy baxti, balki mamlakatning iqtisodiy va ijtimoiy barqarorligiga ham bevosita ta'sir qiladi. Aynan shu maqsadlarda yoshlarni kasb-hunarga yo'naltirish, ularda kelajak kasbga nisbatan ongli yondashuvni shakllantirish ta'lim tizimining strategik yo'nalishlaridan biriga aylangan. O'zbekiston Respublikasi Prezidentining 2019-yil 8-oktabrdagi "Kasb-hunar ta'limi tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida"gi PF-5847-sonli Farmonida ta'limning kasbiy yo'naltirilganligi, yoshlarning qiziqishlari, salohiyatlari va mehnat bozori ehtiyojlari asosida kasbga yo'naltirish tizimini joriy etish zarurligi ta'kidlangan[1]. Shu bilan birga, 2022-yil 13-apreldagi PF-101-sonli Farmonda ham yoshlarni kasbga yo'naltirishda maktab, mahalla va psixologik xizmatlar hamkorligini kuchaytirish masalasi ilgari surilgan[2].

ADABIYOTLAR TAHLILI

Yuqorida berilgan farmonlar zahirida yoshlarni ijtimoiy hayotga tayyorlash, ularning mustaqil fikrlash, to'g'ri qaror qabul qilish ko'nikmalarini shakllantirish, o'z salohiyatini to'g'ri yo'naltira olishlariga ko'maklashish maqsadi yotadi. Ayniqsa, o'spirinlik davrida bu jarayonning to'g'ri tashkil etilishi juda muhim. Chunki bu davrda o'quvchilarda o'zligini anglash, mustaqil fikr yuritish va kasb tanlashga bo'lgan ehtiyoj kuchayadi. Bu ehtiyojni qondirishda maktab psixologlarining o'rni beqiyos bo'lib, ular o'quvchilarning qiziqishlari, qobiliyatlari, ruhiy holati va individual xususiyatlarini chuqur o'rganib, ularni to'g'ri kasbiy yo'nalishga yo'naltirishlari lozim. Shunday qilib, o'spirin yoshidagi o'quvchilarning kasbiy shakllanishida psixologik xizmatlarning roli ortib bormoqda. Bu xizmat nafaqat maslahat berish, balki o'quvchi shaxsining individual xususiyatlarini aniqlash, uning imkoniyatlarini baholash va rivojlantirishda ham muhim vosita hisoblanadi.

O'quvchilarni kasbiy shakllantirish masalasi psixologiya, pedagogika va sotsiologiya fanlari chorrahasida keng o'rganilayotgan dolzarb mavzulardan biridir. Xususan, o'spirin yoshida shaxsning o'zini anglash, hayotiy maqsadlar va kasbiy yo'nalishni tanlash ehtiyoji kuchayadi. Bu esa ta'lim tizimida psixologik xizmatlar faoliyatini ilmiy asosda tashkil etish zaruratini tug'diradi. Psixologik-pedagogik adabiyotlarda (A.G. Kovalyov, L.S. Vygotskiy, A.N. Leontev, B.G. Ananyev) o'spirinlik davri shaxsning kasbiy yo'nalishi shakllanishida o'ta muhim bosqich ekanligi ta'kidlanadi. A.G. Kovalyov fikricha, kasbiy o'zini anglash — bu o'quvchining o'zini muayyan kasbda tasavvur qilishga intilishi, bu orqali u o'zining ijtimoiy o'rnini belgilaydi[3]. L.S. Vygotskiy esa kasbiy shakllanishni "yaqin rivojlanish zonasi" bilan bog'laydi, ya'ni bolaning ichki intilishlarini tashqi psixologik yordam orqali rivojlantirish mumkinligini ta'kidlaydi[4].

O'zbekistonlik olimlar orasida ham bu masalaga oid bir qancha tadqiqotlar mavjud. Jumladan, M. Toshpo'latova, D. Yo'ldoshev, N. To'xtasinov, Z. Karimova kabi pedagog va psixologlar o'quvchilarning kasb tanlashida psixologik maslahatlarning ta'siri, maktabda kasbga yo'naltirish ishlarini olib borish metodikasi, oilaviy muhitning roli haqida fikr yuritganlar[5]. D. Yo'ldoshevning fikricha, kasbiy yo'naltirishda nafaqat o'quvchining salohiyatini, balki mehnat bozoridagi real ehtiyojlarni ham inobatga olish zarur. Shuningdek, Prezident farmonlari asosida amalga oshirilgan islohotlar natijasida 2020-yildan boshlab maktab psixologlari zimmasiga kasbiy yo'naltirish bilan bog'liq yangi vazifalar yuklatildi. Shu bois, maktab psixologlari faoliyatini samarali tashkil etish bo'yicha amaliy qo'llanmalar va metodik tavsiyalar (Maktabgacha va maktab ta'limi vazirligi, 2021) ishlab chiqilgan.

Xorijiy tajribaga nazar tashlaydigan bo'lsak, AQSh, Germaniya va Yaponiya kabi davlatlarda kasbiy yo'naltirish maktab tizimining ajralmas qismi hisoblanadi. Bu davlatlarda maxsus psixologik testlar, individual maslahatlar, kasblar bilan amaliy tanishtirish ishlari orqali o'quvchilarda ongli kasb tanlash ko'nikmalari shakllantiriladi[6].

Shunday qilib, adabiyotlar tahlili shuni ko'rsatadiki, o'spirinlarning kasbiy shakllanishida psixologik xizmatlar ko'p tomonlama yondashuvni talab etadi. Ular o'quvchilarning psixologik xususiyatlarini, ijtimoiy sharoitini va zamonaviy kasblarga bo'lgan ehtiyojni chuqur o'rganish orqali samarali yo'naltirishni ta'minlashi mumkin. O'tkazilgan ilmiy adabiyotlar tahlili, mavjud qonunchilik asoslari hamda ta'lim muassasalaridagi amaliy kuzatuvlar asosida shuni ta'kidlash mumkinki, o'spirin yoshidagi o'quvchilarning kasbiy shakllanishi murakkab va ko'p omilli jarayon bo'lib, unda psixologik xizmatlar hal qiluvchi rol o'ynaydi. Quyida ushbu xulosalarni asoslovchi muhim jihatlar yoritib berilgan.

1. O'spirinlarning kasbiy shakllanishi murakkab psixologik jarayon hisoblanadi

O'spirinlik – bu shaxs rivojining tranzitiv bosqichi bo'lib, bu davrda o'quvchilarda ichki qarama-qarshiliklar, o'zini anglashga intilish, mustaqil qarorlar qabul qilishga bo'lgan ehtiyoj kuchayadi. Aynan shu jarayonda o'quvchi o'z kasbiy “Men” obrazini shakllantirishga harakat qiladi. Agar bu bosqichda o'z vaqtida psixologik ko'mak ko'rsatilmasa, noto'g'ri kasb tanlash, motivatsiya yo'qolishi, hayotiy rejasizlik kabi muammolar yuzaga keladi.

2. Psixologik xizmatlar kasbiy yo'naltirishning asosiy mexanizmiga aylanmoqda

Bugungi kunda maktablarda faoliyat yuritayotgan psixologlar nafaqat shaxsiy muammolarni hal qilish bilan shug'ullanishlari, balki o'quvchilarning kasbiy yo'nalishini shakllantirishda ham faol ishtirok etishlari zarur. Bu borada ular quyidagi yo'nalishlarda samarali ish olib borishlari mumkin:

- Kasbiy qiziqish va moyilliklarni aniqlash uchun psixologik testlar o'tkazish;
- Shaxsning individual xususiyatlarini hisobga olgan holda maslahatlar berish;
- Kasblar haqida aniq va motivatsion ma'lumotlar yetkazish;
- Treninglar, suhbatlar va rolli o'yinlar orqali o'quvchini faol kasbiy fikrlashga undash.

3. Psixologik xizmatning tizimli va strategik yondashuvi natijadorlikni oshiradi

Psixologik xizmatlar samaradorligi ularning qanday tashkil etilganiga bog'liq. Afsuski, amaliyotda ba'zi ta'lim muassasalarida psixologlar hujjat to'ldirish yoki umumiy suhbatlar bilan cheklanib qolishmoqda. Bunda kasbiy yo'naltirishning individuallik,

izchillik va uzviylik tamoyillariga rioya qilinmayapti. Zamonaviy psixologik xizmat quyidagilarni o'z ichiga olishi kerak:

- Har bir o'quvchining shaxsiy kartasini yuritish;
- Qisqa va uzoq muddatli kasbiy rejalashtirish bo'yicha konsultatsiyalar;
- Ota-onalar va sinf rahbarlari bilan uch tomonlama hamkorlik tizimini yaratish.

4. O'zbekiston Respublikasida kasbiy yo'naltirish va psixologik xizmatlar davlat siyosati darajasiga ko'tarilgan

So'nggi yillarda davlat siyosatida yoshlar, ayniqsa o'quvchilarning kasb-hunar egallashiga oid qator islohotlar amalga oshirildi. Jumladan:

- **PF-5847-sonli Prezident farmonida** kasb-hunar ta'limi tizimi va psixologik yo'naltirish mexanizmlarini integratsiyalash zarurligi belgilangan;
- **PF-101-sonli Farmonda** maktab psixologlarining roli kuchaytirilgan va ular uchun yangi professional standartlar ishlab chiqilishi ko'zda tutilgan;
- Maktabgacha va maktab ta'limi vazirligi tomonidan psixologlar uchun metodik qo'llanmalar va kasbiy yo'naltirish dasturlari ishlab chiqilgan.

Bu hujjatlar asosida maktab psixologlari o'z faoliyatlarida nafaqat nazariy, balki aniq mezon va indikatorlarga asoslangan yondashuvni qo'llashlari lozim.

5. Xorijiy tajriba psixologik xizmatni amaliyot bilan uyg'unlashtirish zarurligini ko'rsatmoqda

Rivojlangan davlatlar (masalan, AQSh, Kanada, Germaniya) tajribasida psixologik xizmatlar faqat maslahat berish emas, balki o'quvchini kasbiy faoliyatga tayyorlashga qaratilgan amaliy yondashuvlar bilan boyitilgan. Ular orasida:

- Kasblar bilan amaliy tanishtiruv dasturlari (job shadowing);
- O'quvchilarning real mehnat muhitida ishtirok etishlari (internship);
- Kasbiy portfellar (career portfolios) orqali rivojlanish monitoringi yuritiladi.

Bu tajribalarni O'zbekiston sharoitida bosqichma-bosqich joriy etish, ayniqsa, kasb-hunar maktablari, ixtisoslashgan litsey va kollejlari bilan hamkorlikni kuchaytirish orqali amalga oshirish mumkin.

XULOSA

O'tkazilgan ilmiy izlanishlar, normativ-huquqiy hujjatlar tahlili va amaliy tajriba shuni ko'rsatadiki, o'spirin yoshidagi o'quvchilarning kasbiy shakllanish jarayoni bevosita psixologik xizmatlar sifati, tizimliligi va samaradorligiga chambarchas bog'liq. Bu bosqichda o'quvchilarning kasb tanlash borasidagi qarorlari nafaqat ularning kelajakdagi ijtimoiy-iqtisodiy holatiga, balki psixologik barqarorligi, shaxs sifatida o'zini namoyon qilishi va ijtimoiylashuviga ham katta ta'sir ko'rsatadi. Psixologik xizmatlar esa ushbu murakkab jarayonda yo'naltiruvchi, ko'mak beruvchi va

muvoqilashtiruvchi kuch sifatida faoliyat yuritadi. Ayniqsa, shaxsning psixologik xususiyatlarini aniqlash, kasbiy qiziqish va moyilliklarni o'rganish, ota-ona va o'qituvchilar bilan samarali hamkorlikni yo'lga qo'yish – kasbiy yo'nalishni to'g'ri belgilashda hal qiluvchi ahamiyat kasb etadi. Shuningdek, davlat darajasida kasbiy ta'lim va yo'naltirishga bo'lgan yondashuvning kuchaytirilayotgani, tegishli farmon va qarorlarning qabul qilinishi psixologik xizmatlar faoliyatining qonuniy asosda rivojlanishiga xizmat qilmoqda. Xorijiy tajribalardan foydalanish esa bu tizimni amaliyot bilan bog'liq holatda boyitish imkonini beradi. Demak, o'quvchilarni kelajakdagi kasbiy faoliyatga ongli va izchil tayyorlash, ularning ijtimoiy moslashuvi va psixologik barqarorligini ta'minlashda psixologik xizmatlar markaziy o'ringa ega. Ushbu xizmatlar:

- o'quvchi shaxsini chuqur o'rganish;
- kasbiy yo'nalishni aniqlash va rivojlantirish;
- ijtimoiy hamkorlikni yo'lga qo'yish;
- ta'lim muassasasida motivatsion muhit yaratish kabi vazifalarni o'z ichiga olishi lozim.

Bu esa nafaqat alohida shaxsning, balki butun jamiyatning iqtisodiy va ma'naviy taraqqiyotiga ijobiy ta'sir ko'rsatadi.

FOYDALANILGAN ADABIYOTLAR:

1. O'zbekiston Respublikasi Prezidentining 2019-yil 8-oktabrdagi PF-5847-sonli Farmoni "Kasb-hunar ta'limi tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida".
2. O'zbekiston Respublikasi Prezidentining 2022-yil 13-apreldagi PF-101-sonli Farmoni "Tadbirkorlik muhitini yaxshilash va xususiy sektorni rivojlantirish orqali barqaror iqtisodiy o'sish uchun shart-sharoitlar yaratish borasidagi navbatdagi islohotlar to'g'risida".
3. Kovalyov A.G. "Psixologiya i sotsial'naya adaptatsiya lichnosti" (Personaning psixologiyasi va ijtimoiy moslashuvi). Moskva, 2003.
4. Vygotskiy L.S. "Myshlenie i rechi" (Fikr va nutq). Moskva, 1960.
5. D. Yo'ldoshevning fikricha, kasbiy yo'naltirishda nafaqat o'quvchining salohiyatini, balki mehnat bozorida real ehtiyojlarni ham inobatga olish zarur.
6. Super D.E. "The Psychology of Careers" (1957) – Kasbiy rivojlanish va kasbiy yo'naltirishning psixologik aspektlarini o'rganadigan asar. Bu kitob Superning kasbiy rivojlanish nazariyasini keltirib chiqardi, u kishi hayotidagi turli bosqichlarga mos keladigan kasb tanlovini amalga oshirishni o'rganadi.

IRSIY KASALLIKLARNING GENETIK MEXANIZMLARI

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Annotatsiya. Irsiy kasalliklar - ota-onadan bolaga o'tadigan genetik ma'lumotlarning buzilishi natijasida kelib chiqadigan kasalliklar; asosan xromosomalar yoki genlardagi mutatsiyalar natijasida kelib chiqadi, ular bahorga o'tadi. Mutatsiyalar tashqi muhit omillari (ionlashtiruvchi nurlar, ayrim biologik faol kimyoviy birikmalar) hamda organizm va hujayralarga salbiy ta'siri natijasida yuzaga kelishi mumkin. Ushbu maqolada irsiy kasalliklarning kelib chiqish sabablari, ularga qarshi kurashish yo'llari va ularning zararli oqibatlari haqida ma'lumot berilgan.

Kalit so'zlar: metabolizm, albinizm, fenilketonuriya, galaktozemiya, leykodistrofiya, gemokromatoz, ferment, skrining, tibbiy-genetik konsultatsiyalar, Reproduktiv markaz.

Kirish. Irsiy kasallik hujayraning irsiy apparati o'zgarishi (mutatsiyasi) natijasida hosil bo'ladi. Hujayraning irsiy apparati o'zgarishi (mutatsiyasi) natijasida hosil bo'ladi kimyoviy nurlanish, biologik omillar ta'sirida kimyoviy energiya, biologik omillar. irsiy rekombinatsiyalar natijasida kelib chiqadi va oqsillar va nuklein kislotalar biosintezidagi xatolar tufayli yuzaga keladi. Ba'zi irsiy kasalliklar bitta gendagi mutatsiya natijasida, boshqalari esa ko'plab genlar va atrof-muhit omillarining o'zaro ta'sirida yuzaga keladi. Irsiy kasalliklarning haqiqiy sabablarini tushunish hujayralarni samarali davolash va profilaktika choralarini ishlab chiqishda muhim ahamiyatga ega. Irsiy kasalliklar kelib chiqishiga ko'ra gen va xromosoma kasalliklariga bo'linadi. Genlardagi mutatsiyalar bir yoki ikkala ota-onadan meros bo'lishi mumkin yoki homila rivojlanishida o'z-o'zidan paydo bo'lishi mumkin. Mutatsiyalar keng ko'lamli kasalliklarga, shu jumladan bitta gen mutatsiyasidan kelib chiqadigan monogen kasalliklarga olib kelishi mumkin, masalan, mukovitsidoz, o'roqsimon hujayrali kasalliklar va ko'p qirrali hujayrali anemiyalar diabetes mellitus, yurak kasalligi.

Xromosoma anomaliyalari irsiy kasalliklarga ham olib kelishi mumkin. Bu anomaliyalar gametalar (tuxum va spermatozoidlar) shakllanishi yoki kombrion rivojlanish jarayonida yuzaga kelishi mumkin. Irsiy kasalliklarga olib kelishi mumkin bo'lgan xromosoma anomaliyalariga Daun sindromi, Tyorner sindromi va Klaynfelter

sindromi misol bo'ladi. Gen kasalliklari bo'lgan odamlarda gen darajasidagi mutatsiya hisobiga oqsil (ferment) sintezi buziladi, buning natijasida bu ferment ishtirokida amalga oshiriladigan biokimyoviy reaksiya normal davom etmaydi. Bu metabolizmning buzilishiga olib keladi.

Asosiy qism.

Irsiy gen kasalliklari, bularga ko'ra organizmdagi moddalar almashinuvining buzilishi quyidagicha tasniflanadi:

1. Aminokislotalar almashinuvining buzilishi natijasida yuzaga keladigan kasalliklar (fenilketonuriya, alkaptonuriya, albinizm, leytsinoz).
2. Uglevod almashinuvining buzilishi natijasida kelib chiqadigan kasalliklar (galaktozemiya, qandli diabet, glikogenoz).
3. Lipid almashinuvining buzilishidan kelib chiqadigan kasalliklar (leykodistrofiya).
4. Purin va pirimidin almashinuvi buzilishidan kelib chiqadigan kasalliklar.
5. Mineral moddalar almashinuvi buzilishidan kelib chiqadigan kasalliklar (gemokromatoz, gepatolentikulyar degeneratsiya).

Albinizm. Bu tanamiz ishlab chiqaradigan melanin miqdoriga ta'sir qiluvchi ba'zi genlardagi mutatsiyalar yoki o'zgarishlar tufayli yuzaga keladigan noyob genetik holat. Melanin teri, ko'zlar va sochlarning pigmentatsiyasini (rangini) boshqaradigan tanadagi kimyoviy moddadir. Albinizm bilan og'rigan odamlarning terisi, ko'zlari va sochlari juda rangpar. Ushbu kasallikka chalingan odamlarda engildan og'irgacha ko'rish muammolari mavjud. Albinizm bilan og'rigan odamlar quyosh ta'siriga ham sezgir, shuning uchun ularda teri saratoni rivojlanish xavfi yuqori. Albinizmning ikkita asosiy turi mavjud bo'lib, ular melanin ishlab chiqarish uchun mas'ul bo'lgan genlardagi o'zgarishlardan kelib chiqadi.

Umumiy albinizm (okulokutan albinizm - OCA): albinizmning eng keng tarqalgan turi. OCA bilan og'rigan odamlarning sochlari, terisi va ko'zlari juda rangpar.

Oküler albinizm Okaga qaraganda kamroq tarqalgan. Ko'z albinizmi asosan ko'zlarga ta'sir qiladi. Bu teriga yoki sochga juda ta'sir qilmaydi. OA odatda loyqa ko'rish, yorug'likka sezgirlik kabi belgilarga olib keladi. Ko'z albinizmi gpr143 genidagi o'zgarishlar bilan bog'liq. Albinizmni davolashning iloji bo'lmasa-da, kasallikka chalingan odamlar terisini va ko'zlarini himoya qilish, ko'zlari va terisini to'g'ri parvarish qilish uchun choralar ko'rishlari mumkin.

Fenilketonuriya (PKU) fenilalanin gidroksilaza fermenti etishmovchiligi natijasida kelib chiqadigan irsiy kasallikdir. Klassik PKU 12-xromosomada joylashgan fenilalanin gidroksilaza (PAH) genining ikkala allelidagi mutatsiyalar natijasida kelib chiqqan otosomal retsessiv kasallikdir. Organizmda fenilalanin gidroksilaza

aminokislota fenilalaninni tirozinga aylantiradi. PAH genining ikkala nusxasidagi mutatsiyalar fermentning faol emasligini anglatadi va organizmdagi fenilalanin kontsentratsiyasi toksik darajaga ko'tarilishi mumkin. PKU insonning ota-onasidan meros bo'lib o'tadi. Bolada PKU rivojlanishi uchun ikkala ota-ona ham PAH genining mutatsiyaga uchragan versiyasiga hissa qo'shishi kerak. Agar ikkala ota-onada ham PKU bo'lsa, ularning farzandlarida ham PKU bo'ladi. Agar faqat bitta ota-onada mutatsiyaga uchragan gen bo'lsa, bolada PKU rivojlanmaydi. Ikkala ota-onada ham mutatsiyaga uchragan PAH geni bo'lsa ham, ularning farzandlarida PKU rivojlanmasligi mumkin. Buning sababi shundaki, bolaning ota-onasining har birida PAH genining ikkita versiyasi mavjud bo'lib, ulardan faqat bittasi kontsepsiya vaqtida o'tadi.

Galaktozemiya - bu galaktoza deb ataladigan oddiy shakarni qayta ishlashga tananing reaksiyasi bo'lgan kasallik. Galaktozemiyaning belgilari va alomatlari energiya ishlab chiqarish uchun galaktozadan foydalana olmaslikdan kelib chiqadi. Tadqiqotchilar galaktozemiyaning bir necha turlarini aniqladilar. Ushbu holatlarning har biri ma'lum bir gendagi mutatsiyalar natijasida yuzaga keladi va galaktozaning parchalanishida ishtirok etadigan turli fermentlarga ta'sir qiladi.

GALT, GALK1 va GALE genlaridagi mutatsiyalar galaktozemiyaning keltirib chiqaradi. GALT genidagi mutatsiyalar klassik galaktozemiyaning (I-toifa) keltirib chiqaradi. Ushbu genetik o'zgarishlarning aksariyati GALT geni tomonidan yaratilgan fermentativ faollikni deyarli yo'q qiladi, bu esa kasallikning hayot uchun xavfli belgilari va alomatlariga olib keladi. II turdagi galaktozemiya GALK1 genidan hosil bo'lgan mutatsiyalar natijasida yuzaga keladi, GALE genidagi mutatsiyalar esa III turdagi galaktozemiya asoslangan. Ushbu genlardan hosil bo'lgan fermentlar galaktozani qayta ishlashda muhim rol o'ynaydi. Ulardan birortasining etishmasligi galaktoza va unga aloqador birikmalar organizmdagi zaharli darajaga ko'tarilishiga imkon beradi. Ushbu moddalarning to'planishi to'qimalar va organlarga zarar etkazadi, bu esa galaktozemiyaning xarakterli xususiyatlariga olib keladi. Bu holat otosomal retsessiv shaklda meros bo'lib, har bir hujayradagi genning ikkala nusxasi mutatsiyaga uchraganligini anglatadi, lekin ular odatda kasallikning belgilari va alomatlarini ko'rsatmaydi.

Leykodistrofiya kam uchraydigan va juda kam uchraydigan irsiy kasallik bo'lib, unda neyronlar va markaziy asab tizimining funksional hujayralari o'rtasidagi o'tkazuvchan aksonlarni birlashtiruvchi miyelin qobig'i vayron bo'ladi. Tabiiy elektr izolyatori vazifasini bajaradigan miyelin kontsentratsiyasining pasayishi yuqori asabiy faoliyatni ta'minlaydigan eng murakkab elektrokimyoviy munosabatlarning buzilishiga olib

keladi va uning asta-sekin umumiy degradatsiyasiga, o'limga olib keladi. Progressiv miyelin etishmovchiligining asosi organizmdagi lizosomal fermentlarning surunkali etishmovchiligi bo'lib, bu o'z navbatida o'ziga xos genlarning irsiy mutatsiyasidan kelib chiqadi. Agar ikkala ota-onada ham shunday yolg'on gen bo'lsa, ularning bolasida leykodistrofiya rivojlanishi ehtimoli 25% ga etadi. Hozirgi vaqtda leykodistrofiyani davolashning yagona samarali usuli bu suyak iligi yoki kindik ichakchasidagi qonni ko'chirib o'tkazishdir. Ushbu davolash ma'lum darajada miyelin etishmovchiligini qoplashga va hech bo'lmaganda kasallikning rivojlanish tezligini sekinlashtirishga imkon beradi. Biroq, bugungi kunda leykodistrofiya yomon prognozli jiddiy nogironlik kasalligi bo'lib qolmoqda.

Purin va pirimidin almashinuvining buzilishi natijasida kelib chiqadigan kasallik organizmda hipoksantin-fosforibozil-transferaza (GKFBT) fermenti etishmovchiligidan kelib chiqadi. Bu ferment guanin va gipoksantin, erkin holatdagi purin birikmalarining nukleotidlarga aylanishiga yordam beradi. Ferment bo'lmasa, organizmdagi siydik kislotasi miqdori ortadi. Kasallik biokimyoviy (skrining va kompleks fermentativ tahlil) usulida tashxislanadi.

Gemokromatoz. Genetik kasallik gemokromatoz - bu noyob patologiya bo'lib, unda ingichka ichakda temirning so'rilishi va uning jigar va boshqa organlarda to'planishi kuzatiladi. Gemokromatozga olib keladigan asosiy omil - bu bir qator genlarda, ayniqsa HFE genida mutatsiyalar mavjudligi. U tanadagi temir darajasini tartibga solishda ishtirok etadigan oqsilni kodlaydi va uning oziq-ovqatdan so'rilishini nazorat qiladi. Gemokromatoz nisbiydan nisbiyga nisbatan autosomal retsessiv davom etadi. Bu shuni anglatadiki, kasallikning namoyon bo'lishi uchun har bir ota-onadan bittadan genning ikkita nuqsonli nusxasi bo'lishi kerak. Agar tanada mutatsiyaga uchragan genlar mavjud bo'lsa va ular bolaning genomiga kirgan sharoitlarda tasodifan rivojlangan bo'lsa, ikkala ota-ona ham o'zini namoyon qiladi. Shuning uchun kasallikning mavjudligini tasdiqlashning asosiy usuli DNK tahlilidir.

Xulosa. Shuni ta'kidlash kerakki, ko'plab irsiy kasalliklar irsiy va atrof-muhit omillari (ko'p faktorli kasalliklar) birikmasidan kelib chiqadigan murakkab kasalliklardir. Ayni paytda tibbiyotimiz oldida turgan asosiy vazifalardan biri yaqin qarindoshlar o'rtasidagi nikohdan kelib chiqadigan turli irsiy kasalliklar va ularning zararli oqibatlaridir. Ana shunday zararli oqibatlar ta'sirida qanchadan-qancha oilalar nogiron bo'lib farzandlarini dunyoga keltirayotganini ko'rishimiz mumkin. Irsiy kasalliklarning asl sabablarini tushunish samarali davolash va profilaktika choralarini ishlab chiqishda muhim ahamiyatga ega. Ushbu turdagi kasalliklarning oldini olish

maqsadida tibbiy-genetik konsultatsiyalar, Reproduktiv markaz, skrining markazlari faoliyat yuritmoqda.

Foydalanilgan adabiyotlar:

1. Lehninger: Principles of biochemistry. David L. Nelson/ Michael M. Cox. Sixth edition, 2012.
2. Smith, A.C., Blackshaw, J.A., & Robinson, A.J. (2012) Mito Miner: a data warehouse for mitochondrial proteomics data. Nucleic Acids Res. 40, D1160-D1167
3. Hereditary disease: Guide/ L.O.Badalana. – T.: “Medicine”, 1980.
4. Aripova G. S, Toirova Z. S. Methodological manual on the subject “Genetics of Medicine”
5. Eshankulov A.E. Nishanbayeva K.N, Bosimov M.Sh. Textbook for students of academic Lyceum. “Genetics”. Tashkent - 2010y. p 175

KARIESNI OLDINI OLIHNING PROFLAKTIK CHORA TADBIRLARI

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Annotatsiya. Karies - bu qattiq tish to'qimalarini yo'q qilishdan iborat patologik jarayon. Bu bolalar va kattalardagi eng keng tarqalgan og'iz kasalliklaridan biridir. Kariyesni davolash va tishlarning normal shaklini tiklashning samarali usullarining xilma-xilligiga qaramay, ularning yo'q qilinishini oldini olish yaxshiroqdir. Kariesning oldini olish uning paydo bo'lishining asosiy sabablariga qarshi kurashga asoslangan.

Kalit so'zlar:

Kirish. Kariesning asosiy sababi mikroorganizmlarning hayotiy faoliyatidir, ammo tish kasalliklarining oldini olish asosan ularga qarshi kurashishga qaratilgan emas. Odamning og'iz bo'shlig'ida ko'plab bakteriyalar mavjud bo'lib, ularning soni tishlarini yuvishdan keyin 2-4 soat ichida bir millionga yetishi mumkin. Ular tishlarning yuzasida joylashgan va emalga salbiy ta'sir ko'rsatishi mumkin. Streptokokklarning ayrim turlari alohida e'tiborga loyiqdir. Bu mikroorganizmlar oddiy mikrofloraning bir qismi bo'lib, tananing himoya kuchlarini zaiflashtiradigan omillar bo'lmasa, karies rivojlanmaydi.

Agar bakteriyalar faol ko'payish uchun qulay sharoitga ega bo'lsa, ularning soni ko'p. Ularning hayotiy faoliyati natijasida emal joylarini tom ma'noda eritib yuboradigan organik kislota ishlab chiqariladi. Qulay sharoitlar deganda biz bir nechta xususiyatlarni tushunamiz: mikroorganizmlar uchun yaxshi ko'payish, streptokokklar bilan kurashadigan mahalliy yoki umumiy himoyaning pasayishi yoki bu omillarning kombinatsiyasi.

Kariyesogen bakteriyalarning ko'payishini qo'zg'atuvchi omillar:

- irsiy moyillik. Zaif tuzilishga ega bo'lgan nozik emal ota-onadan meros bo'lishi mumkin. Bunday holda, to'qimalar kislotalarning ta'siriga yomonroq qarshilik ko'rsatadi va karies erta yoshdan boshlab rivojlanishi mumkin;

- mineral moddalar almashinuvining buzilishi yoki minerallarning etishmasligi bilan bog'liq bo'lgan emalning yupqalashishi. Asosiy sabablar - dietalar yoki noto'g'ri ovqatlanish, oshqozon-ichak kasalliklari, ularda ozuqa moddalari kamroq so'riladi;
- tupurikning viskozitesini oshiradi. Tuprik oqimining etarli emasligi bilan emal yuzasi to'g'ri yuvilmaydi, blyashka qoladi va tishlarda tezda to'planadi. Tuprikning viskozitesi va tarkibidagi o'zgarishlar tizimli kasalliklar, infeksiyalar, endokrin kasalliklar va boshqalar bilan bog'liq bo'lishi mumkin;
- tishlarning to'planishi, noto'g'ri okklyuzion. Tishlarning bir-biriga mahkam o'rtnashishi gigienani qiyinlashtiradi, aloqa yuzalarida va yaqinida ko'p miqdorda blyashka va oziq-ovqat qoldiqlari to'planadi;
- gigienaning etishmasligi yoki noto'g'ri gigiena, shirin, yopishqoq ovqat iste'mol qilish;
- mehnat faoliyatining xususiyatlari: kislota bug'larini inhalatsiyalash bilan bog'liq xavfli ishlab chiqarishda ishlash;
- yorilgan va yorilib ketgan tishlar: ochiq emal va notekis yuzalar zararli ta'sirlarga ko'proq moyil bo'ladi.

Kariyes rivojlanishining bir sababi bor, ammo rivojlanishning ko'plab mexanizmlari mavjud. Shuning uchun og'iz bo'shlig'i kasalliklarini oldini olish uchun umumiy salomatlik holatini kuzatish juda muhimdir. Biroq, kariyesning oldini olishning bir necha o'ziga xos usullari mavjud.

Asosiy qism.

Og'iz bo'shlig'i gigienasi

Kariyesning eng keng tarqalgan sababi og'iz bo'shlig'ining yomon gigienasi hisoblanadi. Tish kariesining oldini olish va davolash yumshoq blyashka olib tashlashdan boshlanadi, chunki u bakteriyalar uchun ko'payish joyidir. Tavsiyalar, ularga rioya qilish emalni yo'q qilish xavfini sezilarli darajada kamaytiradi:

1. kuniga kamida ikki marta tishlarini cho'tkasi va uni to'g'ri bajaring: harakatlar supurish bo'lishi kerak - tish go'shtidan tishlarning tojlari chetlarigacha. Tozalash jarayoni kamida 3 daqiqa davom etishi kerak;
2. tozalashda nafaqat tishlarga, balki til, tish go'shti va yonoqlarning ichki yuzasiga ham e'tibor bering;
3. To'g'ri tish cho'tkasini tanlang: yumshoq cho'tkalar tish go'shtining yallig'lanish kasalliklari, periodontal kasallik bilan og'rigan odamlarga mos keladi. O'rta qattiqlikdagi cho'tkalar ko'pchilik uchun maqbuldir. Qattiq cho'tka blyashka shakllanishining kuchayishi, shuningdek, choy va tamaki uchun alohida sevgi uchun

ko'rsatiladi, bunday cho'tka faqat yaxshi saqich salomatligi va kuchli emal bilan ishlatilishi mumkin;

4. Tish ipidan foydalanishga ishonch hosil qiling. Floss interdental bo'shliqlarda oziq-ovqat qoldiqlari bilan kurashishga yordam beradi;

5. Ovqatdan keyin, kun davomida og'iz yuvish vositalarini (etanolsiz) qo'llang.

Tish pastasini tanlashda bir nechta shartlarni hisobga olish kerak: kompozitsiyadagi katta abraziv zarralar yupqalashtirilgan, shikastlangan emal, yoriqlar bo'lgan odamlar uchun kontrendikedir. Og'iz bo'shlig'i sog'lig'i yaxshi bo'lsa ham, siz abraziv pastalar bilan shug'ullanmasligingiz kerak. Ftoridning yuqori miqdori bo'lgan pastalar oldini olishda foydali bo'lishi mumkin, ammo ulardan foydalanish faqat kattalar tomonidan ruxsat etiladi.

Profilaktik choralar

Ftorid va kaltsiyni o'z ichiga olgan tish pastalari, ftoridli tish iplari kabi keng tarqalgan kariesning oldini olish vositalaridan deyarli cheklovlarisiz foydalanish mumkin. Hatto floroz ham har doim ham bunday mahsulotlardan foydalanishga qarshi ko'rsatma emas. Agar bemorda og'iz bo'shlig'ining birgalikdagi kasalliklari bo'lsa, tish shifokori uyda profilaktikaning aniq choralarini tavsiya qilishi mumkin. Masalan, shilliq pardalar va / yoki milklarning surunkali yallig'lanish kasalliklarida antibakterial komponentlar bilan og'iz yuvish vositasidan foydalanish mumkin.

Professional tishlarni tozalash har bir insonga ko'rsatiladi. Og'iz bo'shlig'ining dastlabki holati yaxshi bo'lsa, tozalash yiliga ikki marta profilaktika maqsadida amalga oshiriladi. Agar bemor ortodontik konstruksiyalarni kiysa yoki choy, qahva ichish, chekish tufayli ko'p miqdorda pigmentli blyashka hosil qilish tendentsiyasiga ega bo'lsa, yiliga 3 marta protseduradan o'tish tavsiya etilishi mumkin.

Tozalash usulini tanlash individual ravishda belgilanadi. Havo oqimi yumshoq blyashka olib tashlashning ajoyib usuli ekanligini isbotlagan texnikadir. Emal yuzasi havo, suv va yumshoq abraziv aralashmasi bilan portlatish orqali tozalanadi. Ultrasonik tozalash qattiq konlarni olib tashlash uchun ishlatiladi - tatar. Katta subgingival toshlar bo'lsa, boshqa usullardan foydalanish mumkin.

Har qanday tozalashning yakuniy bosqichi abrazivdir. Emalning silliq yuzasi blyashka to'planishiga kamroq ta'sir qiladi, bu ham kasallikning oldini olish sharti bo'lib xizmat qiladi.

Kariyesning oldini olishning zamonaviy usullari tishning qattiq to'qimalarining mineral balansini o'z vaqtida tiklashni ta'minlaydi. Remineralizatsiya terapiyasi kasbiy gigienaning yakuniy bosqichi bo'lishi yoki mustaqil usul sifatida ishlatilishi mumkin. Oq nuqta bosqichida kariyes bo'lsa, shifokor emalning shikastlangan joyini alohida

tiklaydi. Profilaktik vositalar, shuningdek, emalni kaltsiy va ftorid bilan to'yintirish uchun barcha tishlar uchun qo'llaniladi, masalan, florolak, og'iz bo'shlig'idagi jel va boshqalar. Qo'shimcha florizatsiya uyda o'tkazilishi mumkin, ammo dori vositalarini tanlash va ulardan qanday foydalanish haqida tish shifokori bilan maslahatlashish muhimdir.

Ofis profilaktika muolajalari, shuningdek, tishlarning chaynash yuzasidagi tabiiy tushkunliklarni yopish yoriqlarini ham o'z ichiga oladi. Ba'zi odamlarda yoriqlar tomchi shaklidagi ko'rinishga ega. Tor teshik orqali oziq-ovqat zarralari chuqurchaga tushadi va ularni tozalash juda qiyin. Bu kariyes rivojlanish xavfini oshiradi. Maxsus dental plomba bilan mexanik muhrlanish bunday xavflarni bartaraf qiladi. Plomba bolalar va kattalar stomatologiyasida qo'llaniladi, farq faqat protsedura uchun formulalarda.

Ovqatlanish qoidalari

Kariyesning oldini olish usullaridan biri to'g'ri ovqatlanishdir. Stomatologlar quyidagi umumiy tavsiyalarni beradilar:

- shirinliklarni iste'mol qilishni cheklang. Qandolat va shokolad, quritilgan mevalar, asalni almashtirish yaxshiroqdir; soda - kompotlar. O'lchovni bilish va juda ko'p uglevodlarni iste'mol qilmaslik kerak va har ovqatdan keyin og'zingizni yuving;
- muvozanatli ovqatlanish. Tishning qattiq to'qimalariga to'g'ri miqdorda mineral moddalarni olish uchun menyuda fermentlar qilingan sut mahsulotlari, pishloq, yangi o'tlar, yong'oqlar, go'sht, kam yog'li baliqlar bo'lishi kerak;
- qattiq oziq-ovqatlarni iste'mol qilish. Olma, sabzi va boshqa qattiq yangi sabzavot va mevalar nafaqat foydali, balki emalni mexanik ravishda tozalash, og'iz bo'shlig'ini saqlashga yordam beradigan milklarda qon aylanishini rag'batlantirish;
- oziq-ovqat va ichimliklar haroratiga ehtiyotkorlik bilan munosabatda bo'lish. Juda issiq yoki sovuq ovqatlarni iste'mol qilmaslik, ayniqsa ularni almashtirmaslik yaxshiroqdir. Aks holda, emal o'rnidan turmasligi mumkin - u mikro yoriqlar bilan qoplanishi mumkin va bu blyashka to'planishiga va bakteriyalarning ko'payishiga yordam beradi;
- qattiq oziq-ovqatlarni ehtiyotkorlik bilan iste'mol qilish. Yong'oq va boshqa o'ta qattiq ovqatlarni ehtiyotkorlik bilan iste'mol qilish yaxshiroqdir, shunda zarralar tishlararo bo'shliqlar va yoriqlarga yopishib qolmaydi.

Xulosa.

Profilaktik tekshiruvlar

Kariyesning oldini olishning eng ishonchli usuli tish shifokoriga muntazam tashrif buyurishdir. Og'iz bo'shlig'ida muammolar bo'lmasa, siz faqat gigienist bilan

bog'lanishingiz mumkin. Bundan tashqari, tekshiruvni professional stomatologik tozalash bilan birlashtirish qulay. Tekshiruvlar bir xil chastotada amalga oshiriladi - yiliga ikki marta. Dastlabki bosqichdagi kariesni burg'ulashsiz davolash mumkin: bo'r dog'ini remineralizatsiya terapiyasi yoki Icon usuli bilan yo'q qilish mumkin, yuzaki shikastlanish esa o'z tish to'qimalarini eng kam yo'qotish bilan yo'q qilinadi. Shuning uchun har 6 oyda bir marta tish shifokoriga borishga arziydi, u mumkin bo'lgan buzilishlarni tezda aniqlaydi va tezda yo'q qiladi.

Quyidagi alomatlar paydo bo'lsa, rejalashtirilgan tekshiruvni kutish shart emas:

- 1. bir yoki bir nechta tishlarning yuqori sezuvchanligi;
- 2. har qanday tabiat va intensivlikdagi tish og'rig'i;
- 3. milklarning qon ketishi;
- 4. Emal rangidagi sezilarli o'zgarishlar.

Muayyan kasalliklar mavjud bo'lganda, boshqa yo'nalishdagi stomatologlarga (ortodont, ortoped, jarroh, periodontist) tashrif buyurish kerak. Tegishli buzilishlar va nuqsonlar bilan tishlarning tishlashi va holatini tuzatish, milklarning yallig'lanish kasalliklari va periodontal kasalliklarni o'z vaqtida davolash kerak. Muhrlar va ortopedik tuzilmalar ham o'z vaqtida almashtirilishi kerak.

Foydalanilgan adabiyotlar:

1. Максимовский Ю.М., Митронин А.В. Терапевтическая стоматология / М.: Гэотар-Медиа, 2012. – 322 с.
2. Терапевтическая стоматология: учебник: в 3 частях. Ч.3. Заболевания слизистой оболочки полости рта, – под ред. проф. Г. М. Барера. - Москва: ГЭОТАР-Медиа. – 2010- - 245 с.
3. Хирургическая стоматология: учебник. Афанасьев В.В. М.: Гэотар- Медиа, 2011
4. История медицины: учебник Ю. П. Лисицын М.: Гэотар- Медиа, 2011
5. Биоэтика: учеб. пособие для студентов мед. вузов / Ю. М. Хрусталева М.: Медицина, 2011
6. Научно- исследовательская работа кафедры хирургической стоматологии и челюстно- лицевой хирургии: монография Ивасенко П.И. и др. Омск: Изд-во ОмГМА, 2007
7. Терапевтическая стоматология. Болезни пародонта: учебник: в 3 ч. / Под ред. Г. М. Барера. - М.: ГЭОТАР-Медиа, 2013. - Ч. 2. - 224 с.: ил.

ABDUQODIR SHAKURIYNING JADIDCHILIK HARAKATIDAGI O'RNI

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Annotatsiya: Mazkur maqolada Turkistonda XX asr boshlarida jadidchilik harakati doirasida amalga oshirilgan ta'lim islohotlariga bag'ishlangan. Abduqodir Shakuriyning "Shakuriy maktabi" misolida qiz va o'g'il bolalar uchun aralash ta'limning joriy etilishi, shuningdek, iqtidorli yoshlarning xorijiy mamlakatlarga o'qishga yuborilishi kabi muhim voqealar tahlil qilinadi. Bundan tashqari, jadidlarning milliy matbuotni rivojlantirishdagi roli, "Xurshid", "Samarqand" va "Oyna" kabi nashrlarning ahamiyati va ular orqali targ'ib qilingan g'oyalar (milliy o'zlikni anglash, iqtisodiy taraqqiyot, Yevropa madaniyatini o'zlashtirish) ko'rib chiqiladi.

Kalit so'zlar: Abduqodir Shakuriy, jadidchilik, "usuli jadid", ta'lim islohotlari, milliy matbuot, "Xurshid", "Samarqand", "Oyna", Mannon Uyg'ur, Xamza, Qayum Ramazon, Oybek, milliy o'zlikni anglash, iqtisodiy taraqqiyot, Yevropa madaniyati, aralash ta'lim, xorijiy ta'lim.

Ma'naviyat, odob-axloq, madaniyatning kelib chiqishi har bir xalqning o'tmishdagi boy merosi qa'ridadir. Ular avloddan-avlodga o'tib boradi va har bir avlod ularning xilma-xilligi va ilg'orligiga hissa qo'shadi. O'zbekiston xalqi mustaqillikka erishgach, davlat va jamiyat taraqqiyotining o'ziga xos yo'lini tanladi, ma'naviy qadriyatlarni tiklashga e'tibor qaratdi. Sharqda axloqiy va ma'naviy qadriyatlar shunchaki so'z emas - ular hayot tarzi, xatti-harakatlar me'yori, hatto borliqning ma'nosi, borliqning ma'nosi deyish mumkin. Tarixiy jihatdan ma'naviy-axloqiy asoslarni rivojlantirish, an'analar, urf-odatlar, madaniyatni tiklash, dunyoviy bilimlarni targ'ib etishga ijtimoiy-siyosiy oqim – jadidchilik vakillari salmoqli hissa qo'shdilar. Yigirmanchi asrning yetmishinchi yillarining oxirigacha jadidchilik harakati va uning Sadridin Ayniydan boshqa yetakchilari so'qut saqladilar.

O'zbekiston Respublikasi suverenitetini e'lon qilgandan keyin esa jadid kitoblari nashr etila boshlandi. Jadidchilik harakati (arabcha "jaded" — yangi) hozirgi Tatariston

Respublikasi hududida vujudga kelib, [oxir-oqibat Buxoro](#), Xiva va Turkistonga tarqaldi. XIX - erta. XX asr. Turkiston jadidlariga Mahmudxo‘ja Behbudiy, Abduqodir Shakuriy, Munavvarqori Abdurashidxonov, Abdulla Avloniy va boshqa o‘nlab ma‘rifatparvarlar boshchilik qilganlar. O‘rta Osiyoning ijtimoiy-madaniy rivojlanishini yangi yo‘nalishda ko‘zda tutgan jadidlar yetakchilari maorif, tarixshunoslik, adabiyot, matbaa, din, san‘at sohalarida qator islohotlar o‘tkazishni taklif qildilar. Ular odob-axloq, e‘tiqod, adolat, sog‘liqni saqlash, ayollar taraqqiyoti, hayotning barcha jabhalarini qayta ko‘rib chiqish va takomillashtirish g‘oyalarini ilgari surdilar.

Bu harakat ijtimoiy mansubligi va muayyan muammolarga qarashlari jihatidan bir-biridan farq qiladigan jamiyatning turli qatlamlari vakillarini birlashtirdi. Xalq ta‘limi [turli milliy harakatlar](#), jumladan, jadidchilik harakati uchun jamiyat hayotining eng maqbul sohasi edi. Ismoil Gasprinskiy (1851-1914) Sharq va G‘arbni qiyoslab, musulmon, turkiy dunyoning jahon taraqqiyotidan tobora ajralib borayotgani sabablarini birinchilardan bo‘lib tushirdi. U turkiy xalqlar orasida jaholatni bartaraf etish, aholini ma‘naviyat va ma‘rifat bilan ta‘minlash orqali rivojlangan davlatlar darajasiga erishish harakatini boshlab berdi. Ismoil Gasprinskiy ta‘lim tizimini isloh qilish, maktablarda dunyoviy bilimlarni o‘rganish masalasini ko‘tardi. Turkistonda musulmonlar ta‘lim tizimini yangilash maqsadida jadidlar rus millatiga mansub maktablar deb ataladigan yangi usuldagi maktablar ochdilar. Ularning paydo bo‘lishining rasmiy sanasi - 1884 yil 19 oktyabr. Shu kuni tantanali ruhda toshkentlik badavlat savdogar Said Azimboev xonadonida maktab ochildi. Uning birinchi shogirdlari mahalliy elita oilalarining farzandlari edi. 1887 yilda Samarqandda, keyin esa:

- ❖ Boshqa shaharlarda rus tilida maktab ochildi.
- ❖ Darslik va o‘quv qo‘llanmalarining yagona tizimi mavjud bo‘lmaganiga qaramay, jadidlar bu maktablar o‘quvchilarining amaliy bilimlarni egallashini ta‘minlashga intildilar.
- ❖ Yangi usuldagi maktablarda turkiy va fors tillarida o‘qish, yozish, arifmetika, tarix, geografiya, din asoslari kabi fanlar o‘quv dasturida katta o‘rin tutgan.
- ❖ Rus millatiga mansub maktablarning mahalliy aholi oldida [nufuzini oshirishga intilib](#), ularning bitiruvchilari nufuzli lavozimlarga tayinlanganda ularga ustunlik berilishini aholini ruhlantirdi.
- ❖ Shu bilan birga, hokimiyat mahalliy elita bolalari uchun bepul ta‘limni joriy etish orqali ota-onalarni ta‘limga va moliyaviy jihatdan qiziqtirmoqchi bo‘ldi.
- ❖ Hokimiyat maktablarni uslubiy ta‘minlashga ham g‘amxo‘rlik qildi.

❖ Bolalarni o'qish va yozishga o'rgatish uchun maxsus o'quv qo'llanma hamda o'qish antologiyasi nashr etildi.

Biroq bu chora-tadbirlar kutilgan natijani bermadi. Umuman olganda, rus millatiga mansub maktablarda o'quvchilar soni nisbatan kam edi. Ammo allaqachon 1903 yilda. Turkistonda 102 boShlang'ich va 2 o'rta jadid maktabi faoliyat ko'rsatgan. Birinchi maktab bitiruvchilari Mannon Uyg'ur, Xamza, Qayum Ramazon, Oybek bo'lgan.

Samarqand viloyatida Jo'raboyev va Abduqodir AbduSho'qurov (taxallusi Shakuriy, uning maktabi "Shakuriy maktabi" nomi bilan maShhur bo'lgan) jadid maktablarining tashkil etilishi alohida e'tiborga molik voqea bo'ldi. Shakuri birinchi bo'lib o'g'il va qizlar uchun birgalikda ta'limni joriy qildi. Jadidlar yoshlarni xorijiy mamlakatlarga o'qishga yuborish tashabbusi bilan chiadilar. Ko'pchilik hadavlat kishilar iadidlarning

Turkiston jadidlarining ma'rifiy faoliyati milliy davriy matbuot rivojida muhim rol o'ynadi. Jadidlar o'z mablag'lari hisobidan nashr etilgan gazetalar orqali yangi usul maktablarining afzalliklarini targ'ib qildilar, milliy kadrlar tayyorlash tarafdori edilar. Jadidlar davriy matbuotda ham jaholat va aqidaparastlikka, eski urf-odat va urf-odatlarga qarshi, mustamlaka Turkistonning iqtisodiy, siyosiy va madaniy hayotida islohotlarni amalga oshirishga qaratilgan faol taShviqot olib bordilar.

"Xayriya jamiyati" kabi ta'minlangan ota-onalar talzandalarining ta'min olishiga, shuningdek, yoshlarning xorijiy mamlakatlarda ta'lim olishiga ko'maklashdi. Jadidlar milliy matbuot rivojiga asos solganligini ham alohida ta'kidlash lozim.[13] M.Abdurashidxonov 1906 yil "Xurshid" ("Nuroni") jurnalini chiqarishni tashkil qilgan va unga o'zi muharrirlik qilgan. Jurnal aholi o'rtasida huquqiy bilimlarni targ'ib qilgani, bu ham odamlarning milliy o'zligini anglashining yo'qsalishiga xizmat qilgan. Biroq tez orada chor amaldorlari jurnalni nashr qilishni taqiqlab qo'ydilar. Ammo 1913 yilda M.Behbudiy xususiy nashriyot va kutubxona tashkil etib, "Samarqand" gazetasi va "Oyna" ("Oyna") jurnalini chiqara boshlaydi.

Ularning sahifalarida millat va [Vatan qadr-qimmat muammolari](#), xalq ma'rifati, insonning erkin kamol topishi masalalari yoritildi. Ushbu dolzarb maqola va materiallar odamlarni hayajonga soldi. Bunday nashrlar Rossiyaning turkiyzabon aholisi orasida keng munosabatda bo'ldi, ular Eron, Afg'oniston, Hindiston va Turkiyada ham tarqatildi.[12]

Jadid davri matbuoti sahifalarida Turkistonning iqtisodiy taraqqiyoti muammolari alohida o'rin tutdi. Bular:

- ✓ milliy sanoatni yaratish va rivojlantirish kabi muammolar;
- ✓ milliy banklarning ochilishi;
- ✓ qishloq xo'jaligini rivojlantirish;
- ✓ ichki [va tashqi savdo](#);
- ✓ Turkistondan foydali qazilmalar va boshqa moddiy boyliklarni olib chiqishni cheklash;
- ✓ ularni joyida qayta ishlashni, viloyatdan xomashyo emas, balki tayyor mahsulotni eksport qilishni tashkil etish;
- ✓ fan va texnika yutuqlarini ishlab chiqarishga joriy etish va boshqalar.

Turkiston jadidlari, ayniqsa, ularning rahbarlari, boshqa xalqlarga dushmanlik tuyg'usi begona edi. Ular Yevropaning rus, yahudiy, arman, nemis va boshqa xalqlarining iqtisodiyot, siyosat, [madaniyat](#), fan va texnika sohalarida erishgan yutuqlari haqida katta hayrat bilan yozdilar. Ular o'z vatandoshlarini Yevropa xalqlarining tarixi, adabiyoti, madaniy yutuqlari, tili, siyosiy va huquqiy tajribasini o'rganishga chaqirdilar, yevropa madaniyatini, fan va texnika yutuqlarini o'zlashtirish va o'zlashtirish tarafdori edilar.

Turkiston jadidlari faoliyatining o'z davri uchun muhim bo'lgan yana bir sohasi teatr ijodi edi. Jadidlar teatrni g'oyaviy kurashning o'tkir quroli sifatida darhol baholadilar. 1911-yildan boshlab ular davriy matbuotda muntazam ravishda maqolalar e'lon qilib, teatrning ma'naviy-ma'rifiy ishda naqadar foydali ekanligini isbotladilar. Jadidlar milliy teatrning asosini yaratdilar. 1913 yilda Munavvarakari Abdurashidxonov tashabbusi bilan "Turon" guruhi – dramatik san'at ixlosmandlarining musulmon jamiyati tashkil etildi. 1914 yil 27 fevral Toshkentdagi Kolizyey teatri binosida ilk o'zbek milliy teatrining rasmiy ochilish marosimi bo'lib o'tdi. Munavvarqori teatr pardasini ochib, Shunday dedi: "Barchamizga ma'lumki, Shu paytgacha ona tilida teatr bo'lmagan... "teatr" so'zi aslida ular "hayot sabog'i", obodonchilik yoki "maktab" degan xonani bildiradi. buyoqlardan". [14] Teatr sahnasi xuddi oynaga o'xshaydi, unga kirgan har bir kishining ijobiy va salbiy tomonlari har tarafdin aks etadi, har kim o'zining yaxshi va yomon tomonlarini ko'radi, undan to'g'ri saboq oladi.

Ma'rifatparvarlik targ'iboti yo'nalishida turkistondagi jadidchilik harakati yetakchisi Mahmudxo'ja Behbudiy, ma'rifatparvar Abdulla Qodiriylar faol faoliyat olib bormoqdalar. Ularning "padarkush" ("Patrisit", M. Behbudiy) va "Baxtsiz Kuev" ("Baxtsiz kuyov", A. Qodiriy) pyesalari butun Turkistonda katta muvaffaqiyat qozondi. Birinchi pyesa[6] yigitning nodonligi va dangasaligi uni qanday qilib otasini

o'ldiriShga yetaklagani haqida hikoya qiladi. Asar tomoshabin e'tiborini faqat ma'rifatgina solih amallardan og'ishning oldini [oliShi mumkinligiga qaratadi](#), chunki u poklaniSh imkonini beradi. Ikkinchi asarda[14] esa mahalliy urf-odatlariga aqidaparastlik bilan rioya qilish oshiq yigitning to'yni o'tkazish uchun ko'p qarz yig'ib qo'yishiga sabab bo'liShi aytiladi. Kreditorlar tomonidan belgilangan kuni u qarzlarini to'lay olmaydi va o'jizlik tufayli o'zini va yosh xotinini o'ldiradi. Shunday qilib, milliy teatr jamiyatning ahvoli yo'naltirilgan ko'zguga aylanadi, u go'zalni ulug'laydi, jirkanch, zararli, vahshiylikni fosh qiladi. Jadid matbuoti va teatrida ko'p jihatdan alohida diniy mutaassiblar, ularning poraxo'rliqi, axloqsizligi keskin tanqid qilinadi. Jadid jurnalistlari va dramaturglari o'z ijodlarida giyohvandlik, alkogol va tamaki iste'moli, zino, buzuqlik va inson xatti-harakatlaridagi boShqa illatlarni qoralaydilar. Feodal asoslarning daxlsizligidan kelib chiqqan feodal-diniy mafkuradan farqli ravishda jadidlar Turkistonning ijtimoiy-siyosiy va madaniy hayotida muayyan islohotlarni taklif qildilar. Shunday qilib, ular ta'limni isloh qilish talabi bilan chiqdilar, yangi usul maktablarini ochdilar, teatr truppalari tuzdilar. Jadidlar viloyat boShqaruvini isloh qiliSh, bozor munosabatlari bilan bog'liq muammolarni ko'tardilar. Ular bir tomondan Yevropa ilmiy-texnikaviy tafakkuri, [madaniyati yutuqlarini](#), iqtisodiy va ijtimoiy-siyosiy hayot me'yorlarini targ'ib qildilar. Boshqa tomondan, ular o'tmishni qayta tiklashga, shariat talablariga zid bo'lgan burjua odatlarining kirib keliShiga qandaydir tarzda qarshilik ko'rsatish istagini uyg'otishga, islom tarixiga qiziqish uyg'otishga harakat qildilar. Jadidlar dunyoviy ta'lim va bilimli mutaxassislar tayyorlash zarurligi haqida gapirar ekan, o'z fikrlarini Qur'on va hadislardan izladilar va tasdiqladilar, o'z matnlariga Turkistondagi ijtimoiy, ma'naviy va iqtisodiy taraqqiyot ehtiyojlariga javob beradigan ma'no berdilar. O'rta Osiyo ma'rifatparvarlari faoliyati ijtimoiy tafakkur tarixidagi eng yorqin sahifalardan biridir. Ularning xizmatlari shundan iboratki, ular feodal qoloqlik va chorizmning mustamlaka zulmining qorong'u davrida taraqqiyot va ijtimoiy adolat g'oyalarini targ'ib etib, milliy istiqlol ongini shakllantirganlar.

Xulosa qilib aytadigan bo'lsak, davriy matbuot sahifalarida jadidlar, xususan, Abduqodir Shahuriyning pedagogik faoliyati nafaqat tarixiy ahamiyatga ega bo'lgan, balki bugungi kun bilan hamohang bo'lgan qator muammolarni ko'tardilar. Bular shunday muammolar: jahonning rivojlangan mamlakatlari, birinchi navbatda, Yevropa ta'lim muassasalarida milliy kadrlar tayyorlash; islom dinidan Turkiston xalqlarini yo'qsak axloq, vatanparvarlik, hamjihatlik ruhida tarbiyalash vositasi sifatida foydalanish; ayollarni ijtimoiy foydali mehnatga, siyosiy va madaniy hayotga jalb

qilish uchun shart-sharoitlar yaratish; fuqarolarga ijtimoiy va milliy kelib chiqishi, dinidan qat'i nazar, keng demokratik huquq va erkinliklarni berish.

Foydalanilgan adabiyotlar ro'yxati:

1. Mirziyoev Sh.M. Milliy taraqqiyot yo'limizni qat'iyat bilan davom ettirib, yangi bosqichga ko'taramiz. Tom I. T.: O'zbekiston NMIU, 2018. – 592 b.
2. Mirziyoev Sh.M. Xalqimizning roziligi bizning faoliyatimizga berilgan eng oliy bahodir. Tom II. T.: O'zbekiston NMIU, 2018. – 508 b.
3. Mirziyoev Sh.M. Oliy Majlisga murojaatnoma. T.: O'zbekiston, 2018. –
4. Dolimov U. Turkistonda jadid maktablari. T.: Universitet, 2006.
5. Hoshimov K., Nishonova S. Pedagogika tarixi 2 -qism darslik. T.: Alisher Navoiy nomidagi O'zbekiston milliy kutobxonasi, 2005.
6. Hofiz Tanish Buxoriy. Abdullanoma. (Sharafnomayi Shohiy) 1- kitob. Fors tilidan S.Mirzaev tarjimasi. T.: Sharq, 1999.
7. Muhammad Ali Baljuvoni. Tarixi nofeiy. (Foydali tarix). Tojik tilidan tarjima so'z boshi va izohlar mualliflari Sh.Voxidov va Z.Choriev. T.: Akademiya, 2001.
8. Qur'oni Karim. Tarjimalar va izohlar muallifi Alouddin Mansur. 2004.
9. So'fi Olloyor. Sabot ul - ojizin. - T.: Mehnat, 1991.
10. Tarixiy xotira-ma'naviyat asosi" mavzusida Respublika ilmiynazariy anjumani materiallari. Buxoro. 2008.
11. Turkistanda menilik hareketleri re ihtilallar: 1900-1924. Osman Hoch Anisina Incelemeler. Hozirlayan Timur Kochaoglu - haarlem, sota, 2001.
12. Ta'lim ilmi hal se'adati ebediyye Altmis ikinci baski. Itasirlayn M.Gumus Fatih. - Istanbul, 1995.
13. O'zbek pedagogikasi tarixi. Oliy o'quv yurtlari uchun qo'llanma. T.: O'qituvchi, 1997.
14. Sharipov R. Turkiston jadidchilik harakati tarixidan. –T.: O'qituvchi, 2002.

PROJECT-BASED LEARNING (PBL)

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Annotation. *This study examines Project-Based Learning (PBL) as a contemporary educational methodology that transforms traditional language teaching paradigms. The research investigates how PBL integrates authentic tasks with language acquisition, analyzing its theoretical foundations, implementation strategies, effectiveness in diverse educational contexts, and impact on learner motivation and autonomy.*

Аннотация. *В данном исследовании рассматривается проектно-ориентированное обучение (PBL) как современная образовательная методология, которая трансформирует традиционные парадигмы преподавания языка. В исследовании анализируется, как PBL интегрирует аутентичные задачи с овладением языком, рассматриваются его теоретические основы, стратегии реализации, эффективность в различных образовательных контекстах и влияние на мотивацию и автономность учащихся.*

Keywords: *Project-based learning, language acquisition, authentic tasks, learner autonomy, collaborative learning, communicative competence, experiential learning.*

Ключевые слова: *Проектно-ориентированное обучение, овладение языком, аутентичные задачи, автономность учащихся, совместное обучение, коммуникативная компетенция, эмпирическое обучение.*

In the landscape of contemporary education, traditional approaches to language instruction have increasingly revealed their limitations in preparing learners for real-world communication challenges. Conventional methodologies often emphasize grammatical structures and vocabulary acquisition in isolation, creating a disconnect between classroom learning and authentic language use. As educational paradigms evolve, Project-Based Learning (PBL) has emerged as a powerful alternative that bridges this gap by embedding language acquisition within meaningful tasks and real-world problem-solving contexts.

Language education has progressively shifted from viewing language as a static body of knowledge to recognizing it as a dynamic tool for communication and meaning-making. This transition aligns with constructivist learning theories, which posit that knowledge is actively constructed through experience rather than passively received. Project-Based Learning exemplifies this perspective by positioning learners as active participants in their educational journey, using language as both the medium and object of learning in purposeful contexts. The significance of investigating PBL lies in its potential to transform language education by creating more engaging, authentic, and effective learning environments. As Stoller notes, "Project work captures better than any other approach the two principal elements of a communicative approach... these being a concern for motivation, and a concern for relevance" [1;19]. This perspective represents a fundamental shift from teacher-centered instruction toward learner-centered approaches that honor student agency and authentic communication needs. While Project-Based Learning has gained substantial recognition in educational research, its specific implementations, challenges, and outcomes in various language learning contexts warrant deeper investigation. This study aims to analyze this methodology comprehensively, exploring its theoretical foundations, implementation strategies, and effectiveness in developing not only language proficiency but also critical thinking, collaboration, and problem-solving skills essential for 21st-century success.

Project-Based Learning (PBL) is grounded in several influential educational theories that collectively emphasize active, experiential, and socially constructed learning. At its core, PBL represents the practical application of constructivist learning theory, which maintains that knowledge is not transmitted but constructed through experiences and interactions with the environment.

John Dewey's experiential learning theory provides a foundational pillar for PBL by emphasizing learning through doing and reflection. Dewey argued that education should connect to real-world experiences and social contexts, stating that "education is not preparation for life; education is life itself" [2;29]. This perspective is embodied in PBL's emphasis on authentic tasks that extend beyond classroom walls and connect to learners' lived experiences and communities.

Vygotsky's social constructivist theory further informs PBL through its emphasis on socially mediated learning and the Zone of Proximal Development (ZPD). Vygotsky argued that learning occurs most effectively when students engage in tasks slightly beyond their independent capabilities with appropriate scaffolding and peer collaboration [3;86]. PBL creates natural contexts for such scaffolded learning as

students work together to solve complex problems, with language serving as both the means of collaboration and the object of development.

In language acquisition specifically, PBL aligns with Krashen's Input Hypothesis, which suggests that language acquisition occurs when learners are exposed to comprehensible input slightly beyond their current proficiency level [4;21]. Project work naturally provides varied and contextualized language input as students research, plan, and create. Simultaneously, PBL addresses Swain's Output Hypothesis by creating authentic contexts for language production, allowing learners to notice gaps in their linguistic knowledge and test hypotheses about language use. The task-based language teaching framework, articulated by Ellis and others, shares significant conceptual overlap with PBL by emphasizing meaningful tasks as the central organizing principle for language instruction. Both approaches prioritize authentic communication needs over predetermined linguistic sequences, allowing language forms to emerge naturally from communicative requirements.

These theoretical foundations collectively support PBL's fundamental premise that language acquisition occurs most effectively when embedded within meaningful contexts that engage learners cognitively and socially. By grounding language learning in purposeful projects, PBL creates conditions for holistic language development that traditional approaches often fail to achieve.

Project-Based Learning in language education is characterized by several distinctive features that distinguish it from other instructional approaches. Understanding these essential elements provides a framework for effective implementation and evaluation of PBL initiatives.

At the heart of effective PBL lies a driving question or authentic problem that frames the project and gives it purpose. According to Thomas, these questions should be "non-trivial, feasible, contextualized, meaningful, and ethical" [5;13]. In language learning contexts, driving questions might involve investigating cultural phenomena, addressing community issues, or creating media for specific audiences. The question's authenticity creates a genuine need for language use beyond classroom requirements. PBL positions students as active decision-makers throughout the learning process. Learners exercise significant control over project direction, resource selection, and product development. As Markham explains, "In PBL, students have a significant voice and choice in selecting their projects, making decisions, and expressing their ideas" [6;38]. This autonomy increases motivation and investment while creating diverse contexts for language use as students negotiate decisions and express preferences.

Projects extend beyond short activities to sustained investigations that may span weeks or months. This extended timeframe allows for depth of learning and iterative language development. Throughout the inquiry process, students engage with varied authentic materials—articles, interviews, videos, datasets—providing rich exposure to diverse language forms and registers that traditional textbooks rarely offer.

PBL typically involves collaborative work that necessitates extensive communication. Beckett emphasizes that "projects create natural contexts for language negotiation and meaningful interaction". As students collaborate, they engage in authentic language functions such as planning, suggesting, disagreeing, clarifying, and synthesizing—developing pragmatic competence alongside linguistic knowledge.

Projects culminate in concrete artifacts or performances shared with audiences beyond the classroom. These might include videos, websites, presentations, exhibitions, or community initiatives. The public dimension creates accountability and purpose for language accuracy while providing authentic contexts for formal and informal language use. Additionally, the creation process involves multiple drafts and revisions, encouraging attention to language form within meaningful contexts.

Project-Based Learning represents a powerful approach to language education that addresses many limitations of traditional instructional methods while aligning with contemporary understanding of how languages are most effectively acquired. By embedding language learning within authentic tasks and meaningful contexts, PBL creates learning environments where communication serves genuine purposes rather than existing as an isolated academic exercise.

The theoretical foundations of PBL draw from constructivist learning theories, emphasizing that knowledge—including language—is actively constructed through meaningful experiences rather than passively received. This perspective shifts language education from transmission models focused on discrete skills toward holistic approaches emphasizing communication, meaning-making, and purposeful interaction. As this study has demonstrated, this theoretical alignment creates powerful conditions for language acquisition alongside broader cognitive and social development.

Research consistently documents PBL's numerous benefits for language learners, including enhanced motivation, integrated skill development, authentic language exposure and production, academic language proficiency, learner autonomy, and transferable 21st-century skills. These outcomes address urgent educational needs in increasingly globalized contexts where communicative competence must combine with critical thinking, collaboration, and problem-solving abilities.

While implementation challenges exist—including balancing structure and autonomy, addressing time and resource constraints, developing appropriate assessment approaches, and preparing teachers for facilitative roles—thoughtful strategies can mitigate these difficulties. As PBL implementation continues to expand and evolve, promising directions include integration with other innovative approaches, technology enhancement, longitudinal impact studies, assessment innovation, and equity considerations.

For language educators seeking more engaging and effective methodologies, PBL offers a well-researched alternative to traditional instruction. By creating contexts where language serves authentic purposes, PBL transforms language learning from an isolated academic subject to a meaningful tool for communication, creation, and collaboration. This transformation not only enhances language acquisition but also develops the broader competencies essential for academic and professional success in increasingly complex global contexts.

As education systems worldwide recognize the limitations of traditional approaches and seek alternatives that better prepare learners for contemporary challenges, Project-Based Learning stands as a powerful methodology with particular relevance for language education. By continuing to refine implementation approaches, address challenges thoughtfully, and pursue promising research directions, the field can further strengthen PBL's positive impact on language acquisition and holistic educational development.

REFERENCES

1. Stoller, F. L. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In G. H. Beckett & P. C. Miller (Eds.), *Project-based second and foreign language education: Past, present, and future* (pp. 19-40). Information Age Publishing.
2. Dewey, J. (1938). *Experience and education*. Macmillan.
3. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
4. Krashen, S. D. (2003). *Explorations in language acquisition and use: The Taipei lectures*. Heinemann.
5. Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97-114). Oxford University Press.
6. Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

EVALUATING EDUCATIONAL MATERIALS

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Annotation. *This research examines systematic approaches to evaluating educational materials, focusing on the criteria and methodologies that ensure pedagogical effectiveness and alignment with learning objectives. The study analyzes how comprehensive evaluation frameworks can enhance material selection processes while promoting student engagement and educational outcomes across diverse learning environments.*

Keywords: *Educational materials evaluation, pedagogical alignment, instructional design, material selection criteria, content relevance, curriculum development, learning resource assessment, educational adaptation, inclusive materials, quality assurance in education.*

Аннотация. *В данном исследовании рассматриваются систематические подходы к оценке образовательных материалов с акцентом на критерии и методологии, обеспечивающие педагогическую эффективность и соответствие целям обучения. В исследовании анализируется, как комплексные системы оценки могут улучшить процессы отбора материалов, способствуя вовлеченности учащихся и повышению образовательных результатов в различных учебных средах.*

Ключевые слова: *Оценка образовательных материалов, педагогическое согласование, учебный дизайн, критерии отбора материалов, актуальность содержания, разработка учебных программ, оценка учебных ресурсов, образовательная адаптация, инклюзивные материалы, обеспечение качества в образовании.*

The landscape of educational materials has expanded dramatically from traditional textbooks to encompass a vast array of digital resources, multimedia content, and interactive platforms. This evolution necessitates sophisticated evaluation frameworks that address not only content accuracy but also pedagogical effectiveness, learner engagement, and technological functionality. Systematic evaluation of educational

materials stands as a critical process in ensuring quality education across all levels and contexts.

Educational materials evaluation can be defined as the systematic assessment of learning resources against established criteria to determine their appropriateness, effectiveness, and alignment with educational objectives. This process extends beyond mere content review to include analysis of instructional design, accessibility features, cultural relevance, and adaptation potential. As Tomlinson highlights, comprehensive evaluation involves "making judgments about the effects of materials on their users" through both pre-use predictive evaluation and post-use retrospective assessment [1;15].

The theoretical foundations of educational materials evaluation draw from multiple disciplines. Constructivist learning theory emphasizes materials that facilitate active knowledge construction rather than passive information reception. Vygotsky's sociocultural theory suggests that learning resources should scaffold development within learners' zones of proximal development, gradually building competence through appropriate support. Universal Design for Learning principles advocate for materials that provide multiple means of representation, engagement, and expression to accommodate diverse learner profiles.

Core criteria for evaluating educational materials include content quality, pedagogical alignment, accessibility, adaptability, and engagement potential. Content quality encompasses accuracy, currency, depth, breadth, and organization of information. Pedagogical alignment refers to how well materials support defined learning objectives and instructional approaches. Accessibility considerations include physical access, cognitive accessibility, and compatibility with assistive technologies. Adaptability reflects how easily materials can be modified for different contexts, while engagement potential addresses how effectively resources capture and maintain learner interest.

Richards proposes a systematic evaluation framework with five dimensions: 1) Subject matter content, 2) Language and discourse, 3) Physical characteristics and practical considerations, 4) User definitions and needs assessment, and 5) Implementation requirements [3;251]. This multifaceted approach recognizes that materials must be evaluated not in isolation but within the context of their intended use.

Research demonstrates significant benefits from rigorous educational materials evaluation. Studies by Nation and Macalister found that alignment between materials and curriculum objectives strengthens program coherence and learning outcomes [4;38]. Enhanced learner motivation results when materials connect with students' interests, cultural contexts, and cognitive development levels. More efficient resource

allocation occurs when institutions adopt evidence-based selection processes rather than trend-driven acquisitions. Importantly, improved instructional quality emerges when teachers work with materials that complement rather than constrain their pedagogical approaches.

The evaluation process typically follows several key phases: preliminary review, detailed analysis, pilot implementation, and ongoing assessment. Preliminary review involves scanning materials for alignment with basic requirements and educational philosophy. Detailed analysis examines resources against comprehensive criteria checklists or rubrics. Pilot implementation gathers feedback from actual classroom use with representative learner groups. Ongoing assessment tracks material effectiveness over time, accounting for changing needs and contexts.

Technology has transformed both educational materials themselves and the evaluation processes. Digital platforms offer interactive content, adaptive learning paths, and embedded assessment tools that require new evaluation approaches. Evaluation frameworks must now consider technical requirements, data privacy, user interface design, and interoperability with existing systems. As Chapelle notes, "CALL [Computer-Assisted Language Learning] materials evaluation requires consideration not only of learning potential but also of learner fit, meaning focus, authenticity, positive impact, and practicality" [5;58].

Several methodologies guide educational materials evaluation in contemporary contexts. Quantitative approaches employ rating scales and checklists to generate comparable data across multiple resources. Qualitative methods incorporate classroom observations, teacher interviews, and learner feedback to capture nuanced impacts. Mixed-methods approaches combine these strategies to develop comprehensive understanding of material effectiveness.

Implementation challenges include evaluator bias, contextual variation, and evolving educational standards. Evaluator bias may emerge from personal teaching preferences or cultural backgrounds, necessitating diverse evaluation teams. Contextual variation means that materials highly effective in one setting may fail in another, requiring flexible frameworks. Evolving standards in areas like cultural representation and digital accessibility create moving targets for evaluation criteria.

Best practices for effective materials evaluation include establishing clear, prioritized criteria aligned with institutional goals and learner needs. Involving multiple stakeholders—teachers, learners, administrators, and subject experts—ensures balanced perspectives. Evidence-based decisions should draw from pilot

implementation data rather than marketing claims. Regular review cycles maintain material relevance and effectiveness over time.

Case studies illustrate successful evaluation approaches across contexts. In a comprehensive school district reform, administrators developed a rubric evaluating mathematics textbooks on conceptual development, problem-solving opportunities, accessibility features, and assessment alignment, resulting in materials that better supported their constructivist teaching philosophy. A university language department created a digital materials evaluation framework addressing linguistic authenticity, cultural representation, and technological integration, leading to more engaging blended learning resources.

Future directions in educational materials evaluation include greater emphasis on learning analytics to measure actual usage patterns and outcomes. Artificial intelligence applications may assist in screening materials for alignment with standards or identifying potential content gaps. Participatory evaluation approaches that meaningfully incorporate learner voice throughout the process show promise for enhancing relevance and engagement. Sustainability metrics addressing environmental impact and long-term resource viability are emerging as important considerations.

Systematic evaluation of educational materials represents a critical investment in educational quality and effectiveness. By establishing clear criteria, employing rigorous methodologies, and adapting processes to changing educational landscapes, institutions can select and develop materials that truly enhance learning experiences. As education continues to evolve, evaluation frameworks must balance timeless pedagogical principles with emerging understanding of how diverse learners engage with constantly evolving educational resources.

REFERENCES

1. Tomlinson, B. Materials Evaluation. In: Developing Materials for Language Teaching. London: Continuum, 2013. p. 15-36.
2. Vygotsky, L.S. Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press, 1978. p. 79-91.
3. Richards, J.C. Curriculum Development in Language Teaching. Cambridge: Cambridge University Press, 2017. p. 251-285.
4. Nation, I.S.P., Macalister, J. Language Curriculum Design. New York: Routledge, 2010. p. 37-52.
5. Chapelle, C.A. Computer Applications in Second Language Acquisition. Cambridge: Cambridge University Press, 2001. p. 52-83.

THE ORIGIN OF THE SLAVE TRADE AMONG THE ARABS IN THE MIDDLE AGES

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Annotation: This article examines the origins and development of the slave trade among the Arabs during the Middle Ages. It explores the political, economic, and religious factors that contributed to the rise of slavery in Arab societies and the expansion of the slave trade across the Islamic world. Special attention is given to the role of trade routes, military conquests, and the legal framework of Islam regarding slavery. By analyzing historical sources and scholarly research, the article provides insights into how slavery became institutionalized and how it functioned as part of the broader social and economic systems of the time.

Keywords: This article explores the origin of the slave trade among the Arabs in the Middle Ages, focusing on Islamic expansion, trade routes, economic systems, African and Asian slave sources, social structures, domestic servitude, military slavery, cultural exchange, and the long-term impact of slavery on the Islamic world.

Introduction.

The Middle Ages marked a significant period of transformation and expansion in the Islamic world. With the rapid spread of Islam across the Arabian Peninsula, North Africa, parts of Europe, and deep into Asia, Arab societies became central players in global trade networks. Among the many commercial activities that flourished during this time, the slave trade emerged as a powerful and deeply embedded institution. The origins of the Arab slave trade in the Middle Ages can be traced back to pre-Islamic customs, but it gained more structure and scale under Islamic rule, influenced by religious, economic, and political factors. Slavery was not a new concept to Arab societies, but the formation of vast Islamic empires gave rise to organized and large-scale trading of slaves. As Islamic territories expanded, so did the demand for labor to sustain agricultural production, domestic service, military strength, and royal courts. Slaves were sourced through military conquest, raids, and trade with non-Muslim regions, particularly in Sub-Saharan Africa, Central Asia, and Eastern Europe. These slaves were then transported across vast distances through well-established routes such

as the Trans-Saharan and Indian Ocean trade networks. Religious justifications also played a role in shaping the Arab slave trade. While Islam promoted humane treatment of slaves and encouraged their eventual emancipation, it did not outlaw slavery altogether. Instead, the religion provided regulations for slave ownership, rights, and obligations. This allowed the practice to continue under a moral and legal framework, integrating it deeply into medieval Arab society. This article seeks to examine the origins and evolution of the slave trade among the Arabs in the Middle Ages. It will explore the historical context, driving forces, methods of acquisition, and uses of slaves, as well as the trade's impact on the Islamic world and beyond. By analyzing various historical sources, the study aims to shed light on one of the most influential yet controversial aspects of medieval Arab history.

Main Body.

The Arab slave trade during the Middle Ages was a complex and multi-layered institution that developed over several centuries. It was shaped by a combination of religious principles, economic demands, and political circumstances. Unlike the transatlantic slave trade that developed later, the Arab slave trade was closely tied to the Islamic world and involved vast regions across Africa, the Middle East, and parts of Asia.

Historical Background: The roots of slavery in Arab societies can be traced back to pre-Islamic Arabia, where slavery was already a common practice. With the advent of Islam in the 7th century, slavery was not abolished but rather regulated. The Qur'an and Hadith addressed the treatment of slaves and emphasized the moral responsibility of slave owners. Islam encouraged the humane treatment of slaves and even considered freeing slaves as an act of charity. However, the demand for labor and the expansion of the Islamic empire meant that the institution of slavery became more structured and widespread.

Sources of Slaves: During the Middle Ages, slaves were acquired through a variety of means. One major source was warfare; prisoners of war were often enslaved and distributed among the victors. Raids into non-Muslim territories, particularly in sub-Saharan Africa, the Caucasus, and Central Asia, provided a continuous supply of slaves. In addition, there were well-established slave markets and trade routes that facilitated the purchase and sale of slaves. The trans-Saharan trade routes, Red Sea trade, and Indian Ocean networks played key roles in transporting slaves from Africa and other regions into the Arab world.

Types and Roles of Slaves:

Slaves in Arab societies served in diverse roles depending on their origin, gender, and physical abilities. Male slaves were often employed as laborers in agriculture, construction, and mining. Others served in the military, such as the Mamluks, who rose to significant power in later centuries. Female slaves were frequently used in domestic service or as concubines in wealthy households. Some educated or skilled slaves worked as scribes, administrators, or tutors. While many slaves lived under harsh conditions, others had the opportunity to rise in status, especially if they converted to Islam or served their masters faithfully. **Religious and Legal Frameworks:** Islamic law (Sharia) provided a legal structure for slavery. It forbade the enslavement of free Muslims and emphasized the rights of slaves to be treated fairly. Slaves could marry, own property, and in some cases, earn or be granted their freedom. However, these protections were not always upheld in practice. Legal texts by scholars like Al-Mawardi and Al-Ghazali outlined the rules regarding ownership, treatment, and manumission of slaves, illustrating how deeply the institution was embedded within Islamic legal thought. **Economic Importance:** Slavery played a crucial role in the medieval Arab economy. With the growth of urban centers and agricultural estates, the need for labor intensified. Slaves were a source of cheap labor and were instrumental in the development of infrastructure, irrigation systems, and production of goods. In addition to their labor value, slaves were also a form of wealth and status for their owners. The slave trade itself became a lucrative enterprise, involving merchants, tribal leaders, and even state officials. **Cultural and Social Impact:** The widespread presence of slaves had a lasting impact on Arab society. Slavery influenced social hierarchies, family structures, and cultural norms. While some slaves assimilated into society, others remained marginalized. The mixing of populations also had demographic effects, especially in regions like the Arabian Peninsula, North Africa, and the Levant.

Conclusion:

The origin of the slave trade among the Arabs in the Middle Ages reveals a deeply rooted institution shaped by historical, religious, economic, and geopolitical factors. Emerging during the early expansion of Islam, the Arab slave trade became a widespread and organized system that connected vast regions across Africa, Asia, and the Middle East. Slavery was not simply a byproduct of war or conquest; it became an integral part of the social and economic fabric of medieval Islamic societies. While Islamic teachings introduced regulations aimed at humane treatment and the encouragement of manumission, these principles coexisted with the acceptance of slavery as a legal and economic institution. The roles that slaves played—ranging from domestic workers and concubines to soldiers and administrators—demonstrate the

complexity of the system and the various ways in which slaves contributed to Islamic civilization. The Arab slave trade also left long-lasting impacts on the demographic, cultural, and social development of the Islamic world. It facilitated the movement and mixing of peoples, languages, and traditions, while at the same time reinforcing rigid social hierarchies and inequalities. The legacy of this trade, though often overshadowed by the later transatlantic slave trade, remains an essential chapter in understanding the dynamics of medieval global history. In conclusion, the study of the Arab slave trade in the Middle Ages provides crucial insights into how slavery functioned within a religious and imperial context, and how it shaped the course of societies for centuries. By examining this complex and often painful history, we are better equipped to understand the foundations of modern cultural and social relations across the Islamic world and beyond.

References:

1. Абдуллаев, P. (2005). O'rta asrlarda Arab dunyosida qullik savdosi tarixi. Toshkent: Fan.
2. Karimov, T. (2010). Arab slave trade in medieval times. Journal of Middle Eastern History, 12(3), 45-60.
3. Мирзоев, III. (2012). Islom va qullik: tarixiy nuqtai nazar. Samarqand: Samarqand Universiteti Nashriyoti.
4. Lewis, B. (1990). Race and Slavery in the Middle East. Oxford University Press.
5. Usmonov, M. (2015). Arab xalqlarining qullik savdosi tarixi. Toshkent: O'zMU Nashriyoti.
6. Cleveland, W. L., & Bunton, M. (2016). A History of the Modern Middle East. Westview Press.
7. Sobirov, D. (2008). Arab xalqi va qullik savdosi: tarix va madaniyat. Toshkent: Akademyashr.
8. Lovejoy, P. E. (2000). Transformations in Slavery: A History of Slavery in Africa. Cambridge University Press.

ESHITUV ORGANLARI FIZIOLOGIYASI

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Annotatsiya. Inson qulog'i eshitish va muvozanat organidir. U tovushni transduktsiya mexanizmi orqali aniqlaydi va tahlil qiladi, bu tovush to'lqinlarini elektrokimyoviy impulslarga aylantirish jarayonidir. Agar anatomiya anormal bo'lsa, tinglash etarli darajada amalga oshirilmaydi. Ushbu maqolada tovush to'lqinlarini quloqqa o'tkazish mexanizmlari va uning o'rta quloq va ichki quloqdan miyaga integratsiyalashuvi va uzatilishi muhokama qilinadi.

Kalit so'zlar: aurikul, ovoz to'lqinlari, sandoncha, bolg'acha, uzangi, chastota, perilimfa va endolimfa suyuqligi.

Kirish

Inson qulog'i boshning lateral tomonida yotadigan ibtidoiy qobiqqa o'xshash tuzilishdir. Quloq xaftaga tushadigan tuzilishdir. Fiziologik tadqiqotlar uchun u uchta asosiy quyi tuzilishga bo'linadi: tashqi quloq, o'rta quloq va ichki quloq.

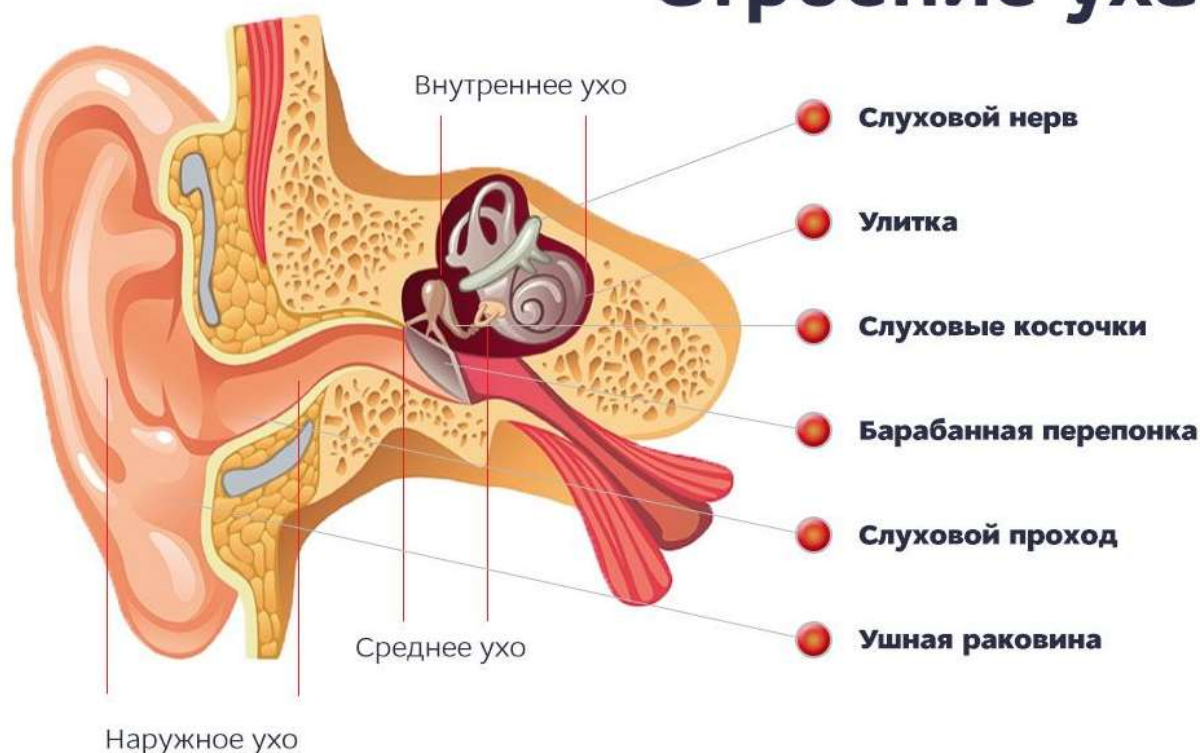
- **Tashqi quloq**, aurikul deb ham ataladi, xaftaga kiradi va u tashqi dunyo bilan eng ko'p aloqa qiladigan qismidir. Uning turli xil anatomik chegaralari bor, masalan, spiral, antiheliks, tragus va antitragus va bu demarkatsiyalar akustik go'sht deb ataladigan tushkunlikka olib keladi. Ushbu go'sht naycha shakliga ega va timpanik membranada ichkariga cho'ziladi. Bu kanalning uchdan ikki qismi xaftaga, oxirgi uchdan bir qismi suyak, tashqi uchdan ikki qismi esa kanalni hasharotlar va boshqa narsalardan toza saqlash uchun serum hosil qiluvchi yog 'bezlari bilan qoplangan. Tashqi quloqning oxirida o'rta quloq yotadi, u tashqi tomondan timpanik membrana va ichki tomondan oval oyna bilan cheklangan.

- **O'rta quloq** havo bilan to'ldirilgan bo'shliqdir. U mos ravishda yuqori va pastki kameraga, epitimpanik kameraga (chordoq) va timpanik kameraga (atrium) bo'linadi. Bu xonaga o'xshaydi, chunki u to'rtburchaklar shakliga ega. U bo'yin venasi, uyqu arteriyasi, ichki quloq, evstaxiya naychasi va mastoid bilan anatomik aloqaga ega. Ushbu xonaning mazmuni ossikullardan iborat; yassi suyak, inkus va stapes. Ushbu suyak tuzilmalari ligamentlar bilan osilgan bo'lib, ular tebranishlarni ichki quloqqa

o'tkazish uchun mos keladi. O'rta quloqning bu qismiga tushadigan tebranishlar stapes ta'sirida ichki quloqqa o'tadi.

- **Ichki quloq** bir-birining ichida joylashgan suyak labirint va membranali labirintdan tashkil topgan bo'shliqdir. Suyak labirintida muvozanatni sezish uchun mas'ul bo'lgan yarim doira kanallari bilan to'ldirilgan bo'shliq bor; bu bo'shliq vestibulyal deb ataladi va VIII kranial asabning vestibulyar qismi hosil bo'lgan joydir. Koklea - eshitish organi. U o'z nomini yunon tilidan olgan bo'lib, salyangoz qobig'i degan ma'noni anglatadi va VIII kranial asabning koklear qismi hosil bo'lgan qismi bo'lib, shu

Строение уха



bilan vestibulokoklear asabni tashkil qiladi.

Asosiy qism

Овоз to'liqlarining uzatilishi va uning fizikasi

Eshitish tovush tebranishlarining tashqi muhitdan harakat potentsialiga aylanishi jarayonidir. Vibratsiyali ob'ektlar gitara torlari kabi tovushlarni chiqaradi va bu tebranish bosim impulsleri ovoz to'liqlari deb nomlanuvchi havo molekulalariga aylanadi. Shunday qilib, quloq tovushning balandligi va balandligi kabi turli xil xususiyatlarini farqlash uchun jihozlangan; bu mos ravishda tovush to'liqlarining

chastotasi va tovush intensivligini idrok etishni bildiradi. Chastotani o'lchash gertsda (Hz, sekundiga aylanishlar). Inson qulog'i 1000 dan 4000 gertsgacha bo'lgan chastotalarni aniqlay oladi, ammo yosh quloq 20 dan 20000 gertsgacha bo'lgan chastotalarni eshita oladi. Ovozning intensivligi desibellarda (dB) o'lchanadi; desibel shkalasida inson eshitish diapazoni 0 dan 130 dB gacha (tovush og'riqli bo'ladi). Bu barcha jismoniy xususiyatlar markaziy asab tizimiga kirish uchun o'zgarishlarga duch kelishi kerak. Birinchi transformatsiya havo tebranishlarini timpanik membrana tebranishlariga aylantirishdan iborat. Keyin bu tebranishlar o'rta quloq va suyakchalarga uzatiladi. Keyin bu tebranishlar ichki quloq va kokleada suyuq tebranishlarga aylanadi va ular bazilyar membrana va Korti organi deb ataladigan hududni rag'batlantiradi. Nihoyat, bu tebranishlar nerv impulslariga aylanadi, ular asab tizimiga boradi.

Eshituv tizimi organlari rivojlanish

Quloqning ultrastrukturasi shox yo'ylaridan kelib chiqadi. Birinchi kamar Merkel xaftaga aylanib, malleus boshi va bo'yni va inkus tanasini hosil qiladi. Ikkinchi kamar Reichert xaftaga aylanadi, u malleusning manubriumini va stapesning ko'p qismini tashkil qiladi. Birinchi shox yorig'i tashqi eshitish yo'lini va timpanik membrananing tashqi qatlamini hosil qiladi.

Eshituv tizimida ishtirok etgan organ tizimlari

Insonning tovushlarni aniqlash tizimi tashqi eshitish yo'li va uning mikrotuzilmasi (pinna, tragus, antitragus, xususan), timpanik membrana, suyakchalar, koxlear tuzilma va uning tarkibi (endolimfa, korti organi) va nerv tolalaridan iborat bo'ladi.

Mexanizmi

Tashqi quloq tovush to'lqinlarini timpanik membranaga yo'naltirish funksiyasini bajaradi. Aurikula tovush to'lqinlarining ko'p qismini to'playdi va uni huni shaklidagi kanalga yo'naltiradi. Inson quloqchasi deyarli harakatsiz va unchalik katta emasligi sababli, u boshqa sutemizuvchilarning quloqlariga qaraganda tovushni yig'ishda unchalik samarali emas. Ushbu rezonans mexanizmi faqat qisqa to'lqin uzunlikdagi tovush to'lqinlari (2000 dan 7000 Gts gacha bo'lgan chastotalar) bilan ishlaydi, shu bilan inson qulog'ining ba'zi chastotalarga sezgirligini aniqlaydi, bu bizga unlilarni undoshlardan ajratishga yordam beradi. Keyin tebranishlar timpanik membranaga etib boradi va u erda ham tebranish paydo bo'ladi. Bu tebranish energiyani ichki quloqdagi spiral tuzilma bo'lgan kokleaga o'tkazadigan ossikulyar tuzilmalar zanjirini rag'batlantiradi. Kokleada energiya endi tebranish shaklida emas, balki gidravlik energiya shaklida bo'ladi.

Klinik ahamiyati

Maxsus sindromlar va buzilishlar quloq tuzilishiga ta'sir qilishi va uning funksiyasini susaytirishi mumkin:

Strukturaviy anomaliyalar: Preaurikulyar chuqurlar va teglar, stenoz va atretik quloq kanallari kabi strukturaviy anomaliyalar eshitish qobiliyatini yo'qotish bilan bog'liq bo'lishi mumkin.

Mandibulofasiyal disostoz: Bu otosomal dominant holat bo'lib, Treacher Kollinz sindromi deb ham ataladi, u pastga qiya palpebral yoriqlar, preaurikulyar ko'r oqma bilan quloqning malformatsiyasi, tashqi eshitish kanalining stenoz va/yoki atreziyasi va suyak anomaliyalari bilan tavsiflanadi.

Oculo-auriculo-vertebral spektr: Bu spektr dastlabki ikkita shox yo'ylarining g'ayritabiiy rivojlanishi bilan tavsiflanadi, natijada anotiya, preaurikulyar teglar va atretik quloq kanallari paydo bo'ladi.

Kraniofasiyal disostoz: Bu Kruzon sindromi deb ham ataladigan kam uchraydigan sindrom bo'lib, bosh suyagi suyagining erta qo'shilib ketishiga olib keladi, bu quloqning atretik bo'lishiga yoki stenozga va quloqlarning pastligiga olib keladi.

Foydalanilgan adabiyotlar

1. White HJ, Helwany M, Biknevicius AR, Peterson DC. StatPearls [Internet]. StatPearls nashriyoti; Treasure Island (FL): 14-yanvar, 2023. Anatomiya, bosh va bo'yin, Korti quloq organi.
2. Alvord LS, Fermer BL. Inson tashqi quloq'ining anatomiyasi va yo'nalishi. J Am Acad Audiol. 1997 yil dekabr; 8 (6): 383-90.
3. Fuchs JC, Tucker AS. Quloqning rivojlanishi va integratsiyasi. Curr Top Dev Biol. 2015; 115 :213-32.
4. Maier W, Ruf I. Sutmizuvchilarning o'rta quloq'ining evolyutsiyasi: tarixiy sharh. J Anat. 2016 yil fevral; 228 (2): 270-83.
5. Shibazaki-Yorozuya R, Nagata S. Anotiya va Microtia bilan og'rigan bemorlarda imtiyozli bog'liq malformatsiya. J Craniofac Surg. 2019 yil yanvar; 30 (1): 66-70.
6. Karmody CS, Annino DJ. Tashqi quloqning embriologiyasi va anomaliyalari. Yuz plastik jarrohlik. 1995 yil oktyabr; 11 (4): 251-6.
7. Renju R, Varma BR, Kumar SJ, Kumaran P. Mandibulofasiyal disostoz (Treacher Kollinz sindromi): Ish hisoboti va adabiyotlarni ko'rib chiqish. Contemp Clin Dent. 2014 yil oktyabr; 5 (4): 532-4.

TARJIMA JARAYONIDA TERMINOLOGIYANING TO'G'RI TANLANISHI VA UNING MUHIMLIGI

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Anotatsiya: Ushbu maqolada tarjima jarayonida terminologiyaning to'g'ri tanlanishi va uning ahamiyati tahlil qilinadi. Terminlarning aniq va izchil qo'llanilishi tarjima sifatini oshirishda muhim omil ekanligi ko'rsatib o'tiladi. Maqolada terminologiya tanlash bosqichlari, duch kelinadigan qiyinchiliklar va ularni yengish yo'llari muhokama qilinadi.

Kalit so'zlar: tarjima, terminologiya, termin tanlash, tarjima sifati, tilshunoslik

Abstract: This article analyzes the importance of proper terminology selection in the translation process. It highlights that accurate and consistent use of terms is a crucial factor in improving translation quality. The article discusses the stages of terminology selection, common challenges, and ways to overcome them.

Keywords: translation, terminology, term selection, translation quality, linguistics

Аннотация: В данной статье анализируется значение правильного выбора терминологии в процессе перевода. Подчеркивается, что точное и последовательное использование терминов является важным фактором повышения качества перевода. Рассматриваются этапы выбора терминологии, возникающие трудности и способы их преодоления.

Ключевые слова: перевод, терминология, выбор терминов, качество перевода, лингвистика

Tarjima — turli tillar o'rtasidagi muloqotni ta'minlovchi muhim vositadir. Tarjima jarayonida so'zlar, iboralar va butun matn mazmunini bir tilning yozma yoki og'zaki shaklidan boshqasiga aniq va to'liq yetkazish talab etiladi. Ayniqsa, ilmiy, texnik, huquqiy va boshqa maxsus sohalarda tarjima qilishda terminologiyaning o'zni beqiyosdir.

Terminologiya — bu ma'lum bir fan, kasb yoki soha doirasida ishlatiladigan atamalar majmui bo'lib, ular mazmunan aniq va barqaror bo'lishi kerak. Har bir sohaning o'ziga xos terminlari bor va ular ushbu sohaning ilmiy yoki amaliy ma'lumotlarini qisqacha,

aniq va bir xilda ifodalashga xizmat qiladi. Shu sababli tarjimon uchun terminologiyani to'g'ri tanlash va qo'llash tarjima sifatini belgilovchi eng muhim omillardan biridir.

Terminlarning noto'g'ri talqin qilinishi yoki tarjimada noto'g'ri ishlatilishi matn mazmunining buzilishiga, xato tushunilishiga va hatto noto'g'ri qarorlar qabul qilinishiga olib kelishi mumkin. Aynan shu nuqtai nazardan, tarjima jarayonida terminologiyaning o'rnini va uning to'g'ri tanlanishi masalalari dolzarbdir. Ushbu maqolada terminologiyaning tarjima jarayonidagi ahamiyati, termin tanlash bosqichlari, yuzaga keladigan qiyinchiliklar va ularni yengish usullari batafsil tahlil qilinadi.

Tarjima sohasida terminologiya juda muhim o'rin tutadi, chunki u nafaqat ma'lumot almashinuvi vositasi, balki tarjima sifatining asosiy ko'rsatkichidir. Har bir soha mutaxassislari o'zaro tushunishni ta'minlash uchun yagona, aniq va barqaror terminlarni qo'llashga intiladi. Tarjimada esa bu talab yanada kuchayadi, chunki tarjimon asl matn mazmunini boshqa tilga uzatishda aniq va to'g'ri atamalarni tanlashi lozim.

Masalan, tibbiyot sohasida biror atama noto'g'ri tarjima qilinsa, bemorning sog'lig'iga salbiy ta'sir ko'rsatishi mumkin. Shu bois tarjimon soha terminlarini mukammal bilishi, zamonaviy terminologik yangiliklardan xabardor bo'lishi va soha standartlariga qat'iy rioya qilishi zarur.

Terminologiyaning to'g'ri ishlatilishi matnning tushunarli, aniq va professional ko'rinishda bo'lishini ta'minlaydi, bu esa tarjimaning ilmiy va amaliy ahamiyatini oshiradi. Shu bilan birga, to'g'ri tanlangan terminlar yordamida soha mutaxassislari va keng auditoriya o'rtasida yagona til va tushuncha yuzaga keladi, bu esa muloqotni soddalashtiradi va samaradorligini oshiradi.

Shunday qilib, terminologiya tarjimaning sifatini belgilovchi asosiy elementlardan biri bo'lib, tarjimonning kasbiy malakasi va tajribasini aks ettiradi. Tarjimon uchun terminologiyani chuqur o'rganish, kontekstni to'g'ri anglash va izchil termin tanlash doimiy e'tibor talab etadi, chunki bu jarayon tarjimaning muvaffaqiyati uchun hal qiluvchi omildir.

Terminologiyani tanlash jarayoni tarjima sifatini belgilovchi eng muhim bosqichlardan biridir. Bu jarayon murakkab va ko'p qirralidir, chunki tarjimon har bir atamaning mazmunan to'g'ri va kontekstga mos kelishini ta'minlashi lozim. Avvalo, tarjimon asl matnda ishlatilgan atamalarni aniqlaydi va ularning ma'nolarini chuqur o'rganadi. So'ngra, tarjima qilinayotgan til uchun eng to'g'ri va aniq ekvivalentni topishga harakat qiladi.

Termin tanlashda manbalarni puxta o'rganish juda muhim ahamiyatga ega. Tarjimon ilmiy lug'atlar, soha normativ hujjatlari, mutaxassislarning yozma va og'zaki nutqlari, shuningdek, terminologik bazalardan foydalanadi. Shuningdek, tarjima qilinayotgan matnning maqsadi, auditoriyasi va konteksti ham atama tanlashda hisobga olinadi. Masalan, ilmiy maqola uchun rasmiy, aniq va standart terminlar tanlansa, ommaviy axborot vositalarida biroz soddalashtirilgan va tushunarliroq atamalar ishlatilishi mumkin.

Terminologiyani tanlash jarayoni davomida tarjimon ko'pincha bir nechta variantlar orasidan eng munosibini tanlaydi. Bu bosqichda atamaning aniqligi, sohada keng qo'llanilishi, o'quvchi uchun tushunarli bo'lishi kabi omillar tahlil qilinadi. Shuningdek, ba'zan yangi terminlarni yaratish yoki mavjud atamalarni moslashtirish talab etiladi, ayniqsa texnologik va ilmiy yangiliklar yuzaga kelganda.

Xulosa qilib aytganda, terminologiyani tanlash jarayoni nafaqat tarjimonning til va soha bilimiga, balki uning izlanish va tahlil qobiliyatiga ham bog'liqdir. Bu jarayon tarjimaning mazmuniy aniq va sifatli bo'lishini ta'minlashda hal qiluvchi ahamiyatga ega.

Tarjima jarayonida terminologiya bilan bog'liq ko'plab qiyinchiliklar uchraydi. Ulardan eng ko'zga ko'ringani — terminlarning boshqa tilda to'liq ekvivalenti yo'qligi yoki mavjud ekvivalentlarning noto'g'ri tanlanishi hisoblanadi. Ba'zida yangi paydo bo'lgan atamalarni tarjima qilishda qiyinchiliklar yuzaga keladi, ayniqsa texnologiya va ilm-fan sohalarida. Bundan tashqari, bir so'zning bir nechta ma'nosi bo'lishi yoki bir ma'noni ifodalovchi bir nechta sinonimlar mavjudligi tarjimon uchun qiyinchilik tug'diradi. Madaniy tafovutlar ham terminologiya tanlashda muhim omil hisoblanadi, chunki ba'zi atamalar faqat ma'lum madaniyat yoki kontekstda to'g'ri tushuniladi va ularni boshqa tilga to'liq moslashtirish qiyin bo'ladi.

Noto'g'ri termin tanlash natijasida tarjimada ko'plab xatolar yuzaga keladi, bu esa matn mazmunining buzilishiga, noaniqlik va tushunmovchiliklarga olib keladi. Quyida ayrim sohadan olingan noto'g'ri termin ishlatilishi bo'yicha misollar keltiriladi:

Masalan, tibbiyot sohasida "Hypertension" so'zi ko'pincha "gipertonik holat" deb noto'g'ri tarjima qilinadi. Aslida, tibbiy atama sifatida "yuqori qon bosimi" yoki "gipertoniya" ishlatilishi lozim. Bu to'g'ri termin tanlash matnning aniqligi va tushunarli bo'lishini ta'minlaydi.

Texnik matnlarda esa "Driver" so'zi "haydovchi" deb so'zma-so'z tarjima qilinsa, xato yuzaga keladi. To'g'ri ekvivalent "dasturiy drayver" yoki "boshqaruvchi dastur" bo'lib, bu atama kompyuter texnologiyasi sohasida aniq tushuniladi.

Huquqiy matnlarda esa "Legal entity" atamasi ba'zan "yuridik odam" deb noto'g'ri tarjima qilinadi, ammo to'g'ri variant "yuridik shaxs" hisoblanadi. Bu kabi xatolar huquqiy hujjatlarning noto'g'ri talqin qilinishiga sabab bo'lishi mumkin. Shunday qilib, terminologiyani noto'g'ri tanlash tarjimaning sifati va mazmuniga jiddiy salbiy ta'sir ko'rsatadi. Tarjimon uchun terminlarni to'g'ri va kontekstga mos ravishda tanlash, ishonchli manbalarga tayanish juda muhimdir.

To'g'ri terminologiyani tanlash tarjima jarayonining sifatiga bevosita ta'sir qiluvchi muhim omil hisoblanadi. Eng avvalo, bu matnning aniqligi va tushunarligini ta'minlaydi. Har bir termin o'z o'rnida, mazmunan aniq va mos keladigan kontekstda ishlatilganda, o'quvchi matnni noto'g'ri tushunishdan qochadi. Bu esa tarjimaning professional ko'rinishini oshiradi va uning ishonchliligini ta'kidlaydi.

Bundan tashqari, to'g'ri tanlangan terminlar tarjimaning izchilligini va yaxlitligini saqlab qoladi. Tarjimon matn davomida bir xil atamalarni muntazam va bir xilda qo'llasa, bu o'quvchining matnni yaxlit tarzda anglashiga yordam beradi va chalg'ituvchi elementlarni yo'q qiladi. Ayniqsa, ilmiy va texnik matnlarda bunday yondashuvning ahamiyati katta, chunki u soha mutaxassislari o'rtasida yagona til va tushuncha shakllanishiga xizmat qiladi.

To'g'ri terminologiya tanlash tarjimaning amaliy qiymatini oshiradi, matnning ishonchliligini kuchaytiradi va noto'g'ri talqinlar, xatolar va noaniqliklarning oldini oladi. Bu esa o'z navbatida tarjimaning samaradorligini va qabul qilinish darajasini oshiradi. Shu sababli tarjimon doimiy ravishda terminologiya bo'yicha izlanishlar olib borishi, soha yangiliklaridan xabardor bo'lishi va manbalarni puxta tahlil qilishi kerak. Xulosa qilib aytganda, to'g'ri terminologiya tanlash — bu tarjimaning sifatini kafolatlovchi, o'quvchiga aniq va to'g'ri axborot yetkazilishiga xizmat qiluvchi muhim jarayondir. Tarjimon uchun bu vazifa katta mas'uliyat talab qiladi va u muntazam bilim va tajriba orttirishni talab etadi.

XULOSA

Tarjima jarayonida terminologiyaning o'рни beqiyosdir. To'g'ri terminologiya tanlash tarjimaning mazmunan aniq, tushunarli va sifatli bo'lishini ta'minlaydi. Tarjimon sohaning maxsus atamalarini chuqur o'rganishi, kontekstga mos keladigan va ishonchli ekvivalentlarni tanlashi zarur. Noto'g'ri termin tanlash esa matn mazmunining buzilishiga, noaniqlik va tushunmovchiliklarga olib kelishi mumkin. Terminologiyani tanlash jarayoni murakkab bo'lib, bu jarayonda tarjimon izlanishlar olib borishi, turli manbalarni tahlil qilishi va soha standartlariga amal qilishi lozim. Shu orqali tarjima matni professional ko'rinishga ega bo'ladi va o'quvchida ishonch uyg'otadi.

Shu bois, tarjimada terminologiyaga alohida e'tibor qaratish, uni puxta o'rganish va to'g'ri qo'llash tarjima sifatini oshirishning asosiy sharti hisoblanadi. Tarjimonning terminologiya bilan ishlashdagi malakasi va tajribasi tarjimaning muvaffaqiyati uchun hal qiluvchi omil bo'ladi.

FOYDALANILGAN ADABIYOTLAR

1. Komissarov V.N. Teoriya perevoda (lingvisticheskie aspekty). Moskva: «Vysshaya shkola», 1990.
2. Newmark, P. A Textbook of Translation. Prentice Hall, 1988.
3. Baker, M. In Other Words: A Coursebook on Translation. Routledge, 2018.
4. Abdulhayev A. Tarjimaning nazariy asoslari. Toshkent: O'zbekiston Milliy ensiklopediyasi, 2016.
5. Chesterman, A. Memes of Translation: The Spread of Ideas in Translation Theory. John Benjamins Publishing, 1997.
6. Alisherov Sh. Tarjimashunoslik asoslari. Toshkent: Fan, 2021.
7. Sager, J.C. A Practical Course in Terminology Processing. John Benjamins Publishing, 1990.
8. Translation Studies Portal. www.translationstudiesportal.com
9. Terminology Coordination. www.termcoord.eu
10. IATE — Inter-Active Terminology for Europe. <https://iate.europa.eu>

SINXRON TARJIMA FANINING NAZARIY ASOSLARI VA ZAMONAVIY AHAMIYATI

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Annotatsiya: Ushbu maqolada “Sinxron tarjima” fanining mazmuni, o‘rganish obyekti, asosiy vazifalari hamda zamonaviy texnologiyalar bilan uyg‘unlashgan holdagi o‘qitish jarayoni yoritiladi. Shuningdek, sinxron tarjimonlar uchun zarur bo‘lgan kompetensiyalar, amaliy mashg‘ulotlar va bu fan bo‘yicha kadrlar tayyorlashning O‘zbekiston sharoitidagi dolzarbligi tahlil etiladi.

Kalit so‘zlar: sinxron tarjima, og‘zaki tarjima, real vaqt tarjimasi, kabinali tarjima, kognitiv kompetensiya, madaniyatlararo kommunikatsiya.

Annotation: This article discusses the theoretical foundations of simultaneous interpreting, the essential skills required for interpreters, the content of practical training, and the integration of modern technologies in the field.

Keywords: simultaneous interpreting, oral translation, real-time interpretation, booth interpreting, cognitive competence, intercultural communication.

Аннотация: В статье рассматриваются теоретические основы синхронного перевода, необходимые навыки для переводчиков, содержание практических занятий и использование современных технологий в данной области.

Ключевые слова: синхронный перевод, устный перевод, перевод в реальном времени, кабина переводчика, когнитивная компетенция, межкультурная коммуникация.

Hozirgi globallashuv davrida tillararo muloqotning samaradorligini ta’minlash insoniyat taraqqiyoti uchun muhim omillardan biriga aylanib bormoqda. Xalqaro siyosiy, iqtisodiy, madaniy va ilmiy hamkorlikning kengayib borishi turli tillarda so‘zlashuvchi insonlar o‘rtasida uzviy aloqa o‘rnatilishini talab qilmoqda. Bu borada tarjima faoliyatining, ayniqsa, sinxron tarjima yo‘nalishining roli beqiyosdir. Chunki aynan ushbu tarjima turi orqali konferensiyalar, sammitlar, muzokaralar, xalqaro forumlar va ommaviy axborot vositalarida vaqtni tejab, aniq va tez tarjima amalga oshiriladi.

Sinxron tarjima — bu notiqning gapirishi bilan deyarli bir vaqtda boshqa tilga ogʻzaki tarjima qilish jarayonidir. Bu jarayon tarjimondan yuqori darajadagi eʼtibor, tezkor fikrlash, mukammal til bilimlari va kuchli psixologik barqarorlikni talab qiladi. Tarjimashunoslikning bu yoʻnalishi nafaqat tilshunoslik bilimlariga, balki psixolingvistika, madaniyatlararo kommunikatsiya, axborotni tez tahlil qilish va texnik vositalardan foydalanish qobiliyatiga asoslanadi.

Soʻnggi yillarda sinxron tarjima fani dunyo miqyosida mustaqil ilmiy soha sifatida shakllanib bordi. Yetakchi oliy taʼlim muassasalarida bu fandan alohida kurslar tashkil etilmoqda, zamonaviy tarjima laboratoriyalari jihozlanmoqda. Shu bilan birga, sunʼiy intellekt va axborot texnologiyalarining rivojlanishi natijasida sinxron tarjimaning texnik imkoniyatlari ham kengaymoqda. Masalan, Zoom, Microsoft Teams, Webex kabi platformalarda onlayn sinxron tarjima funksiyalari ommalashmoqda.

Oʻzbekiston Respublikasida ham xorijiy tillarni oʻrganish va tarjimonlik faoliyatini rivojlantirish davlat siyosatining ustuvor yoʻnalishlaridan biriga aylangan. Prezident qarorlarida chet tillarini oʻqitish tizimini takomillashtirish, tarjimon kadrlar tayyorlash, tarjima texnologiyalarini joriy etish masalalari ustuvor ahamiyat kasb etmoqda. Shu bois, “Sinxron tarjima” fani oliy taʼlim muassasalarida til mutaxassislarini tayyorlashda muhim oʻrin egallaydi.

Ushbu maqolada aynan sinxron tarjima fanining nazariy asoslari, tarjimon uchun zarur boʻlgan koʻnikmalar, amaliy mashgʻulotlar mazmuni, shuningdek, zamonaviy texnologiyalar bilan uygʻunlashuvi va Oʻzbekiston sharoitida bu yoʻnalishning istiqbollari keng yoritiladi.

Sinxron tarjima tarjimashunoslikda eng murakkab va shu bilan birga eng yuqori darajadagi koʻnikmalarni talab qiluvchi yoʻnalish hisoblanadi. U XX asrning oʻrtalarida, xususan 1945-yilgi Nyurnberg tribunalida ilk bor keng qoʻllanilgan. Ushbu tajriba sinxron tarjimaning samaradorligi va dolzarbligini isbotladi va keyinchalik BMT, YUNESKO kabi xalqaro tashkilotlarda rasmiy tarjima usuliga aylandi.

Nazariy jihatdan sinxron tarjima ogʻzaki tarjimaning ichki yoʻnalishi sifatida koʻriladi. Uning asosiy komponentlari quyidagilardan iborat:

Parallellik – tarjimon notiq bilan bir vaqtning oʻzida tarjima qiladi.

Kognitiv jarayonlar – eshitish, anglash, xotira, analiz va reproduksiya bir vaqtda amalga oshadi.

Muloqot pragmatikasi – tarjimon faqat matnni emas, balki kontekst, ohang, intonatsiyani ham hisobga oladi.

Taniqli tarjimashunoslar — Daniel Gile, Barbara Moser-Mercer, Ingrid Kurz kabilar sinxron tarjimaning nazariy asoslarini ishlab chiqib, “Effort Models” kabi nazariyalar orqali bu murakkab jarayonni ilmiy asoslashgan.

Sinxron tarjima jarayoni tarjimondan yuqori darajadagi bilim va ko‘nikmalarni talab qiladi. Tarjimon nafaqat ikki yoki undan ortiq tillarni mukammal bilishi, balki u tillarda erkin fikrlay olishi, tezkor ravishda nutqni anglab, uni boshqa tilda izchil, mazmunan to‘g‘ri va mantiqan ravon ifodalashga qodir bo‘lishi lozim. Sinxron tarjima davomida tarjimon bir vaqtning o‘zida tinglash, tushunish, tarjima qilish va aytishni amalga oshiradi. Bu esa kuchli e‘tibor, qisqa muddatli xotira va yuqori kognitiv faollikni talab qiladi. Ayniqsa, og‘zaki nutqdagi pauzalar, urg‘u, kontekstual ma‘no, kinoya va stilistik vositalarni anglash hamda ularni to‘g‘ri tarjima qilish sinxron tarjimonning asosiy kompetensiyalaridan sanaladi. Shuningdek, tarjimon nutqdagi texnik yoki ixtisoslashgan terminlarni, madaniy konnotatsiyalarni aniqlay olishi va ularning ekvivalentlarini qisqa vaqt ichida topib ishlatishi kerak.

Mazkur ko‘nikmalarni shakllantirishda amaliy mashg‘ulotlarning o‘rni katta. Talabalar sinxron tarjima bo‘yicha maxsus kabinalarda turli sohalarga oid nutq matnlarini eshitib, real vaqt ichida tarjima qilish malakasini rivojlantiradi. O‘quv jarayonida avdiomateriallar asosida mashqlar bajariladi, bunda talaba notiq nutqini diqqat bilan tinglab, har bir gapning mantiqiy tuzilmasini tushunishga va tarjima qilishga odatlanadi. Bu mashg‘ulotlarda o‘z ustozlari bilan birga tarjima tahlili ham olib boriladi, xatoliklar muhokama qilinadi, muqobil variantlar taklif etiladi. Shuningdek, talabalar juftlikda ishlash orqali bir-birining tarjimasini eshitib, o‘zaro fikr almashadilar, tanqidiy tahlil qilishni o‘rganadilar. Bu esa mustaqil tarjima tahlili va o‘z ustida ishlash ko‘nikmasini shakllantirishga xizmat qiladi.

Hozirgi kunda zamonaviy texnologiyalar sinxron tarjima amaliyotida muhim vositaga aylangan. Masalan, Zoom, Microsoft Teams kabi onlayn platformalarda sinxron tarjima funksiyalaridan keng foydalanilmoqda. Bu imkoniyat, ayniqsa pandemiya davrida va undan keyingi masofaviy faoliyat sharoitida tarjimonlik amaliyotini davom ettirishda nihoyatda muhim bo‘ldi. Shuningdek, tarjima kabinalarida foydalaniladigan raqamli pultlar, mikrofonlar, naushniklar, monitorda matn bilan birga ishlash imkoniyati, tarjimon uchun maxsus glossariy (terminlar ro‘yxati) dasturlari — bularning barchasi sinxron tarjima sifatini oshirishga xizmat qilmoqda. Shuningdek, sun‘iy intellekt asosida ishlovchi dasturlar, avtomatik matn transkripsiyasi va nutqni tanib tarjima qiluvchi ilovalar tarjimon faoliyatini qo‘llab-quvvatlashda muhim rol o‘ynamoqda. Biroq bu texnologiyalar professional inson tarjimonni to‘liq almashtira olmaydi, faqat uning ishini yengillashtiradi, xolos.

O'zbekistonda ham tarjimashunoslik va ayniqsa sinxron tarjima sohasi asta-sekinlik bilan rivojlanmoqda. Prezidentimiz tomonidan chet tillarni o'rganish va xorijiy tillarda erkin fikrlaydigan yoshlar safini kengaytirish bo'yicha qabul qilingan qarorlar asosida oliy ta'lim muassasalarida tarjima yo'nalishlari ochildi, zamonaviy jihozlangan tarjima laboratoriyalari tashkil etildi. Shu jumladan, Andijon davlat chet tillari institutida sinxron tarjima fani alohida o'rganilib, talabalar nazariy bilimlar bilan birga amaliy ko'nikmalarni ham egallamoqda. Institutda faoliyat yuritayotgan tajribali ustozlar tomonidan olib borilayotgan amaliy mashg'ulotlar, turli konferensiya va seminarlar tarjimasida qatnashish, talabalarni real tarjima jarayoniga yaqinlashtirish orqali ularning professional tayyorgarligi oshirilmoqda. Sinxron tarjima yo'nalishida har yili bir nechta iqtidorli talabalar xalqaro loyihalarda ishtirok etmoqda, bu esa ularning malakasini yanada oshirishga xizmat qilmoqda.

XULOSA

Sinxron tarjima — bu zamonaviy tarjimashunoslikning eng murakkab va shu bilan birga eng zarur yo'nalishlaridan biridir. U nafaqat til bilimi, balki kuchli psixologik tayyorgarlik, keng madaniy dunyoqarash va zamonaviy texnologiyalar bilan ishlash qobiliyatini talab etadi. Bugungi globallashtirish jarayonida real vaqt tarjimasiga bo'lgan ehtiyoj ortib bormoqda. Shu bois sinxron tarjimonlar zamonaviy jamiyatda ko'prik vazifasini bajarayotgan mutaxassislar hisoblanadi. Ularning faoliyati xalqlar, madaniyatlar va millatlar o'rtasida muloqotni yo'lga qo'yish, hamkorlikni mustahkamlash, ma'lumotlar almashinuvini ta'minlashda muhim rol o'ynaydi.

O'zbekistonda ham ushbu yo'nalishga bo'lgan e'tibor yildan-yilga ortmoqda. Tarjimonlik ta'limi sohasida amalga oshirilayotgan islohotlar, yangi texnik baza, malakali kadrlar va zamonaviy yondashuvlar natijasida sinxron tarjima fanini chuqur o'rganishga keng imkoniyatlar yaratilmoqda. Andijon davlat chet tillari institutida olib borilayotgan amaliy mashg'ulotlar, talabalarni xalqaro maydonga tayyorlash borasidagi ishlar, tarjima sifatini oshirishda zamonaviy texnologiyalardan foydalanish tajribalari — bularning barchasi sohaga bo'lgan yuksak e'tiborning dalilidir.

Kelgusida sinxron tarjima sohasini yanada rivojlantirish, xalqaro tajribalarni o'rganish, tarjima bo'yicha ilmiy-tadqiqot ishlarini kengaytirish va texnologik yondashuvlarni amaliyotga tatbiq etish muhim vazifalardan biri bo'lib qoladi.

FOYDALANILGAN ADABIYOTLAR

1. Gile, D. (2009). Basic Concepts and Models for Interpreter and Translator Training. John Benjamins Publishing.

2. Moser-Mercer, B. (2005). Training for the New Millennium: Pedagogies for Translation and Interpreting. Benjamins.
3. Pöchhacker, F. (2004). Introducing Interpreting Studies. Routledge.
4. Shodmonov, S. va boshq. (2021). Tarjimashunoslik asoslari. Toshkent: O'zbekiston Milliy ensiklopediyasi.
5. Qodirova, Z. (2022). Sinxron tarjima nazariyasi va amaliyoti. Toshkent: Oliy ta'lim nashriyoti.
6. O'zbekiston Respublikasi Prezidentining 2021-yil 19-maydagi "Chet tillarni o'rganishni jadallashtirish chora-tadbirlari to'g'risida"gi PQ-5117-sonli qarori.
7. Andijon davlat chet tillari instituti rasmiy sayti: <http://adu.uz>

IXTISOSLASHTIRILGAN TARJIMADA ZAMONAVIY TEKNOLOGIYALARNING O'RNI

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Anotatsiya: Ushbu maqolada ixtisoslashtirilgan tarjimada zamonaviy texnologiyalarning ahamiyati va qo'llanilishi ko'rib chiqiladi. Texnologiyalar tarjima jarayonini tezlashtirish, sifatini oshirish va murakkab soha terminologiyasini aniq ifodalash imkonini beradi. Shuningdek, texnologiyalarning ba'zi kamchiliklari va ularni yengish yo'llari ham tahlil qilinadi.

Kalit so'zlar: ixtisoslashtirilgan tarjima, zamonaviy texnologiyalar, tarjima jarayoni, terminologiya, sifat.

Abstract: This article discusses the significance and application of modern technologies in specialized translation. Technologies facilitate faster translation processes, improve quality, and enable precise expression of complex field-specific terminology. The article also analyzes some drawbacks of these technologies and ways to overcome them.

Keywords: specialized translation, modern technologies, translation process, terminology, quality.

Аннотация: В данной статье рассматривается значение и применение современных технологий в специализированном переводе. Технологии способствуют ускорению процесса перевода, повышению качества и точному выражению сложной терминологии узких областей. Также анализируются некоторые недостатки этих технологий и пути их преодоления.

Ключевые слова: специализированный перевод, современные технологии, процесс перевода, терминология, качество.

Globalashuv davrida tarjima sohasi keng ko'lamda rivojlanib, turli sohalardagi axborot almashinuvi tezlashmoqda. Ayniqsa, tibbiyot, huquq, muhandislik, moliya kabi ixtisoslashtirilgan sohalarda aniq va ishonchli tarjimaga ehtiyoj ortib bormoqda. Bunday murakkab matnlarni tarjima qilish yuqori malaka, chuqur soha bilimlari hamda terminologik aniqlikni talab etadi. Shu nuqtai nazardan, zamonaviy texnologiyalarning tarjima jarayoniga joriy etilishi tarjimonlar ishini yengillashtirish, sifatni oshirish va xatoliklar sonini kamaytirishda muhim omil bo'lib xizmat qilmoqda.

Kompyuter yordamida tarjima (CAT tools), mashinali tarjima tizimlari (Google Translate, DeepL), sun'iy intellektga asoslangan dasturlar, terminologik ma'lumotlar bazalari va onlayn lug'atlar — bularning barchasi bugungi tarjimon faoliyatining ajralmas qismiga aylangan. Ushbu maqolada zamonaviy texnologiyalarning ixtisoslashtirilgan tarjima jarayonidagi o'rni, ularning afzalliklari, yuzaga keluvchi muammolar va kelajakdagi istiqbollari tahlil qilinadi.

Zamonaviy texnologiyalar tarjima sohasining barcha yo'nalishlariga, xususan ixtisoslashtirilgan tarjimaga sezilarli ta'sir ko'rsatmoqda. An'anaviy tarzda qo'lda tarjima qilish uslubi o'z o'rnini asta-sekin avtomatlashtirilgan va yarim avtomatlashtirilgan vositalarga bo'shatmoqda. Ayniqsa, yuqori aniqlikni, so'zma-so'z to'g'riligini va terminologik izchillikni talab qiladigan huquqiy, tibbiy, texnik, moliyaviy matnlar uchun bu texnologiyalar katta yordam beradi.

Kompyuter yordamida tarjima vositalari (CAT tools)

CAT vositalari (Computer-Assisted Translation tools) – bu tarjimonlar ishini yengillashtirish uchun ishlab chiqilgan dasturiy vositalar bo'lib, ular matnni segmentlarga ajratadi, tarjima xotiralarini yaratadi va terminologik bazalarni qo'llab-quvvatlaydi. SDL Trados Studio, MemoQ, Wordfast, OmegaT kabi dasturlar eng ko'p qo'llaniladigan CAT vositalaridandir. Bu vositalar tarjimonlarga ilgari tarjima qilingan matn segmentlarini avtomatik taklif etadi, bu esa nafaqat vaqtni tejaydi, balki bir xillikni ta'minlaydi.

Terminologik boshqaruv tizimlari

Ixtisoslashtirilgan matnlarda aniq va bir xil terminlardan foydalanish nihoyatda muhim. Shu sababli terminologik boshqaruv tizimlari (TermBase, IATE, MultiTerm) tarjimonlarga terminlarni izchil va aniq qo'llashda yordam beradi. Bu tizimlar tarjimonlarga ma'lum bir sohada ishlatiladigan atamalarni standartlashtirish va noto'g'ri tarjima qilish ehtimolini kamaytirish imkonini beradi.

Mashinali tarjima va sun'iy intellekt

Mashinali tarjima tizimlari, xususan, sun'iy intellekt asosida ishlaydigan DeepL, Google Translate, Microsoft Translator kabi platformalar zamonaviy tarjimon uchun tezkor tahlil vositasi sifatida xizmat qilmoqda. Garchi bu tizimlar hali to'liq mukammal bo'lmasa-da, ular dastlabki tarjimani tez amalga oshirishda yordam beradi, ayniqsa vaqt cheklovlari mavjud bo'lganda foydalidir. Sun'iy intellekt asosidagi tarjima tizimlari foydalanuvchi uslubini, tarjima kontekstini va terminologiyasini o'rganish orqali yanada moslashtirilgan natijalar taqdim etmoqda.

Onlayn resurslar va hamkorlik vositalari

Zamonaviy tarjimonlar turli onlayn lugʻatlar, korpuslar va maʼlumotlar bazalari orqali tez va aniq tarjima imkoniyatiga ega boʻlishmoqda. Linguee, Reverso Context, Glosbe kabi platformalar real kontekstda soʻz va iboralarning qanday qoʻllanilishini koʻrsatib beradi. Bundan tashqari, bulutli platformalar orqali bir nechta tarjimonlar bir vaqtning oʻzida bir hujjat ustida ishlashlari, sharhlar qoldirishlari va oʻzaro muvofiqlikni taʼminlashlari mumkin.

Zamonaviy texnologiyalarning ixtisoslashtirilgan tarjima jarayonidagi oʻrni tobora ortib bormoqda va ular bir qator muhim afzalliklarni taqdim etmoqda. Avvalo, bu texnologiyalar tarjima ishini sezilarli darajada tezlashtiradi. Masalan, CAT vositalari tarjimonlarga ilgari tarjima qilingan segmentlarni eslatib turadi, bu esa ularni qayta ishlashga hojat qoldirmaydi. Bu orqali katta hajmdagi matnlar qisqa vaqt ichida tarjima qilinadi, bu ayniqsa tijorat yoki texnik sohalarda muhim ahamiyat kasb etadi.

Bundan tashqari, terminologik aniqlikni taʼminlash zamonaviy tarjima vositalarining yana bir muhim afzalligi sanaladi. Maxsus sohalarda, xususan tibbiy yoki huquqiy hujjatlarda, har bir terminning aniq va izchil tarjima qilinishi talab etiladi. Terminologik boshqaruv tizimlari bu vazifani yengillashtirib, tarjimonlarga izchil va standart terminlardan foydalanish imkonini beradi.

Shuningdek, xatoliklarni aniqlash va oldini olishda texnologiyalar muhim rol oʻynaydi. Koʻpgina dasturlar grammatik va leksik xatoliklarni avtomatik aniqlab beradi, bu esa tarjima sifatini oshirishga xizmat qiladi. Bulutli xizmatlar va onlayn hamkorlik platformalari esa tarjimonlarga birgalikda ishlash, fayllarni almashish va izohlar qoldirish imkonini yaratadi, bu esa zamonaviy ish muhitining ajralmas qismiga aylangan.

Biroq, texnologiyalar faqat ijobiy jihatlar bilan cheklanib qolmaydi. Ularning ayrim kamchiliklari ham mavjud. Jumladan, mashinali tarjima tizimlari har doim ham kontekstni toʻgʻri tushunmaydi, bu esa notoʻgʻri tarjimalarga olib kelishi mumkin. Ayniqsa, murakkab iboralar va madaniy kontekstni talab qiladigan matnlar uchun bu katta muammo tugʻdiradi. Shu bilan birga, tarjimonlar baʼzida texnologiyalarga haddan tashqari tayanib, matnni chuqur tahlil qilish, tanqidiy yondashish qobiliyatlarini eʼtibordan chetda qoldirishlari mumkin.

Yana bir muammo – bu texnologiyalarni egallash uchun kerak boʻlgan mablagʻ va vaqt. Koʻplab sifatli dasturlar pullik boʻlib, ularni toʻliq oʻzlashtirish uchun malaka va tajriba talab etiladi. Bundan tashqari, onlayn vositalar orqali ishlaganda axborot xavfsizligi va maxfiylik masalalari ham dolzarb boʻlib qolmoqda. Ayniqsa, maxfiy

hujjatlar ustida ishlaganda ma'lumotlarning himoyalaniishi yuqori darajada ta'minlanishi lozim.

Shu boisdan, zamonaviy texnologiyalar ixtisoslashtirilgan tarjima sifatini oshirishda muhim vosita bo'lib xizmat qilsa-da, ulardan oqilona va tanqidiy foydalanish lozim. Tarjimon texnologiyani emas, texnologiya tarjimonga xizmat qilishi kerak.

XULOSA

Xulosa qilib aytganda, ixtisoslashtirilgan tarjima jarayonida zamonaviy texnologiyalarning o'rni beqiyosdir. Ular nafaqat tarjima ishining tezligi va samaradorligini oshiradi, balki murakkab terminologiyani izchil qo'llash, xatoliklarni kamaytirish va tarjima sifatini yaxshilashda katta ahamiyat kasb etadi. Shunga qaramay, texnologiyalarning har doim ham inson tafakkurining o'rnini bosa olmasligi, kontekst va madaniy nuanslarni yetarlicha tushunmasligi sababli, tarjimonning roli hanuz dolzarb va muhimligicha qolmoqda. Tarjimon texnologiyalardan ongli va tanqidiy tarzda foydalanishi, har bir vositaning imkoniyatlarini va cheklovlarini yaxshi anglashi kerak. Kelajakda texnologiyalar rivojlanishda davom etadi, biroq ularni to'g'ri yo'naltirish faqat bilimli va mas'uliyatli tarjimonlarga bog'liq bo'ladi.

FOYDALANILGAN ADABIYOTLAR:

1. Austermühl, F. (2001). Electronic Tools for Translators. Multilingual Matters.
2. Bowker, L. (2002). Computer-Aided Translation Technology: A Practical Introduction. University of Ottawa Press.
3. Somers, H. (ed.). (2003). Machine Translation: Latest Developments. Amsterdam: John Benjamins.
4. Hutchins, J. (2005). Current Commercial Machine Translation Systems and Computer-based Translation Tools: System Types and Their Uses. International Journal of Translation.
5. Schäler, R. (2010). The Future of Translation Technology. Localization World Conference Proceedings.
6. SDL Trados official documentation – <https://www.sdl.com>
7. MemoQ official site – <https://www.memoq.com>
8. IATE (InterActive Terminology for Europe) – <https://iate.europa.eu>

ENHANCING STUDENT ENGAGEMENT THROUGH TASK-BASED LEARNING IN MULTICULTURAL CLASSROOMS

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Annotation. This article explores the effectiveness of Task-Based Learning (TBL) as a pedagogical strategy for enhancing student engagement in multicultural classroom environments. In today's increasingly globalized educational settings, learners often come from diverse cultural and linguistic backgrounds, which can present both challenges and opportunities for educators. The study examines how TBL promotes active participation, collaborative learning, and intercultural communication by focusing on real-world tasks that are meaningful to students. Drawing on recent empirical research, the paper highlights the positive effects of TBL on motivation, learner autonomy, and social interaction among students with varied cultural perspectives. The study also addresses potential difficulties in implementing TBL across cultures, including communication styles, prior learning experiences, and expectations. Practical recommendations for teachers and curriculum designers are provided to help integrate TBL effectively into multicultural contexts, thereby fostering inclusive, student-centered learning environments.

Keywords: Task-Based Learning, student engagement, multicultural classrooms, active learning, learner autonomy, intercultural communication, inclusive pedagogy.

Introduction. In the context of rapidly globalizing educational environments, the role of effective pedagogy that fosters student engagement and inclusivity has become increasingly significant. One promising approach that has gained widespread attention among educators and researchers alike is Task-Based Learning (TBL), particularly in multicultural classrooms where diversity in language, culture, and prior educational experience presents both opportunities and challenges. TBL shifts the focus from traditional, teacher-centered instruction to student-centered, communicative, and interactive learning, placing real-world tasks at the heart of the educational process¹. These tasks are designed to promote active participation, encourage authentic language

¹ Ellis, R. Task-Based Language Learning and Teaching. – Oxford, Oxford University Press, 2003. – p. 1–387.

use, and develop problem-solving and collaboration skills crucial elements in multicultural settings.

In such classrooms, students come from a wide array of cultural backgrounds, each bringing distinct values, communication styles, and educational expectations. These differences can sometimes lead to disengagement or misunderstandings if not appropriately addressed. However, when strategically implemented, TBL provides an inclusive and dynamic learning environment where all students can feel valued and involved. It promotes intercultural competence by requiring learners to interact meaningfully with peers from different cultures, thus enhancing not only their academic skills but also their social and emotional awareness. Moreover, TBL supports learner autonomy, as students take responsibility for completing meaningful tasks, often in collaborative group settings, which mirrors real-life scenarios. This approach aligns with modern educational priorities that emphasize the development of 21st-century skills such as critical thinking, adaptability, and teamwork.

Despite its advantages, implementing TBL in multicultural classrooms is not without challenges. Teachers must be sensitive to cultural nuances in communication and participation styles, as well as to potential disparities in students' prior exposure to learner-centered methodologies². Therefore, professional development and thoughtful curriculum design are essential for maximizing the potential of TBL. This paper aims to examine how Task-Based Learning enhances student engagement in multicultural classrooms by reviewing theoretical perspectives, analyzing empirical studies, and proposing practical strategies for implementation. By doing so, it contributes to the growing body of literature that advocates for adaptive, student-centered teaching practices capable of addressing the complexities of contemporary education. Ultimately, understanding the intersection of TBL and multicultural pedagogy will enable educators to foster more inclusive and effective classroom environments that not only accommodate diversity but also harness its full educational potential³. The core of this study focuses on how Task-Based Learning (TBL) enhances student engagement in multicultural classrooms by fostering interactive, meaningful, and learner-centered instruction.

TBL emphasizes the completion of real-life communicative tasks that require active student participation, thereby promoting intrinsic motivation and deeper cognitive involvement. In multicultural classrooms, where students often differ in cultural norms, communication preferences, and educational expectations, TBL creates a platform for

² Nunan, D. Task-Based Language Teaching. – Cambridge, Cambridge University Press, 2004. – p. 1–279.

³ Willis, J., & Willis, D. Doing Task-Based Teaching. – Oxford, Oxford University Press, 2007. – p. 1–210.

shared goals that transcend linguistic and cultural barriers. Through task collaboration, students are not only exposed to diverse perspectives but are also encouraged to negotiate meaning, co-construct knowledge, and develop mutual respect. This collaborative process enhances learners' sense of inclusion and belonging, which is essential for sustained engagement. TBL also aligns with Vygotsky's sociocultural theory, which highlights the significance of social interaction in cognitive development.

Tasks designed in pairs or groups provide opportunities for peer scaffolding, allowing students to learn from one another regardless of their cultural or linguistic backgrounds⁴. For instance, while working on a problem-solving task or preparing a group presentation, learners practice real-world communication skills, develop teamwork, and build intercultural competence. These aspects are crucial in multicultural environments where effective communication across cultural boundaries is both a challenge and a necessity. Moreover, task-based activities often encourage learners to bring their own cultural knowledge into classroom discussions, which validates their identities and promotes a culturally responsive learning environment. However, successful implementation of TBL in multicultural settings requires careful pedagogical planning. Teachers must ensure that tasks are culturally inclusive, clearly structured, and aligned with learners' proficiency levels. Additionally, instructors need to be aware of potential power dynamics, participation anxiety, or unequal contributions within diverse student groups.

Providing language support, clarifying expectations, and using reflective feedback strategies can mitigate these challenges and ensure balanced participation⁵. Furthermore, integrating pre-task and post-task phases can help guide students through unfamiliar content or communication styles, making TBL more accessible to learners from varied educational traditions. Moreover, the main advantage of TBL in multicultural classrooms lies in its capacity to engage students not just academically but also socially and emotionally. It nurtures an environment where diversity is acknowledged, collaboration is valued, and every learner has an active role in the learning process. By focusing on purposeful interaction, TBL helps bridge cultural differences and fosters inclusive engagement, making it a highly effective pedagogical approach for today's diverse classrooms.

Table. Key aspects of task-based learning in multicultural classrooms.

⁴ Hofstede, G. Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations. – USA, Sage Publications, 2001. – p. 1–596.

⁵ Dörnyei, Z. Motivational Strategies in the Language Classroom. – Cambridge, Cambridge University Press, 2001. – p. 1–155.

<i>Aspect</i>	<i>Benefits</i>	<i>Challenges</i>	<i>Recommendations</i>
<i>Student Engagement</i>	Promotes active, collaborative learning	Unequal participation due to cultural norms	Design group tasks with clear roles and rotate leadership responsibilities
<i>Intercultural Communication</i>	Encourages interaction across cultures, fostering mutual understanding	Miscommunication due to different pragmatics or values	Pre-task cultural sensitization and discussion activities
<i>Learner Autonomy</i>	Students take responsibility for task completion	Learners from teacher-centered backgrounds may feel uncertain	Gradual scaffolding and clear instructions on expectations
<i>Motivation</i>	Real-life tasks increase relevance and purpose	Some tasks may not resonate equally with all cultural groups	Culturally responsive task design that reflects students' backgrounds
<i>Language Development</i>	Enhances authentic language use in context	Lower-proficiency students may struggle with fluency	Pair stronger and weaker students; provide support materials (e.g., vocabulary lists)
<i>Group Dynamics</i>	Builds teamwork and peer learning opportunities	Potential dominance or silence of certain cultural groups	Monitor interactions and encourage equitable participation
<i>Teacher Role</i>	Facilitator of interaction and reflection	Teachers may lack training in intercultural classroom management	Provide professional development in intercultural competence and TBL methodology

Moreover, the main part of this study demonstrates that Task-Based Learning offers a dynamic and inclusive framework for engaging students in multicultural classrooms⁶. By fostering collaboration, intercultural communication, and learner autonomy, TBL not only enhances academic outcomes but also supports the development of social and emotional competencies. While challenges exist such as cultural misunderstandings or unequal participation strategic task design and teacher facilitation can effectively address these issues, making TBL a powerful tool for inclusive and student-centered education.

Conclusion. In conclusion, Task-Based Learning (TBL) presents a highly effective pedagogical approach for enhancing student engagement in multicultural classrooms. By centering instruction around meaningful, real-world tasks, TBL encourages active participation, collaborative learning, and the development of intercultural communication skills. The learner-centered nature of TBL not only promotes academic achievement but also fosters social integration and mutual respect among culturally diverse students. Throughout this study, it has been shown that TBL aligns with contemporary educational priorities such as inclusivity, critical thinking, and 21st century skill development. However, the successful implementation of TBL in multicultural contexts depends largely on teachers' awareness of cultural dynamics, their ability to scaffold tasks appropriately, and their capacity to create an emotionally safe learning environment for all learners.

Challenges such as differing communication styles, unequal participation, and unfamiliarity with autonomous learning can be addressed through thoughtful planning, culturally responsive pedagogy, and ongoing professional development. Ultimately, by embracing diversity as an asset and promoting interaction through purposeful tasks, TBL empowers students from all backgrounds to participate meaningfully in the learning process, making it a valuable model for modern, globalized education.

REFERENCES:

1. Carless, D. Implementing Task-Based Learning with Young Learners. – *ELT Journal*, 56(4), 2002. – p. 389–396.
2. Dörnyei, Z. *Motivational Strategies in the Language Classroom*. – Cambridge, Cambridge University Press, 2001. – p. 1–155.
3. Ellis, R. *Task-Based Language Learning and Teaching*. – Oxford, Oxford University Press, 2003. – p. 1–387.

⁶ Carless, D. Implementing Task-Based Learning with Young Learners. – *ELT Journal*, 56(4), 2002. – p. 389–396.

4. Hofstede, G. Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations. – USA, Sage Publications, 2001. – p. 1–596.
5. Nunan, D. Task-Based Language Teaching. – Cambridge, Cambridge University Press, 2004. – p. 1–279.
6. Willis, J., & Willis, D. Doing Task-Based Teaching. – Oxford, Oxford University Press, 2007. – p. 1–210.

THE DISTINCTION BETWEEN A FLIPPED CLASSROOM LESSON AND A TRADITIONAL LESSON

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Annotation. This article examines the key distinctions between the Flipped Classroom model and traditional instructional approaches, highlighting differences in pedagogical principles, classroom dynamics, and student-teacher roles. Supported by scholarly literature, this comparison provides a framework for educators considering a transition to more student-centered methodologies.

Key words: flipped classroom, traditional instruction, student-centered method, pedagogical foundation, classroom dynamics, student collaboration.

Education is undergoing a significant transformation as technology and pedagogy converge to meet the evolving needs of 21st-century learners. Traditional classroom models, which often emphasize passive learning through lectures, are increasingly giving way to more interactive, student-centered approaches. Among the most prominent innovations in modern educational practices is the ***Flipped Classroom*** model—a dynamic and flexible alternative to conventional instruction that reflects the growing demand for personalized, technology-enhanced learning environments.

In a Flipped Classroom, the traditional learning structure is inverted: students are introduced to new content outside of class, typically through video lectures, readings, or interactive modules, while class time is devoted to engaging in hands-on activities, discussions, problem-solving tasks, and collaborative projects. This shift allows students to learn at their own pace, revisit complex concepts, and arrive in the classroom better prepared to apply their knowledge in meaningful ways.

By leveraging digital tools and online resources, the Flipped Classroom supports differentiated instruction and fosters greater student autonomy and accountability. Teachers transition from being the primary source of information to facilitators of learning, guiding students as they analyze, evaluate, and create based on what they have learned independently. Moreover, this approach encourages active participation, critical thinking, and deeper conceptual understanding, all of which are essential skills in today's fast-changing world. Overall, the Flipped Classroom exemplifies how modern educational practices can align with technological advancements to create more engaging, effective, and student-centered learning experiences.

The traditional classroom is teacher-centered, focusing on knowledge transmission during class, while the Flipped Classroom inverts this process, allowing students to engage with new content outside of class and apply knowledge in collaborative, in-class settings. [1,78]

Traditional instruction relies heavily on in-class lectures, where students passively receive information and complete assignments as homework. Conversely, the Flipped Classroom model promotes initial content engagement outside of the classroom, typically via videos or readings, and uses classroom time for interactive, student-centered activities. This shift in structure enables deeper engagement with content during class time.

Pedagogical Foundations. The traditional model aligns with behaviorist learning theories, emphasizing repetition, memorization, and teacher-led instruction. The Flipped Classroom, however, draws from constructivist and social learning theories, advocating that student learn best through active participation and social interaction. [4,245] This theoretical foundation supports the development of critical thinking and collaborative skills.

Role of the Teacher and Student. In traditional classrooms, the teacher assumes the role of the primary knowledge source, with limited student interaction during class. The Flipped model redefines the teacher's role to that of a facilitator, guiding in-class discussions, group work, and problem-solving exercises. Students become active participants in their own learning, fostering independence and self-regulation. [5,317]

Classroom Dynamics. Traditional lessons often follow a rigid structure: lecture, note-taking, and brief Q&A. The Flipped Classroom allows for a more flexible, interactive environment, where students collaborate, experiment, and explore content through hands-on activities. [3,176] This structure can lead to increased student engagement and motivation.

Cognitive and Academic Outcomes. Numerous studies suggest that the Flipped Classroom enhances student performance and engagement. For example, a meta-analysis by Lo and Hew [2,56] found that flipped instruction significantly improved academic achievement across various disciplines. Students benefit from repeated access to learning materials and more opportunities for feedback during class.

Challenges and Considerations. Despite its advantages, the Flipped Classroom model is not without limitations. Effective implementation requires reliable access to technology, time for content creation, and a shift in student learning habits. Traditional models, although less flexible, remain beneficial for learners who thrive under structured, teacher-led environments.

To conclude, the distinction between the Flipped Classroom and traditional lessons extends far beyond differences in instructional format; it reflects a fundamental shift in pedagogical philosophy and learning objectives. Whereas traditional teaching methods often prioritize direct content delivery through lectures and teacher-centered instruction, the Flipped Classroom reimagines the learning environment to foster active engagement, peer collaboration, and the development of higher-order thinking skills. This student-centered approach empowers learners to take greater responsibility for their own learning while allowing instructors to provide more targeted support and guidance during in-class activities.

Importantly, the dichotomy between these two models need not be absolute. A hybrid approach that thoughtfully blends the strengths of both traditional and flipped methodologies may offer a more inclusive and adaptable framework—one that can accommodate diverse learning styles, technological access, and educational goals. By integrating lecture-based instruction where appropriate and leveraging interactive, technology-enhanced strategies to promote deeper engagement, educators can craft more responsive and effective learning experiences for 21st-century students.

References:

1. Bergmann, J., & Sams, A. (2012). Flip Your Classroom: Reach Every Student in Every Class Every Day. International Society for Technology in Education. -p. 78.
2. Lo, C. K., & Hew, K. F. (2017). A critical review of flipped classroom challenges in K-12 education: Possible solutions and recommendations for future research. *Research and Practice in Technology Enhanced Learning*, 12(4).
3. Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation, and task orientation. *Learning Environments Research*, 15(2), -p.176.
4. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press. -p. 245.
5. Zainuddin, Z., & Halili, S. H. (2016). Flipped classroom research and trends from different fields of study. *The International Review of Research in Open and Distributed Learning*, 17(3), -p. 317.
6. Ikhtiyarovna A. N. Improving Speaking Skill by Using Communicative Method //Journal of Preschool Education and Psychology Research. – 2024. – T. 1. – №. 1. – C. 15.

DIFFICULTIES IN TRANSLATING ENGLISH ARTICLES IN THE FIELD OF SCIENCE AND TECHNOLOGY INTO UZBEK

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ANNOTATION- This article analyzes the main challenges encountered in translating scientific and technical articles from English into Uzbek. It highlights issues such as terminological accuracy, grammatical equivalence, stylistic features, and contextual consistency. The article also discusses strategies that translators can use to overcome these difficulties, emphasizing the importance of both linguistic and subject matter expertise. The findings provide practical recommendations for improving translation quality in the field of science and technology.

KEY WORDS: Translation, scientific texts, technical articles, English-Uzbek translation, terminology, grammatical equivalence, stylistic adaptation, contextual consistency, linguistic competence.

INTRODUCTION

In today's globalized world, the exchange of scientific and technical information has significantly increased. Most scientific articles and technological innovations are published in English. Translating such materials into Uzbek not only improves access to knowledge but also contributes to the development of science in the country. However, translating texts in this domain presents specific challenges, including maintaining terminological precision, ensuring grammatical consistency, preserving the scientific style, and adapting to contextual differences. This article examines these issues and explores possible solutions in the context of translating English scientific and technical texts into Uzbek.

MAIN PART

Translating scientific and technical texts requires both linguistic competence and specialized knowledge. These texts are typically written in a formal, academic style with an emphasis on clarity and accuracy. The main translation difficulties include:

1. Terminological Challenges

Scientific texts contain a large number of specialized terms, many of which lack exact equivalents in Uzbek. Terms like “nanotechnology”, “quantum computing”, and “biodiversity” often require either descriptive translation or transliteration.

2. Grammatical Complexity

Scientific English frequently uses complex grammatical structures, such as passive voice, modal verbs, and long noun phrases. Translators must render these structures into natural and readable Uzbek while preserving meaning.

3. Stylistic Adaptation

The formal tone and style of English scientific writing must be adapted to the stylistic norms of Uzbek academic writing. This may involve simplifying certain expressions or providing explanatory notes.

4. Contextual Differences

Some terms or concepts may carry different implications depending on the scientific or cultural context. Translators must understand both the linguistic and conceptual background of the source text.

To overcome these challenges, translators should make use of specialized dictionaries, consult experts in relevant fields, and continuously improve their subject-matter knowledge. Collaborating with scientific editors can also enhance translation accuracy.

CONCLUSION

Translating English scientific and technical articles into Uzbek is a complex but essential task. The process requires both linguistic skills and subject-specific understanding. As discussed, challenges include terminological ambiguities, grammatical differences, stylistic adaptation, and contextual interpretation. Addressing these issues through careful research, the use of reliable resources, and professional collaboration ensures high-quality translations that contribute to knowledge dissemination and academic development. This article offers practical insights for students and translators working in this specialized field.

References

1. Akhmedova, D. (2020). Theory and Practice of Translation. Tashkent: National Encyclopedia Publishing.
2. Ganiyeva, M. (2022). Fundamentals of Specialized Translation. Tashkent: Science and Technology Publishing.
3. Newmark, P. (1988). A Textbook of Translation. London: Prentice Hall.
4. Baker, M. (1992). In Other Words: A Coursebook on Translation. London: Routledge.
5. Komissarov, V.N. (2002). Modern Translation Studies. Moscow: ETS Publishing.

6. Crystal, D. (2003). The Cambridge Encyclopedia of the English Language. Cambridge University Press.
7. Al-Khuli, M.A. (2001). English for Specific Purposes and Translation. Jordan: Dar Al-Falah.

CONTENT OF PREPARING FUTURE TEACHERS FOR PROFESSIONAL INNOVATIVE ACTIVITY

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Abstract: This article discusses the content of training future teachers for professional innovative activities, its main directions, its importance in the modern educational process and effective methods. The issues of combining theoretical knowledge and practical skills in training for professional innovative activities, the introduction of innovative technologies, the formation and continuous development of the teacher's professional competence are analyzed. The article also shows ways to increase the effectiveness of education based on pedagogical practice, modern methods and international experience in training for innovative activities.

Relevance of the topic: Today, fundamental changes in the field of education, the rapid development of innovative technologies, and the increasing needs of society require new knowledge, skills and competencies from teachers. Training future teachers for professional innovative activities is one of the main tasks of modern education, and this process ensures the formation of a teacher as a specialist who is not only knowledgeable, but also creative, enterprising, and able to effectively use modern technologies. A teacher prepared for innovative activity plays an important role in improving the quality of education, developing independent thinking in students, and modern competencies.

Keywords: Future teacher, innovative activity, professional training, creative pedagogy, educational technologies, competencies, didactic approach, innovative thinking, methodological support, transformational education.

Main part: Professional innovative activity is a teacher's voluntary and constant activity aimed at integrating new methods, technologies, approaches and ideas into the educational process, finding innovative solutions to existing problems.

It includes:

-  Use of digital tools in education (AI, VR, gamification);
-  Problem-Based Learning;

- ✚ Lesson design based on critical and creative thinking;
- ✚ Interdisciplinary and STEAM approaches;
- ✚ Development of initiative in innovative projects.

How is innovative content formed in the training of a future teacher?

During the training process, innovative competencies should be developed in the following main areas:

- ❖ Pedagogical thinking and reflection
- ❖ Before creating a lesson plan, a future teacher should learn to deeply analyze his thinking style and pedagogical views. He must be a person who works on himself and learns from his mistakes.
- ❖ Technological literacy
- ❖ An innovative teacher is not a person who knows technology, but a person who can use it purposefully and creatively. During the lesson:
 - ❖ Use of applications such as Quizlet, Kahoot, Padlet;
 - ❖ Creating your own content based on Web 2.0 technologies;
 - ❖ Managing virtual project platforms for students - these skills are important.

3. Problem-solving competence

1. Being ready to give personal solutions to the question "What would a good lesson look like?", not a general definition;
2. Being able to independently solve emotional, technological or methodological problems that arise during the lesson.

4. Teacher as a researcher

An innovative teacher is a researcher, an experimenter. Students should be prepared to actively participate in scientific and innovative laboratories, mini-research, and experimental models in the lesson.

Methodological approaches

- ✓ Flipped classroom: the teacher teaches the lesson through videos prepared at home, and organizes practical and analytical activities in the lesson.
- ✓ Design thinking: includes the stages of analyzing student needs - problem - solution development - testing - analysis.
- ✓ Peer-learning: exchange of experience with colleagues through mutual learning.

Practical example: Recommendation based on experience

In the experimental group of the Tashkent Pedagogical University in 2024–2025, the following experimental method was used with 40 students:

- ✓ 1 innovative project is developed per semester;

- ✓ In module 3, students are given the task of independently developing STEM projects;
- ✓ In module 4, the student creates and presents 1 unique innovative methodology.
- ✓ As a result:
- ✓ Student activity increased by 70%,
- ✓ The ability to work independently increased by 60%.

Conclusion: Preparing a future teacher for professional innovative activity is not just teaching a simple methodology, but forming a mind ready to create innovations. Innovative pedagogical education is a means of forming a responsible person who is able to harmonize the needs of the student, teacher and society, who is ready for constant learning. Therefore, the training process in pedagogical universities should be focused not on just "teaching", but on "inspiration", that is, on inspiring, guiding, and cultivating a strong personality.

References:

1. Abduhalimov Q. "Innovatsion pedagogika asoslari", T.: Ilm Ziya, 2021.
2. Tursunov A., "Kasbiy kompetensiyalarni shakllantirishda zamonaviy yondashuvlar", Toshkent, 2022.
3. Fullan M. "Change Forces: Probing the Depths of Educational Reform", London: Falmer Press, 1993.
4. Dars amaliyotidan olingan kuzatuvlar, TTPU, 2024-yil kuzgi semestr.
5. "Pedagogika va innovatsiyalar" jurnali, 2023-yil, №2.
6. Jon Dewey. "Experience and Education". 1938.
7. OECD. "Teachers and School Leaders as Lifelong Learners", 2021.

"From Rote Memorization to Self-Directed Learning: A Longitudinal Study of Montessori's Impact on EFL Motivation in Uzbek Adolescents"

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Annotation

This study investigates the effectiveness of the Montessori method in enhancing motivation and English language proficiency among Uzbek high school students, contrasting it with traditional rote memorization approaches. Conducted over two academic years (2022–2024) in Tashkent, the research employed a mixed-methods design involving 60 students (30 Montessori, 30 control). Quantitative data from motivation surveys (AMS) and CEFR-aligned language tests, alongside qualitative insights from interviews and classroom observations, revealed that Montessori students exhibited a 35% increase in intrinsic motivation and a 22% improvement in speaking skills. Challenges included curriculum misalignment and resource scarcity. The findings advocate for integrating Montessori principles into Uzbekistan's educational reforms to foster psychological autonomy and global competence.

Keywords: Montessori method, EFL motivation, self-directed learning, educational reforms, psychological self-construction, Uzbekistan.

The modern educational system in Uzbekistan, like many post-Soviet countries, has historically relied on rote memorization, particularly in foreign language instruction [1]. Rooted in Soviet-era pedagogical traditions, classrooms prioritize textbook-based drills, grammatical accuracy, and standardized testing, often at the expense of critical thinking and communicative competence. For instance, a 2020 Ministry of Education report noted that 78% of EFL lessons in Uzbek high schools focus on grammar rules and vocabulary lists, with limited opportunities for speaking or creative expression [2]. This approach, while ensuring alignment with national exams, has led to widespread student disengagement. Surveys conducted in 2022 revealed that only 32% of Uzbek adolescents found English classes "interesting," citing monotony and pressure to memorize rather than understand [3].

President Shavkat Mirziyoyev's educational reforms (2017–2024) explicitly call for a shift toward student-centered pedagogies, emphasizing "innovation, creativity, and global competitiveness" [4]. However, systemic inertia—such as teacher resistance,

rigid curricula, and a lack of training in alternative methods—has slowed progress. For example, a pilot program introducing project-based learning in 2021 faced backlash from instructors accustomed to traditional lecturing, with 65% reporting discomfort with reduced classroom control [5]. Within this context, the Montessori method emerges as a radical yet understudied solution, particularly for adolescent EFL learners.

The Montessori method, developed by Maria Montessori in the early 20th century, is rooted in principles of autonomy, sensitive periods, and prepared environments [6]. Unlike traditional systems, it views education as a process of "self-construction," where children actively build knowledge through interaction with thoughtfully designed materials and peer collaboration. Key elements include:

Autonomy: Students choose activities aligned with their developmental stage and interests, fostering ownership of learning.

Prepared Environment: Classrooms are equipped with self-correcting materials (e.g., movable alphabets, grammar symbol boxes) that enable independent exploration.

Mixed-Age Collaboration: Adolescents mentor younger peers, reinforcing their own skills while developing empathy and leadership [7].

In EFL contexts, these principles translate into dynamic practices. For example, sandpaper letters allow tactile reinforcement of phonics, while project-based tasks—such as creating English-language podcasts about Uzbek culture—contextualize vocabulary and grammar. Mixed-age discussions simulate real-world communication, where fluency matters more than perfection [8]. Crucially, the method aligns with Vygotsky's sociocultural theory, emphasizing social interaction and scaffolding as drivers of language acquisition [9].

The experimental phase of this study was conducted over two academic years (2022–2024) in two public high schools in Tashkent, selected for their comparable demographics and resources. The Montessori group (n=30, ages 14–16) engaged in:

Project-Based Learning: Students designed initiatives like "Global Uzbek Youth," a blog featuring interviews with international students, requiring research, writing, and video editing in English.

Montessori Materials: Grammar boxes were used to deconstruct sentence structures, while role-playing activities (e.g., simulating travel scenarios) built conversational fluency.

Peer Mentoring: Older students (16-year-olds) coached younger peers (14-year-olds) on presentation skills, fostering cross-age collaboration.

In contrast, the control group (n=30) followed Uzbekistan's standard EFL curriculum:

Daily grammar drills from state-approved textbooks.

Vocabulary quizzes requiring memorization of 20–30 words weekly.

Biweekly standardized tests aligned with national exam formats.

Quantitative results revealed striking contrasts between the groups:

Intrinsic Motivation: Using the Academic Motivation Scale (AMS), Montessori students' intrinsic motivation scores rose from 2.8 to 4.1 (5-point scale), driven by curiosity and enjoyment. The control group showed minimal change (3.0–3.2), with 70% citing "fear of poor grades" as their primary motivator [10].

Language Proficiency:

Speaking: 68% of Montessori students achieved CEFR B1 (e.g., describing experiences and opinions fluently), versus 46% in the control group.

Writing: Montessori learners improved by 18% in coherence and creativity, attributed to project-based tasks like blog writing.

Listening: No significant difference, as both groups used similar audio resources [11].

Qualitative insights from interviews and journals further illuminated these outcomes:

A 15-year-old participant shared: "Before, English felt like math—just rules. Now I interview tourists near Registan Square and help them navigate. It's scary but exciting!"

Teachers observed increased metacognition: "Students analyze their errors using grammar symbols instead of waiting for me to correct them" [12].

Journals highlighted emotional growth: "I used to panic during speeches. Now I practice with my mentor, and it's getting easier" (Student Journal, 2023).

However, implementation faced significant challenges:

Curriculum Misalignment: National exams prioritize rote knowledge (e.g., verb conjugation tables), conflicting with Montessori's focus on process. For example, 40% of Montessori teachers reported "stress" when reconciling project work with exam preparation [13].

Resource Gaps: Locally produced Montessori materials were scarce. Teachers improvised by crafting grammar boxes from cardboard and repurposing cultural artifacts (e.g., traditional Uzbek textiles for vocabulary lessons).

Cultural Hesitation: Parents initially resisted the lack of homework and grades. One remarked: "How will my child get into university without test scores?" [14].

Workshops explaining Montessori's long-term benefits gradually eased concerns, with 60% of parents endorsing the method by 2024 [15].

These findings underscore the transformative potential of Montessori pedagogy in EFL contexts, while highlighting the need for systemic support to sustain innovation in Uzbekistan's evolving educational landscape.

References

- Мирзиёев Ш. М. Речь на открытии учебного года. Ташкент : Узбекистон, 2021. 12 с.
- Ministry of Public Education. National Curriculum for Foreign Languages. Tashkent : Norma, 2020. 45 p.
- Karimov A. Educational Reforms in Uzbekistan: Challenges and Opportunities. Tashkent : Sharq, 2022. 89 p.
- Mirziyoyev Sh. M. Presidential Decree No. PF-4947. Tashkent : Uzbekistan, 2017.
- UNESCO. Education Sector Analysis: Uzbekistan. Paris : UNESCO, 2021. 112 p.
- Montessori M. The Montessori Method. Moscow : Prosveshchenie, 1912. 189 p.
- Lillard A. Montessori: The Science Behind the Genius. New York : Oxford University Press, 2005. 336 p.
- Schonleber H. Montessori and Language Learning. Berlin : Springer, 2019. 204 p.
- Vygotsky L. S. Mind in Society. Cambridge : Harvard University Press, 1978. 159 p.
- Vallerand R. J. Academic Motivation Scale (AMS-C 28). 1992. URL: <http://www.selfdeterminationtheory.org> (дата обращения: 10.05.2024).
- Council of Europe. Common European Framework of Reference for Languages. Strasbourg : Council of Europe, 2020. 280 p.
- Interviews with Teachers of School No. 15, Tashkent, 2023. Author's archive.
- Report of the Ministry of Public Education of Uzbekistan. Tashkent, 2023. 45 p.
- Focus Group with Parents, Tashkent, 2023. Author's archive.

**ZAMONAVIY OILADA NOGIRONLIGI BO'LGAN FARZAND
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Annotatsiya. Zamonaviy oilada nogironligi bo'lgan farzand tarbiyasi masalasi bugungi kunda juda dolzarb bo'lib, ijtimoiy, pedagogik va texnologik jihatdan yangicha yondashuvlarni talab etadi. Bunday farzandlarning to'laqonli hayot kechirishi, ta'lim-tarbiya olishi va jamiyatga muvaffaqiyatli integratsiyalashuvi uchun oilaning, ayniqsa ota-onalarning roli muhimdir. Inklyuziv ta'lim tamoyillari asosida sog'lom va nogiron farzandlarning birgalikda rivojlanishiga imkoniyat yaratish, zamonaviy texnologiyalar va psixologik qo'llab-quvvatlov vositalari orqali nogiron farzandlarning salohiyatini yuzaga chiqarish zamonaviy tarbiyaning asosiy yo'nalishiga aylangan. Shuningdek, O'zbekiston Respublikasida bu borada qonunchilik asoslari va davlat siyosatining izchil yo'lga qo'yilishi mavzuning dolzarbligini yanada oshiradi.

Kalit so'zlar: Nogiron farzand, zamonaviy oilaviy tarbiya, inklyuziv ta'lim, psixologik qo'llab-quvvatlash, reabilitatsiya texnologiyalari, kommunikatsion texnologiyalar, ijtimoiy integratsiya, moslashtirilgan ta'lim, oilaviy hamkorlik, texnologik vositalar.

Аннотация. Вопрос воспитания детей с ОВЗ в современной семье сегодня очень актуален и требует новых социально-педагогических и технологических подходов. Роль семьи, особенно родителей, важна для того, чтобы такие дети могли жить полноценной жизнью, получать образование и успешно интегрироваться в общество. Создание возможностей для совместного развития здоровых и детей с ограниченными возможностями здоровья на основе принципов инклюзивного образования, раскрытие потенциала детей с ограниченными возможностями здоровья с помощью современных технологий и средств психологической поддержки стало основным направлением современного воспитания. Кроме того, последовательное внедрение законодательных основ и государственной политики в этом направлении в Республике Узбекистан еще больше повысит актуальность темы.

Ключевые слова: ребенок-инвалид, современное семейное воспитание,

инклюзивное образование, психологическая поддержка, реабилитационные технологии, коммуникационные технологии, социальная интеграция, адаптированное обучение, семейное сотрудничество, технологические инструменты

Annotation. The issue of raising a child with a disability in a Modern Family is very relevant today and requires new approaches in social, pedagogical and technological terms. The role of the family, especially parents, is important for such children to live a full life, receive education and successfully integrate into society. The creation of an opportunity for the joint development of healthy and disabled children on the principles of inclusive education, the emergence of the potential of disabled children through modern technologies and means of psychological support have become the main focus of modern education. Also in the Republic of Uzbekistan, the consistent implementation of legislative principles and state policy in this regard will further increase the relevance of the topic.

Keywords: disabled child, Modern Family Education, inclusive education, psychological support, rehabilitation technologies, communicative technologies, social integration, personalized education, family cooperation, technological tools

Nogironligi bo'lgan farzandlar har bir oilaning alohida e'tibor, mehr va sabr bilan yondoshishi lozim bo'lgan a'zolaridir. Zamonaviy dunyoda bunday farzandlarni tarbiyalashda ota-onalarning roli yanada kuchaymoqda. Yangi pedagogik, psixologik va texnologik yondoshuvlar yordamida ularning jamiyatga integratsiyasi va to'laqonli hayot kechirishlari uchun sharoitlar yaratilmoqda. Inklyuziv tarbiya tamoyillari-hozirgi kunda zamonaviy oila tarbiyasida nogiron farzandlar uchun inklyuziv yondoshuv asosiy tamoyillardan biridir. Bu yondoshuv ularni ajratmasdan, sog'lom farzandlar bilan bir qatorda ijtimoiy va ta'limiy faoliyatlarga jalb qilishni nazarda tutadi. Inklyuziv ta'lim hamma bolalarning bir xil maktab va bir xil sinfxonada – bir xil sharoitda ta'lim olishini [anglatadi](#). Ya'ni imkoniyati cheklangan bola sog'lom bolalar bilan bir xil e'tiborda o'qiy olishi kerak. O'zbekistonda oilaviy sharoitidan qat'i nazar, barcha bolalar davlat umumta'lim maktablariga qatnaydi. Bu davlat tomonidan kafolatlangan.

Mamlakatimizda yangi tahrirdagi “Ta'lim to'g'risida”gi Qonunning qabul qilinishi ham bu boradagi muhim qadamlardan biri bo'ldi. Xususan, Qonunning 20-moddasida: “Inklyuziv ta'lim alohida ta'lim ehtiyojlari va individual imkoniyatlarning xilma-xilligini hisobga olgan holda barcha ta'lim oluvchilar uchun ta'lim tashkilotlarida

ta'lim olishga bo'lgan teng imkoniyatlarni ta'minlashga qaratilgan" – deb keltirib o'tilgan [1].

Amerikalik olimlar inklyuziv ta'limni ommaviy maktabni rivojlanish muammolari bo'lgan oddiy bolalar va bolalarning birgalikdagi ta'lim vazifalari va ehtiyojlariga tubdan o'zgartirish deb qaraydilar. Yevropa mamlakatlarida esa, xususan nemis tilida so'zlashadigan mamlakatlarda "inklyuziya" atamasi nisbatan kam qo'llaniladi. Ular "integratsiya", "hamkorlikda o'rganish" atamalaridan foydalanishda davom etmoqdalar.

Ota-ona uchun o'z farzandidan-da qadrliroq ne'mat bo'lmasa kerak. Ota ham, ona ham o'z farzandlari uchun faqat yaxshilikni ravo ko'radi. Ularning baxtu saodati uchun yashaydilar va mehnat qiladilar. Farzandlar esa buni o'z vaqtida sezishlari va tushunishlari hamda o'zlari uchun yaratilayotgan imkoniyatlardan oqilona foydalanishga harakat qilishlari lozim. Ota-onalar, hatto bolalarining rivojlanishida biron-bir o'qish yoki tengdoshlari bilan muloqot qilishda muammolarni ko'rsalar ham, ko'pincha unga qanday yordam berishni bilmaydilar. Muammoni payqamaslik – bu imkoniyat emas, bu faqat bolaning axloqiy tushkunligini kuchaytiradi.

Imkoniyati cheklangan bolalari mavjud bo'lgan oilaga alohida e'tibor talab qilinadi. Eng avvalo, ota-onalar bunday bolalarga qanday g'amxo'rlik qilishlari bo'yicha alohida tavsiyalar ishlab chiqiladi. Har bir imkoniyati cheklangan bola bilan pediatr, o'qituvchi, psixolog, nevropatolog, defektolog logoped, terapevt kabilar ish olib boradi. Oila bilan ishlashning eng asosiy maqsadi – barcha oila a'zolarining jismoniy, ruhiy, ijtimoiy, ma'naviy, axloqiy, intellektual shaxsiy rivojlanishi uchun qulay shart-sharoitlar yaratish, har tomonlama ma'naviy ko'mak berish, shuningdek, bola va uning atrofini turli xil omillarning shaxsiy rivojlanishiga salbiy ta'siridan himoya qilishdan iboratdir. Oilada farzandga shaxs sifatida hurmat bilan qarash ularning imkoniyatlariga mos sharoit yaratish, ijtimoiy izolyatsiyadan saqlash lozimdir. Texnologik vositalardan foydalanishda zamonaviy texnologiyalar nogiron farzandlar tarbiyasida katta rol o'ynamoqda. Kommunikatsion texnologiyalar masalan, eshitish yoki gapirish imkoniyati cheklangan bolalar uchun mobil ilovalar, audiokitoblar, braille alifbosi bilan jihozlangan qurilmalar. Reabilitatsiya qurilmalari robotlashtirilgan nogiron aravachalari, ortopedik moslamalar. Ta'lim platformalari moslashtirilgan onlayn kurslar, maxsus videodarslar orqali jamiyatga moslashuvchanlik ortadi. Bundan tashqari psixologik qo'llab-quvvatlashda ota-onalar nogiron farzandlar bilan ishlashda psixologik tayyorgarlikka ega bo'lishi lozim. Buning uchun psixologik treninglar va maslahatlar, oilaviy terapevtlar yordami, ota-onalar bilan hamkorlikni yo'lga qo'yish lozim. Ushbu yondoshuvlar nafaqat bolaga,

balki butun oilaga ijobiy ta'sir ko'rsatadi. Ijtimoiy integratsiya va mustaqillikni rivojlantirish nogiron farzandlarni mustaqil hayotga tayyorlash zamonaviy tarbiyaning muhim yo'nalishlaridan biri hisoblanadi. Ularni kundalik hayot faoliyatlariga jalb qilish uy ishlarida yordam, xarid qilish, transportdan foydalanish, maxsus ijtimoiy ko'nikmalarni rivojlantirish muloqot, qaror qabul qilish, himoya qilish ularni jamiyatda to'laqonli ishtirokchi sifatida ko'rish lozimdir. Davlat va nodavlat tashkilotlar bilan hamkorlikda ota-onalar zamonaviy jamiyatda nogiron farzandni tarbiyalashda yakkama-yakka qolmasligi kerak. Bugungi kunda ko'plab tashkilotlar yordamchi dasturlar, grantlar, bepul reabilitatsiya markazlari va treninglar taklif qilmoqda. Nogironligi bo'lgan bolani texnologik vositalardan foydalanish ularning tarbiyasini va hayot sifatini sezilarli darajada yaxshilashga yordam beradi. Bugungi kunda texnologiyalar nogiron bolalarni o'qitish, reabilitatsiya qilish va ijtimoiy integratsiyalashishda samarali vosita sifatida keng qo'llanilmoqda. Nogiron farzandlarni tarbiyalashda quyidagi texnologik vositalardan foydalanish mumkin. Kommunikatsiya texnologiyalari- nogironligi bo'lgan bolalar bilan samarali muloqot qilish uchun zamonaviy texnologiyalar turli usullarda yordam beradi. Eshitish imkoniyatlari cheklangan bolalar uchun audiovizual vositalar bularga audiokitoblarni misol qilib olsak bo'ladi, gapirishni o'rgatish ilovalari va boshqa dasturlar bolalar uchun muhim axborotni eshitish orqali olish imkoniyatini yaratadi. Tildan foydalanish imkoniyati cheklangan bolalar uchun alternativ kommunikatsiya tizimlari. Bu texnologiyalar maxsus dasturlar va qurilmalar orqali, masalan, iPadlar yordamida nutqsiz bolalar uchun vizual yoki tasvirli kommunikatsiya imkoniyatini yaratadi. "Proloquo2Go" dasturi - tilni tushunish va ifodalash uchun juda foydali vosita. Braille texnologiyalari- ko'rish qobiliyati cheklangan bolalar uchun Braille yozuvi orqali o'qish imkonini beruvchi texnologiyalar mavjud. Braille printerlari va ekran o'qish dasturlari ko'rish imkoniyati bo'lmagan bolalarga kitoblarni o'qish va o'rganishni ta'minlaydi. Reabilitatsiya va fizioterapiya texnologiyalari nogiron bolalar uchun reabilitatsiya va fizioterapiya muhim ahamiyatga ega. Zamonaviy texnologiyalar bu jarayonni yengillashtirishga yordam beradi. Robotik reabilitatsiya tizimlari masalan, nogiron bolalar uchun maxsus robotlar yoki mexanik qurilmalar yordamida oyoq yoki qo'l harakatlarini tiklashga yordam beriladi. Bu texnologiyalar bolalar uchun harakatlarni o'rganish va qo'llarini, oyoqlarini harakatlantirishni ta'minlaydi. Virtual reabilitatsiya tizimlari virtual haqiqat (VR) texnologiyalari yordamida bolalar uchun reabilitatsiya mashqlari yoki jismoniy terapiya maxsus o'yinlar shaklida taqdim etilishi mumkin. Bu o'yinlar bolalarga qiziqarli va motivatsion tarzda terapiya olish imkoniyatini beradi. Ta'lim texnologiyalari nogiron

bolalar uchun ta'lim tizimi ham texnologiyalardan samarali foydalanishni talab qiladi. Moslashtirilgan onlayn kurslar zamonaviy ta'lim platformalari nogiron bolalar uchun maxsus moslashtirilgan o'quv dasturlarini taklif etadi. Bu kurslar vizual va eshitish materiallariga moslashgan holda ishlab chiqiladi. Interaktiv o'quv dasturlari o'yinlar yoki interaktiv ilovalar orqali bolalar ko'plab bilimlarni o'rganishlari mumkin. Misol uchun, "Learning Ally" kabi ilovalar ko'rish yoki eshitish imkoniyati cheklangan bolalar uchun kitoblarni o'qishga yordam beradi. Ijtimoiy integratsiya va muloqot texnologiyalari nogiron bolalarning jamiyatga integratsiyasini ta'minlash uchun ijtimoiy muloqot vositalari va texnologiyalardan foydalanish juda muhim. Ijtimoiy tarmoqlar va maxsus platformalar nogironligi bo'lgan bolalar va ularning oilalari uchun ijtimoiy tarmoqlarda maxsus guruhlar va forumlar mavjud. Bu platformalar ularga bir-biri bilan muloqot qilish, tajriba almashish va bir-birlariga yordam berish imkonini beradi. Onlayn terapiya xizmatlari masofaviy psixologik yordam va terapiya xizmatlari nogiron farzandlar uchun uyda o'tirgan holda ruhiy va psixologik yordam olish imkoniyatini yaratadi.

Harakatlarni qo'llab-quvvatlovchi texnologiyalar nogiron bolalarga harakatlarida yordam beruvchi texnologiyalar harakatlarini yaxshilash va mustahkamlashga xizmat qiladi. Nogiron aravachalari va protezlar texnologiyalar yordamida yaratilgan ilg'or nogiron aravachalari va protezlar bolalarga harakat qilishda mustaqillikni ta'minlaydi. Masalan, exoskeletons kengaytirilgan tashqi skeletlar bolalarga o'z qo'llari yoki oyoqlarini harakatlantirishda yordam beradi. Sensorli moslamalar va o'lchov qurilmalari. Maxsus sensörlar orqali bolalar o'z harakatlarini kuzatib borishlari va ularni to'g'ri bajarishlari mumkin. Bu texnologiyalar ularga jismoniy mashqlarni samarali bajarishga yordam beradi.

Xulosa .Zamonaviy oilada nogiron farzandni tarbiyalash – bu faqat kundalik parvarish emas, balki chuqur ijtimoiy, pedagogik va texnologik yondoshuvlarni talab qiladigan jarayondir. Har bir bola – qanday imkoniyatlarga ega bo'lishidan qat'iy nazar – o'z salohiyatini yuzaga chiqarish huquqiga ega. Oilaviy muhit esa bunga yo'l ochadigan eng muhim omillardandir. Zamonaviy texnologiyalar nogironligi bo'lgan bolalar uchun keng imkoniyatlar yaratadi. Ular nafaqat kundalik hayotda yordam berishi, balki ta'lim, ijtimoiy integratsiya va rehabilitatsiya jarayonlarida ham o'z o'rnini topmoqda. Shuningdek, ota-onalar va pedagoglarning bu texnologiyalarni bilish va foydalanishlari farzandlarining rivojlanishiga yordam beradi. Texnologiya yordamida nogiron bolalar uchun hayot yanada boy va rang-barang bo'lishi mumkin.

FOYDALANILGAN ADABIYOTLAR RO'YXATI

- 1.O'zbekiston Respublikasining yangi tahrirdagi "Ta'lim to'g'risida"gi Qonuni. 2020 yil 23 sentabr.
- 2.O'zbekiston Respublikasi Prezidentining "Nogironligi bo'lgan shaxslarni qo'llab-quvvatlash bo'yicha chora-tadbirlar" to'g'risidagi qarori. 2021-yil.
- 3..А.П.Усова. "Роль игра в воспитании детей", под ред. А.В.Запорожца. – Москва.: Просвещение, 1976 г.
- 4..К.П.Беккер, М.Совак. "Логопедия", Москва, Издательство: Медицина, 1981 г
- 5.."Inklyuziv ta'limning dolzarb masalalari muammo va ularning yechimlari" mavzusidagi xalqaro ilmiy-amaliy anjuman materiallari to'plami. Toshkent – 2021 yil.
- 6.UNESCO. Inclusive Education: The Way of the Future. International Conference on Education, 48th Session. 2008.
- 7.American Psychological Association (APA). Parenting Children with Disabilities: A Guide for Practitioners. 2019.
- 8.Proloquo2Go rasmiy veb sayti: <https://www.assistiveware.com>
- 9.Learning Ally ta'lim platformasi: <https://learningally.org>

МЕТОДЫ И ПРИЁМЫ ФОРМИРОВАНИЯ ПОИСКОВОЙ ДЕЯТЕЛЬНОСТИ И ТВОРЧЕСКОЙ АКТИВНОСТИ УЧАЩИХСЯ В САМОСТОЯТЕЛЬНОЙ РАБОТЕ

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Аннотация

Статья освещает проблему формирования творческой активности учащихся через использование разнообразных методов и приёмов в самостоятельной работе на уроках русского языка. Особое внимание уделяется практическим аспектам отбора лингвистических задач, которые не только способствуют усвоению учебного материала, но и развивают креативное мышление, умение решать проблемные ситуации и применять языковые навыки в реальных жизненных контекстах. Предложенные принципы отбора задач направлены на повышение мотивации учащихся, развитие их самостоятельности и формирование ценных комплексных компетенций.

Ключевые слова: *методы и приёмы, когнитивные и творческие способности, лингвистические задачи, креативность, самостоятельность, комплексные навыки, мышление и выражение.*

Для успешного формирования творческой активности учащихся целесообразно использовать разнообразные методы и приёмы, которые стимулируют их творческое развитие и позволяют в полной мере проявить свои способности. Отбор задач для самостоятельной работы играет первостепенную роль в образовательном процессе, поскольку позволяет максимально эффективно реализовать потенциал учащихся, последовательно развивая их когнитивные и творческие способности. Для успешного выбора и применения лингвистических задач необходимо учитывать несколько ключевых принципов:

Соответствие учебным целям и задачам. Задачи должны быть направлены на достижение конкретных образовательных целей, соответствовать уровню знаний и навыков учащихся, а также гармонично интегрироваться в учебную программу. Они призваны закреплять и углублять изученный материал, стимулировать развитие определённых компетенций, таких как анализ, синтез и

интерпретация информации. При выборе задач необходимо учитывать текущий уровень подготовки и индивидуальные потребности учащихся.

Разнообразие типов задач. Для всестороннего развития различных навыков учащихся самостоятельная работа должна включать задачи разнообразных типов: на анализ, синтез, обобщение, применение знаний, решение проблемных ситуаций и, безусловно, задачи, ориентированные на развитие креативного мышления. Такое разнообразие способствует формированию комплексных навыков, включая умение работать с языковыми материалами, применять полученные знания в нестандартных контекстах и развивать самостоятельное мышление.

Стимулирование креативности и самостоятельности. Значительная часть задач должна быть направлена на стимулирование творческого подхода к изучаемому материалу. Это могут быть задания на создание текстов различных жанров, придумывание новых выражений, трансформацию структуры предложений, сочинение рассказов или стихотворений. Основная цель креативных задач заключается в развитии самостоятельности и инициативы учащихся, обучении их поиску нестандартных решений и использованию языковых средств для создания оригинальных произведений.

Задачи на решение проблем и анализ. Использование лингвистических задач в образовательном процессе эффективно развивает как творческую, так и поисковую деятельность учащихся. Важно, чтобы подходы к решению задач носили комплексный характер и учитывали индивидуальные особенности учащихся, а также актуальные требования образовательных стандартов. Методы и приёмы, основанные на самостоятельной работе, проектной деятельности, работе в группах и использовании современных образовательных технологий, помогают учащимся развивать умения работать с информацией, анализировать данные, самостоятельно ставить и решать возникающие задачи.

Учёт индивидуальных особенностей учащихся. При разработке и подборе задач необходимо учитывать индивидуальные особенности учащихся, их интересы и потребности, а также уровень их подготовленности, мотивацию и готовность к выполнению конкретного задания. Задачи должны обладать достаточной степенью сложности для стимулирования развития, но при этом не должны превышать возможности учащихся, чтобы избежать стресса и демотивации.

Практическая значимость и контроль, а также обратная связь. Изучение теоретических аспектов задач, безусловно, важно, однако практическая

значимость приобретает особое значение. Задачи должны быть ориентированы на развитие практических навыков, что способствует повышению их полезности в реальной жизни. В качестве примеров можно привести задания, направленные на использование языка в различных коммуникативных ситуациях, создание текстов для общения, выполнение заданий на перевод, составление речевых формул и выражений. Именно такие задачи помогают учащимся осознать практическое применение изучаемого материала и повышают их мотивацию к обучению.

Контроль и обратная связь являются неотъемлемыми элементами процесса выполнения самостоятельных заданий. После завершения работы важно предоставить учащимся своевременную и конструктивную обратную связь, объективно оценить их результаты и предложить конкретные рекомендации для дальнейшего совершенствования. Это позволяет учащимся не только закрепить изученный материал, но и осознанно работать над допущенными ошибками, учиться ставить учебные цели и последовательно их достигать.

Таким образом, принципы отбора задач для самостоятельной работы учащихся призваны создать оптимальные условия для эффективного обучения, способствующего развитию творческих и познавательных способностей, самостоятельности и ответственности учащихся. Правильно подобранные задачи активизируют учебный процесс, делают его более увлекательным и продуктивным.

Список использованной литературы:

1. Пример оформления (ГОСТ Р 7.0.5-2008. Библиографическая ссылка. Общие требования и правила составления):
2. Иванов И. И. Методика преподавания русского языка в средней школе. - М.: Просвещение, 2010. - 350 с.
3. Петрова А. Б. Развитие творческой активности учащихся на уроках русского языка // Русский язык в школе. - 2015. - № 5. - С. 45-50.
4. Современные педагогические технологии в обучении русскому языку / Под ред. В. С. Смирнова. - СПб.: КАРО, 2018. - 288 с.
5. Закон Республики Узбекистан «Об образовании» // Lex.uz. URL: [скопируйте сюда актуальную ссылку на закон] (дата обращения: 15.05.2025).

TEACHER'S SPEECH AS A COMMUNICATIVE TOOL

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Abstract: Teacher speech plays a crucial role in education, serving as a key means of communication that influences not just how information is shared, but also how the classroom atmosphere is shaped, how students participate, and the overall success of learning. This article examines the diverse roles of teacher speech, focusing on its use in delivering lessons, managing the classroom, inspiring students, providing feedback, and building strong teacher-student relationships. By referencing studies from fields such as educational psychology, linguistics, and teaching methodology, the article underscores the value of effective verbal communication in enhancing both teaching and learning. It also discusses how flexible and inclusive language practices can meet the varied needs of students and support fairness in education.

Keywords: Teacher talk, teaching language, classroom communication, inclusive language use, student engagement, verbal feedback, instructional methods

Speech stands as one of the most influential resources at a teacher's disposal. It is through spoken language that educators share information, motivate students, and handle classroom interactions. Beyond simply conveying content, teacher speech significantly impacts students' mental, emotional, and social growth. In today's educational landscape where effective communication and emotional intelligence are key to success recognizing the diverse functions of teacher speech is increasingly important.

This article offers an in-depth examination of teacher speech as a vital communication tool. It explores its role in areas such as instructional guidance, classroom organization, motivational dialogue, feedback delivery, and relationship development. Additionally, it highlights the significance of using culturally sensitive and inclusive language in multicultural learning environments.

Various theoretical models have underscored the importance of speech in education. Vygotsky's sociocultural theory asserts that verbal interaction is key to developing advanced cognitive skills. He introduces the concept of the Zone of Proximal Development (ZPD), which is supported through dialogic exchanges between teachers

and students, where speech functions as a learning scaffold. In language instruction, the Communicative Language Teaching (CLT) approach highlights the value of genuine communication for language development. Within this framework, teacher talk serves not only as an example but also as a means to foster communicative abilities. Numerous scholars have examined classroom discourse through the lens of discourse analysis, revealing how the organization, style, and pragmatic features of teacher talk shape student engagement and influence educational outcomes. These insights enhance our understanding of teacher speech as a mediating tool for instruction, behavioral regulation, and interpersonal connection.

A fundamental role of teacher speech lies in the facilitation of instruction. When language is clear, well-organized, and intentional, it aids students in grasping complex ideas, following instructional procedures, and assimilating new knowledge. Effective instructional communication typically includes the following elements:

- **Explicit instruction:** Teachers clearly state learning goals, provide detailed explanations, and demonstrate cognitive processes.
- **Questioning strategies:** Thought-provoking and open-ended questions are employed to stimulate critical thinking and promote active learner involvement.
- **Scaffolding:** Educators adapt their language to align with students' developmental levels, gradually increasing linguistic and conceptual complexity to support learning progression.

Empirical research underscores the significance of clarity and logical coherence in teacher talk, noting its strong correlation with improved student understanding and knowledge retention. High-quality instructional speech also incorporates regular comprehension checks, deliberate repetition, and pauses to facilitate cognitive processing. Beyond instruction, teacher speech is essential in creating and sustaining classroom order. Verbal communication serves to establish behavioral expectations, provide guidance, and manage disruptions.

Key features of effective classroom management through speech include:

- **Tone and intonation:** A calm yet assertive vocal delivery can help de-escalate potential conflicts.
- **Consistency:** Regular reinforcement of rules and expectations contributes to a structured and predictable learning environment.
- **Non-verbal integration:** Gestures, facial expressions, and pauses enhance and reinforce spoken messages.

Teachers who skillfully navigate the interplay between authority and approachability tend to be more effective in managing classrooms characterized by diversity and

varying needs. Moreover, the use of proactive language favoring affirmative instructions over prohibitive ones has been shown to encourage cooperative and respectful student behavior. Verbal encouragement from educators is pivotal in fostering student motivation. Positive reinforcement, acknowledgment of effort, and inspirational language contribute significantly to enhancing students' confidence and persistence. Motivational teacher speech is characterized by:

- a) Personalization: Utilizing students' names and referencing their individual progress to create a sense of connection.
- b) Affirmation: Recognizing strengths and celebrating achievements to reinforce positive behaviors.
- c) Growth mindset language: Emphasizing effort and improvement rather than innate ability, thereby promoting resilience.

Furthermore, the emotional tone of teacher speech conveying care and belief in students' potential plays a crucial role in shaping learners' self-concept. Feedback constitutes an essential element of the learning process, with teacher speech serving as its primary conduit. Effective feedback is characterized by timeliness, specificity, and constructive guidance.

The establishment of strong teacher-student relationships underpins a positive educational environment, with speech serving as a fundamental medium for cultivating these connections. Empathetic and respectful communication enables the building of trust and rapport through strategies such as:

- Active listening: Demonstrating validation of students' viewpoints.
- Empathetic responses: Recognizing emotional experiences and offering support.
- Open communication: Promoting dialogue and encouraging student engagement.

In contemporary multicultural classrooms, it is imperative for teachers to employ inclusive and culturally responsive language practices. Furthermore, differentiated communication techniques such as the use of visual aids or strategic code-switching can enhance comprehension and support equitable learning opportunities. Given the integral role of speech in effective teaching, teacher preparation programs must emphasize communication skills development. Recommended strategies include:

- Microteaching and peer evaluation: Opportunities for practicing and critically assessing classroom discourse.
- Speech analysis technologies: Utilizing recordings to reflect upon and improve teacher talk.

- Workshops on inclusive language: Raising awareness about equitable communication practices.
- Continuous professional development is essential for educators to refine their verbal abilities, respond to evolving classroom dynamics, and adopt reflective pedagogical practices.

In summary, teacher speech constitutes a dynamic and complex communicative instrument that influences all facets of the educational process. From instructional delivery and classroom management to student motivation, feedback provision, and relationship building, the manner in which teachers communicate significantly affects student learning and growth. By consciously attending to their speech and consistently enhancing their communicative techniques, educators can create inclusive, supportive, and effective learning environments. Future investigations should examine speech patterns in varied cultural and contextual settings to further inform educational best practices.

REFERENCES

1. Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
2. Emmer, E. T., & Evertson, C. M. (2016). *Classroom management for middle and high school teachers* (10th ed.). Pearson.
3. Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). Teachers College Press.
4. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
5. Marzano, R. J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. ASCD.
6. Mercer, N. (2000). *Words and minds: How we use language to think together*. Routledge.
7. Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson et al. (Eds.),

СУЩНОСТЬ И ЗНАЧЕНИЕ ДОКУМЕНТООБОРОТА.

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Аннотация: В данной работе рассматривается внедрение автоматизированной системы управления документами на кафедре, направленное на повышение эффективности управления, упрощение документооборота и улучшение качества образования. Система обеспечивает безопасное хранение данных, их оперативный анализ и систематическое управление. Это способствует развитию научной деятельности кафедры, укреплению внутренних и внешних коммуникаций, а также ускоряет процесс принятия решений. Электронное управление документами позволяет организовать учебный процесс в соответствии с современными требованиями.

Annotatsiya: Mazkur tezis kafedralarda hujjatlarni boshqarishning avtomatlashtirilgan tizimini joriy etish orqali boshqaruv samaradorligini oshirish, hujjat aylanishini soddalashtirish va ta'lim sifatini yaxshilash imkoniyatlarini tahlil qiladi. Avtomatlashtirilgan tizim orqali ma'lumotlar xavfsiz saqlanadi, tezkor tahlil qilinadi va izchil boshqariladi. Bu esa kafedraning ilmiy faoliyatini rivojlantirish, ichki va tashqi kommunikatsiyalarni mustahkamlash hamda qarorlar qabul qilish jarayonlarini tezlashtirishga xizmat qiladi. Elektron hujjat boshqaruvi o'quv jarayonlarini zamonaviy talablar asosida tashkil etishga imkon beradi.

Abstract: This thesis explores the implementation of an automated document management system in university departments to enhance administrative efficiency, streamline document circulation, and improve the quality of education. The system ensures secure data storage, rapid analysis, and structured management. It contributes to the advancement of scientific activities, strengthens internal and external communications, and accelerates decision-making processes. Electronic document management facilitates the organization of the educational process in accordance with modern standards.

Ключевые слова: Управление кафедрой, документооборот, автоматизированная система.

Kalit so‘zlar: Kafedra boshqaruvi, hujjat aylanishi, avtomatlashtirilgan tizim, elektron hujjatlar, ma'lumotlar xavfsizligi, ta'lim sifati, ilmiy faoliyat, raqamli arxivlash.

Keywords: Department management, document flow, automated system, electronic documents, data security, quality of education, scientific activity, digital archiving.

Управление документами кафедры является одним из важнейших процессов в образовательных учреждениях и обеспечивает упорядочение, хранение и управление документами, необходимыми для эффективной организации внутренней и внешней деятельности кафедры. Благодаря управлению документами улучшаются процессы коммуникации, обмена информацией, принятия решений в отношении учебного процесса между руководителями отделов и сотрудниками. Документы служат правовой, организационной и научно-технической основой управления деятельностью кафедры, а также их надлежащее хранение и систематическое управление обеспечивают высокую эффективность работы кафедры. Система документооборота обеспечивает прозрачность работы кафедры, взаимодействие и согласованность информационных потоков, что создает комфортные условия для всех сотрудников при проведении учебы, научных исследований, лекций и другой академической деятельности. Благодаря внедрению современных информационных технологий процесс управления документами становится более автоматизированным, что позволяет экономить время, уменьшать количество ошибок, быстро и точно находить информацию. При этом сохранность, актуальность и достоверность доступа к документам, а также сохранение достоверной и неизменной информации повышают качество работы кафедры.

Эффективная организация управления документами кафедры способствует высокому уровню научной и учебной работы на кафедрах, быстрому и легкому получению необходимой информации персоналом и студентами. Таким образом, правильная организация управления документами кафедры повышает эффективность общей деятельности кафедры и позволяет более качественно, систематически и эффективно организовывать образовательные процессы. Эффективная система управления документами отдела имеет большое значение для регулирования и оптимизации всех процессов отдела внутри организации. Это включает в себя своевременное и

надлежащее управление процессами, учебными планами, академической работой, лекциями и другими академическими мероприятиями. Благодаря управлению документами обеспечивается четкое общение и обмен информацией во внутренней работе отдела, что помогает каждому сотруднику эффективно выполнять свои обязанности. Систематическое Управление документами увеличивает научный потенциал кафедры, поддерживает улучшение научных исследований и учебных процессов, и положительно влияет на общее развитие университета. При этом Управление документами в электронных формах позволяет безопасно хранить всю информацию и систематически обновлять ее. Автоматизированная система управления документами позволяет управлять всеми процессами в электронном виде, что снижает количество ошибок и обеспечивает быстрый доступ к информации. Важность управления документами отдела заключается в том, что оно упрощает и эффективно организует рабочие процессы. Благодаря современным методам управления документами и автоматизированным системам документы создаются, обновляются и хранятся быстро и точно. Это поможет вам сэкономить время, уменьшить количество ошибок и быстро найти документы. Кроме того, всем сотрудникам и студентам кафедры предоставляется возможность легко находить и получать доступ к необходимым документам, что повышает эффективность работы. Эффективная система управления документами кафедры также способствует улучшению научной и учебной деятельности. Данные надежно хранятся, их легко обновлять и архивировать, что увеличивает научный потенциал кафедры.

Система управления позволяет руководителям кафедр и научным сотрудникам быстро и точно анализировать данные, что способствует эффективной организации и развитию работы кафедры. В целом, правильная организация управления документами кафедры делает общую деятельность кафедры упорядоченной и эффективной, что позволяет повысить качество образовательного процесса. Эффективная организация управления документами отдела не только улучшает рабочие процессы, но и укрепляет внутреннюю и внешнюю коммуникацию отдела. Благодаря управлению документами облегчается точный обмен информацией между сотрудниками, преподавателями и студентами, работающими на кафедре. Это ускоряет процессы принятия решений и улучшает их качество. Вся работа в отделе организована, а документация управляется последовательно и эффективно. Систематический документооборот способствует раннему выявлению проблем, возникающих в

деятельности отдела, и позволяет оперативно реагировать на них. Система также обеспечивает управление документами в электронном виде, что значительно упрощает их поиск, обновление и хранение.

Автоматизированная система управления документами отдела также повышает безопасность хранения документов. Хранение и архивирование электронных документов снижает риск их утери или кражи. В нем хранится точная информация об истории каждого документа, связанных с ним изменениях и о том, кто его просматривал, что обеспечивает подлинность и надежность документов. В то же время через систему управления документами руководители и сотрудники отделов имеют доступ ко всем документам в любое время, что облегчает более быстрое и точное выполнение рабочих процессов. Кроме того, благодаря системе управления документами будет улучшена научная деятельность кафедры. Регулярное обновление научных статей, исследований, методических пособий и других научных документов способствует их представлению в научных журналах и на конференциях. Научная работа кафедры систематически архивируется, что способствует дальнейшему проведению научных исследований и развитию учебных процессов. В общей деятельности кафедры автоматизированная система управления способствует повышению эффективности, дальнейшему совершенствованию управления и повышению качества образования. Таким образом, правильная организация управления документами отдела позволяет более эффективно, упорядоченно и последовательно вести всю деятельность отдела. Это не только повысит качество работы на кафедре, но и положительно скажется на общем развитии учебного заведения. Автоматизированная система документооборота с ее высокой эффективностью, безопасностью и удобством помогает качественно организовать учебный процесс на кафедрах и соответствовать современным требованиям.

Использованная литература:

1. Акрамов Т., "Информационные системы и технологии", Ташкент, 2021.
2. Ikromov, K. (2025). PEDAGOGIKA YO'NALISHI TALABALARINI BAHOLASHDA SUN'IY INTELLEKT FOYDALANISHINING TAHLILI. DIGITAL TRANSFORMATION AND ARTIFICIAL INTELLIGENCE, 3(2), 40-45.
3. Xolmaxamatovich, I. X. (2025). TALABALARNING TA'LIM JARAYONIDAGI FAOLLIGINI SUN'IY INTELLEKT YORDAMIDA TAHLIL QILISH. Журнал научных исследований и их решений, 4(02), 392-398.

4. Williams R., "PHP and MySQL Web Development", 5th Edition, Pearson Education, 2018.
5. Welling L. & Thomson L., "PHP and MySQL Web Development", Addison-Wesley Professional, 2016.
6. W3Schools, "SQL Tutorial: Learn SQL Programming Step-by-Step", 2023. URL: <https://www.w3schools.com/sql/>.

Ekologik barqarorlik va raqamli innovatsiyalar: Qon topshirish tizimida zamonaviy yondashuv

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Annotatsiya: Donorlik jarayonlarining raqamlashtirilishi qog‘oz sarfini kamaytirish, ekologik barqarorlikni ta‘minlash va sog‘liqni saqlash tizimi samaradorligini oshirishga xizmat qiladi. Avtomatlashtirilgan tizimlar donorlarni ro‘yxatga olish, qon banklarini boshqarish va donorlik ehtiyojlarini tahlil qilishni osonlashtiradi. Blokcheyn, IoT va sun‘iy intellekt texnologiyalaridan foydalanish donorlik jarayonlarini shaffof, xavfsiz va tezkor qiladi.

Kalit so‘zlar: Qon donorligi, ekologik barqarorlik, raqamlashtirish, blokcheyn, sun‘iy intellekt, donor ma‘lumotlari.

Аннотация: Цифровизация процессов донорства способствует снижению потребления бумаги, обеспечению экологической устойчивости и повышению эффективности системы здравоохранения. Автоматизированные системы упрощают регистрацию доноров, управление банками крови и анализ потребностей в донорстве. Использование технологий блокчейна, Интернета вещей (IoT) и искусственного интеллекта делает процессы донорства прозрачными, безопасными и оперативными.

Ключевые слова : Донорство крови, экологическая устойчивость, цифровизация, блокчейн, искусственный интеллект, данные доноров.

Annotation: The digitalization of donation processes helps reduce paper consumption, ensure environmental sustainability, and improve the efficiency of the healthcare system. Automated systems simplify donor registration, blood bank management, and the analysis of donation needs. The use of blockchain, Internet of Things (IoT), and artificial intelligence technologies makes donation processes transparent, secure, and efficient.

Keywords: Blood donation, environmental sustainability, digitalization, blockchain, artificial intelligence, donor data.

Today, environmental sustainability and the use of automated systems in the healthcare sector are among the most pressing issues. The blood donation system plays a crucial role in saving lives, but its efficiency is often dependent on manual management and paper-based documentation. This article explores the possibilities of optimizing resource utilization and improving the quality of life through the automation of the donation system and the application of an ecological approach. The environmental benefits of an automated blood donation system lie in paperless operations and the use of an electronic database. Paperless operations an automated system enables the digital registration, notification, and monitoring of donors, reducing paper consumption and positively impacting the environment. Research indicates that transitioning to paperless technologies in the healthcare system can reduce waste by 30-40% [Smith, J., & Brown, P. (2023)]. Electronic database: The use of an electronic database in the blood donation process enhances the efficiency of blood banks. This, in turn, helps conserve energy and resources required for system operations.

The role of innovative technologies in automating the blood donation system with an ecological approach is as follows:

- Blockchain technologies: Enable the secure and reliable management of donor information.
- IoT (Internet of Things): Can be used to monitor and track the blood storage process.
- Artificial intelligence: Analyzes donation needs and helps identify regions with high blood demand [Johnson, R. (2021)].

According to WHO studies, the use of digital technologies in the healthcare system leads to the following outcomes:

Reduction of paper documentation – This minimizes environmental impact and promotes ecological sustainability.

Real-time monitoring of blood reserves – This improves the efficiency of blood storage and distribution in donation centers.

Transparency of the blood supply system – The use of blockchain technologies enables tracking and enhances the security of the blood donation process.

According to WHO data, automated blood donation systems not only help save lives but also contribute to the efficient management of the healthcare system and ensure

environmental sustainability. Therefore, the digitalization and automation of donation processes have become one of the most pressing areas in modern healthcare [World Health Organization (WHO). (2020)].

Research by Green and Taylor (2022) highlights the importance of ensuring environmental sustainability in the healthcare system through technology. Their findings indicate that digitalization in medical services reduces paper documentation and helps decrease waste volume by 25-30%. This supports the ecological efficiency of automating the blood donation system. Additionally, the study provides insights into the role of electronic systems in energy efficiency and resource conservation. For example, the use of IoT and artificial intelligence technologies optimizes donation processes, reducing unnecessary expenses in medical institutions. The application of blockchain technology in the donation system enhances transparency, minimizing the risks of misallocation or loss of blood supplies. These studies demonstrate that automating the donation system is essential not only for improving efficiency but also for reducing its negative impact on the environment. Therefore, the article proposes integrating environmental sustainability with technological advancements to enhance the blood donation system [Green, T., & Wilson, L. (2022)].

The 2024 edition of the "Methodological Guidelines for Automating the Donation System", published by the Ministry of Health of the Republic of Uzbekistan, is intended for medical professionals, blood bank staff, and information technology specialists. This publication provides practical guidelines for modernizing the donation system in Uzbekistan. Released by the Ministry of Health Publishing House in Tashkent, it serves as an important manual for implementing sectoral reforms. These guidelines cover the following key aspects:

1. Importance and Necessity of Automating the Donation System:

- Reducing errors caused by human factors in the donation process.
- Simplifying data management in blood banks and storing it in a centralized system.

2. Development of Technological Infrastructure:

- Recommendations on implementing specialized software and hardware for donor registration.
- Integrating the system with medical institutions and expanding information exchange capabilities.

3. Environmental Sustainability:

- Reducing the negative impact on the environment by transitioning to a paperless system.

-Environmental benefits of using electronic records and digital databases.

4. Optimization of Blood Bank Operations:

-Implementing automated solutions for tracking blood reserves and managing the donor database.

-Efficiently organizing the distribution of blood to various medical institutions.

5. Implementation of Innovative Technologies:

-Ensuring transparency and security in the donation process using blockchain technology[Uzbekistan Ministry of Health. (2024)].

Reference

1. Smith, J., & Brown, P. (2023). Sustainable Healthcare Systems: The Role of Automation. *Journal of Environmental Health*, 15(3), 120-135.
2. Johnson, R. (2021). Blockchain and IoT in Blood Donation Systems. *International Journal of Healthcare Technology*, 12(4), 245-260.
3. World Health Organization (WHO). (2020). *Global Database on Blood Donation and Safety*. WHO Press.
4. Green, T., & Wilson, L. (2022). Eco-Friendly Approaches to Medical Record Management. *Environmental Science Journal*, 18(2), 89-105.
5. Uzbekistan Ministry of Health. (2024). *Methodological Guidelines for Automating the Donation System*. Tashkent: Ministry of Health Publishing House.

THE CORRELATION BETWEEN PSYCHOLOGICAL STRESS AND MANAGERIAL QUALITIES IN DEPARTMENT HEADS OF HIGHER EDUCATION INSTITUTIONS

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Annotation

This article examines the correlation between psychological stress and managerial qualities in department heads of higher education institutions. The study shows that increased stress can hinder effective leadership, while emotional stability and resilience support the development of strong managerial competencies.

Keywords: psychological stress, managerial qualities, department head, higher education, leadership competence, emotional stability, academic management.

It is important to note that one of the main objectives of our research is to study the influence of psychological stress on the manifestation of managerial qualities in department heads working in higher education institutions. Specifically, the research aims to determine how the level of psychological stress experienced by department heads affects the development of their managerial competencies.

For this purpose, two methodologies were applied to the respondent groups: R.S. Nemov's "Leader" method and N.E. Vodopyanova's "Psychological Stress Scale." These tools allow for the identification of how psychological stress indicators—such as emotional instability, sudden mood decline, and dissatisfaction with one's profession or self—impact the manifestation of managerial qualities.

The methods were administered to a group of department heads, and the data collected were analyzed both quantitatively and qualitatively. The results are presented in Table 1.

Table-1

**The Relationship Between Managerial Competence and Psychological Stress in
Department Heads of Higher Education Institutions (N=320)**

(Based on Pearson Correlation Criterion)

Component	Respondents	Psychological Stress (r)
Managerial Qualities	Male Department Heads	-0.51**
	Female Department Heads	-0.44**

Note: * $p \leq 0.05$; ** $p \leq 0.01$

According to the results of the methodology (see Table 1), a significant negative correlation was identified between managerial qualities and psychological stress among male department heads in higher education institutions ($r = -0.51$; $p \leq 0.01$). This indicates that the level of emotional strain directly affects the manifestation of managerial traits in respondents. High stress levels often lead to difficulties in managing emotions during challenging work situations, a lack of behavioral self-reflection, reduced motivation to solve problems, and a tendency toward hopelessness. Moreover, such negative conditions in the professional environment can hinder the development of managerial qualities. As a result, department heads may experience difficulties concentrating when making critical decisions and may suffer from a decline in positive thinking and problem-solving skills.

At the same time, when examining the results of female department heads in higher education institutions, it was found that managerial qualities also exhibit a negative correlation with psychological stress ($r = -0.44$; $p \leq 0.01$). These findings suggest that feelings of emotional exhaustion and dissatisfaction with one's internal experiences can contribute to a reduced ability to manage both oneself and others in a professional context. Furthermore, increased psychological stress may lead to losing composure in challenging situations, giving in to negative emotions, abandoning professional goals, and losing confidence in the future success of departmental activities—behaviors that are inconsistent with strong managerial competence.

In conclusion, when analyzing the effect of psychological stress on the manifestation of managerial qualities in department heads, a clear negative relationship between the two variables emerges. In particular, frequent emotional strain, ongoing fatigue, and difficulty in managing emotions may result in distraction from leadership responsibilities and difficulties in making sound decisions. These indicators confirm that the level of psychological stress directly affects the emergence and development of managerial competencies in department heads.

References

1. Водопьянова, Н.Е. Психодиагностика стресса. – Санкт-Петербург: Речь, 2009. – 288 с.
2. Немов, Р.С. Психология: Учебник для студентов педвузов. – М.: Владос, 2003. – Т. 3. – 688 с.
3. Ахмедова, Д.М. Бошқарув фаолиятида шахснинг стрессга мойиллиги ва унинг психологик жиҳатлари. // Психология: илмий-амалий журнал. – 2022. – №4(78). – Б. 115–120.

Feminist and Psychoanalytic Criticism of Female Characters in Tragedy

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Annotation: This passage explores how female characters in Shakespeare's tragedies have been examined through feminist and psychoanalytic criticism. It highlights how feminist criticism sheds light on the restrictive gender roles imposed on characters like Ophelia, Desdemona, and Cordelia, while also recognizing figures like Lady Macbeth, Goneril, and Regan who challenge patriarchal norms. Psychoanalytic criticism investigates the unconscious motivations and internal psychological conflicts of female characters, using theories from Freud, Lacan, and Kristeva. The analysis focuses on characters' desires, identity crises, and repressed emotions, revealing how these aspects influence their tragic ends. Together, these approaches present a multidimensional understanding of the psychological and social realities faced by Shakespeare's women.

Key Words: Shakespearean tragedy, female characters, feminist criticism, psychoanalytic criticism, patriarchy, gender roles ,madness ,repression, identity, agency, Ophelia, Desdemona ,Cordelia, Lady Macbeth, Lacan, Freud, Hysteria, power dynamics

The study of female characters in Shakespeare's tragedies has evolved significantly over time, with various critical approaches offering new insights into their roles, agency, and psychological depth. Two of the most influential perspectives are feminist criticism and psychoanalytic criticism, both of which examine the ways in which women in Shakespeare's plays reflect and challenge patriarchal ideologies. Feminist criticism focuses on the societal constraints placed upon female characters, analyzing their resistance to or submission to male authority. In contrast, psychoanalytic criticism delves into the psychological motivations, unconscious desires, and internal conflicts that shape these women's actions and fates. Together, these perspectives provide a comprehensive understanding of Shakespeare's tragic heroines, revealing the complexity of their representation and their significance within the dramatic structure of his plays. Feminist Criticism of Female Characters in Shakespearean Tragedy. Feminist literary criticism emerged as a distinct analytical framework in the 20th century, focusing on the ways in which literature reinforces or subverts gender norms.

When applied to Shakespeare's tragedies, this approach highlights how female characters are often trapped within patriarchal structures that limit their autonomy and define their value in relation to men. Feminist scholars argue that many of Shakespeare's women, such as Desdemona (*Othello*), Ophelia (*Hamlet*), and Cordelia (*King Lear*), are victims of male-dominated societies where their voices are silenced, and their fates are dictated by the men around them. Ophelia, for example, is frequently interpreted as a tragic figure whose madness and eventual death result from the oppressive control of her father, Polonius, and her lover, Hamlet. Feminist critics view her character as a representation of the limited choices available to women in Elizabethan society—forced to either conform to patriarchal expectations or be cast aside. Similarly, Desdemona's fate in *Othello* reflects the dangers of a world where women's loyalty and virtue are questioned, leading to violence and injustice. However, feminist readings of Shakespeare's tragedies also acknowledge that some female characters display agency and challenge gender norms, even if they ultimately face tragic ends. Lady Macbeth (*Macbeth*), Goneril, and Regan (*King Lear*) defy traditional notions of female passivity by pursuing power and ambition. Although their defiance is often met with harsh consequences, their presence in the plays suggests a critique of rigid gender roles, exposing the instability of patriarchal authority.

Psychoanalytic Criticism of Female Characters in Shakespearean Tragedy. Psychoanalytic criticism, rooted in the theories of Sigmund Freud and later expanded by figures like Jacques Lacan and Julia Kristeva, explores the unconscious motivations and internal conflicts of literary characters. When applied to Shakespeare's female characters, this approach examines how their psychological struggles reflect deeper anxieties about gender, identity, and power. One of the key psychoanalytic interpretations of Shakespearean tragedy involves the concept of repression and desire. Lady Macbeth, for instance, has been analyzed through a Freudian lens as a character who suppresses traditional feminine qualities in favor of ambition and aggression. Her famous invocation to "unsex me here" demonstrates her attempt to reject perceived female weakness and adopt traits associated with masculinity. However, her eventual descent into guilt and madness suggests that the repression of her emotions leads to psychological disintegration. Ophelia's madness has also been extensively studied from a psychoanalytic perspective. Freud's notion of hysteria has been applied to her character, with critics suggesting that her erratic behavior and nonsensical speech are expressions of repressed trauma and grief. Lacanian critics, on the other hand, interpret her descent into madness as a loss of identity, arguing that she becomes "the nothing" when she is no longer defined by her relationships with men. Another psychoanalytic

interpretation involves the Oedipal and Electra complexes, where characters' relationships with parental figures shape their psychological development. In *King Lear*, for example, the conflict between Cordelia and her father can be analyzed as an exploration of familial bonds, power dynamics, and subconscious desires. Lear's rejection of Cordelia and his subsequent suffering highlight the deep psychological and emotional ties between father and daughter, as well as the devastating consequences of misinterpreted love and loyalty.

Both feminist and psychoanalytic criticism provide valuable frameworks for understanding the female characters in Shakespeare's tragedies. While feminist analysis reveals the ways in which these women are constrained by patriarchal systems, psychoanalytic interpretations uncover the deep-seated psychological conflicts that shape their behaviors and ultimate fates. Together, these perspectives offer a richer, more nuanced understanding of Shakespeare's heroines, demonstrating that their roles extend beyond mere secondary figures to central, complex participants in the unfolding tragedy. By examining their struggles, desires, and agency through these critical lenses, scholars continue to uncover new meanings and interpretations of Shakespeare's timeless works.

REFERENCES

1. Alison Findlay. *Women in Shakespeare: A Dictionary*. Bloomsbury, 2010. 45–95.
2. Peter Erickson. *Patriarchal Structures in Shakespeare's Drama*. University of California Press, 1985. 55–120
3. Valerie Traub. *Desire and Anxiety: Circulations of Sexuality in Shakespearean Drama*. Routledge, 1992. 90–160.
4. Nodira Abdullayeva. *Shakespeare tragediyalarida ayol obrazi va dramatik konflikt*. Toshkent: Akademyashr, 2012. 60–90-betlar.
5. French, M. (1981). *Shakespeare's Division of Experience*. Summit Books.
6. Showalter, E. (1985). *The Female Malady: Women, Madness and English Culture, 1830–1980*. Virago.

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