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« ZAMONAVIY ILM-FAN VA INNOVATSIYALAR NAZARIYASI » NOMLI ILMIY, MASOFAVIY, ONLAYN KONFERENSIYASI

O'ZBEKISTON RESPUBLIKASI PREZIDENTINING 2020 YIL 2-MART KUNGI «ILM, MA'RIFAT VA RAQAMLI IQTISODIYOTNI RIVOJLANTIRISH YILI»DA AMALGA OSHIRISHGA OID DAVLAT DASTURI TO'G'RISIDA»GI FARMONIDA KO'ZDA TUTILGAN VAZIFALARNI IJROSINI TA'MINLASH MAQSADIDA «INNOVATIVE WORLD» MCHJ TOMONIDAN TA'SIS ETILGAN «ORIENTAL JOURNAL ACADEMIC AND MULTIDISCIPLINARY JOURNAL (OJAMR)» ILMIY-USLUBIY JURNALINING (O'ZBEKISTON RESPUBLIKASI PREZIDENTI ADMINISTRATSIYASI HUZURIDAGI AXBOROT VA OMMAVIY KOMMUNIKASIYALARNI RIVOJLANTIRISH AGENTLIGINING 138572-SONLI GUVOHNOMA HAMDA ISSN 3030-3079) "ZAMONAVIY ILM-FAN VA INNOVATSIYALAR NAZARIYASI" NOMLI ILMIY, MASOFAVIY RESPUBLIKA ILMIY-AMALIY ONLINE KONFERENSIYASINI E'LON QILADI.

KONFERENSIYA TO'PLAMI ZENODO, OPEN AIRE, OPEN ACCESS VA INTERNET ARCHIVE BAZALARIDA INDEKSLANADI. KONFERENSIYA TO'PLAMIGA DOI RAQAMI BERILADI.

KONFERENSIYA TO'PLAMIGA QUYIDAGI YO'NALISHLAR BO'YICHA MAQOLALAR QABUL QILADI:

1. ANIQ FANLAR
2. TABIIY FANLAR
3. TEXNIKA FANLARI
4. PEDAGOGIKA FANLARI
5. IJTIMOIIY-GUMANITAR FANLAR
6. TIBBIYOT FANLARI
7. IQTISOD FANLARI
8. QISHLOQ XO'JALIGI FANLARI

ESLATMA! KONFERENSIYA MATERIALLARI TO'PLAMIGA KIRITILGAN MAQOLALARDAGI RAQAMLAR, MA'LUMOTLAR HAQQONIYLIGIGA VA KELITIRILGAN IQTIBOSLAR TO'G'RILIGIGA MUALLIFLAR SHAXSAN JAVOBGARDIRLAR.



ВЛИЯНИЕ ИННОВАЦИЙ НА ФИНАНСОВЫЕ ПОКАЗАТЕЛИ
КОММЕРЧЕСКИХ БАНКОВ

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Аннотация. Научный тезис посвящен вопросам влияния инноваций на такие финансовые показатели банков как прибыльность, рентабельность активов и капитала. Приводятся также и статистические данные банковского сектора касательно влияния инноваций на финансовые показатели.

Ключевые слова. Инновации, рентабельность, банковские услуги, прибыль, цифровые сервисы.

Современный банковский сектор претерпевает одну из самых масштабных трансформаций за всю историю своего существования. Инновации — важный фактор, определяющий конкурентоспособность и прибыльность банков в условиях цифровой экономики. Внедрение новых технологий изменяет бизнес-модели, структуру доходов и систему взаимоотношений между банками и клиентами.

По данным Международного валютного фонда, более 70 % коммерческих банков в мире в период 2020–2025 гг. внедрили хотя бы одну форму технологической инновации: от искусственного интеллекта до платформ open banking [1]. Исследования Аллена и Гейла показывают, что инновации в финансовой сфере «переносят фокус прибыли с процентных доходов на комиссионные и цифровые сервисы», формируя новую архитектуру банковских доходов [2].

В Узбекистане цифровизация банковских услуг развивается ускоренными темпами. Согласно отчёту Центрального банка Республики Узбекистан, доля онлайн-транзакций в общем объёме банковских операций выросла с 36 % в 2020 г. до 71 % в 2025 г. [3]. Это напрямую отражается на финансовых результатах: прибыльность активов и капитала стабильно растёт, а уровень операционных расходов снижается.

Для оценки влияния инноваций использовались показатели:



Рис 1. Финансовые показатели банков

В Узбекистане такие изменения уже наблюдаются:

- Asaka Bank в 2024 г. создал Digital Hub для разработки финтех-продуктов;
- Ipoteka Bank автоматизировал процесс кредитного скоринга с помощью AI, что снизило время рассмотрения заявок на 40 %;
- Agrobank внедрил систему Big Data для анализа клиентского поведения, что увеличило продажи сопутствующих услуг на 22 %.

Это показывает, что инновации в управлении и процессах оказывают не меньшее влияние на прибыль, чем технологические внедрения. Инновации трансформируют структуру доходов банков. Если раньше основным источником прибыли были процентные доходы, то сегодня все большую долю занимают комиссионные и сервисные доходы от цифровых услуг.

Таблица 1. Финансовые показатели банковского сектора за 6 лет

Год	ROA (%)	ROE (%)	Cost-to-Income (%)	Доля цифровых доходов (%)
2020	1.0	8.5	57	17
2021	1.3	9.8	52	24
2022	1.6	11.0	48	32
2023	1.9	12.3	45	40
2024	2.1	13.5	43	47
2025	2.3	14.2	41	53

График показывает устойчивую тенденцию: рост цифровых доходов сопровождается снижением издержек и ростом прибыльности. Анализ корреляции между уровнем цифровизации и ROA/ROE демонстрирует положительную связь на уровне +0.78, что подтверждает статистическую значимость влияния инноваций на прибыль банков.



Результаты исследования подтверждают, что инновации оказывают существенное и долгосрочное влияние на прибыльность банков. Основные эффекты заключаются в:

I. Оптимизации затрат (за счёт автоматизации и цифровизации процессов).

II. Росте комиссионных доходов от инновационных продуктов.

III. Укреплении клиентской базы благодаря онлайн-каналам обслуживания.

Инновации становятся ключевым источником устойчивого роста и конкурентных преимуществ в банковском секторе. Они не только оптимизируют внутренние процессы и повышают качество обслуживания клиентов, но и создают новые каналы дохода, что напрямую влияет на прибыль банков. Цифровизация финансовых услуг, внедрение онлайн-платежей, искусственного интеллекта и big data позволяют банкам значительно сократить операционные издержки и одновременно расширить клиентскую базу за счёт более персонализированных продуктов.

Для банков Узбекистана внедрение инноваций также имеет стратегическое значение: цифровые технологии усиливают доверие населения к финансовым институтам, способствуют росту безналичных операций и повышают прозрачность финансовых потоков. В долгосрочной перспективе инновации формируют основу для устойчивой финансовой системы, адаптированной к требованиям глобальной экономики и технологическим вызовам XXI века. Таким образом, инвестиции в инновационное развитие — это не просто инструмент повышения прибыли, а важнейший фактор обеспечения финансовой стабильности и конкурентоспособности банков в будущем.

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СЛОВО «ЗАРРОБХАНА» И ЕГО АНАЛИЗ В ТАДЖИКСКОМ ЯЗЫКЕ

ШУКУРОВА ХАФИЗА САЙФИЕВНА

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АННОТАЦИЯ: Статья посвящена лингвистическому анализу слова «Зарробхона». Изучаются происхождение, структура, значение и историческое развитие этого слова. На основе историко-лексических источников автор устанавливает, что слово «Зарробхона(монетный двор)» вошло в таджикский язык как заимствование из арабского языка и впоследствии укоренилось в таджикской культуре. Его употребление в научных и исторических трудах, а также в словарях свидетельствует о том, что это слово является не только названием денежно-производственного учреждения, но и частью историко-культурного лексикона таджиков.

КЛЮЧЕВЫЕ СЛОВА: монетный двор, словарь, этимология, монеты, термин, слово, лингвистический анализ.

ВВЕДЕНИЕ

Язык, как зеркало культуры и истории народа, отражает следы различных периодов развития общества. Каждое слово или термин, появляющиеся в языке, имеют свои корни в определённой историко-культурной среде. Одним из таких слов, имеющих историко-культурную ценность, является слово «монетный двор», которое в исторических трудах и старинных словарях трактуется как монетный двор. Например, Mint خانه ضربا - монетный двор, место, где чеканятся серебряные и золотые монеты, называется чеканочная мастерская. Первые монетные дворы появились в Древней Греции и Лидии (конец VIII - начало VII вв. до н. э.). В V-III вв. до н. э. монетные дворы располагались вблизи храмов [1, 152].

В Афинах славился монетный двор храма Тесея, а в Риме – монетный двор богини Юноны Монеты. В Персии, в Бостоне, монетные дворы появились со времен правления Дария I, где выпускались дарики и шекели (серебряные монеты). Первые монетные дворы появились в Бактрии, в Бостоне, в V веке до нашей эры, и их монеты чеканились с изображением совы, по образцу афинских монет. В Согдиане, в Бостоне, монетный двор появился с IV века до нашей эры, где монеты чеканились по образцу Александра Македонского. На древних монетах, в том числе из Бактрии, выгравированы одна или две первые буквы названия

монетного двора. В исторических сочинениях античной эпохи работники монетного двора упоминаются как монетчики, литейщики, весовщики, мерщики, помощники мастера и т. д.

В период Сасанидов монетные дворы работали в 86 городах, наиболее известные из которых находились в Истахре, Ширазе, Рее, Хамадане, Бишапуре, Балхе, Герате, Мерве и Самарканде. Первые две-три буквы названия монетного двора также встречаются на монетах этого периода. По словам Наршахи, монетный двор Бухары находился во дворце Мохак, где чеканились монеты Гитриф.

В период Саманидов монетные дворы работали в 38 городах, большинство из которых находились в Трансоксании (20), Хорасане (17) и Рее (1). Крупнейшие монетные дворы эпохи Саманидов располагались в городах Бухара, Самарканд, Шош, Балх, Андароба, Нишапур и Мухаммадия (Рай). Монетные дворы эпохи Саманидов действовали в Таджикистане, в том числе в Хутталоне, Вахше, Раште, Худжанде и Усурушане, самый известный из которых находился в центре Хутталона — городе Хульбук. Некоторые монетные дворы Саманидов располагались вблизи крупных серебряных рудников, названия которых пишутся на дирхемах как «Ма'дан» или вместе с названием города, например, «Ма'дан аш-Шош». Худжандский монетный двор действовал до XV века, а Хутталонский — в XV веке. Средневековые монетные дворы в исламских странах назывались «Доруззарб». На некоторых среднеазиатских серебряных монетах (XIII век) встречается фраза «Доруззарб Бухара» [6, 152].

В начале XVI века монетный двор для чеканки медных монет в Средней Азии назывался «Дорулфулус», это название встречается на монетах Самарканда (выпускались в 1508-1509 годах). Крупнейший монетный двор в Средней Азии находился в Бухаре (XIX век — начало XX века), а более мелкие — в Коканде и Хорезме. Бухарский монетный двор находился в Арке и чеканил монеты два раза в год по мере необходимости. Начальник монетного двора — «доруга» — назначался эмиром. В 1893 году эту должность занял Астанакул Парваначи. Монетный двор был передан [6, 153] предпринимателям за определённую плату. Монетный двор ежедневно выдавал предпринимателям золотые, серебряные и стальные штампы для чеканки монет и забирал их обратно после завершения работы. Предприниматели образовали общество менял из числа опытных ювелиров и запустили монетный двор. Монетный двор имел семь мастерских и 10–20 рабочих, которые выполняли всю работу вручную. Рабочие работали в монетном дворе днём, а вечером уходили домой.

В настоящее время монетные дворы имеются в 48 странах мира. Больше всего монетных дворов (4) в Германии. В настоящее время два монетных двора действуют в России (в Санкт-Петербурге и Москве) и один в Казахстане (в городе Эскишехир). Страны, не имеющие монетных дворов, выпускают свои банкноты и монеты за рубежом. Монеты Таджикистана выпускаются на монетных дворах в Санкт-Петербурге и Казахстане. [6, 153]

Изучение этого слова имеет научное значение, поскольку через него можно понять языковые, культурные и экономические связи Средневековья в научной среде. С лингвистической точки зрения, «зарробхона» представляет собой интересный пример сложносоставных структур в таджикском языке, в которых сочетаются заимствованные и исконно русские элементы. Целью данного исследования является изучение лингвистического и этимологического строения слова «зарробхона», анализ его структуры и значения в древности и современности, а также рассмотрение его места в таджикской лексической системе.

ЛИТЕРАТУРНО-МЕТОДОЛОГИЧЕСКИЙ АНАЛИЗ

Для изучения темы использовались этимологический, сравнительно-исторический и лексикографический методы. Основными источниками являются «Национальная таджикская энциклопедия» [1], труды исследователей в области нумизматики и языкознания – А.Н. Зографа, Э.А. Давидовича, Р.З. Бурнашевой и Л.Н. Казамановой [3].

Также были использованы исторические словари, такие как «Словарь таджикского языка» [4], «Словарь арабской лексики в таджикском языке» [5], а также письменные памятники саманидского периода. В анализе также рассматривались однокоренные и синонимичные слова, такие как «сиккахона», «доруззарб», «дарик», «фулус» и «муаммал».

Аналитико-сопоставительный метод позволил определить корень, форму и значение исследуемого слова в различных языковых средах.

ОБСУЖДЕНИЕ И ЗАКЛЮЧЕНИЕ

Лингвистическая принадлежность и происхождение этого слова следующие: слово «зарробхона» состоит из двух частей: зарроб + хона. Первая часть — зарроб — образована от арабского корня زرب (zarb), что означает «чеканить, чеканить монету». Вторая часть — хона — персидское слово, означающее «место, здание, местоположение». В целом, «зарробхона» буквально означает «место, где чеканят монеты».

Структурный анализ. С точки зрения структуры, «зарробхона» — сложное существительное, образованное от «существительное +

существительное». Первая часть — арабское слово, вторая — таджикское. Данная структура является примером полуконфлексификации в таджикском языке. Семантический и семантический анализ

В средние века «зарробхона» обозначала исключительно государственное учреждение по чеканке монет. Со временем в современном языке это слово используется почти исключительно в историко-культурных текстах.

В таджикском произношении слово имеет устойчивую форму заробхона. Однако в некоторых древних памятниках встречается также форма «заробхона», «зарбахона». В других персоязычных языках (иранско-персидском или афганском дари) это слово употребляется в той же форме.

ЗАКЛЮЧЕНИЕ

Анализ слова «зарробхона» показывает, что этот оазис является ярким примером сосуществования элементов арабского и персидского языков в таджикской культуре. Производная часть слова «зарроб» пришла под влиянием исламской культуры, а часть «хона» – из местных слов.

С лингвистической точки зрения такие слова имеют не только историческое, но и системное значение. Использование слова «зарробхона» в исторических трудах, таких как «История Бухары» и других средневековых источниках, свидетельствует о наличии официальной государственной терминологии в таджикском языке.

«Зарробхона» – сложное заимствование с арабскими и персидскими корнями. Это слово занимает историческое и культурное место в таджикском языке, что свидетельствует о языковых связях таджиков с другими исламскими народами. Его морфологическая структура является примером адаптации заимствования к правилам таджикской лексикографии. С семантической точки зрения «зарробхона» является символом государственного хозяйства и культуры зарабатывания денег в истории таджиков.

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70-80-YILLAR O'ZBEK SHE'RIYATIDA SAN'ATKOR QISMATINING BADIY
TALQINI

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Annotatsiya: She'riyatdagi san'at mavzusi ko'pincha shoirlar ijodiy tabiati, badiiy ifodaning betakrorligi, hissiy yukning og'irligi, metaforiklik va assotsiativlikning maromida qo'llanilishi bilan alohida qiymatga ega. Maqolada san'atkor qismati badiiy talqiniga bag'ishlangan she'riyat namunalari tahlilga tortilgan.

Kalit so'zlar: she'riyat, san'at, san'atkor, san'atkor qismati, badiiy talqin, adabiyot, teatr, musiqa.

Аннотация: Тема искусства в поэзии часто приобретает особую ценность благодаря творческой природе поэтов, своеобразие художественного выражения, эмоциональной нагрузке, использованию метафоричности и ассоциативности в ритме. В статье анализируются образцы поэзии, посвящённые художественной интерпретации судьбы художника.

Ключевые слова: поэзия, искусство, художник, судьба художника, художественная интерпретация, литература, театр, музыка.

Abstract: The theme of art in poetry often acquires particular value due to the creative nature of poets, the uniqueness of artistic expression, the emotional charge, and the use of metaphor and associative rhythm. This article analyzes examples of poetry dedicated to the artistic interpretation of the artist's destiny.

Keywords: poetry, art, artist, artist's destiny, artistic interpretation, literature, theater, music.

70-yillar avlodi ilk ijodidanoq o'z g'oyaviy-estetik qarashlarini va pozitsiyalarini belgilab olgan edilar. Shuning uchun ham shoir umuman san'atkor qismati mavzusida talaygina she'rlar yaratildi. Xurshid Davron ijodida "Vereshchagin", "Chyurlyonis", "Behzod", "Migel Ernandes so'zi", "V.G.Yan xotirasiga", "Sholoxov yodi", "Maksimilian Voloshin", "Turg'un Alimatovning tanburi" va boshqa she'rlarini ko'rishimiz mumkin. Usmon Azim she'riyatida "Brut", "Van gog haqida hikoya", "Usmon Nosirning so'nggi tushi", "Oybekning so'nggi she'ri", "Maqsud Shayxzoda", "Shuhrat Abdurashid xotirasiga", "G'ofur g'ulom haqida hujjatli fantaziya", kabi she'rlarini olishimiz mumkin. Shavkat Rahmon she'riyatida "Lorka", "Y. Yevtushenkoga", "Pablo

Nerudaga”, “Buddaga bir nazar” kabi she’rlarini, Rauf Parfi ijodida esa “Tagor va Sarbon yomg’irlari” “Betxoven”, “Bayronning so’nggi safari”, “Van gog”, “Aleksandr Blok”, “Eduard Veydembaum”, “Pablo Neruda o’limiga”, “Aleksandr Ulyanov”, “Lutfixonim “Uyg’on bolam””, “Chingiz Aytmatov” kabi she’rlarni olishimiz mumkin. Ko’ryapmizki, ushbu davr ijodkorlari qalamga olgan san’atkor qismati haqidagi she’rlarning ko’lami nihoyatda keng. Har qanday davr boshqa davrlardan farq qiladi. Ushbu davrning ham boshqa davrlardan qiyofasi, turish- turmushi o’zga edi. Albatta bu o’zgachalik shu davrda yashagan insonning umumiy kayfiyatini belgilaydi. 70- yillar avlodi o’zidan avvalgi salaflaridan farqli o’laroq o’zi to’qnash kelgan hayot bilan g’oyaning, so’z bilan amalning bir-biriga nomuvofiqligini teranroq his qiladi. Shuning uchun ham she’rlarida o’zgacha ruh, o’zgacha qarash va o’zgacha kayfiyat aks etadi. Jumladan Xurshid Davron san’atkor qismati mavzusidagi she’rlaridan “Migel Ernandes so’zi” sarlavhasidagi she’rida Ispan shoiri Migel Ernandesning o’limidagi holatiga (uning ko’zlari ochiq holatda o’ladi) ulkan ijtimoiy dardni yuklaydi. Shoirning e’tiqodicha, shoirlik bekordir, agar “Kulfat panjasida qolgan insonga Qalbini baxsh eta olmasa”, chunki uning uchun shoirlik avvalo insonparvarlikdir. “Qanday yumay, kipriklarim qilichga aylansa, Vatan” deb boshlanuvchi she’rida “Qanday yumay? ” degan savolni qayta- qayta ta’kidlaydi va bu savolning ortida nega yuma olmayotganligining sabablarini keltirib o’tadi. “Qanday yumay, do’stlarimni ko’rib tursam, Ko’rib tursam ular tutgan qurollarni” deya shoirning yuragida og’riqqa aylangan dardlarini birma-bir qalamga oladi. Bu dardlar yuqoridan pastga qarab gradatsiya orqali kuchayib boradi va davomida:

“Ona xalqim sen ochlikdan, qullikdan,
Muhabbatdan, nafrattan to’kkan ko’z
Yoshlaringni bir o’zim to’ksam,
Oqib tushib qorachig’im, yumilarmi ko’zlarim?”

deya xitob qiladi. Shoir ko’zlarni nega yuma olmayotganini misrama-misra teranroq anglab boramiz-u, bu ijtimoiy chirkinlik, erkinlikning oyoqosti bo’lishi aynan bizda ham bo’lgandi-ku, Migel Ernandesniku ko’zlari ochiqqligini ko’rishibdi, ruhoniyl chaqa qo’yib ko’zlarini yumibdi deymiz. Ammo qatag’onlik qurbonlari bo’lgan millatimizning ziyolilari-yu ijodkorlarining, hatto o’liklari kafan ko’rmay ko’milmaganmidi; qabrlari uzoq o’lkalarda, muzliklarda, jarliklarda qolib ketmaganmidi degan savollar bo’g’zingda achchiq bir tug’yon bo’lib bo’g’adi. Shoir ham shu dardlarni his etgan albatta. Ammo buni ochiq ayta olmas edi. Shuning uchun ham o’zga bir yurt shoiri taqdirida buni akslantiradi. Shoir shu dardlarni his etib misralarda davom etadi:

“Men hech qachon qo’shiq aytmaganman motam, azada.

Biroq bugun bir xalq azasida kuylagim kelar,
Qo'shiq aytgim kelar o'lmas xalq haqida.
She'rlarimni yoqing, axir men bugun
Haqiqiy she'rlar yozishga qudratim yetganda
Qanday yumay ko'zlarimni,
Qanday yumay?!"¹

Misralarni o'qiydiz-u, ko'z oldimizda ispan shoiri emas, balki xalqni uyg'otish ilinjida o'limini bo'yniga olgan Cho'lponlar-u, Qodiriylarning nigohlarini ko'rgandek bo'lamiz go'yo. Ushbu misralarda shoir xalq azasi va o'lmas xalq so'zlarini bir-biriga qarama-qarshi qo'yadi. Aynan yuqorida aytgan ziyolilarning o'limi xalq azasi emasmi? katta yo'qotish emasmi? Ammo bu yo'qotishlar bilan xalqning ruhi sinmadi. Ozodlikka bo'lgan ishonch so'nmadi. X. Davronning "Vereshchagin" she'rini yuqoridagi she'riga qarama-qarshi qo'yib tahlil qilsak. Ushbu she'rida ham san'atkor qismati tasvirlangan. Ammo butunlay o'zga qismat egasi edi bu Vereshchagin.

Satang xonimlarning davrasi aro
U olis Turkiston ertagin so'zlar.
Tegrada shukuhli, beg'am bir sado,
Bashang quvonchlarga o'rgangan ko'zlar.

U so'zlar Toshkandu Jizzah, Samarqand
Poyida qanday jon berganin sartlar.
Quvonchdan shivirlar: (Xonimlar tinglang!)
"Eh, bizning soldatlar, chinakam mardlar!"

Vasilevich Vereshchagin Ruslarning Osiyoga yurishlarida faol qatnashgan rus rassomi edi. 1868-yil 8-9- iyunda Samarqandda bo'lgan dahshatli qirg'inlarda ham qatnashadi. "Qonli voqealarni chizishni, Peterburgning kibor xonimlari davrasida: "Dorga osilgan odamlar tipirchilab turganda, rasmlarini chizganman", deya maqtanishni, "bir mullavachchani minoradan uloqtirib yubordim", deb maktublarida kerilishni haddan tashqari yoqtirgan mustabid rassom bu so'zlarni jazoga tortilayotgan odamlarga achinganidan emas, balki "saxovatli" Konstantin Petrovich irodasi va qatiyatiga qoyil qolganidan qayd etadi! Es-hushi joyida bo'lgan odamning inson qonini to'kib turgan jallodni "sahovatli" deyishiga ishonish mumkinmi?!"¹ X. Davronning "Bosqinchi qahramon bo'ldimi?" nomli maqolasini "Zvezda Vostoka" oynomasining bosh muharriri S.Taturga ochi xat shaklida yoziladi. Ushbu maqolada oynomaning 1990-yil 3-sonida

¹ Xurshid Davron. Bolalik ovozi. – T.: Adabiyot va san'at, 1986. – B. 138.

bosilgan “ko’zbo’yamachilik” asosida yozilgan maqolalariga keskin e’tiroz bildiradi. Bu maqolalar orasida “Rossiyaning mustamlakachilik siyosati, bu siyosatni amalga oshirgan generallar “jasorati” maddohi V. Vereshchagin” deya tilga oladi va u haqida shunday yozadi: “Vereshchagin haqidagi oynomangiz so’zboshida xatolar bor: “Mashhur rus musavviri Vasiliy Vasilevich Vereshchagin faqat mo’yqalam emas, shuningdek, qalam egasi edi, u nasr, hatto she’r bitardi”, degan jumla “u miltiq va tig’ egasi ham edi”, deb tuzatish kiritish kerak! Oynoma: “Musavvir Vereshchagin va yozuvchi Vereshchagin doimo yonma-yon edi”, deb yozadi. Menimcha, bu jumla ham, “Musavvir Vereshchagin, yozuvchi Vereshchagin va bosqinchi Vereshchagin doim yonma-yon edi”, deb tuzatilsa, to’g’ri bo’lardi. Men Vereshchagin asarlari, kundalik daftarlari, maktublari oynomangizda bosilishini istayman. Mobodo shunday niyatingiz bo’lsa, yuqoridagi tuzatishlardan foydalanasiz, degan umidim bor.”² Deya yozadi X. Davron. Yuqorida keltirganimiz ikki bandda shoir nima demoqchiligini tushundik va she’rdagi obraz xatti-harakatlari mohiyatini ham ko’rdik deb o’ylaymiz.

Ko’p yillar o’tadi, anglar bir kuni
Boshqacha so’zlashi kerak edi u
Va o’sha beshafqat lahzadan uni
Tark etmas hech qachon yarador qayg’u.

Axir yodida-ku: Toshkand yonida
Sarmast kazaklarni jarga boshlashar...
Go’dakka o’q uza olmagan bitta
Yoshgina soldatni chopib tashlashar.

Berilgan ikki bandda lirik obraz o’zi haqiqat deb bilgan yolg’onlarning qulashi, vaqt o’tishi bilan o’zi ishongan mafkuraning paytavasiga allaqachon qur tushganligini anglashini, bir vaqtlar ko’kragini kerishga sabab bo’lgan vahshiyliklar eni uni ruhan qulashiga olib kelganligini anglashini, o’sha vahshiyliklardan lavhalar ko’z oldidan birma-bir o’tib ruhan azob berishini qalamga oladi shoir.

Beshafqat haqiqat qaytadi qalbga,
U shunda anglaydi, anglatar ranglar;
Miltiq o’qtalغانlar – boshqa Rossiya,
Boshqa Rossiyadir o’q uzmaganlar.

Ko’zlarin oldida qotar abadiy:
(bu balki vijdonning o’lmas mujdasi)

² Fitna san’ati. 1-kitob. – T.: Fan nashriyoti, 1993.

Miltiqlar tig'iga sanchilgan mitti –
Qonlarga bo'yalgan go'dak murdasi.

Lirik obraz anglab yetayotgan haqiqatlar uning chizgilarida o'z aksini topadi. Buyuk rus yozuvchisi aytgandek haqiqat – Rossiyadan ulug'dir. U topgan haqiqatda ham vahshiyliklar qilayotgan Rossiya boshqaligini anglaydi. Va ko'z oldida miltiq tig'lariga osilgan norasida go'daklar murdasi qayta jonlanadi.

Balki shuning uchun tunlar Isoga
Yolvorib, sig'inib, yosh to'lib ko'zga,
Urush maydonlarin egallab olgan
Quzg'unlar to'dasin chizar u bo'zga.

Qonli kunlar haqqi endi u bedor,
Ko'zini yumishga qo'rqadi, hayhot.
Tig'larga sanchilgan go'daklar takror
Qichqirar ko'zini yumgani zahot.

O'sha kunlar haqqi, qo'rquv, g'am ichra
Zulmat bandalari qilgan shum, basir,
Qonli gunohlarni jon chiqargancha
Yuvolmay dunyodan o'tdi musavvir.

Ushbu bandlarda musavvirning faqat azob chekayotganini his qilamiz. Uning suratlari endi avvalgidek kibr-u havoga emas, balki dard-u hasratga yo'g'rilgan tasvirlar. Ko'zlarini yumsa, o'sha tig'larga sanchilgan go'daklar ko'rinadi va anglagani o'sha "qora siyosat" qurboniga aylangani ruhan majruh yashashga mahkum etadi. Ammo ming afsus cheksa-da, bu gunohlarni yuva olmas edi. X. Davron san'atkor qismatining fojiali yakunini "Vereshchagen" she'ri orqali ideal shaklda tasvirleydi. Bundan farqli o'laroq, o'z e'tiqodlariga, millatiga sodiq yashagan Federiko Garsia Lorkaning ayanchli taqdirini qalamga olar ekan, "qora siyosat" kuchlari tomonidan beshafqat o'ldirilayotgan xalqni ko'ramiz. Ularning qanday insonliklari; yaxshimi, yomonmi, do'st yo dushmanmi bu ahamiyatsiz. Shunchaki o'limga mahkum ekanliklarini ko'ramiz.

Uni tongga tirab otdilar...

U yiqildi,

So'ng yana turdi

Va yoshgina, bukri bir askar

Qo'ndiq bilan boshiga urdi.

She'rning birinchi bandini o'qir ekanmiz, oddiy bir insonni qay holatda xo'rlashlari guvohi bo'lamiz. Xuddiki, jarayonni ko'zlarimiz bilan ko'ramiz. Bu

yerda yuqorida aytgan sabablarimizning ikkinchisi: san'atlar sintezini ko'rishimiz mumkin (bu boshqa masala, lekin aytib o'tishni joiz deb bildik). Birinchi misrada tong saharida sharpadek kelgan askarlar multiqlarini o'qталadi-yu, o'q uzadi. She'r boshlanishidanoq konfliktga qurilgan. Go'yoki, ekranda kino ko'rayotgandek his qiladi kitobxon o'zini. Yangi misralardan esa yarador qonga belangan vujudi bilan bazo'r turayotganligi sahnasi ko'z oldimizda gavdalanadi. "kino kadri esa davom etadi." Yarador bir amallab o'rnidan turdi-yu, ularning ichidagi yosh bir bukri askar boshiga avtomatining qo'ndog'i bilan urib yiqitadi. "Tomoshabinlarning" qalbida askarlarga nisbatan chuqur nafrat uyg'onadi, bir erkin insonni bunday qiynoqqa solinishi "kinoning" boshidanoq "tomoshabinlarni" o'z ichiga olib kirib ketadi.

U jon berdi...

Askarlar esa

Shosha-pisha ortga qaytdilar,

Sharob ichib mungli qo'shiqni

Tun sukutin buzib aytdilar.

Misralar davomida erkin insonning erki qay darajada "qadrlı" ekanini his qilamiz. Uning o'limi qalbida yonayotgan o'tga yonilg'i quygandek askarlardan nafratlanib ketamiz. Ammo askarlarning mungli qo'shiq kuylash sahnasi ularning ham yuragidagi dardlaridan xabar bergandek kitobxonda achinish hisini uyg'otadi. Keyingi baddan askarlar kuylagan qo'shiq nima haqida ekanligi shoir tomonidan ochiqqlanib boriladi:

Bu qo'shiqda bulutni yorgan

Hilol cho'qqi uzra porlardi,

Bu qo'shiq qor ostida yotgan

Chechaklarni bo'zlab chorlardi.

Bu qo'shiqda qora kiyingan

Tul kampirlar ertak to'qirdi,

Ularining oldida ko'zi ko'r bola

Zulmat aro kitob o'qirdi.

Ushbu misralarda insonga armon bo'lgan hislar, ushalishi qiyin orzular, kelajak qayg'usi, askarlarning qalbidagi dardlarni akslantirgan qo'shiq ekanligini ko'ramiz. Bu xuddi kinoda bir kishi o'ylanib o'tiradi-yu, musiqa ohangida xotiralari xira tortgan, rangsiz tasvirda ekranda jonlanadi. Bu badda ham xuddi shunday kadrni ko'rishimiz mumkin va so'nggi badda shoir asosiy aytmoqchi bo'lganlarining mohiyatiga yetamiz.

Qo'shiq kuylab,

Tuyib alamni,



Yosh askarlar sarmast edilar,
Shu qo'shiqni yozgan odamni
Otganlarin bilmas edilar...³

Yechimsiz konfliktning guvohi bo'ldik nazarimda. "U" deb ta'kidlab kelingan, erki oyoq osti qilib o'ldirilgan "u" aslida askarlar sevib dardlariga hamohang yozilgan she'rlarini o'qiguvchi shoirlarini o'ldirganlarini bilmas edilar. Millatning ruhini o'ldirayotganlarini bilmas edilar. Bularga shunchaki o'ldirilish buyurilgan. Buyruqni bajar, qolgani bilan ishing bo'lmasin degan qarashlar singib ketgan onglarida rahm degan narsa nima qilsin. Albatta bu she'rlar buyurtma asosida yozilgan. Ammo buning ortida yotgan ijtimoiy dard faqat ispanlarga tegishlimi? Yo'q. Bizning diyorda bundan bo'lakcharoq holat bo'lganmidi? Yana yo'q. Bundan ham vahshiyroq bo'lsa bo'lganki, bundan yengil bo'lmagan. San'at tuzum uchun xizmat qildi. 70- yillarga kelibgina yangicha qarashlar va yangicha fikrlashlar she'riyatga kirib keldi. Sababi istiqloлга ishonch, chirkin tuzumga esa nafrat ortib bo'lgandi ijodkor qarashlarida. "XIX asrning qariyb ikkinchi yarimidan XX asrning so'nggi o'n yiliga qadar davom etgan uzun muddat har xil shakllarda turlanishiga qaramay, mohiyatan istibdod davri bo'ldi"⁴. Shoir bu bo'g'riqqan tuzumda erkin nafas ololmaydi. Uning bu kechinmalari esa she'rlarida akslanadi. Yuqorida aytganimizdek ushbu she'rida ham faqat ispan shoirini qalamga olmadi shoir.

Balki o'zining yuragida sanchiqdek qadalib turgan dardlaridan bir parchasini o'zga yurtning ijodkori taqdiri misolida yoritadi. She'rning kino san'ati bilan sintezini ham kuzatib bordik. Ushbu qorishuv she'riyatga go'zal joziba baxsh etgan nazarimizda. Avvalo bu avlod shoirlikni qismatgina emas, balki yashash tarzi deb biladi. Bu esa shunday yashash tarziki, dunyoda yuz berayotgan har neki bo'lsa, shoir yuragida o'z sadosini bermay qolmagan. Shoir esa bularning bari uchun o'zini ma'sul his etgan. "30- marta tug'ilgan ikki daho: fransuz shoiri Polo Verlen va niderland musavviri Vinsent Van Gog ijodi, ularning achchiq taqdiri dunyo shoirlarini hamisha hayajonga solib kelgan". O'zbek she'riyatida bu ijodkorlarga Rauf Parfidanda ruhan yaqinroq iojodkor yo'q nazarimizda. X.Davron "Pol Verlen, Vinsent Van Gog va Rauf Parfi" nomli maqolasida shunday eslaydi: "O'shanda Rauf akaning "Verlen musavvir, Van Gog shoir, men esa kompozitor bo'lishim kerak edi, aslida" degan gapi xotiramda muhrlanib qoldi"¹. Bundan ko'rinadiki, Rauf Parfi faqatgina so'z san'atini emas, balki rangtasvirni, musiqani chuqur his etgan va anglagan ijodkor edi va buni anglash uchun "Van Gog" hamda "Verlen" she'rlarini tahlil qilish yetarli bo'ladi.

³ Davron X. Bahordan bir kun oldin. – T.: Sharq, 1997. – B. 51.

⁴ Davron X. Yangi o'zbek she'riyati. – T.: Adib, 2012. – B. 160.



Buyuk sevgi rangin izlab yuribdi...

Yozar moviylikka rangin qasida.

Biroq hayrat ichra qalqar yuragi

Yaxshilik, yomonlik chegarasida.

Ushbu misralarda chuqur majozni ko'rishimiz mumkin. Ya'ni ijodkor shoir va musavvir qismatini bir-biriga o'xshash qo'ymoqda. Musavvir BUYUK SEVGIni mo'yqalami bilan qidirs, shoir so'z bilan qidiradi.

Hech narsasiz, lekin mehri ziyoda,

Izlar tiriklikning sirli bo'yog'in.

Buncha g'arib... razillar ko'p dunyoda?!

Kesib bersamikan qolgan qulog'in...

Vinsent birgina ilojsizlik va tushkunlik oqibatida bir qulog'ini kesib tashlagan. U umri davomida yo'qchilikda yashagan. Ammo o'z e'tiqodiga sodiq bo'lgan. R.Parfini ham shu hislar doim ruhlantirgan nazarimizda. So'nggi misrada "Yuragin rangini ko'rmoqchi bo'ldi..." deya she'rni yakunlaydi. Bu bejiz emas. Musavvir o'z hislarni, dardlari-yu, kechinmalarini rang bilan ifodalaydi. TIRIKLIKNING SIRLI BO'YOG'Ini go'yoki yuragining rangidan topmoqchi bo'ladi. Yuragiga singib ketgan dardlarga yurak qonidan ranglar olib musavvir mo'yqalamida jonlanadi. Ko'ryapmizki san'atkor qismati mavzusi ancha keng masalalarni o'z ichiga qamrab oladi. Ba'zi she'rlarda vatan, istiqloq sog'inchi ma'nolari yashiringan bo'lsa, ba'zilarida ijodkorlarning boshqa san'at sohalari vakillaridan ruhlanish, ular bilan ruhan og'a-ini tutinish hisini boshdan kechirganini ko'rishimiz mumkin va yana ba'zilarida shoirning she'rlarini boshqa san'at sohalari bilan sintezi natijasida yozilgan go'zal yozg'ichlari guvohi bo'lamiz. Ba'zi she'rlarida o'z e'tiqodlari yo'lida sobitqadam obrazlarni qalamga olishadi. Ammo san'atkor taqdiri markaziy plandagi masala. Uning ortidan ko'rinayotgan ma'nolar esa ijodkorning subyektiv hukmlaridir. R. Parfi "Betxoven" nomli she'rida ijodkor o'z iste'dodiga cheklov qo'yilsa-da, so'nggi imkon tugaguncha ijod qilish, ijod qilish va yana ijod qilish kerakligini teran his qiladi. Shu o'rinda R.Parfining badiiy idrok va ijodkor shaxsiyati masalasi haqidagi fikriga to'xtalsak: "Xususan, shaxsiyat butunligisiz asl san'atning bo'lishi mumkin emas; tuyg'u-kechinmalar ko'lmakka aylanib qolgan holatda shoir shaxsiyatining san'atdagi inqirozi boshlanadi. Bu – ijodkor shaxsiyatining sinishi demakdir. Bu – asl san'atga yolg'onning aralashishi, ijodkor hukmron mafkuralar malayiga aylanish oqibatidir."⁵ "Betxoven" nomli she'rini ham shu e'tiqodi asosida yozgan nazarimizda.

Hozir so'ng zarb ila uzilajak tor,

⁵ Rahimjonov N. Rauf Parfi adabiy-estetik qarashlarining shakllanish omillari // Sharq yulduzi, 2002. № 2.



O'zing qo'lla meni, ey, buyuk Daho.
Nahot, har ne abas, hammasi bitar,
Qanday saodatdir bu so'nggi sado?

Shivirlar, hayqirar bepoyon dengiz,
Men uni sipqarmoq istayman tanho.
Faqat sen ko'zingni bag'ishla, Ziyo,
Faqat sen, Jasorat, qo'lingni ber tez.

Ijodkor oldindan nima bo'lishini bilib turibdi. Lekin umid qiladi. Hayoti ko'z oldidan o'tgandek butun mehnati, ijod safari ko'z oldidan o'tadi. Ammo hammasi bitayotganini, har narsa unga bevafoqlik qilayotganini his etadi va so'nggi chalayotgan ohangidan taskin izlaydi, e'tiqodidan yuz burmaydi. Uning ko'nglida shunday to'liqlik hislar kechadiki, bepoyon dengizlarni sipqarishni, ziyoning bor ko'rinishini ko'zlariga jam qilishni va o'zidagi jasoratni so'nggi nafasgacha birga bo'lishi istaydi. "Balki bu Osmon – orzu sadosi, Dengiz – xayollarin sadosidir bu, Haqiqat toshida qasamdir ezgu." Ijodkor uchun osmon orzularining, dengiz esa xayollarining sadosidek. Dengiz o'ziga sig'may to'liqlik qoyalarga urilganidek uning hislari ham to'liqliklaridan ham shiddatliroq, chalayotgan ohangga hamohang qalbidan qaynab toshadi va bu uning yolg'iz va mangu haqiqati bo'ladi. R. Parfi shunday holat bilan bog'liq ustoz Abdurahmon Vodiliy she'riyatining hayotiy mag'zi haqida to'xtalar ekan, yozadi: "Moddiy va ma'naviy og'irliklarga qaramasdan shoir qalamini qo'ldan qo'ymadi, yuragidagi dard-u hasratini qog'ozga tushirib qoldirdi. Bu asarlar bugun davr haqidagi kuchli hujjatga aylandi. "Beshikdan qabrgacha ilm izla", deyiladi, hadisi sharifda. Ammo, boshingda zulm qilichi yalang'och ekan, ilm izlamaysan, bir osuda nafas, bir burda non izlaysan. Ko'zingga tashlangan ochlik pardasi iymon pardasini yuzdan ko'taradi. O'z nafsining ustidan g'alaba qilgan inson chin shoirdir"⁶. R. Parfi ham shu e'tiqodga to'umrining oxirigacha sodiq yashadi va she'rlaridagi san'atkor qismati mavzusida ham shu ruh saqlanib qoladi.

Suyukli insonga balki vidosi,
Hozir so'ng zarb ila uzilajak tor –
So'nggi zarb hayotni yashamoq darkor.

So'nggi nafas kabi vido onida turgan bo'lsa ham ijodkor so'nggi zarbnida yashatmog'i shartligini aytadi. Rauf Parfining qarashlari ham aslida shunday edi. U shunday yozadi: "San'atning vazifasi insonga o'limni anglatishdir. Shakli qanday bo'lishidan qat'iy nazar... Tushungan, anglagan inson hamisha og'riq, fojia bilan yashaydi. Agar, ta'bir joiz bo'lsa, shunday

⁶ Rahimjonov N. Rauf Parfi adabiy-estetik qarashlarining shakllanish omillari // Sharq yulduzi, 2002. № 2.

aytish mumkin – fojia inson bilan birga tugʻilgan aniq narsa. Inson doim oʻlim bilan yonma-yon yuradi. Toshbaqa kosasini bir umr ortib yurgandek, oʻz oʻlimini doimo koʻtarib yurishga mahkum. Menimcha, oʻz oʻlimini koʻtarib yurgan odam Allohga, oʻziga, birovga xiyonat qilmaydi”. Shoir fojiani inson bilan birga tugʻilgan narsa deydi va yuqorida tahlil qilgan sheʼrimizda ham fojeadan qoʻrqmaydi. Toki tor uzilmaguncha ijodda davom etadi, oʻzligiga xiyonat qilmaydi. Aslida butun bashariyat shunday boʻlishi kerak emasmi? R.Parfi ijodida yoritilayotgan sanʼat mavzusi faqat sanʼat vakillariga bagʻishlanmagan balki butun bashariyatga tegishlidir. Bunday ruhiyat Shavkat Rahmon sheʼriyatiga ham tegishli. Uning sanʼatkor qismati mavzusidagi sheʼrlarini oʻqir ekanmiz dunyoda har neki boʻlsa, u hodisalar shoirning yuragida oʻz sadosini beradi va Sh. Rahmon bari hodisalar uchun oʻzini masʼul oʻlaroq shoirlardan biri edi. Sheʼrlarida ham bu ruhiyatini akslantiradi. Uning rus shoiri Yevtushenkoga bagʻishlangan sheʼrida ham shu fikrlarni singdirilganini koʻrishimiz mumkin:

Gazetalar chinqirar – dahshat,
Qayda vabo, qayda bosqinlar,
Ado boʻlmas janjal, xiyonat,
Tamom boʻlmas otqin, osqinlar.

Orom bermas har lahza, har dam,
Oʻzingizni sevmassiz bu kun –
Haqqingiz yoʻq, endi har odam
Javobgardir majruh yer uchun.⁷

Yevtushenko adabiyotni kompartiyaning gʻoyaviy quroliga aylantirmay, asl holiga qaytarishga - insoniyatning madadkoriga aylantirishga harakat qilgan shoir edi. Qarashlar va maqsadlardagi mushtaraklik baki Sh. Rahmonning Yevtushenko nomidan yozishiga sabab boʻlgandir. Ushbu sheʼrining mantiqiy davomi sifatida oradan hech qancha vaqt oʻtmay “Pablo Nerudaga” nomli sheʼrini yozadi. Shoir birinchi sheʼrida aytgan fikrlarini yanada chuqurlashtiradi:

Shoirni oʻldirmak –
Jinoyat,
Gunoh.
Shoirning yoʻli bu- dunyoning yoʻli.
U bashar qalbida lovullagan oh,
Basharning ziyoga choʻzilgan qoʻli.
Hali bu zaminda zulmat ziyoda,

⁷ Shavkat Rahmon. Abadiyat oralab. – T.: Movarounnahr, 2012. – B. 24

Shoirman-
Boraman zulmatga tikka.
Sira ham haqqim yo'q bu kun dunyoda
Shoir bo'lmaslikka,
Yashamaslikka!⁸

Bu she'rida Sh. Rahmon shoirlik va yashamoq so'zlarini bir- biriga ma'nodosh talqin qiladi va bundan anglangani shuki, shoirlik va yashamoq so'zlarining ma'nodoshligi, ikkisining ham mohiyati bir: zulmatga qarshi borish, loqayd bo'lmaslikdir. Demak, yuqorida aytganimizdek ijodkor befarq bo'lmasligi, doim ko'zlari bilan haqiqatni ko'ra olishligi shoirga qo'yilayotgan birinchi vazifadir. Usmon Azim she'riyatida esa bir oz keskinlikni his qilamiz. Uning qarashlari, shiddati o'zgacha. Shoir uchrashuvlaridan birida shunday deydi: "... ijod – mukammallik sari eltadigan yo'lni izlash yoki... buyuk tasalli – umid yaratadigan jarayon... Ijod – san'atkorning mangu uchun o'tkinchi dunyo bilan qilgan jangidir... Bu jang-u jadal, bu sog'inch, bu yolg'izlik, bu iztirob, nochorlik va jasorat iste'dodning sehrli shu'lalari bilan omixta bo'lganda, go'zal asarlar yaratiladi. Iste'dod – Olloh bilan uchrashuvning eng go'zalidir..."⁹. Uning mangu uchun o'tkinchi dunyo bilan kurashi she'rlarida yaqqol akslanadi. Shekspirning "Brut" asaridan ta'sirlanib U. Azim ham "Brut" nomli she'r yozadi. Ushbu she'rida haqning botil ustidan baribir g'olib kelishi, vatanga bo'lgan muhabbat inson qalbida mangu yashamog'ini baralla aytadi:

Sezr, Vatan o'ynashing emas,
Sezr, Vatan onadir faqat.
Validani e'zozlamoq farz,
Ammo xo'rlash og'ir qabohat.

Seni oqlash mumkin emas, yo'q!
Sezr, mudhish gunohing shukim,
Do'st-yorlaring el ko'ziga cho'g'
Bosishganda qarab turding jim.

Bir qarashda tarixdagi voqeani yozayotgandek shoir. Ammo bu faqat tarix haqida emas, balki o'sha 80- yillarga ham tegishli hodisa. Istiqloлга bo'lgan ishonch, chirkin tuzumning qulashiga bo'lgan umid juda katta edi shoir ko'nglida. U davom etadi:

Tuyub erkning quchoqlarini,
Sokin o'tda yonar ko'zlarim.
Yalong'ochlab yaroqlarini.
Atrofingni o'rar do'stlarim.

⁸ Shavkat Rahmon. Abadiyat oralab. – T.: Movarounnahr, 2012. – B. 26.

⁹ Usmon Azim. Tanlangan asarlar. I jild. – T.: G'afur G'ulom nomidagi nashriyot-matbaa ijodiy uyi, 2016.– B. 3.

Kapitoliy uzra chaqnaydi
Qo'limdagi po'lat bu xanjar!
Mard ko'zlaring meni payqaydi...
Buyuk eding, Sezr, naqadar! –

O'zing zarbga ko'ksing tutding jim
Hamda sezding so'ng bor to'lg'anib,
Haqiqatni yengolmas hech kim –
U baribir keladi g'olib!

“Usmon Azim she'riyati haqida so'z ketganda, she'rning boshqa vazifalari mezonlari haqida o'ylaysan, she'r, umuman ijod bu – insonning isyoni, dunyoning nomukammalligiga, umrning o'tkinchiligiga qarshi bir isyon ekanligini tushuna boshlaysan”¹⁰. Ijodkor ushalajak orzusining – istiqlolning epkinlarini his qiladi va mustabid tuzumga yanada qattiqroq qarshilik ko'rsatadi. Bu hodisa va kechinmalarni tarixiy voqea misolida tasvirlaydi. O'zi bilan birga butun millat bu tuzumga qarshi chiqayotganini va albatta g'alaba qozonishini ich-ichidan his qiladi. 70- 80- yillar she'riyatida san'atkor qismati mavzusini yoritish orqali faqat san'atkor qismatini emas, balki inson erki, vatanga muhabbat, inson e'tiqodi kabi masalalarni ham bu mavzu orqali yoritib beradi.

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¹⁰ Usmon Azim. Tanlangan asarlar. I jild. – T.: G'afur G'ulom nomidagi nashriyot-matbaa ijodiy uyi, 2016.– B. 3.



**RANGLAR ORQALI O'RGANISH : VIZUAL TEXNOLOGIYALAR YORDAMIDA
TA'LIM SIFATINI OSHIRISH YO'LLARI**

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ANNOTATSIYA Rang — bu o'quvchi tafakkurini uyg'otuvchi til. Rang faqat estetik element emas — u axborot, his-tuyg'u va diqqatni boshqaruvchi kuchli vosita. Psixologlar (masalan, Arnheim, 1974) ranglarni idrok jarayonining bir qismi deb bilishadi — ular xotira, diqqat va hissiy holatni tartibga soladi. Rang-tasvir ta'limini o'rganayotgan o'quvchilar tafakkurni yorituvchi va borliqni ham real ko'ra bilan baholovchi sifatida yaralishadi. Bu jarayon ham ta'lim samaradorligiga o'z ta'sirini o'tkazmasdan qolmaydi. Ya'ni, oddiy matnli slaydda o'quvchi 20% ma'lumotni eslab qoladi, ammo rangli grafik va tasvirlar bilan ishlaganda — 70–80% gacha eslab qolish darajasi oshadi va shuningdek, hozirgi kunda ta'lim jarayonida zamonaviy texnologiyalardan foydalanish shiddatli tarzda oshib ketdi. Shunga ko'ra ham o'qitish uslublari yangicha yondashuvni talab qilmoqda.

KALIT SO'Z : Vizual texnologiyalar; STEAM ta'lim; harakatni boshqarish; diqqat; aqliy mehnat; ruhiy salomatlik; pedagogik jarayon; pedagogik mahorat.

KIRISH

Har bir sohada, har bir kasbda e'tirof etiladigan narsa bu diqqat hisoblanadi va shuningdek, bir necha voqealarni ichidan eng muximiga diqqat qaratiladi. Diqqatni asosli bitta kanaldan kelgan axborotga boshqa tomondan keladigan axborotlar ahamiyatsiz bo'lib qoladi. Diqqatni bitta xodisaga qaratgan holda qolganlarini ham ma'lum tarzda nazorat qilib turish qobiliyatini rivojlantirish juda muhim. Bunga axborotni saralash yo'li bilan erishish mumkin. Maqsad va istaklar harakatlar strategiyasini ifodalasa, ularni amalga oshirish uchun qilingan harakatlar taktik harakatlardir. Harakatni boshqarishda markaziy rejalashtirish va teskari aloqa katta ahamiyatga ega.

"Diqqat, aqliy mehnat faoliyatini yuqori darajada saqlay olish mumkinmi?" -degan savolga rus olimi N. E. Vedenskiyning ta'kidlashicha, aqliy mehnatning yuqori mahsuldorligini ta'minlovchi sharoitlar quyidagilardan iborat:

- har qanday mehnatni bajarishga asta-sekin kirishish;



- ish bajarishning optimal ritmini va tartibini tanlash va unga rioya qilish;
- ishni izchillikda va ketma-ket bajarishga odatlanish;
- mehnat va dam olishni to'g'ri tashkil qilish, bir ish turini ikkinchisi bilan almashtirib olib borish;
- muntazam ravishda jismoniy mashqlar bilan shug'ullanish tufayli aqliy mehnat malakalarini avtomatlashtirish va takomillashtirish hamda avtomatik malaka hosil qilish.

Yuqoridagi omillarning ko'pchiligi o'quvchilarning ham ish qobiliyatini aniqlaydi, ammo ularning eng muhimi o'quv kun tartibiga va o'z vaqtida dam olishga rioya qilishdir.

Ranglar inson yoki jonzoatlarning faqat tashqi ko'rinishi emas balki ularning ichki holatini yuzada aks ettiruvchi tur ekanligining yana bir isboti. Ilya Repin o'zining «Вестник знаний» jurnali nashriyotchisi Vilgelm Bitner portreti xomaki tasvirida insonning ichki holati va xonaning muhitni ko'rsatib berishga e'tibor qaratgan. Faol amaliy faoliyat jarayonida har bir ijodkorning ijodiy ishtiyoqlariga qarab, o'z ishini olib borish ketma-ketligi ishlab chiqiladi. Ishni tartibsiz olib borish mutaxassislariga xos emas. Ba'zan qo'yilma birdan katta taassurot qoldiradi va ilhomlantiradi, lekin ba'zan badiiy qiziqishni topish va aniqlash uchun ko'p mehnat qilishga to'g'ri keladi. Talabalarni oddiylilikda go'zallikni ko'rishga o'rgatish ta'lim beruvchilarning vazifalaridan biridir. Bu soha vakillari "umumiylikdan xususiylikka" tamoyili asosida ish olib borishadi. Menimcha, ranglar orqali o'rganish usuli ayniqsa san'at, dizayn, geografiya yoki hatto til o'qitishda ham katta foyda beradi. Chunki u o'quvchining ko'rish xotirasini faollashtiradi, darsni zerikarli emas, balki ijodiy va jonli jarayonga aylantiradi. Bunday darslarda o'quvchi nafaqat ma'lumot oladi, balki estetik did, tafakkur va tasavvurni ham rivojlantiradi. Aslida esa, texnologiyani rang, tasvir va dizayn orqali o'quvchini ilhomlantirish vositasiga aylantirish kerak.

Rang bu — o'qituvchi bilan o'quvchi o'rtasidagi hissiy ko'prik, u bilimni yurakdan o'tkazib yetkazish imkonini beradi. Vizual texnologiyalar yordamida o'rganish o'quvchilarda axborotni tez qabul qilish, eslab qolish va tahlil qilish qobiliyatini kuchaytiradi. Masalan, rangli slaydlar, infografikalar, videodarslar yoki interaktiv dizayn elementlari orqali o'tilgan mavzular oddiy matnga qaraganda ancha yaxshi yodda qoladi.

MAQSAD VA VAZIFALAR

Keling masalani boshqa tomonini ham ko'rib chiqaylik, demak, samarali o'qitish muhim ammo o'quvchi psixologiyasidan kelib chiqadigan bo'lsak, o'quvchi darsni o'qiydi, o'rganadi, ammo, unda charchoq yuzaga kelishi tabiiy holat.



I. P. Pavlov charchashda tormozlanish jarayonining ahamiyatiga to'xtalib o'tar ekan: «Charchash tormozlanish jarayonining avtomatik ichki qo'zg'tuvchilaridan biridir», - deb yozgan edi. Bolalarga bajarilayotgan yuklama ortiqcha ekanligi yoki charchaganliklari ko'rinib turgan bir vaziyatda mashg'ulotni davom ettirish shunday holni keltirib chiqaradiki, uni I. P. Pavlov chegaradan «tashqi yoki himoyalash tormozlanishi» deb atagan edi, bu tormozlanish po'stloqning asab hujayralarini zo'riqib ketishidan himoya qiladi.

Po'stloq hujayralarining tez zo'riqib ketib tormozlangan holatga o'tishi ayni bir sharoitda bosh miya quyi bo'limlari hujayralarining chidamliligiga keskin sur'atda zid keladi. O'qituvchining pedagogik mahorati, uning yangi materialni tushuntirish paytidagi ko'tarinki kayfiyati, o'qituvchining har ohangda so'zlashi: o'qituvchi bir xil ohangda so'zlagan nutqi o'quvchini zeriktirib, mudratib qo'yadi, bunday paytda o'quvchi tomonidan dars materialini o'zlashtirish qiyinlashadi.

Bosh miya yarimsharlari po'stlog'ida tarqoq tormozlanish jarayoni paydo bo'lib, uyqu bosadi. Gigiyenachilar o'quvchilarning darsda toliqish sabablarini o'rganib chiqib, qiziqarli ma'lumotlarni keltirganlar. Ularning aniqlashicha, yuqori sinf o'quvchilari va litsey talabalarining charchashiga asosiy sabab ko'pincha ularning darsga qiziqmasliklari, o'qishning og'irligi, mashg'ulot bajarishga layoqatsizlik, darsni zerikarli o'tilishi, dars materialini tushuntirmaslik, mikromuhitning salbiy ta'siridir. Agarda charchash holati o'z vaqtida dam olish bilan almashtirilmasa u o'ta charchash holatiga o'tadi.

Bu organizm uchun kasallikdir. O'ta charchagan bolalar darsni yaxshi natijada o'zlashtirishlari pasayib ketadi. Maktab o'quvchilarida o'ta charchash, asosan, o'quv va o'qishdan tashqari ishlarning me'yoridan ortib ketishi, kun tartibining buzilishi, ochiq havoda yetarli sayr qilmaslik, ovqatlanishni to'g'ri tashkil qilmaslik natijasida kelib chiqadi.

O'rganilgan ma'lumotlarga asoslanib charchashning oldini olish choralaridan yana biri deb, pedagogik jarayonning ratsionalizatsiyalashni belgilash mumkin. Ya'ni darsning tuzilishi va mazmuni jihatdan to'g'ri tashkil qilish innovatsion pedagogik texnologiyalarni qo'llash bilan o'quvchilarning aqliy mehnat faoliyatini jadallatirish kerak. Jadallashtirish faqat boshlang'ich sinflardagina emas, yuqori sinflar, maxsus maktablar, (litsey va gimnaziyalar) uchun ham zarurdir. Chunki litsey va gimnaziyalar o'quv yuklamasi umumiy ta'lim maktablardagidan ortiq bo'lib, ba'zan kuniga 10–12 soatgacha yetadi, tabiiyki bunday yuklama o'quvchi salomatligiga salbiy ta'sir ko'rsatadi. Bolaning jismoniy va ruhiy salomatligiga, maktabgacha va maktab yoshidayoq asos solinadi, shu sababli ularni gigiyenik jihatdan to'g'ri o'qitish uchun aqliy mehnat gigiyenasining ilmiy asoslariga tayanish kerak. Bu masalaga maktab

va maxsus maktablardagi pedagoglar va shifokorlar befarq bo'lmashliklari kerak. Aqliy va jismoniy jihatdan charchagan bolalar va o'smirlarning ish qobiliyatini oshirish, ularni dam olishiga uyquga e'tibor berish talab etiladi.

XULOSA

Xulosa qilib aytganda, rang va vizual texnologiyalar ta'lim jarayonida faqat bezak emas, balki psixologik va didaktik vosita sifatida muhim o'rin tutadi. Amerikalik psixolog Jerom Bruner o'z tadqiqotlarida shunday deydi: "Inson axborotning 80 foizini ko'rish orqali qabul qiladi, shuning uchun ta'limda vizual elementlar ongga chuqurroq ta'sir ko'rsatadi." Bu fikr meni shunga ishonitiradiki, darslarda rang, shakl va tasvirlardan foydalanish o'quvchining diqqatini jamlaydi, o'rganish jarayonini ko'proq his etiladigan va uzoq esda qoladigan qiladi.

Shuningdek, mashhur pedagog Jan Piagetning kognitiv rivojlanish nazariyasida ham bolalar dunyoni asosan ko'rish, tajriba va obrazlar orqali anglaydi deyiladi. Bu shuni anglatadiki, rangli vizual materiallar nafaqat darsni bezaydi, balki o'quvchining tafakkurini shakllantirish va ijodiy fikrlashini rivojlantirishga xizmat qiladi. Zamonaviy ta'lim texnologiyalari haqida gapirganda, olim R. Mayerning "Multimedia Learning" nazariyasini ham eslab o'tish zarur. U shunday deydi:

"Ta'lim samaradorligi tasvir, matn va tovush uyg'unligida namoyon bo'ladi." Menimcha, aynan ranglar bu uyg'unlikning eng ta'sirli qismi. Ular o'quvchini dars jarayoniga hissiy jihatdan jalb qiladi, bilimni esa nafaqat ongda, balki his-tuyg'ularda ham mustahkamlaydi.

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IJODIY DARSLAR ORQALI O'QUVCHILARDA MUSTAQIL FIKRLASH VA
TASHABBUSKORLIKNI OSHIRISH

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"O'quvchini o'rgatish emas, o'ylashga o'rgatish — haqiqiy ustozlikdir."

ANNOTATSIYA

Zamonaviy ta'lim tizimida o'quvchilarning mustaqil fikrlash, muammolarga yechim topish va tashabbus ko'rsatish qobiliyatlarini rivojlantirish muhim o'rin tutadi. Avvalo, biz ijodiy darslar "nima" va ular "qay tarzda" olib borilishi haqida tushuncha hosil qilib olishimiz kerak. Bu usulda o'qitish jarayonida ijodkorlikni uyg'otish, talabalarda mustaqil va estetik fikrlashni rivojlantirish usullar tahlillarini ko'rib chiqamiz.

"Yuqoridagi fikrga ko'ra, o'quvchilar mustaqil fikrlarini bayon eta olishi o'ziga bog'liq ya'ni ularning fikr doirasiga qaratiladi." -deb hisoblanadi. Bu aksincha, o'quvchilarning shaxsiy fikr yuritishi tabiiy, ammo buni atrofdagilarga yetkazib bera olishi-chi? Bu ijodiy yondashuvdagi darslarga bog'liq bo'lib qolmoqda. Ijodiy yondashuv asosida darslarni olib borish, ham muvaffaqiyatda ham fikrlashda - samarali yo'l sifatida e'tirof etilmoqda. Ijodiy darslarda o'qituvchi o'quvchini erkin fikrlashga, o'z nuqtai nazarini bildirishga, yangi g'oyalarni ilgari surishga undaydi.

Bu muhit davomida o'zini erkin his qila olgan o'quvchilar, albatta o'z shaxsiy fikrini mustaqil bildiradi. Hozirda darslarni faqatgina ma'lumot berish orqali o'quvchilarni qoniqtirib bo'lmay qoldi. Shu bois ko'pchilik metodist o'qituvchilar o'z darslarida turli o'yin va foydali usullar orqali o'tishadi.

KALIT SO'Z: Pedagogik texnologiya; innovatsion yondashuv; mustaqil fikrlash; axborot-kommunikatsion usul; pedagogik mahorat; faoliyatga moyillik; ta'lim-tarbiya YUNESKO; AKT loyihasi;



KIRISH. Ta'limda yangicha yondashuvlarni qabul qilishga ko'mak beruvchi bosh omillardan biri mana shu taklif qilinayotgan usullar o'z ustuvorliklariga ega bo'lib, innovatsion yondashuv avvalgisidan ancha afzal ekanini to'liq anglashdan iboratdir. Ushbu holatda uzluksiz tarzda, amaliy tatbiq etish sayin u yoki boshqa usulning samaraliligini tahlil qilib borish kerak bo'ladi. Bunda yutuq va kamchiliklarni, albatta, ko'rsatish maqsadga muvofiq bo'ladi.

Pedagogik texnologiyalarning bu kabi monitoringini olib borish o'quv jarayoniga o'qitishning eng samarali usullarini tatbiq qilish va ularni keng yoyishga turtki beradi. Bugunda jahonning ko'plab mamlakatlari o'qituvchilar tomonidan axborot-kommunikativ usullarni innovatsion qo'llaniladigan takomillashtirish bo'yicha YUNESKOning tavsiyalariga amal qilmoqda. Mazkur tavsiyalarning maqsadi qo'llanilayotgan o'qitish usullarini yanada mukammal qilish. Chunki ular mehnat resurslari sifatini, ta'lim jarayonining samaraliligini, yangi avlod kadrlarini tayyorlashni ko'tarishga yordam berishga, oxir-oqibatda esa har qanday mamlakatning ijtimoiy-iqtisodiy taraqqiyotiga to'g'ridan to'g'ri ta'sir ko'rsatadi.

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MAQSAD VA VAZIFLAR

Zamonaviy oliy ta'limni elektron ta'lim vositalarisiz va turli masofaviy ta'lim texnologiyalarisiz tasavvur qilib bo'lmaydi. Jahon amaliyoti o'qitish jarayonining metodologiyasiga elektron texnologiyalarni faol tatbiq etmoqda. Ko'plab ta'lim muassasalarida o'qitish jarayoniga AKTni faol tatbiq qilish

kuzatilmoqda hamda ularni ta'lim jarayonida amaliy qo'llash bo'yicha uslubiy qo'llanmalarni ishlab chiqish yuzasidan allaqachon ishlar olib borilmoqda, shuningdek, o'quv-ta'lim resurslarining elektron bazasini yaratishga katta e'tibor qaratilmoqda.

XXI asrga kelib o'qitish tizimi ta'limga bo'lgan an'anaviy qarashlarni zamon talabidan kelib chiqqan holda, yangi nazar bilan ko'rib chiqishni va yangicha yondashuv ko'nikmalarini egallash masalalarini talab etmoqda. Bu esa, o'z o'rnida, innovatsiyalarni faol tatbiq qilish, ilm-fan va ishlab chiqarishni ta'lim jarayoniga integrasiya qilishni taqozo etmoqda.

Ta'lim bu kelajagimiz, demak, ta'lim tizimiga yondashuvni qaytadan ko'rib chiqib, an'anaviy o'qitish modeliga yangi o'qitish standartlarini kiritish zarur. Davr talablaridan kelib chiqqan holda, texnologiyalar o'qitish jarayonining bosh katalizatoriga aylanishi kerak.

XULOSA

Ta'lim tizimini to'liq isloh qilish murakkab jarayon bo'lib, tashqi olam bilan uzluksiz tarzda o'zaro munosabatda bo'lishni talab qiladi. Bundan tashqari, o'qituvchilar va ta'lim beruvchilardan pedagogik mahorat ham talab qilinmoqda. Pedagogik mahorat - bu o'quv jarayonining barcha shakllarini eng qulay va samarali holatda tashkil etish, ularni shaxs kamoloti maqsadlari tomon yo'naltirish, talabalarda (o'quvchilarda) dunyo- qarash, qobiliyatni shakllantirish, ularda jamiyat uchun zarur bo'lgan faoliyatga moyillik uyg'otishdir. Pedagogik mahorat o'ziga bolalar haqidagi, ularning psixologiyasi to'g'risidagi, maktab haqidagi, ta'lim-tarbiya jarayonlarini tashkil etish va uning mazmuni, metodlari haqidagi keng bilimlarni qamrab oladi.

Xulosa qilib aytganda, bu bilimlar umumiy pedagogik madaniyatni tashkil etadi, o'qituvchi, tarbiyachi bu madaniyatni egallamasa, hech vaqt o'z ishining chinakam ustasi bo'la olmaydi, yomon, eski usuldagi barchaga mal'um bo'lib qolgan bir qolipdagi tayyor andozalarni ishlatishdan nariga o'tmaydi.

Biroq, zamonaviy o'qituvchiga birgina umumiy madaniyatning o'zi kifoya qilmaydi-maxsus bilimlar va malakalar-bolalarni kuzatish, ularning o'sishdagi muhim narsalarni aniqlay olish, ularni rivojlantirish yo'llari hamda usullarini aniqlash, o'zaro ta'sirini chuqur tahlil qilish, pedagogik izlanishlar va yutuqlarni ilmiy jihatdan bir tizimga solish malakalari zarur bo'ladi.

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O'RGATISHDAN ILHOMLANTIRISH SARI: SAN'AT TA'LIMIDA ZAMONAVIY
PEDAGOGNING ROLI

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ANNOTATSIYA

“Tasviriy faoliyat — bu bolalar qalbida go‘zallikni his etish, aql bilan idrok etish va qo‘l bilan ifoda etish san‘atidir.” San‘at ta‘limi sohasidagi pedagoglar darslarni qay yo‘sinda olib borishi juda muhim. Negaki, San‘at ta‘limida pedagogning dars o‘tish uslubi o‘quvchi shaxsining ijodiy fikrlashini shakllantirish, tasviriy ko‘nikmalarini rivojlantirish va go‘zallikni his qilish qobiliyatini oshirishga xizmat qilishi kerak. Dars faqat texnik mashg‘ulot emas, balki o‘quvchini san‘at olamiga yetaklovchi ijodiy jarayondir. Shuningdek, ma‘naviy va estetik muhit yaratishi kerak. O‘quvchi san‘at darsida o‘zini erkin his qilsa, u o‘z fikrini ranglar, shakllar yoki chiziqlar orqali ifodalashdan cho‘chimaydi. Bu esa ijodkorlikni rag‘batlantiradi.

KALIT SO‘Z: Tahlil ; sintez ; tahliliy faoliyat ; applikatsiya ; rangtasvir ; san‘at ta‘limi.

KIRISH

Bundan tashqari o‘rganuvchi shaxslar uchun diqqat va kuzatuvchanlik qobiliyati juda muhim. Ko‘rib turganimizdek, san‘at tasvir ta‘limi faqat mo‘yqalamni o‘ynatishda emas balki rasm chizish, loydan buyumlar yasash va applikatsiya - bu tasviriy faoliyat turlari bo‘lib, ularning asosiy vazifasi tevarak-atrofni obrazli aks ettirish hisoblanadi. Masalan, yozuvchining she‘ri va rassomning asari. Tasviriy faoliyat maktab yoshidagi bolalarni har tomonlama tarbiyalashda katta ahamiyatga egadir. Tasviriy faoliyat bolalarni ongli tomondan tarbiyalashda katta ahamiyat kasb etadi. Birorta predmetni chizish yoki yasash uchun albatta u bilan oldindan tanishish yoki kuzatib chiqish, uning shakli, katta-kichikligini, qismlarning joylashishi, rangini bilish kerak bo‘ladi. Bu jarayonda ko‘rish, sezish, qo‘l harakatlari ishtirok etmay qolmaydi. Bolalar predmet va hodisalarni kuzatish va ko‘rib chiqish jarayonida predmetni katta-kichik guruhlarga bo‘lib, uning shaklini o‘zgartirib, rangini turli-tumanligi bilan tasvirleydilar.

Shuningdek, tasviriy faoliyat jarayonida bolalar turli xil material (qog‘oz, bo‘r, bo‘yoqlar) bilan ularning o‘ziga xos xususiyatlari, ular bilan



ishlash texnikasi bilan tanishadilar, bu esa bolalarning aqlan o'sishiga sabab bo'ladi. Tasviriy faoliyat jarayonida bolalarda fikr yuritish operatsiyalari (tahlil, sintez, tagqoslash umumlashtirish)ning rivojlanishiga imkon beradi, bu, o'z navbatida, bolalarning oqilona o'sishiga olib keladi. Bu jarayonda bolalarning nutqi rivojlanadi. Sensor tarbiyani amalga oshirishda tasviriy faoliyatning ahamiyati katta. Chunki bolalar predmetlar bilan uzviy bog'lanadilar, ularning o'ziga xos sifatleri, shakli, rangi bilan, katta-kichikligi bilan tanishadilar, ularning fargini, o'xshashligini aniqlaydilar, bu esa bolalarni sensor tarbiyalashga, ko'rgazmali, obrazli fikr yuritishga imkon beradi. Tasviriy faoliyat bolalarni axloqiy jihatdan tarbiyalaydi. Chunki bolalar o'z ishlarida bizning hayotimizda, jamiyatda bo'layotgan voqea-hodisalarni aks ettiradilar. ulardan mamnun bo'ladilar, hayajonlanadilar.

MAQSAD VA VAZIFALAR

Lev Tolstoy : "San'at — bu inson qalbini poklovchi va uni yuksak tuyg'ular sari yetaklovchi kuchdir."-deya e'tirof etgan. Demak, biz bajarayotgan ishimizni qanchalik sevsak, bu ish ham bizga muvaffaqiyat olib kelishi tayin. Tasviriy faoliyat ham shunday kuch va mehnatni talab qiladi. Tasviriy faoliyat jarayonida bolalarda irodaning sifatleri -boshlagan ishini oxiriga yetkazish, oldiga maqsad qo'yib, o'shani bajarishga tomon intilish, qiyinchiliklarni yengish, o'rtoqlariga yordamlashish kabi xususiyatlar tarbiyalanadi. Jamoa ishini yaratish jarayonida bolalarga bir-biriga yordam, kelishib ishlash kabi sifatlar tarbiyalanadi. Bolalarda, ishni baholash jarayonida, bolalarni o'rtoqlarining ishga nisbatan real munosabatda bo'lish, to'g'ri baholash, o'z ishidan va o'rtoqlarining ishidan xursand bulish kabi axloqiy sifatlar tarbiyalanadi. Tasviriy faoliyat bu bolalarni o'z oldiga qo'ygan maqsadlarini bajarishda tinmay mehnat qilishga undovchi faoliyat hisoblanadi. Bolalarda mehnat ko'nikmalarini o'stirish, tarbiyalash kerak, faqat navbatchilik orqali ba'zi bolalarda emas, balki, har bir bolada. Tasviriy faoliyat bolalarga estetik tarbiya berishning asosiy vositasi hisoblanadi. Bundan tashqari ta'lim jarayonlarida o'quvchilarning psixologik holati ham muhim, xuddi yuqoridagi kabi.

Shunga ko'ra biz ta'lim oluvchilarning psixo-fiziologik holatini 3 asosiy sohaga bo'lib o'rganamiz va ularning holatini yaxshi tomonga o'zgartirishga ko'maklashadi.

1) Kognitiv sohada - talabalarning o'z muammolarini anglash, o'z ruhiy holatini optimallashtirish imkonini beruvchi sanogen (sog'lomlashtiruvchi) fikrlashni o'rganishga ko'maklashishni.

2) Emotsional sohada - talabalarning o'z his-tuyg'usini boshqarish, o'zi va o'zgalarning his-tuyg'ulari bilan hisoblashish, o'z muammolariga tegishli bo'lgan kechinmalarni tushunish va ifodalay olish, turg'un emotsional holatni



rivojlantirish, salbiy emotsional holatlarni yengib o'tish ko'nikmalarini egallashlariga yordam berishni.

3) Xulq-atvor sohasida - talabalarning o'z-o'zini boshqarish, o'z xulq-atvoriga ongli ravishda ta'sir o'tkazish, o'z hatti-harakatlarini qo'llab-quvvatlash yoki o'zgartirishga yordam berish nazarda tutildi.

XULOSA

Xulosada, barchamiz shaxs bo'lib yaralibmizki, bizda muloqot uchun til va fikrlash uchun ong mavjud. Shu boisdan ham ma'lum kasbga yo'nalgan shaxslardan, ta'lim oluvchilardan talab qilinadigan asosiy narsalar, diqqat va kuzatuvchanlik hisoblanadi.

Keling bunga bu ma'lumotga olimlarning fikriga ko'ra oydinlik kiritaylik. S.L.Rubinshteyn bo'yicha shaxs tuzilishi quyidagi ko'ri- nishga ega:

1.Yo'nalganlik - ehtiyojlar, qiziqishlar, ideallar, e'tiqodlar faoliyat va xulqning ustuvor motivlari hamda dunyoqarashlarni o'z ichiga oladi.

2. Bilimlar, ko'nikmalar, malakalar - hayot va faoliyat jarayo- nida egallanadi.

3.Individual psixologik xususiyatlar qobiliyat, xarakter, temperamentlarda ifodalanadi.

Shaxs taraqqiyoti, va uning kamoloti to'g'risida turli xil konsepsiyalar mavjud. Ular inson shaxsini o'rganishda turlicha yondashib, o'z pozitsiyalarini himoya qilib kelmoqdalar. Mazkur ma'lumotlar zamonaviy pedagoglar bilishi kerak bo'lgan va hozirda muhim manbaa sifatida qaralyotgan jihatlar hisoblanadi.

Demak, zamonaviy pedagoglarning dars o'tish mahorati samarali usul sifatida qaralmoqda. Ammo, shuni ta'kidlash lozimki bizgacha ham ko'plam malakali kadrlar yetishib chiqqan. Ular ham albatta o'z davrining qobiliyatli olim va metodistlari bo'lishgan. Barcha o'rganuvchilar o'zlarining shaxsiy usul va qo'llanmalari asosida shogirdlar yetishtirishgan. Shu boisdan, biz hozirga kelib, bu usul xato yoki bu usul samarasiz tarzida qoralay olmaymiz. Biz shunchaki zamon talabini asosida kerakli bilim, ko'nikma va malakalarni berib boramiz. San'at va ilm-fanni uyg'unlikda his qila olishlari ko'maklashamiz. San'at tasviri faqatgina ranglar bilan ishlaymaydi, ular mantiqiy natijani his qila olishlari va o'rgatishdan ilhomlantirish sari tamoyili asosida bu soha haqida o'zlariga kerakli yo'riqlarni yarata olishlari muhim.

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TEXNIKA YO'NALISHIDAGI FANLARNI INGLIZ TILIDA O'QITISH
METODIKASINI TAKOMILLASHTIRISH

Voxobova Sarvinoz Maxamatkarim qizi

Marhamat agrotekhnologiyalar texnikumi, maxsus fan o'qituvchisi

Annotatsiya. Mazkur tezisda texnika yo'nalishidagi fanlarni ingliz tilida o'qitishning zamonaviy metodlari, CLIL texnologiyasining o'rni va texnik soha talabalarining kasbiy terminologiyasini shakllantirish masalalari yoritilgan. Ingliz tilida o'qitish jarayonini samarali tashkil etish uchun texnik fan o'qituvchisining kommunikativ kompetensiyasi va metodik tayyorgarligi muhim omil sifatida tahlil qilinadi.

Abstract. This thesis highlights modern methods of teaching technical sciences in English, the role of CLIL technology, and the development of professional terminology among technical students. The study analyzes the significance of teachers' communicative competence and methodological readiness in ensuring the effective organization of English-medium instruction.

Kalit so'zlar: texnik fanlar, ingliz tili, CLIL texnologiyasi, kasbiy terminologiya, kommunikativ kompetensiya, metodika.

Keywords: technical sciences, English language, CLIL technology, professional terminology, communicative competence, methodology.

Asosiy qism

XXI asrda ta'lim tizimi globallashtirish, raqamli transformatsiya va integratsiya jarayonlari bilan chambarchas bog'liq bo'lib, bu holat o'qituvchidan zamonaviy yondashuvlarni qo'llashni talab etadi. Texnik yo'nalishdagi fanlarni ingliz tilida o'qitish nafaqat xorijiy tilni o'rgatish, balki kasbiy tafakkurni rivojlantirishga xizmat qiladi.

Bugungi kunda texnik oliy ta'lim muassasalarida ingliz tilida o'qitish jarayoni CLIL (Content and Language Integrated Learning) konsepsiyasiga asoslanmoqda. Ushbu yondashuv fanning mazmuni bilan til o'rganishni uyg'unlashtiradi. CLIL texnologiyasi talabalarning texnik terminlarni o'zlashtirishini, nutq madaniyatini shakllantirishini va mustaqil fikrlash ko'nikmasini rivojlantirishni ta'minlaydi.

Texnik fanlarni ingliz tilida o'qitishda o'qituvchi metodik jihatdan tayyor bo'lishi kerak. Bunda o'quv materiallarini soddalashtirish, texnik jarayonlarni ingliz tilida tushuntirish, terminlarni izohli tarzda o'rgatish, va interaktiv metodlardan — "Case study", "Brainstorming", "Project work" kabi usullardan foydalanish tavsiya etiladi.



Masalan, “Engineering Graphics” fanini o‘qitishda talabalar ingliz tilida chizma chizish bosqichlarini izohlab berishlari yoki “Mechanical Engineering Technology” fanida ishlab chiqarish jarayonlarini inglizcha tahlil qilishlari mumkin. Bu jarayonlar nafaqat fanni chuqur o‘zlashtirish, balki texnik tafakkurni ingliz tilida ifodalashga yordam beradi.

Texnika fanlarini ingliz tilida o‘qitishning asosiy maqsadi – talabalarda kasbiy kompetensiyani global mehnat bozori talablariga mos shakllantirishdir. Shuning uchun o‘qituvchi zamonaviy o‘quv resurslari, onlayn platformalar (Coursera, EdX, FutureLearn) va texnik matnlarni o‘qish metodikasidan foydalana olishi zarur.

Natijada, texnik fanlarni ingliz tilida o‘qitish — bu nafaqat til o‘rgatish, balki talabaning ilmiy va kasbiy salohiyatini oshirishga xizmat qiladigan kompleks metodik tizimdir.

Xulosa.

Texnika fanlarini ingliz tilida o‘qitish metodikasini takomillashtirish ta’lim sifati, kasbiy kompetensiya va xalqaro raqobatbardoshlikni oshiradi. O‘qituvchilar ingliz tilidagi texnik darslarni loyihalash, baholash va interaktiv texnologiyalar yordamida tashkil etish ko‘nikmalarini rivojlantirishlari zarur.

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AYOL OBRAZI O'ZBEK ADABIYOTIDA: TARIXIY VA ZAMONAVIY QIYOS

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Annotatsiya: Mazkur maqolada o'zbek adabiyotida ayol obrazining tarixiy shakllanishi va zamonaviy talqinlari qiyosiy tahlil qilingan. Mumtoz davr adabiyotida ayol obrazi asosan sadoqat, poklik va fidoyilik timsoli sifatida gavdalangan bo'lsa, zamonaviy adabiyotda u mustaqil fikrlovchi, o'z o'rnini izlovchi, ijtimoiy faol shaxs sifatida tasvirlanadi. Maqolada turli davrlardagi adabiy namunalardan foydalanilib, ayol obrazining estetik va ijtimoiy evolyutsiyasi ochib berilgan.

Kalit so'zlar: ayol obrazi, o'zbek adabiyoti, tarixiy qiyos, zamonaviy adabiyot, psixologik tahlil, gender, ma'naviy qadriyatlar.

Annotation: This article provides a comparative analysis of the image of women in Uzbek literature from a historical and modern perspective. In classical literature, women are often portrayed as symbols of loyalty, purity, and devotion, while in modern Uzbek literature they appear as independent, socially active, and self-conscious individuals. The paper examines the aesthetic and social evolution of the female image using examples from different literary periods.

Keywords: female image, Uzbek literature, historical comparison, modern literature, psychological analysis, gender, moral values.

Аннотация: В данной статье проведён сравнительный анализ образа женщины в узбекской литературе в историческом и современном аспектах. В классической литературе женщина изображается как символ верности, чистоты и самоотверженности, тогда как в современной узбекской литературе она предстаёт как самостоятельная, социально активная и мыслящая личность. В работе раскрыта эстетическая и социальная эволюция женского образа на основе произведений разных эпох.

Ключевые слова: образ женщины, узбекская литература, историческое сравнение, современная литература, психологический анализ, гендер, духовные ценности.

O'zbek adabiyoti insoniyatning ruhiy, ma'naviy olamini tasvirlashda o'ziga xos chuqur badiiy an'analarga ega. Adabiyotda inson obrazi, xususan, ayol siymosi eng muhim, eng ko'p tahlil qilingan mavzulardan biridir. Chunki



ayol – jamiyatning, millatning, oilaning, ma'naviyatning tayanchidir. O'zbek adabiyotida ayol obrazining talqini tarix davomida o'zgarib, turli davrlarning ijtimoiy-siyosiy sharoitlari, ma'naviy qadriyatlari va estetik tamoyillari bilan chambarchas bog'liq bo'lib kelgan.

Tarixiy adabiyotda ayol obrazi

O'zbek mumtoz adabiyotida ayol obrazi asosan ideal go'zallik, sadoqat, poklik va fidoyilik timsoli sifatida tasvirlangan. Bu holat, avvalo, Sharq adabiyotiga xos estetik tamoyillardan kelib chiqqan.

Alisher Navoiy asarlarida ayol obrazlari yuksak ma'naviyat va go'zallikning ramzidir. Masalan, "Layli va Majnun" dostonidagi Layli obrazi nafaqat sevgi timsoli, balki insoniy kamolotga intiluvchi, ma'naviy go'zallikni targ'ib etuvchi siymo sifatida gavdalanadi. Layli obrazida ayolning aql, sabr va ruhiy kuch bilan bezatilgan ideal timsoli ifodalanadi.

Zahiriddin Muhammad Bobur asarlarida esa ayol obrazlari hayotiy realizmga yaqinroq. U o'z "Boburnoma"sida ayollarning ijtimoiy hayotdagi o'rnini, ularning oila va jamiyatdagi faoliyati haqida samimiy fikrlar bildiradi.

Keyinchalik Ogahiy, Nodira, Uvaysiy, Zebuniso kabi ijodkor ayollar adabiyotga o'z nigohi bilan kirib kelishgan. Ularning she'riyatida ayol faqat "muhabbat timsoli" emas, balki fikrlaydigan, his qiladigan, ijod qiladigan shaxs sifatida gavdalanadi. Ayniqsa, Nodira ijodida ayolning ma'naviy mustaqilligi, mehr va vafodorlik, sabr va fidoyilik birgalikda yuksak badiiy ifodasini topgan.

Sovet davri adabiyotida ayol obrazining yangicha talqini

XX asrning o'rtalariga kelib, o'zbek adabiyotida ayol obrazi yangi ijtimoiy mazmun kasb etadi. Bu davrda ayollar hayotning barcha jabhalarida faol ishtirok etishgan, bu esa adabiyotda ham o'z aksini topgan.

Abdulla Qodiriyning "O'tkan kunlar" romanidagi Oybachin obrazi orqali muallif ayolning fojiali taqdirini, o'sha davr jamiyatidagi ijtimoiy tengsizlikni yoritadi. Oybachin sevgi, sadoqat va or-nomus yo'lida kurashuvchi, biroq ijtimoiy bosim qurboni bo'lgan ayol sifatida tasvirlanadi. Shu orqali yozuvchi ayolning inson sifatidagi qadriyatini himoya qiladi.

Oybek, G'afur G'ulom, Said Ahmad kabi yozuvchilar asarlarida esa ayol obrazi mehnatkash, vatanparvar, oilaparvar sifatida gavdalanadi. Masalan, Oybekning "Qutlug' qon" romanidagi Ra'no — yangicha fikrlaydigan, erkak bilan teng ravishda mehnat qiluvchi, hayotda o'z o'rnini topishga intiluvchi ayol timsolidir. Bu obraz orqali yozuvchi jamiyatda ayolning yangicha rolini ko'rsatadi.

Bu davr adabiyotida ayol obrazi endi faqat muhabbat yoki oilaviy doira bilan cheklanmay, balki ijtimoiy faol, erkin fikrlovchi, ma'rifatli ayol sifatida tasvirlana boshladi.

Zamonaviy o'zbek adabiyotida ayol obrazining talqini

Mustaqillikdan keyingi o'zbek adabiyotida ayol obrazlari yanada murakkab psixologik holatlar, ichki kechinmalar, ijtimoiy kurashlar orqali yoritilmoqda. Endilikda yozuvchilar ayolni ideal yoki fojiali qahramon sifatida emas, balki hayotiy, real shaxs sifatida tasvirlaydilar.

Xurshid Do'stmuhammad, O'tkir Hoshimov, Saida Zunnunova, Muhammad Ali, Gulchehra Nurullayeva, Lola Ergasheva kabi yozuvchilar ijodida zamonaviy ayol — mustaqil fikrlovchi, o'z huquqlarini anglaydigan, hayotda o'z yo'lini topishga intiluvchi shaxs sifatida namoyon bo'ladi.

Masalan, O'tkir Hoshimovning "Dunyoning ishlari" asarida onalar obrazlari orqali insoniy fazilatlar, mehr, kechirim, sadoqat singari abadiy qadriyatlar yoritilgan. Asarda ayolning oilaviy sadoqati, sabr-toqati bilan bir qatorda uning ijtimoiy mavqeiga ham urg'u beriladi.

Zamonaviy ayol adabiyotda endi jamiyatdagi o'z o'rnini izlovchi, o'zligini anglovchi, ba'zan esa erkaklar dunyosiga qarshi turuvchi qahramon sifatida tasvirlanadi. Shu bilan birga, ayrim yozuvchilar ayollarning ichki ruhiy dunyosiga chuqur kirib borish, ularning kechinmalarini psixologik jihatdan tahlil qilish orqali ayol ruhiyatining realizmini yaratishga intilmoqda.

Tarixiy va zamonaviy ayol obrazlarining qiyosi

Quyidagi jihatlar asosida tarixiy va zamonaviy ayol obrazlarini qiyoslash mumkin:

Ko'rsatkich Tarixiy adabiyotdagi ayol Zamonaviy adabiyotdagi ayol;

Ijtimoiy mavqe Odatda passiv, jamiyatdan chetda Faol, o'z fikriga ega, mustaqil;

Badiiy ifoda Idealizatsiyalangan, ramziy Realistik, psixologik chuqur;

Asosiy fazilatlar Sadoqat, poklik, vafodorlik Mustaqillik, ong, tanlov erkinligi;

Jamiyatdagi roli Oilaviy va ma'naviy sohada Ijtimoiy va professional hayotda ham faol;

Muallif pozitsiyasi Erkak nigohi bilan ifodalangan Ayol nigohi (ayol yozuvchilar) kuchaygan.

Bu qiyosdan ko'rinadiki, zamonaviy adabiyotda ayol endi "erkakning soyasi" emas, balki teng huquqli inson, jamiyatda o'z o'rnini topuvchi shaxs sifatida ko'rsatiladi. Shu bilan birga, tarixiy asarlardagi ayol obrazi estetik va axloqiy jihatdan hanuz adabiyotimizda ideal sifatida qadrlanadi.

Xulosa

O'zbek adabiyotida ayol obrazi — xalqimizning ma'naviy qadriyatlari, dunyoqarashi va ijtimoiy ongining o'zgarishini aks ettiruvchi muhim badiiy ko'rsatkichdir. Tarixiy davr adabiyotida ayol obrazlari asosan sadoqat va go'zallik timsoli bo'lgan bo'lsa, zamonaviy adabiyotda ularning ruhiy olami,



ijtimoiy faolligi, hayotga bo'lgan munosabati yanada kengroq, chuqurroq yoritilmoqda.

Bugungi o'zbek adabiyotida ayol obrazi nafaqat oilaning, balki jamiyatning ham asosiy harakatlantiruvchi kuchi sifatida gavdalanmoqda. Bu esa milliy adabiyotimizning insonparvarlik ruhini, ma'naviy boyligini va zamonaviylik darajasini ko'rsatadi.

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Проза

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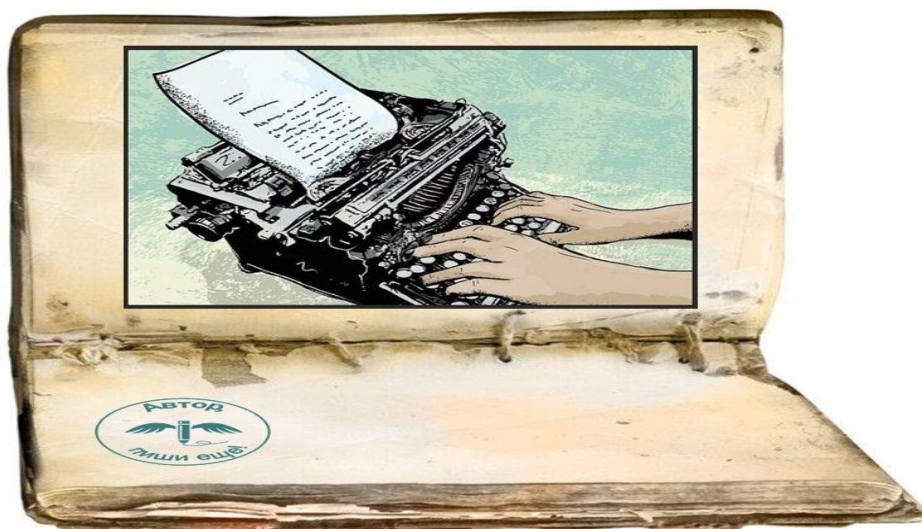
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Проза первой половины XX века в русской литературе представляет собой сложное и многослойное явление, которое отразило как художественные поиски эпохи, так и её драматические исторические реалии. Этот период, охватывающий время от начала XX века до конца 1940-х годов, включает в себя модернистские эксперименты Серебряного века, революционные потрясения, становление советской литературы и её развитие в условиях сталинского режима. Проза стала жанром, способным запечатлеть масштабные общественные изменения, внутренние конфликты личности и эволюцию национального сознания, сочетая в себе реализм, сатиру, антиутопию, исторические повествования и эпические формы. В настоящем параграфе мы подробно рассмотрим основные тенденции развития прозы, её жанровое своеобразие, ключевых авторов и их вклад, а также влияние исторического контекста на этот жанр, опираясь на конкретные произведения, их анализ и более широкий культурный фон[2].

Основные тенденции развития прозы

Проза первой половины XX века прошла через несколько этапов, каждый из которых отражал изменения в общественной жизни, культурной политике и эстетических приоритетах. От модернистских экспериментов начала века до монументальных реалистических полотен сталинской эпохи она демонстрировала гибкость и способность адаптироваться к вызовам времени, сохраняя при этом художественную глубину и разнообразие подходов.

Модернистская проза (1900-е – 1910-е годы)



На рубеже XIX–XX веков русская проза находилась под сильным влиянием модернизма, который стремился преодолеть описательность и социальную дидактику реализма XIX века, предлагая вместо этого акцент на внутреннем мире человека, символике и новаторских формах повествования. Этот этап тесно связан с Серебряным веком — временем культурного расцвета, когда проза, хотя и уступала поэзии в популярности, начала обретать новые выразительные средства. Символизм проник в прозу, придав ей философскую и мистическую глубину. Андрей Белый в романе «Петербург» (1913–1916) создал произведение, ставшее вершиной модернистской прозы. Петербург в его изображении — не просто город, а живое существо, символ распада Российской империи и человеческого сознания. Белый использовал ритмическую прозу, сложные синтаксические конструкции и многослойную символику: «зелёная муть каналов», «бронзовый всадник», «туманные призраки» создают атмосферу надвигающейся катастрофы. Этот роман, написанный на грани поэзии и прозы, требовал от читателя интеллектуального напряжения, что делало его элитарным текстом.

Фёдор Сологуб в романе «Мелкий бес» (1907) сочетал реализм с символизмом, изображая провинциального учителя Передонова, чьё безумие и мелочность становятся метафорой духовного упадка общества. Его проза, полная мрачного юмора и психологизма, предвосхищала экзистенциальные мотивы поздней литературы. Другие авторы, такие как Леонид Андреев, в рассказах вроде «Красного смеха» (1904) исследовали тему войны и безумия, усиливая модернистский акцент на субъективности и трагизме. Проза этого периода была экспериментальной, часто оторванной от массового читателя, что

контрастировало с широкой социальной направленностью Тургенева или Толстого.

Революционная и послереволюционная проза (1917–1920-е годы)

Октябрьская революция 1917 года и последовавшая Гражданская война радикально изменили тематику и функции прозы, сделав её инструментом осмысления социальных катаклизмов, сатирической критики и поиска новой идентичности. Этот этап характеризуется расцветом короткой прозы, сатиры и первых попыток создания советской литературы в условиях относительного плюрализма НЭПа (1921–1929). Борис Пильняк в романе «Голый год» (1922) изобразил революционный хаос через фрагментарное повествование и импрессионистические зарисовки: смена эпизодов — от деревенских сходов до разрушенных усадеб — передаёт ощущение распада старого мира и рождения нового. Его стиль, полный недосказанности и символов, отражал смятение эпохи[2].

Исаак Бабель в сборнике «Конармия» (1926) представил Гражданскую войну через лаконичные, но мощные рассказы. В «Соли» он описывает моральные дилеммы красноармейцев, а в «Моем первом гусе» — жестокий обряд инициации, где герой убивает гуся, чтобы заслужить уважение товарищей. Эта проза, сочетавшая реализм с лиризмом, вызвала протест со стороны военных цензоров, включая Семёна Будённого, за «очернение» армии. Михаил Булгаков в повести «Собачье сердце» (1925) создал сатирическую аллгорию на революционные эксперименты: превращение пса Шарика в человека-хулигана Шарикова высмеивает идею насильственного «перевоспитания» общества. Написанная в 1925 году, повесть была запрещена и распространялась в самиздате.

Евгений Замятин в романе «Мы» (1920) заложил основы русской антиутопии, предсказав тоталитарные тенденции XX века. Единое государство с его номерами вместо имён, стеклянными стенами и строгим контролем стало пророческим образом сталинского режима. Роман, запрещённый в СССР, был опубликован за границей в 1924 году, оказав влияние на Оруэлла и Хаксли. Эмигрантская проза также начала формироваться: Иван Бунин в «Окаянных днях» (1918–1920) — дневниковых очерках — описал революцию как катастрофу, а в рассказе «Господин из Сан-Франциско» (1915) предвосхитил крах буржуазного мира, сохраняя реалистическую традицию с символическими оттенками[1].

В этот период появились и сатирические шедевры: «Двенадцать стульев» Ильи Ильфа и Евгения Петрова (1928) высмеяли советскую бюрократию и авантюризм через похождения Остапа Бендера. Юмор, яркие типы и лёгкость стиля сделали роман популярным, несмотря на цензурные ограничения[3].

Проза (1930-е – 1940-е годы)

С утверждением социалистического реализма в 1932 году постановлением ЦК ВКП(б) и на I Всесоюзном съезде советских писателей (1934) проза стала главным жанром советской литературы, призванным прославлять социализм, трудовые подвиги и воспитывать «нового человека». Этот период отмечен монументальными романами, исторической прозой и военной тематикой. Михаил Шолохов в «Тихом Доне» (1928–1940) создал эпическое полотно о судьбе казаков в революцию и Гражданскую войну. Его реализм, насыщенный казачьими диалектами, бытовыми сценами и психологической глубиной, сочетался с идеологически выверенной трактовкой: трагедия Григория Мелехова оправдывала победу большевиков. Роман получил Сталинскую премию и мировое признание, став первым советским произведением, удостоенным Нобелевской премии (1965).

Алексей Толстой в «Петре Первом» (1929–1945) переосмыслил исторический роман, изображая царя как сильного реформатора, чья воля перекликалась с культом Сталина. Его проза, богатая деталями и драматизмом, отвечала официальным требованиям, но сохраняла художественную ценность. Максим Горький, вернувшийся в СССР в 1931 году, сыграл роль идеолога соцреализма, хотя его поздние произведения, такие как «Жизнь Клима Самгина» (1925–1936), остались незавершёнными. Этот роман-хроника охватывает жизнь русской интеллигенции перед революцией, сочетая реализм с философскими размышлениями[2].

Сатира и антиутопия ушли в подполье: Михаил Булгаков писал «Мастера и Маргариту» (1928–1940) втайне, создавая многослойный роман, где сатира на советскую бюрократию (сцены с Воландом) соседствует с притчей о вечных ценностях. Произведение, опубликованное лишь в 1966 году, стало шедевром мировой литературы. Военная проза 1940-х годов отражала героизм Второй мировой войны: Константин Симонов в повести «Дни и ночи» (1944) изобразил стойкость защитников Сталинграда, а Виктор Некрасов в «В окопах Сталинграда» (1946) показал войну глазами рядового солдата, избегая пафоса и подчёркивая человеческую уязвимость. Оба текста,



хотя и соответствовали соцреализму, сохраняли искренность и эмоциональную силу.

Жанровое разнообразие

Проза первой половины XX века отличалась богатством жанров, отражая как модернистские эксперименты, так и идеологические задачи. Основные жанры включают:

- Роман: крупная форма, варьирующаяся от символистского «Петербурга» Белого до эпического «Тихого Дона» Шолохова, исторического «Петра Первого» Толстого и философско-сатирического «Мастера и Маргариты» Булгакова[5].

- Повесть: средняя форма, популярная в 1920-е и 1940-е годы, как «Собачье сердце» Булгакова, «Дни и ночи» Симонова или «Судьба человека» Шолохова (1956, написана в конце периода).

- Рассказ: короткая проза, раскрывающая острые темы, как «Конармия» Бабеля, «Солнечный удар» Бунина или «Один день Ивана Денисовича» Солженицына (хотя опубликован позже, замысел возник в 1940-е).

- Антиутопия: жанр, предвосхищающий тоталитаризм, яркий пример — «Мы» Замятина, а также элементы в «Мастере и Маргарите».

- Сатира: критический взгляд на общество в «Двенадцати стульях» Ильфа и Петрова, «Собачьем сердце» или «Золотом телёнке» (1931).

- Исторический роман: переосмысление прошлого в «Петре Первом» Толстого, «Разине Степане» Алексея Чапыгина (1927) или «Емельяне Пугачёве» Вячеслава Шишкова (1940-е).

- Очерк: документальная проза, как «Окаянные дни» Бунина, «Поездка в Полесье» Замятина или «Записки врача» Викентия Вересаева (1920-е).

- Автобиографическая проза: «Жизнь Арсеньева» Бунина (1927–1933) или «Детство» Горького (1913, продолженное в 1920-е).

Ключевые авторы и их вклад

- Андрей Белый (1880–1934): символист, чей «Петербург» стал вершиной модернистской прозы, сочетая ритм, символику и психологизм. Его эксперименты повлияли на развитие формы романа.

- Михаил Булгаков (1891–1940): мастер сатиры и философской прозы. «Собачье сердце» и «Мастер и Маргарита» — шедевры, скрытые от советского читателя при его жизни, но ставшие классикой позже.

- Исаак Бабель (1894–1940): автор «Конармии», чья лаконичная и выразительная проза раскрыла трагизм войны. Репрессирован и расстрелян в 1940 году.

- Борис Пильняк (1894–1938): писатель революционного хаоса, чей «Голый год» стал образцом импрессионизма. Арестован и расстрелян в 1938 году.

- Евгений Замятин (1884–1937): создатель антиутопии «Мы», предсказавшей тоталитаризм. Эмигрировал в 1931 году, умер в Париже.

- Михаил Шолохов (1905–1984): автор «Тихого Дона», соединивший эпический размах с соцреализмом. Первый русский нобелевский лауреат по литературе (1965).

- Алексей Толстой (1883–1945): мастер исторической прозы, адаптировавший талант к советским требованиям в «Петре Первом» и «Хождении по мукам» (1920–1941).

- Иван Бунин (1870–1953): эмигрант, чьи рассказы («Тёмные аллеи», 1937–1944) и «Окаянные дни» сохранили реалистическую традицию. Нобелевский лауреат 1933 года.

- Константин Симонов (1915–1979): автор военной прозы, чьи «Дни и ночи» и «Живые и мёртвые» (1959, начат в 1940-е) стали классикой героической литературы.

- Виктор Некрасов (1911–1987): писатель, чей «В окопах Сталинграда» показал войну без прикрас, став важным вкладом в военную прозу.

Влияние исторического контекста

Исторические события оказали решающее влияние на развитие прозы. Вторая мировая война породила героическую прозу, отражавшую подвиг народа (Симонов, Некрасов), но даже в ней проступала правда человеческих утрат. Цензура вытеснила модернизм, заменив его соцреализмом, однако подпольные тексты — «Мастер и Маргарита», «Мы» — сохранили дух сопротивления[4]. Эмигрантская проза Бунина, Набокова и Гайто Газданова (рассказы 1930-х) стала продолжением дореволюционной традиции, контрастируя с советской унификацией. Политическая борьба внутри СССР — от троцкистских чисток до культа личности — также отражалась в прозе: «Жизнь Клима Самгина» Горького фиксировала раскол интеллигенции, а «Хождение по мукам» Толстого оправдывало победу большевиков.

Значение прозы первой половины XX века

Проза этого периода стала зеркалом эпохи, запечатлев её трагедии, надежды и противоречия. Она сочетала модернистскую новизну с реализмом, сатиру с эпосом, индивидуальное с общественным, создавая произведения, вошедшие в мировой канон. Несмотря на цензуру и репрессии, прозаики сохранили жанровое богатство и художественную глубину, отражая как национальный, так и универсальный опыт. От

«Петербурга» Белого до «Тихого Дона» Шолохова, от «Мастера и Маргариты» Булгакова до «В окопах Сталинграда» Некрасова она остаётся свидетельством человеческой стойкости и творческой силы в условиях кризиса. Её значение выходит за рамки эпохи, влияя на литературу второй половины XX века и современность.

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THE DEVELOPMENT OF RECEIVED PRONUNCIATION

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Annotation: This article examines the historical evolution, characteristics, and social significance of Received Pronunciation (RP), the prestige accent traditionally associated with southern England and educated speakers. The study traces RP's origins to the 15th–16th centuries, when regional dialects in England began to standardize under the influence of social mobility, education, and London's growing cultural prominence. The article highlights key phonological features that distinguish RP, including non-rhoticity, specific vowel qualities, and consonant articulation patterns, as well as its role as a marker of social class and formal education.

The article also explores how RP has been shaped by historical events, such as the establishment of public schools and the BBC's broadcasting standards, which reinforced its status as the model accent for national communication. Additionally, it discusses ongoing debates regarding RP's relevance in contemporary society, noting that while its dominance has declined due to regional and multicultural influences, RP still functions as a symbol of social prestige and linguistic authority. The article concludes that understanding RP's development provides insight into the interplay between language, society, and identity, illustrating how pronunciation norms evolve in response to social, cultural, and institutional factors.

Key words: Received Pronunciation, standard accent, social prestige, phonology, language variation, historical development.

Introduction: The study of Received Pronunciation (RP) occupies a significant place in the field of sociolinguistics and the history of the English language, as it represents both a linguistic standard and a social symbol. RP, often referred to as the "Queen's English" or "BBC English," is traditionally regarded as the prestige accent of southern England, particularly associated with educated speakers and formal communication. Its development reflects a complex interplay between historical, social, and linguistic factors that have influenced the evolution of English pronunciation over several centuries. Understanding RP is essential not only for phoneticians and linguists but also for educators, broadcasters, and anyone interested in the dynamics of language standardization and social stratification.



The origins of RP can be traced to the late medieval and early modern periods, roughly between the 15th and 17th centuries, when English society underwent substantial social, political, and cultural transformations. During this time, regional dialects dominated most areas of England, and pronunciation varied widely across communities. The rise of London as a political and economic center, coupled with increased mobility among the educated and upper classes, created conditions for the emergence of a more uniform and socially prestigious speech variety. Education played a crucial role in shaping RP, particularly through public schools and universities, which reinforced specific pronunciation norms. Students from different regions were exposed to a standard model of speech that gradually influenced their own accents, facilitating the spread of RP across the upper and middle classes [1,284].

Phonologically, RP is characterized by features that distinguish it from regional dialects, including non-rhoticity (the dropping of post-vocalic /r/), specific vowel qualities, and precise consonant articulation. These phonetic markers not only establish RP as a recognizable accent but also signal social identity and educational background. The adoption of RP as a prestige form reflects broader societal values, as it became associated with authority, sophistication, and cultural refinement. Historically, this association was reinforced through literature, theatre, and later broadcasting, particularly with the establishment of the BBC in the 20th century, which promoted RP as a standard for national communication.

The historical development of RP cannot be understood without considering the social hierarchy of England. Speech patterns functioned as markers of class distinction, and RP emerged as a way for the upper and upper-middle classes to signal social status. In contrast, regional accents were often stigmatized or associated with lower social standing, a perception that influenced language attitudes and reinforced social boundaries. The standardization of RP thus exemplifies the connection between language and social identity, demonstrating how pronunciation can serve both communicative and symbolic functions. This social dimension of RP also highlights the role of language in shaping perceptions of prestige, authority, and correctness [2,456].

Education and institutional influence were central to the codification of RP. Public schools, such as Eton and Harrow, and prestigious universities, including Oxford and Cambridge, actively promoted specific pronunciation norms. These institutions not only trained students in RP but also ensured that the accent was disseminated through generations of educated speakers. Furthermore, the rise of national broadcasting in the 20th century



significantly reinforced RP's status. The BBC, seeking a clear and neutral standard for communication across England, adopted RP as its model accent, effectively cementing its association with formal speech, professionalism, and national identity. As a result, RP became not merely a regional variant but a socially recognized standard that carried symbolic weight across the country.

Despite its long-standing prestige, RP has never been completely uniform, and it continues to evolve in response to social, cultural, and linguistic changes. Contemporary sociolinguistic research shows that RP is increasingly influenced by regional accents and multicultural speech patterns, reflecting greater social mobility, globalization, and shifting attitudes toward class and identity. While traditional RP remains associated with older generations and formal contexts, modern variations sometimes referred to as "Modern RP" demonstrate flexibility in pronunciation and acceptance of subtle regional influences. This evolution underscores the dynamic nature of RP and its ongoing negotiation between standardization and variation.

Studying the development of RP also provides valuable insight into broader processes of language change. It illustrates how phonological systems can be shaped by social pressures, institutional norms, and communicative needs. The spread and maintenance of RP show that language is not merely a neutral system of sounds but a social tool that reflects historical circumstances and cultural values. By analyzing RP, linguists can better understand the mechanisms of accent standardization, the role of social networks in language diffusion, and the symbolic functions of speech in identity construction [3,496].

Moreover, RP's development highlights the relationship between language and power. The promotion of RP as a standard accent historically privileged speakers from certain social and educational backgrounds, reinforcing social hierarchies and limiting linguistic diversity in formal contexts. Understanding this historical dimension encourages critical reflection on contemporary attitudes toward accent, prestige, and linguistic authority. It also provides a framework for exploring issues of linguistic inclusivity, representation, and the evolving social meanings of speech. In conclusion, Received Pronunciation is more than just a speech variety; it is a linguistic and social phenomenon that encapsulates centuries of historical development, educational influence, and cultural significance. Its phonological features, social associations, and institutional support illustrate the ways in which language and society interact to produce standards of communication and markers of identity. Studying RP offers insights into historical linguistics, sociolinguistics, and the dynamics of language change, making it a vital subject for scholars interested in the evolution of English, the sociology of language,



and the cultural meanings embedded in speech. The following sections of this study will examine RP's phonetic characteristics, historical development, social functions, and contemporary transformations, providing a comprehensive understanding of its role in English language history and society [4,368].

Literature review: Research on Received Pronunciation (RP) has developed extensively over the past century, combining historical, phonological, and sociolinguistic perspectives. Early studies by Gimson (1962) and Wells (1982) provided foundational descriptions of RP, focusing on its phonetic characteristics, including non-rhoticity, vowel quality, and consonant articulation. Gimson's *Introduction to the Pronunciation of English* offered a detailed account of traditional RP features and established it as the model for standard British English pronunciation. Wells' *Accents of English* further explored RP in comparison with regional accents, emphasizing its sociolinguistic significance and historical development [5,356].

Subsequent research by Mugglestone (2003) and Hughes et al. (2012) examined RP from a historical and social perspective, tracing its origins to southern English dialects and the role of public schools and the BBC in standardizing the accent. Mugglestone highlighted the social prestige of RP and its association with education and authority, while Hughes and colleagues analyzed both traditional and modern variations, noting the influence of social mobility, globalization, and multiculturalism on contemporary RP [6,312].

Recent studies also address the evolving role of RP in society. Fabricius (2000) and Kerswill & Williams (2000) investigated how younger speakers adapt RP to reflect regional and social diversity, demonstrating its ongoing transformation. These studies collectively underscore that RP is not a fixed form but a dynamic, socially embedded accent shaped by historical, cultural, and linguistic factors. The literature thus provides a comprehensive framework for understanding RP's phonological features, social functions, and historical evolution [7,673].

Methodology: The research on the development of Received Pronunciation (RP) employs a combination of historical-descriptive, comparative, and sociolinguistic approaches. The primary objective of the study is to analyze RP's phonological features, historical evolution, and social significance, drawing on both textual and audio-visual data from different periods. Historical analysis involves examining written sources, including pronunciation guides, dictionaries, and educational materials from the 18th to the 20th centuries, which document the codification of RP and its usage in formal contexts. Key sources include works by phoneticians such as Daniel



Jones, Gimson, and Wells, which provide detailed accounts of RP pronunciation norms over time.

The second stage of the methodology involves comparative phonological analysis. RP is compared with regional southern English dialects to trace its emergence and standardization. This comparison identifies key features, such as non-rhoticity, vowel quality distinctions, and consonant articulation, which distinguish RP from other accents. Historical recordings, where available, are analyzed to examine changes in pronunciation patterns and the influence of social and educational institutions, including public schools and the BBC, on the dissemination of RP.

The third stage applies a sociolinguistic perspective. The study investigates how RP functions as a marker of social prestige, class, and education. This involves analyzing contemporary literature, surveys, and studies on attitudes toward RP, focusing on its symbolic role in identity construction and its evolving status in modern society. Both traditional RP and its modern variations are considered to understand ongoing changes resulting from social mobility, globalization, and multicultural influences.

Finally, the collected data are synthesized to provide a diachronic account of RP's development, demonstrating how phonological, social, and institutional factors collectively shaped the accent. By combining historical documentation, phonetic analysis, and sociolinguistic investigation, the methodology offers a comprehensive approach to understanding RP as both a linguistic and social phenomenon.

Results: The research demonstrates that Received Pronunciation (RP) emerged as a socially prestigious and linguistically distinct accent during the 18th and 19th centuries, consolidating features from southern English dialects. Analysis of historical sources indicates that RP is characterized by non-rhoticity, specific vowel qualities (e.g., the distinction between /ɑ:/ and /æ/), and precise consonant articulation, which collectively differentiate it from regional accents. These phonological features became codified through pronunciation manuals and educational practices, particularly in public schools and universities, ensuring a standardized model for formal communication.

The results also reveal that RP's development was closely linked to social class and institutional influence. Public schools, such as Eton and Harrow, played a key role in transmitting RP to upper- and middle-class students, while the BBC reinforced RP as a national standard in broadcasting. The accent thus functioned as a marker of social prestige and educational background, providing speakers with symbolic capital in both professional and social contexts.



Comparative analysis shows that while RP initially drew heavily from southern dialects, it evolved into a distinct and homogenized form, minimizing regional variation. Historical recordings indicate subtle shifts in pronunciation over the 20th century, including vowel changes and occasional rhoticity in modern variants. Furthermore, sociolinguistic data suggest that contemporary RP is less rigid, with younger speakers incorporating features from regional and multicultural influences. Despite these changes, RP continues to maintain social authority, particularly in formal and professional contexts.

Overall, the results confirm that RP is both a product of historical linguistic processes and a socially constructed standard. Its phonological consistency, institutional support, and symbolic significance highlight the interplay between language, society, and identity, demonstrating how pronunciation norms are shaped and maintained over time.

Discussion: The findings of this study highlight the dual nature of Received Pronunciation (RP) as both a linguistic system and a social phenomenon. Linguistically, RP is marked by distinct phonological features, including non-rhoticity, precise vowel qualities, and consonant articulation, which set it apart from regional dialects. These features reflect a process of standardization aimed at creating a uniform and socially recognized accent. The historical codification of RP through pronunciation guides, educational instruction, and broadcasting reinforced its consistency and facilitated its spread among the upper and middle classes.

Socially, RP functioned as a marker of prestige, authority, and educational background. The association of RP with elite institutions and professional settings illustrates how pronunciation can serve symbolic functions beyond mere communication. Public schools and the BBC played critical roles in shaping both the perception and adoption of RP, highlighting the influence of institutional power on language standardization. This demonstrates that linguistic norms are closely tied to social hierarchies and cultural values.

The study also underscores the dynamic nature of RP. While traditional RP remained relatively stable for much of the 19th and early 20th centuries, modern sociolinguistic influences have introduced variation. Regional accents, social mobility, and multicultural interactions have led to subtle shifts in pronunciation, giving rise to contemporary forms of RP that retain prestige while reflecting broader societal changes. These developments show that language is not static; it evolves in response to social, cultural, and communicative pressures.



Furthermore, RP exemplifies the interaction between language, identity, and social perception. Speakers may adopt or modify RP to align with desired social identities, demonstrating the performative and symbolic role of accent. This perspective emphasizes that studying RP requires attention not only to phonetic characteristics but also to historical context and sociolinguistic function.

Conclusion: The study of Received Pronunciation (RP) provides valuable insights into the interplay between language, society, and historical change. RP emerged as a standardized accent primarily in southern England, distinguished by its non-rhoticity, specific vowel qualities, and precise consonant articulation. Its development was closely linked to social and educational institutions, particularly public schools and universities, which promoted RP as a model of “correct” pronunciation. Later, the BBC’s adoption of RP as the standard broadcasting accent further solidified its status as a national benchmark for formal speech. These historical processes highlight how language can be shaped by institutional authority and social prestige, reflecting broader societal values and hierarchies.

The research confirms that RP functions not only as a system of pronunciation but also as a marker of social identity, education, and authority. Historically, it allowed speakers from the upper and upper-middle classes to signal their social position, while regional accents were often associated with lower status. RP’s prestige and codification demonstrate the symbolic power of accent and the role of language in reinforcing social stratification. In addition, the study shows that RP is dynamic; while traditional forms remain influential, contemporary variations incorporate regional and multicultural influences, reflecting ongoing social change and linguistic evolution.

Comparative analysis with southern English dialects reveals that RP evolved through a process of homogenization, minimizing regional variation while retaining core phonological features. This standardization process illustrates the broader principles of language change, including the influence of social mobility, education, and mass communication on pronunciation norms. The development of RP also exemplifies how linguistic forms can acquire cultural and symbolic significance, functioning as markers of prestige and identity across generations.

In conclusion, RP represents a convergence of linguistic, social, and historical factors. Its study sheds light on how pronunciation norms are established, maintained, and transformed over time. By examining RP’s phonological features, historical development, and social functions, the research highlights the intricate connections between language and society, demonstrating that accent is both a tool for communication and a symbol of

cultural and social identity. Understanding RP provides a framework for analyzing other standard accents and contributes to broader discussions on language variation, standardization, and change.

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ПЕРСПЕКТИВЫ ИЗВЛЕЧЕНИЯ МАСЛА ИЗ СЕМЯН ТЫКВЫ

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Аннотация. В статье рассмотрены современные технологии и перспективные направления извлечения масла из семян тыквы. Проанализированы методы механического прессования, экстракции растворителями и инновационные способы, включающие ультразвуковую, микроволновую и сверхкритическую CO₂-экстракцию. Показаны преимущества комплексной переработки сырья с точки зрения экономической эффективности и экологической устойчивости.

Ключевые слова: тыквенные семена, растительное масло, экстракция, прессование, CO₂-технологии, энергосбережение, биотехнологии.

Введение. В последние годы наблюдается устойчивый рост интереса к растительным маслам, обладающим высокой биологической ценностью и функциональными свойствами. Масло из семян тыквы относится к категории пищевых масел премиум-класса, благодаря уникальному составу и терапевтическому действию. Оно содержит до 50–55 % липидов, богатых ненасыщенными жирными кислотами, токоферолами, каротиноидами, фосфолипидами и микроэлементами. Несмотря на значительный потенциал сырьевой базы, промышленное производство тыквенного масла в ряде стран, включая Узбекистан и соседние регионы, пока ограничено. Это обусловлено недостаточной технологической оснащённостью и необходимостью внедрения энергосберегающих, экологических методов переработки.

Современное состояние технологий извлечения масла

1. Механическое прессование

Механическое прессование является наиболее распространённым методом, позволяющим получать экологически чистое масло без использования химических реагентов.

- Холодное прессование обеспечивает сохранение витаминов и биологически активных соединений, но выход масла обычно не превышает 35–40 %.

- Горячее прессование повышает выход до 50–55 %, однако сопровождается частичным разрушением термолабильных веществ и потемнением продукта.

2. Экстракция органическими растворителями

Экстракция с применением гексана, этанола или изопропанола даёт высокий выход (до 95 %), но требует последующей очистки масла и утилизации растворителя. Экстракционные установки отличаются сложностью и повышенными энергозатратами, что ограничивает их использование в малых производствах.

Инновационные и перспективные технологии. Современные исследования направлены на совершенствование традиционных методов за счёт внедрения физических, биотехнологических и комбинированных воздействий.

1. Сверхкритическая CO_2 -экстракция — наиболее перспективная технология, обеспечивающая получение чистого масла без растворителей. Метод позволяет варьировать давление и температуру, регулируя состав экстракта. Выход достигает 90–95 %, качество продукта остаётся максимально высоким.
2. Ультразвуковая обработка способствует разрушению клеточных структур семян и улучшает диффузию масла, повышая эффективность последующего прессования или экстракции на 10–20 %.
3. Микроволновая и инфракрасная подготовка сырья обеспечивает быстрый и равномерный нагрев, что ускоряет выделение масла и снижает энергопотребление.
4. Ферментативная предобработка с применением целлюлаз, протеаз и пектиназ разрушает клеточные стенки, облегчая извлечение липидов и повышая общий выход на 5–10 %.

Перспективным направлением является комплексное использование тыквенных семян, включающее получение масла, белково-витаминных концентратов и кормовых добавок. Жмых после отжима содержит до 40 % белка и может использоваться в пищевой и кормовой промышленности. Это позволяет минимизировать отходы и повысить экономическую эффективность производства.

Спрос на натуральные и органические масла в мире растёт ежегодно на 8–10 %. Тыквенное масло используется не только в пищевых целях, но и в фармацевтике, косметологии и диетологии.

Развитие местных перерабатывающих мощностей способствует импортозамещению и созданию новых рабочих мест в сельской местности.

Современные технологии позволяют снизить экологическую нагрузку на производство:

- отказ от токсичных растворителей;
- сокращение энергозатрат за счёт комбинированных физических методов;
- утилизация отходов в виде кормов или сырья для биогаза.

Такие подходы соответствуют принципам зелёной экономики и устойчивого развития сельского хозяйства.

Заключение. Анализ показывает, что извлечение масла из семян тыквы имеет значительный технологический и экономический потенциал. Основные тенденции развития отрасли связаны с внедрением инновационных технологий — сверхкритической CO₂-экстракции, ультразвуковой и микроволновой обработки, ферментативной подготовки сырья. Применение энергосберегающих и экологически безопасных методов позволит повысить эффективность переработки, улучшить качество продукта и укрепить позиции местных производителей на внутреннем и внешнем рынках.

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ENZYMATIC HYDROLYSIS FOR FUNCTIONALISATION OF WATERMELON
SEED PROTEIN FROM ULTRASOUND-ASSISTED EXTRACTION IN
COMPARISON TO SOY PROTEIN ISOLATE

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Abstract: The functional characteristics of a watermelon seed protein isolate (UA-WSPI), which resulted from an underutilised protein source by ultrasound-assisted extraction and freeze-drying, and a commercial spray-dried soy protein isolate were compared. Both were enzymatically treated with pepsin plus trypsin (PT) or additionally with PT plus Alcalase (PAT) for functionalisation by obtaining different partial hydrolysates. Composition, DPPH scavenging activity, digestibility and technological functionality (such as dispersibility, water-/oil-holding capacity, and zeta potential) were analysed for each protein isolate and the hydrolysates. UA-WSPI had advantages such as higher protein solubility. Enzymatic digestion of UA-WSPI resulted in the highest peptide yields and degrees of hydrolysis. Hydrolysis by the PT treatment even increased the antioxidant activity and emulsifying properties of the hydrolysate compared to UA-WSPI, whereas the soy protein isolates yielded hydrolysates of lowered antioxidant activity. Watermelon seeds proved to yield protein isolates as new functional food components, especially when applying appropriate enzyme combinations.

Keywords: watermelon seed protein isolate, ultrasound-assisted extraction, functional food ingredients, bioactive peptides, protein hydrolysates, enzymatic hydrolysis, pepsin-trypsin treatment, Alcalase, antioxidant activity, emulsifying properties, protein solubility, plant-based protein, watermelon seed by-products, WSPI, soy protein isolate, DPPH scavenging activity, technological functionality, water-holding capacity, oil-holding capacity, zeta potential, rational nutrition, balanced composition,

vegetable pastes, sustainable processing, food technology, functional confectionery products.

Introduction. Watermelon (*Citrullus lanatus* (Thunb.) Matsum. & Nakai) is a member of the cucurbit family (Cucurbitaceae). It is grown commercially in agricultural areas having warm periods. In the year 2021, the global annual production of watermelon fruit was 101.6 Mt, with 3.5 Mt thereof being produced on 729 km² in Turkey as one of the major cultivation countries. Watermelon is widely appreciated for its nutritious properties, including vitamins and minerals, for its sweet taste and for being refreshing. It has a moisture content of almost 90 g hg⁻¹ (Abu-Nasser & Abu-Naser, [2018](#)). As it is mostly consumed as fresh fruit or processed into drinks on the small scale, e.g., in gastronomy, most of the seeds are turned into food waste, besides some seeding material for fruit cultivation. However, there is a growing demand for products containing industrially processed watermelon juice. In the process, 25%–60% of the raw materials are altered into food processing by-products. Nonetheless, industrial processing of watermelon seeds (WMS) still plays an inferior role, yielding, e.g., roasted and salted seeds as popular food snacks or watermelon seed oil for cosmetic applications. As readily available, but still underutilised by-products, WMS can be used to produce further beneficial goods cost-effectively. They are a potential protein source owing to their high protein content and the balanced amino acid composition (Arg, Asp, Leu, Glu, etc.; Wen et al., [2019](#)). These properties make WMS a promising source to produce protein isolates (WSPI) and hydrolysates (WSPH), in particular, if the seedy fruit is grown organically. In terms of abundant contents of protein, amino acids and bioactive peptides, WMS come close to soy, being the most widely used plant protein source so far.

Broad industrial utilisation of the seeds is additionally restricted by limiting factors of existing methods for protein extraction, such as high energy consumption, effects of chemical solvents, long extraction times and low separation yields. In the last decades, various novel extraction techniques have been introduced for protein extraction from plant-based sources, including ultrasonic, microwave-assisted, pressurised liquid and subcritical extraction methods. Ultrasound, being a green, innovative and inexpensive technology, is widely used for the extraction of proteins and antioxidant compounds. Gadalkar & Rathod explored the ultrasound-assisted extraction of watermelon seed proteins with different sonication parameters. The combination of watermelon seed protein extraction with the ultrasound method enhanced the protein extraction yield by around 87% and reduced the extraction time to 9 min. Ultrasound could improve later enzymatic hydrolysis and protein properties. Furthermore, the development of

ultrasound devices can play an important role in the preparation of bioactive protein hydrolysates.

Materials and chemicals

Watermelon seeds were procured as dried foodstuff from the local market (Diyarbakir, Turkey). Soy protein isolate (SPI, low-fat (1.5 g hg^{-1}), conventionally extracted, spray-dried) was purchased from the market (Myvegan, THG plc, Manchester, UK). All trials were performed with chemicals of analytical grade. Chemicals and enzymes were purchased from Sigma-Aldrich (Merck, Darmstadt, Germany): hexane, hydrochloric acid, sodium hydroxide, ethanol, sodium chloride, 2,2-diphenyl-1-picrylhydrazyl (DPPH), formaldehyde and proteases. These enzymes comprised pepsin (endoprotease from porcine gastric mucosa, $3200 \text{ units mg}^{-1}$), trypsin (endopeptidase from porcine pancreatic glands, $1000\text{--}2000 \text{ units mg}^{-1}$) and Alcalase (endoprotease from *Bacillus licheniformis*, $0.75 \text{ units mL}^{-1}$).

Watermelon protein extraction by ultrasound-assisted extraction (UAE) and extraction yield

Defatted watermelon seed powder (50 g) was suspended in 500 mL ultra-pure water (CLiR 5000, ResinTech Inc., Camden, US) in a flat-bottom glass reactor. The pH was adjusted to 9 by adding 2 M NaOH. The blend was sonicated for 9 min at 90 W and a frequency of 25 kHz (UP400St, Hielscher Ultrasonics GmbH, Teltow, Germany). Centrifugation followed at $10\,000 \times g$ for 15 min at 4°C (Gadalkar & Rathod, [2020](#)). The supernatant pH was adjusted to 4.5 with 1 N HCl to precipitate the soluble proteins. The residue was obtained by centrifugation $10\,000 \times g$ (FL40R, Thermo Scientific, Rockford, USA) for 15 min at 4°C and freeze-dried (FDL1R-0E, LAB1ST, Shanghai, China) to collect the dried protein. The extraction yield was calculated as the percentage ratio of the obtained mass of ultrasound-extracted watermelon seed protein (UA-WSPI) to the mass of watermelon seed powder used. Prior to further use, the freeze-dried material was pulverised, using a granite mortar.

Compositional analysis

For both defatted and crude (non-defatted) watermelon seed powder, the contents of fibre, ash, total fat and moisture were determined, applying the standard AOAC methods 985.29, 942.05, 948.22 and 948.12 (AOAC, [2006](#)). The protein contents were deduced from the total nitrogen contents, resulting from a Kjeldahl analyser (UDK 159, Velp Scientific, Deer Park, NY, USA) according to the Kjeldahl method (Kirk, [1950](#)). The converting factors used to calculate the total protein contents from the nitrogen contents were 5.3 for watermelon seed products (seed powder, protein isolate, hydrolysates) as for oil seeds in general, but 5.71 for the soy products (protein

isolate, hydrolysates), as particularly specified for this plant species (Matissek et al., [2018](#)). For the different protein samples (UA-WSPI, SPI and their hydrolysates), only the contents of total nitrogen and total protein were quantitated, but according to the Dumas method (Ebeling, [1968](#)), using a Dumatherm analyser (C. Gerhardt, Gerhardt Analytical Systems, Königswinter, Germany) and the aforesaid converting factors.

Table 1. Proximate analysis of crude and defatted watermelon seed (WMS) powder

WMS source	Protein (g hg ⁻¹)	Ash (g hg ⁻¹)	Moisture (g hg ⁻¹)	Oil (g hg ⁻¹)	Crude fibre (g hg ⁻¹)
Crude WMS					
Own material	20.9 ± 0.6 ^a	13.4 ± 0.04 ^a	3.8 ± 0.02 ^a	38.2 ± 0.6 ^a	38.9 ± 0.03 ^a
Gadalkar & Rathod (2020)	18.7 ± 0.1 ^a	4.4 ± 0.2 ^b	5.6 ± 0.5 ^b	49.4 ± 1.2 ^b	6.2 ± 0.3 ^b
Wani et al. (2008)	16.3 ± 0.6 ^b	2.5 ± 0.4 ^c	7.7 ± 0.2 ^c	21.9 ± 0.6 ^c	22.2 ± 0.4 ^c
Defatted WMS					
Own material	49.0 ± 0.3 ^c	14.5 ± 0.05 ^d	4.9 ± 0.03 ^d	3.6 ± 0.06 ^d	40.3 ± 0.02 ^a
Gadalkar & Rathod (2020)	54.5 ± 0.3 ^f	5.9 ± 0.3 ^e	7.4 ± 0.5 ^c	4.6 ± 0.5 ^e	7.8 ± 0.1 ^d

Composition of protein isolates and their partial hydrolysates

In terms of the total nitrogen content, being 13.61 ± 0.07 g hg⁻¹ for UA-WSPI and 14.01 ± 0.02 g hg⁻¹ for SPI, the two protein isolates from WMS and soy were very similar (Table [2](#)). The different nitrogen–protein conversion factors for oil seeds and soy slightly increased the difference in the protein contents, which were 72.13 ± 0.35 g hg⁻¹ for UA-WSPI and 80.01 ± 0.14 g hg⁻¹ for SPI. Nonetheless, the protein contents of both isolates were comparable to those reported by Wang et al. ([2004](#)) and Wani et al. ([2012](#)). Application of UAE to defatted, but non-dehulled WMS thus enabled the recovery of a protein isolate (UA-WSPI) that showed almost the same protein content as those, which had been extracted conventionally from dehulled plus defatted WMS (79.1–83.8 g hg⁻¹, Wani et al., [2012](#)).

Protein isolate	Hydrolysate	Total nitrogen (g hg ⁻¹)	Protein (g hg ⁻¹)
UA-WSPI		13.61 ± 0.07 ^a	72.13 ± 0.35 ^a
	WSPH-PAT	5.03 ± 0.02 ^b	26.63 ± 0.08 ^b
	WSPH-PT	5.57 ± 0.04 ^c	29.53 ± 0.20 ^b
SPI		14.01 ± 0.02 ^a	80.01 ± 0.14 ^c
	SPH-PAT	5.12 ± 0.01 ^b	29.24 ± 0.06 ^b
	SPH-PT	5.62 ± 0.01 ^c	32.09 ± 0.08 ^d

Table 2. Total nitrogen and protein content of watermelon protein isolate, soy protein isolate, and their hydrolysates

For the protein hydrolysates from UA-WSPI and SPI, the degree of hydrolysis increased as the number of applied enzymes rose, whereas the peptide yields fell (Table 3). Accordingly, the combined use of pepsin, Alcalase and trypsin (PAT-treatment) caused higher DH percentages and lower peptide yields than the incubation with pepsin plus trypsin (PT-treatment) did. The peptide yields always ranged at ~37% after PAT-treatments and at ~40% after PT-treatments ($P < 0.05$). However, DH percentages of hydrolysates from UA-WSPI were always clearly higher (47%–56%) than those of hydrolysates from the soy protein isolate (34%–40%). Consequently, WSPH-PAT showed the highest DH (55.8% ± 0.7%).

Similar differences in DH among these enzyme combinations were reported previously for soy protein hydrolysates (Chen et al., 2020). As described by Meinschmidt et al. (2016), incubation of soy protein for 2 h with either Alcalase, trypsin or pepsin under the individual optimum conditions of each enzyme led to soy protein hydrolysates of different DH. For mere Alcalase, peptic and tryptic hydrolysis of WMS protein, DH was reported to increase from 13% to 19% to 26% (Arise et al., 2016). Concurrently, the peptide yields found by Arise et al. (2016) after mere peptic hydrolysis were much higher than those shown in Table 3 for enzyme combinations.

Conclusions. The protein isolate produced by UAE from defatted, but non-dehulled WMS proved comparable to commercial soy protein isolate in terms of protein content, the negative ζ -potential, dispersibility, and digestibility. Most importantly, UA-WSPI turned out to be even superior to SPI as regards solubility at pH 11 and water-holding capacity, besides oil-holding

capacity and emulsion stability. However, it could not compete with SPI in terms of foaming properties and antioxidant capacity. Partial enzymatic hydrolysis (PT- and PAT-treatments) entailed greater degradation of UA-WSPI than of SPI. For both hydrolytic treatments, protein hydrolysis turned out to be apparently too intense to maintain important technological properties of the proteins, such as water-/oil-holding capacity as well as foaming and gelling properties.

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**ФИСКАЛЬНАЯ УСТОЙЧИВОСТЬ И ИННОВАЦИОННЫЕ ПОДХОДЫ К
УПРАВЛЕНИЮ ГОСУДАРСТВЕННЫМ ДОЛГОМ**

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Фискальная устойчивость в условиях современной экономической нестабильности становится ключевым ориентиром для государственной финансовой политики. Способность государства выполнять свои долговые обязательства в краткосрочной и долгосрочной перспективе без создания избыточного давления на экономику или социальной напряжённости требует комплексного и стратегического подхода. Управление государственным долгом перестаёт быть исключительно технической задачей и превращается в инструмент обеспечения макроэкономического баланса, стимулирования роста и предотвращения кризисов.

Фискальная устойчивость подразумевает такое состояние публичных финансов, при котором уровень долга остаётся контролируемым, а дефицит бюджета не приводит к накоплению системных рисков. В условиях роста расходов на социальные программы, инфляционных колебаний и глобальных внешнеэкономических вызовов, традиционные методы управления государственным долгом оказываются недостаточно гибкими [1]. В этой связи усиливается интерес к инновационным подходам, направленным на оптимизацию структуры долга, снижение его стоимости, продление сроков обслуживания и диверсификацию источников заимствования.

Одним из направлений таких инноваций становится цифровизация процессов управления долгом. Использование автоматизированных платформ для анализа долгового портфеля, прогнозирования фискальных рисков и моделирования сценариев обслуживания долга позволяет органам государственного управления принимать более обоснованные решения. Кроме того, цифровые инструменты обеспечивают более высокий уровень прозрачности и подотчётности, что особенно важно для повышения доверия со стороны внутренних и внешних кредиторов.

Растущий интерес вызывает и применение «зелёных» и устойчивых финансовых инструментов - например, выпуск облигаций, привязанных

к целям устойчивого развития. Такие инструменты позволяют одновременно привлекать инвестиции и выполнять обязательства по климатической повестке, повышая репутационную и социальную устойчивость страны. В условиях глобального перехода к устойчивой экономике интеграция экологических и социальных критериев в долговую стратегию становится элементом не только фискальной, но и общей государственной политики развития.

Инновационные подходы включают также применение концепции активного управления долгом, при которой правительство не просто обслуживает задолженность, а активно пересматривает её структуру, проводит рефинансирование и использует выгодные рыночные условия для оптимизации долговой нагрузки. Это требует высокой квалификации специалистов, наличия аналитической инфраструктуры и доступа к международным финансовым рынкам. В ряде стран создаются специализированные агентства или департаменты государственного долга, деятельность которых основана на лучших практиках управления рисками, ликвидностью и стоимостью заимствований.

Фискальная устойчивость рассматривается не как разовое достижение, а как динамическое состояние, требующее постоянного мониторинга, адаптации и реформ. Важным элементом становится институциональная устойчивость - способность финансовых органов действовать в рамках стратегических целей, невзирая на политический цикл или внешние шоки [2]. Только при условии стабильных правил, прозрачной бюджетной политики и чётких механизмов контроля государственный долг может быть эффективно встроен в систему долгосрочного экономического роста.

Принятие Закона Республики Узбекистан № ЗРУ-836 «О государственном долге» стало важным шагом в укреплении законодательной базы долгового управления и напрямую способствует фискальной устойчивости страны [3]. В Законе чётко сформулированы принципы управления государственным долгом - включая приоритетность макроэкономической стабильности, открытость, результативность использования заимствованных средств и своевременность исполнения обязательств - что задаёт нормативно-правовые рамки контроля над долговой нагрузкой и снижает риски неплатёжеспособности. Через введение лимитов по государственному долгу и гарантиям, обязательных процедур перекредитования, учета и отчетности, а также механизма утверждения стратегии долгового управления, закон создаёт инструменты, позволяющие правительству

стабильно управлять долговыми обязательствами в зависимости от макроэкономического состояния, уменьшать издержки и обеспечивать устойчивость публичных финансов - ключевой элемент государственной политики устойчивого развития [4].

Таким образом, фискальная устойчивость и инновационное управление государственным долгом - это взаимосвязанные компоненты современного государственного управления. Их эффективное сочетание позволяет не только минимизировать риски, связанные с заимствованиями, но и формировать устойчивую, предсказуемую и адаптивную модель финансовой политики. В современных условиях инновации в долговом управлении перестают быть дополнительной возможностью - они становятся необходимым условием для сохранения экономической стабильности и доверия к государственным институтам.

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KORRUPSIYAGA QARSHI KURASHISHDA TA'LIM-TARBIYANING O'RNI VA
AHAMIYATI

Yuldashev Maqsud Mamasaliyevich,

Bojxona qo'mitasi xodimi

Annotatsiya. Mazkur maqolada korrupsiyaga qarshi kurashishda ta'lim-tarbiyaning o'rni va ahamiyati yoritilgan va taklif va tavsiyalar berilgan. Xususan, korrupsiyani bartaraf etishda eng muhim omillardan biri — jamiyatda ushbu illatga nisbatan mutlaqo murosasiz munosabatni shakllantirishdir. Bunday muhitni yaratish jarayoni, avvalo, ta'lim va tarbiya tizimidan boshlanishi lozim. Har bir shaxs — pedagog bo'ladimi, bojxona yoki ichki ishlar organlari xodimi, prokuratura vakili yoki boshqa soha mutaxassisi bo'ladimi — korrupsiyaga qarshi kurashishni o'zining ichki axloqiy mezoni va mustahkam e'tiqodiga aylantirishi zarur.

Kalit so'zlar: korrupsiya, jamiyat, illat, murosasiz munosabat, ta'lim va tarbiya, o'quv jarayoni.

Prezidentimizning Oliy Majlisga yo'llagan Murojaatnomasi so'nggi yillarda mamlakatimiz rivojlanishining ustuvor yo'nalishlarini belgilab berishda muhim siyosiy-huquqiy hujjat bo'lib xizmat qilmoqda. Uning mazmun-mohiyatidan kelib chiqib aytish mumkinki, bu murojaatnoma O'zbekistonning kelgusi besh yillik strategik rivojlanish dasturining konseptual asosini tashkil etadi. Unda 2030-yilgacha O'zbekistonni dunyoning 50 ta eng rivojlangan davlatlari qatoriga qo'shish, yalpi ichki mahsulotni ikki baravar oshirish, "Raqamli O'zbekiston - 2030" konsepsiyasini joriy etish, shuningdek, maktabgacha ta'lim qamrovini 60 foizga yetkazish kabi qator vazifalar belgilab berilgan.

Biroq ushbu yuksak maqsadlar sari intilar ekanmiz, taraqqiyot yo'liga eng katta to'siq bo'lib turgan, jamiyatning barcha sohalariga o'z salbiy ta'sirini o'tkazayotgan illat — korrupsiya masalasiga alohida e'tibor qaratish lozim. Kadrlarni saralashdan tortib, davlat siyosatining barcha yo'nalishlarida korrupsiyaning mavjudligi taraqqiyot sur'atlarini izdan chiqaradi, jamiyatda ishonch muhitini zaiflashtiradi va eng muhimi, odamlarning adolatga bo'lgan ishonchini yemiradi.

Mamlakatimiz mustaqillikning ilk yillaridanoq korrupsiyani bartaraf etish, uni keltirib chiqaruvchi shart-sharoitlarni tugatish bo'yicha tizimli

chora-tadbirlarni amalga oshirib kelmoqda. “Korrupsiyaga qarshi kurashish to‘g‘risida”gi Qonunning qabul qilinishi ushbu yo‘nalishda muhim bosqich bo‘ldi. Qonun poraxo‘rlik, mansab vakolatlaridan suiiste‘mol qilish, nepotizm, qarindosh-urug‘chilik asosida ishga qabul qilish kabi holatlarga chek qo‘ydi va bunday jinoyatlar uchun jazolarning muqarrarligini belgilab berdi.

Shuningdek, korrupsiyaning oldini olish, jamiyatda korrupsiyaga nisbatan murosasiz munosabatni shakllantirish, huquqiy ongni yuksaltirish kabi ustuvor yo‘nalishlar ham qonun asosida mustahkamlab qo‘yildi. Zero, kuchli fuqarolik jamiyatini barpo etish korrupsiyasiz yashash madaniyatini shakllantirishga bevosita bog‘liqdir.

Korrupsiyaga qarshi kurashning eng samarali yo‘li — bu aholining huquqiy ongini yuksaltirishdir. Huquqiy ongning pastligi, huquqiy nigilizmning yuqori darajada ekanligi korrupsiyaning avj olishiga zamin yaratadi. Shu sababli aholining, ayniqsa yoshlarning huquqiy savodxonligini oshirish bugungi kunning dolzarb masalasidir.

Yoshlar orasida huquqiy nigilizmning kuchayishiga bir qator omillar sabab bo‘lmoqda:

- huquqiy bilimning yetishmasligi;
- ta‘lim-tarbiya jarayonida nazoratning sustligi;
- huquqiy targ‘ibotning yetarlicha tahlil qilinmasligi;
- yoshlarning fikrini o‘rganuvchi jamoatchilik institutlarining kamligi;
- qonunga itoatkor shaxsning jamiyatda yetarli darajada e‘tirof etilmasligi.

Ushbu muammolarni bartaraf etish ta‘lim tizimi orqali amalga oshirilishi kerak bo‘lgan eng muhim vazifalardan biridir.

Ta‘lim tizimidagi korrupsion omillar. Ta‘lim tizimi — korrupsiyaga qarshi kurashning markaziy maydonidir. Biroq, aynan shu sohaning o‘zida korrupsiyaviy omillar mavjud bo‘lsa, kelajak avlodning dunyoqarashi ham buziladi. Kadrlar tayyorlashning barcha bosqichlarida — maktabgacha ta‘limdan tortib, oliy ta‘limgacha — ayrim salbiy holatlarning mavjudligi ta‘lim sifatiga jiddiy zarar yetkazadi.

Bu kabi omillar ta‘lim sifatining pasayishiga, yoshlarning korrupsiyaga nisbatan bag‘rikeng bo‘lib qolishiga sabab bo‘ladi.

- Korrupsiyaga qarshi ta‘lim quyidagi maqsadlarga xizmat qilishi lozim:
- korrupsiyaning mohiyati va oqibatlar haqida chuqur bilim berish;
- murosasiz munosabat shakllantirish;
- mustaqil fikrlash, tashabbuskorlik va ijtimoiy faollikni rivojlantirish;



adolat, haqiqat va mas'uliyat kabi insoniy fazilatlarni singdirish.

Buning uchun interfaol metodlar — rol o'ynash, keys-stadilar, videomateriallar, jamoatchilik bilan hamkorlik, vaziyatli muhokamalar kabi usullar juda samaralidir.

“Tarbiya — yo najot, yo halokat masalasi” degan Abdulla Avloniy hikmati ta'lim-tarbiyaning korrupsiyani bartaraf etishdagi ulkan o'rnini yana bir bor tasdiqlaydi.

Xorijiy tajriba: ta'lim tizimi orqali korrupsiyani kamaytirish

Dunyodagi ko'plab davlatlar ta'lim tizimida shaffoflikni ta'minlash orqali korrupsiyaga qarshi samarali natijalarga erishgan:

Braziliya — Yagona davlat imtihonlari orqali OTMga qabul to'liq shaffof amalga oshiriladi.

Argentina — OTMlarga kirishda maxsus imtihonlar bekor qilingan.

Fransiya — imtihonlarni mutaxassislar ishlab chiqadi, tekshirish ham bir necha bosqichda amalga oshiriladi.

AQSH — PSAT, SAT, ACT kabi standartlashtirilgan testlar butun mamlakat bo'ylab ochiq va bir xil mezonlarda o'tkaziladi.

Yaponiya — variantli testlar va mustaqil baholash tizimlari orqali shaffoflik ta'minlanadi.

Malayziya — davlat imtihonlari orqali OTMga qabul jarayoni tartibga solingan.

Ushbu tajribalar korrupsiyasiz ta'lim tizimi barpo etishda biz uchun ham o'rnak bo'la oladi.

O'zbekiston ta'lim tizimini korrupsiyadan xoli qilish bo'yicha xulosa va takliflar sifatida quyidagi takliflarni ilgari surish mumkin:

1. Ta'lim to'g'risidagi kodeksni ishlab chiqish, barcha ta'lim turlarini yagona talablar asosida tartibga solish.

2. Joriy baholashni reyting tizimi orqali amalga oshirish, yakuniy imtihonlardan voz kechish.

3. Davlat test markazi faoliyatining to'liq shaffofligini ta'minlash, bodikameralar joriy etish.

4. Test javoblarini joyida skaner qilish, internetda erkin tanishish imkoniyatini yaratish.

5. Kirish imtihonlarida ishtirok etuvchi barcha mas'ullarni bodikamera bilan ta'minlash.

6. Maktabdagi yakuniy imtihon natijalarini OTMga kirishda tan olish (Rossiya, Argentina tajribasi).

Xotima o'rnida. Korrupsiyani ildizi bilan yo'qotish — bu uzoq muddatli va murakkab jarayon. Ammo uning eng samarali yo'li — ta'lim va tarbiyani kuchaytirish, yosh avlod ongida halollik va adolat g'oyalarini mustahkamlashdir. Ta'lim tizimi korrupsiyasiz bo'lsa, jamiyat ham shunday bo'ladi. Demak, yuksak ma'naviyat, kuchli huquqiy ong va murosasiz muhit — korrupsiyasiz kelajakning asosiy garovidir.

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The Role of Feedback in Improving Students' Writing Competence

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Annotation. This article examines the critical role of feedback in developing students' writing competence. Writing is a multifaceted skill requiring grammatical knowledge, lexical range, and the ability to organize ideas coherently. Feedback, whether from teachers or peers, provides learners with targeted guidance, identifies errors, and motivates revision. Based on my observations as an educator, students who receive structured and constructive feedback demonstrate significant improvement in sentence variety, coherence, and clarity of argumentation. The article discusses corrective, formative, and peer feedback and highlights effective strategies for integrating feedback into writing instruction. Findings indicate that systematic feedback enhances learners' autonomy, confidence, and critical thinking skills, ultimately improving overall writing performance.

Аннотация. В статье рассматривается важная роль обратной связи в развитии письменной компетенции студентов. Письмо — это многогранный навык, требующий знания грамматики, словарного запаса и умения структурировать идеи. Обратная связь, как от преподавателей, так и от сверстников, обеспечивает учащихся целевым руководством, выявляет ошибки и мотивирует к исправлению. На основе моего опыта работы с учениками видно, что студенты, получающие структурированную и конструктивную обратную связь, значительно улучшают разнообразие предложений, связность и ясность аргументации. В статье обсуждаются корректирующая, формирующая и обратная связь от сверстников, а также эффективные стратегии их интеграции в обучение письму. Систематическая обратная связь способствует развитию самостоятельности, уверенности и критического мышления учащихся, улучшая их общие письменные навыки.

Key words : feedback, writing competence, corrective feedback, formative feedback, peer feedback, student autonomy, writing improvement.

Ключевые слова: обратная связь, письменная компетенция, корректирующая обратная связь, формирующая обратная связь,

обратная связь от сверстников, самостоятельность учащихся, улучшение письма.

Introduction: Writing is one of the most essential skills in language learning. It allows students to communicate ideas effectively, demonstrate their understanding of subject matter, and develop critical thinking. However, writing competence is not innate; it requires consistent practice, guidance, and effective feedback. Many students struggle with grammatical errors, poor paragraph structure, and inadequate argumentation, which reduce the clarity and impact of their texts. From my experience as an educator, feedback serves as a bridge between students' current performance and the expected standard. It helps them recognize mistakes, reflect on errors, and apply corrective measures. Feedback is also an essential tool for motivation: students who receive constructive guidance are more likely to revise and improve their work. This article explores types of feedback, their advantages, effective strategies, and practical classroom applications for improving students' writing competence.

1. Types of Feedback

Feedback can be categorized into three main types, each contributing differently to writing improvement:

- **Corrective** **Feedback:**
Corrective feedback targets linguistic errors, including grammar, spelling, punctuation, and word choice. According to Ferris (2018), such feedback helps students internalize correct language usage and gradually reduces recurrent mistakes. In my classroom, when I provide sentence-level corrections with explanations, students show noticeable improvement in their written accuracy within a few weeks. For example, one student initially struggled with verb tenses, but after receiving detailed corrective feedback, her use of past and present tenses became accurate and consistent.
- **Formative Feedback:** Formative feedback is given during the writing process rather than after completion. It encourages students to think critically, revise drafts, and improve coherence. My observations indicate that students who receive formative feedback are more willing to rewrite their essays, enhance paragraph organization, and provide more detailed examples to support arguments. This type of feedback promotes reflective learning and long-term skill development.
- **Peer Feedback:** Peer feedback involves students reviewing each other's work, which enhances engagement, responsibility, and critical thinking. In my classes, peer feedback sessions have led to surprising improvements: students often notice structural weaknesses or unclear

arguments in their peers' work that they later correct in their own writing. This method fosters collaborative learning and encourages students to critically evaluate writing, a skill that is transferable to self-assessment.

2. Benefits of Feedback

- **Improved Accuracy:** Feedback highlights recurring mistakes and offers guidance for correction, leading to more accurate grammar, punctuation, and vocabulary.
- **Enhanced Organization and Coherence:** Guidance on paragraphing, transitions, and argumentation helps students structure essays logically and maintain a smooth flow of ideas.
- **Motivation and Engagement:** Students feel valued and encouraged when teachers acknowledge strengths alongside weaknesses. Constructive comments boost motivation to revise and improve work.
- **Development of Self-Regulation:** Continuous feedback teaches students to monitor their writing, reflect on errors, and independently apply corrections. Over time, students develop autonomy and critical thinking skills.

3. Effective Feedback Strategies

- **Specificity:** Feedback should clearly indicate errors and suggest improvements. For example, rather than saying "improve your introduction," teachers can suggest adding a hook or stating a thesis more explicitly.
- **Balanced Approach:** Highlighting both strengths and weaknesses ensures motivation while directing attention to areas for improvement.
- **Timeliness:** Immediate feedback is more effective because students can apply corrections while the writing task is still relevant.
- **Interactive Feedback:** Encouraging dialogue allows students to ask questions, clarify misunderstandings, and better internalize corrections.

4. Classroom Examples and Personal Insights

In my experience, a combination of corrective, formative, and peer feedback produces the most significant improvements. For instance, one student struggled with coherence between paragraphs. Through guided formative feedback and peer review, the student gradually learned to use linking words effectively and create a logical flow. Another student showed dramatic improvement in vocabulary after receiving specific suggestions and synonyms

from both peers and teacher feedback. These examples demonstrate that feedback is not merely corrective; it is instructive, motivational, and developmental.

Conclusion: Feedback is an essential component in developing students' writing competence. It improves grammatical accuracy, vocabulary use, coherence, and argumentation, while fostering motivation, autonomy, and critical thinking. My teaching experience confirms that structured, regular, and constructive feedback leads to remarkable progress in students' writing skills. Implementing feedback systematically in the classroom ensures that students can recognize mistakes, revise effectively, and develop into confident, independent writers.

Recommendations:

1. Combine corrective, formative, and peer feedback to address linguistic accuracy, coherence, and engagement.
2. Provide feedback that is specific, balanced, and constructive to maintain motivation.
3. Include peer feedback exercises to enhance critical thinking and collaborative learning.
4. Deliver feedback promptly to maximize effectiveness in revisions.
5. Encourage interactive discussions about feedback for deeper comprehension.
6. Conduct regular teacher training to refine feedback strategies and improve their impact on student writing.
7. Integrate feedback consistently across all writing tasks to promote continuous improvement.

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The Negative Consequences of Overreliance on Translation in English Language Classes

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Annotation. This article investigates the negative consequences of excessive reliance on translation in English language classrooms. Although translation can assist learners in understanding difficult concepts, its constant use reduces communicative competence, slows cognitive processing, and prevents learners from developing the ability to think directly in English. The study highlights how translation-centered instruction weakens listening, speaking, reading, and writing skills and limits exposure to authentic language input. The arguments are supported by well-established research in second language acquisition and language pedagogy. The paper concludes with recommendations for minimizing translation and promoting immersion, communicative interaction, and autonomous language learning.

Аннотация. В данной статье рассматриваются негативные последствия чрезмерного использования перевода на уроках английского языка. Несмотря на то, что перевод может помочь учащимся понять сложные концепции, его постоянное применение снижает коммуникативную компетентность, замедляет когнитивную обработку и препятствует формированию умения мыслить напрямую на английском языке. В исследовании подчеркивается, что обучение, основанное на переводе, ослабляет навыки аудирования, говорения, чтения и письма, а также ограничивает доступ к аутентичному языковому материалу. Представленные аргументы опираются на признанные исследования в области второго языкового усвоения и методики преподавания иностранных языков. В заключение предлагаются рекомендации по снижению зависимости от перевода и расширению языковой среды, коммуникативного взаимодействия и автономного изучения языка.

Keywords: translation, communicative competence, language acquisition, EFL, dependency, target language exposure.

Ключевые слова: перевод, коммуникативная компетентность, усвоение языка, EFL, зависимость, языковая среда.



In many English as a Foreign Language (EFL) classrooms, translation remains one of the most widely used instructional practices. Teachers often translate instructions, vocabulary, and even entire reading passages into students' first language (L1), believing that translation ensures stronger comprehension. However, effective language learning depends on direct interaction with the target language rather than constant switching between languages. As Harmer (2015) emphasizes, learners require continuous and meaningful exposure to English input, and excessive translation limits that exposure. Similarly, Richards and Rodgers (2014) argue that language should be viewed as a system of communication rather than a body of knowledge to be translated. Despite the growth of communicative language teaching, overreliance on translation persists, particularly in contexts with limited authentic exposure to English. This raises questions about the long-term effects of translation-focused instruction on learners' linguistic and communicative development. Overreliance on translation in English language classrooms continues to present serious challenges to students' language development. Although translation can support early comprehension, its excessive use limits communicative competence and restricts learners' ability to process meaning directly in English. The problem persists in many English as a Foreign Language (EFL) settings, particularly where traditional and teacher-centered instruction dominates, and students expect immediate equivalents in their first language. As Harmer (2015) notes, successful language learning requires continuous exposure to the target language rather than reliance on constant bilingual explanation. This article examines the negative cognitive, communicative, and pedagogical consequences associated with translation overuse and discusses the importance of more immersive approaches to English language instruction.

1. Cognitive Barriers and Slowed Processing

When students rely on translation, they process language through a mental chain: English → L1 → meaning, which significantly slows comprehension and reduces automaticity. Cook (2010) notes that frequent translation creates a cognitive burden, preventing learners from processing language directly and internalizing grammar and vocabulary naturally. Literal translation also leads to syntactic and semantic errors because languages differ in structure and conceptual organization. Brown (2001) states that authentic language understanding requires interpretive, strategic, and communicative skills that translation alone cannot develop.

2. Negative Effects on Speaking and Listening Skills

Speaking and listening are the most affected by constant translation. Students who always wait for an L1 equivalent hesitate to speak



spontaneously, which reduces fluency and communication confidence. Ur (2012) explains that listening comprehension develops through attention to target language input, but translation interrupts the flow of speech, causing learners to focus less on English itself and more on its L1 equivalent. As a result, students often stop trying to infer meaning from context and instead depend on the teacher for each lexical or grammatical explanation.

3. Limited Authentic Input and Weak Vocabulary Development

Translation-centered instruction restricts exposure to authentic language. Harmer (2015) indicates that language input plays a crucial role in linguistic development, and when teachers translate everything, learners pay less attention to actual English structures. Nation (2013) emphasizes that vocabulary retention increases when learners encounter new words in context, through collocations and examples, rather than through isolated L1 equivalence lists. Students who rely heavily on translation struggle to paraphrase, guess meaning from context, or develop lexical chunk knowledge, which are essential competencies for reading and speaking fluently.

4. Learner Dependency and Reduced Autonomy

Overuse of translation leads to psychological dependency, where students believe they cannot understand anything without L1 support. Richards and Rodgers (2014) note that autonomy is central to modern language pedagogy, yet translation-heavy classrooms limit students' ability to apply communication strategies such as rephrasing or contextual guessing. When faced with unfamiliar vocabulary, learners accustomed to translation often stop interacting, leading to a loss of confidence and decreased motivation.

5. Pedagogical Limitations for Teachers

Excessive translation also affects teachers' instructional practices. Larsen-Freeman and Anderson (2011) argue that grammar-translation-oriented classrooms reduce student engagement and reinforce teacher-centered instruction. Teachers spend significant time explaining meanings and structures instead of encouraging communicative tasks, collaboration, and learner-driven inquiry. Consequently, classroom interaction becomes limited, and English is used less as a functional medium of communication.

Conclusion

Overreliance on translation has multiple negative consequences for English language learners. It slows cognitive processing, weakens speaking and listening abilities, reduces exposure to authentic language input, restricts vocabulary development, and fosters dependency rather than autonomy. Although translation can be a useful pedagogical support when used strategically, it should not dominate classroom practice. To develop

communicative competence, learners must acquire the ability to process and use English directly.

Recommendations.

1. Increase the use of communicative activities such as role plays, pair discussions, and problem-solving tasks.
2. Provide learners with rich, meaningful English input through extensive listening and reading.
3. Encourage vocabulary development through context-based learning rather than word-for-word translation.
4. Limit translation only to essential clarification when necessary.
5. Offer professional development for teachers to adopt communicative and task-based methodologies.

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Islom sivilizatsiyasida buyuk allomalar va ularning merosi

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ANNOTATSIYA. Ushbu maqola Islom sivilizatsiyasining shakllanishi va rivojida beqiyos hissa qo'shgan buyuk allomalar — Abu Nasr Forobiy, Abu Ali ibn Sino, Abu Rayhon Beruniy, Muhammad al-Xorazmiy, Ibn al-Haysam, Abu Homid G'azzoliy, Ibn Rushd kabi ulug' zotlarning ilmiy merosini chuqur tahlil qiladi. Tadqiqot ularning falsafa, tibbiyot, matematika, astronomiya, fiqh va ijtimoiy fanlar rivojiga qo'shgan hissalarini keng yoritadi. Maqola shuningdek, ushbu allomalarning ilmiy yutuqlari Yevropa uyg'onishiga qanday ta'sir ko'rsatganini, zamonaviy ilm-fan asoslari aynan islom olimlari merosiga tayanishini tarixiy manbalar asosida ochib beradi. Asar islom ilm-fan madaniyatining umumjahon sivilizatsiyasi taraqqiyotidagi o'rni va ahamiyatini ko'rsatishga qaratilgan.

Kalit so'zlar: Islom sivilizatsiyasi, buyuk allomalar, ilmiy meros, Forobiy, Ibn Sino, Beruniy, Xorazmiy, G'azzoliy, Ibn Rushd, ilm-fan tarixi, musulmon olamining ilmiy yutug'i, uyg'onish davri, Sharq mutafakkirlari.

Islom sivilizatsiyasi — IX–XIII asrlarda Yaqin Sharq, Markaziy Osiyo, Ispaniya va Shimoliy Afrika hududlarida ilm-fan, falsafa, tibbiyot, matematik va madaniy jihatdan katta uyg'onish davri bo'ldi. Bu davrda shakllangan ilmiy maktablar va ularning yetuk vakillari — allomalar — o'z g'oyalari, metodlari va asarlari bilan nafaqat musulmon olamini, balki butun dunyo ilm-fanini boyitdi. Ushbu maqola buyuk allomalar ijodini tarixiy kontekst bilan bog'lab, ularning nazariy va amaliy merosini keng va chuqur tahlil qiladi.

Islom uyg'onishi bir vaqtning o'zida bir necha ijtimoiy-madaniy omillarga bog'liq edi:

1. Tarjima harakati — yunon, sanskrit, siriak va fors manbalarini arab tiliga tarjima qilish (ayniqsa Bag'doddagi Bayt al-Hikma) eski bilimlarni saqlab qolish va qayta ishlashga imkon berdi.
2. Imperiyalararo aloqa — savdo, diplomatiya va ilmiy aloqalar orqali g'oyalar tez tarqaldi.
3. Til birlikligi — arab tilining ilmiy aloqa tili sifatida keng yoyilishi.
4. Maktab va madrasalar — ilmiy o'qitish tizimining rivojlanishi va olimlarning himoyasi.
5. Diniy va aqidaviy motivatsiya — ilm-qidiruvni diniy vazifa deb tushunish vaziyatlari (ilmi kashfiyotlarni ibodat bilan uzviy bog'lash).

Ushbu muhitda yetishgan allomalar falsafa, mantiq, tibbiyot, matematika, optika va boshqa fanlarda chuqur ishlar qoldirdi.

Islom davri olimlarida kuzatilgan bir qancha metodologik va didaktik xususiyatlar bor:

- Tarjima va tanqidiy sharhlash: qadimiy manbalarni soʻzma-soʻz tarjima qilmasdan, ularni tahlil qilib, yangi mantiqiy tizimlar hosil qilish.
- Tizimlashtirish va ensiklopediyalash: bilimlarni bir tizim ostida tartiblash (tibbiyot, mantiq, falsafa boʻyicha ensiklopediyalar).
- Kuzatuv va eksperiment: ayniqsa Ibn al-Haysam kabi olimlar tajribaviy metodlarni ilgari surdi.

Interdisipliner yondashuv: bir olim koʻpincha bir nechta fan sohasida ishlaydi — masalan, falsafa bilan tibbiyot yoki matematika bilan astronomiyani bogʻlash.

Endi eng mashhur va buyuk allomalarning har biri haqida kengroq tahlil qilamiz.

1. Abu Nasr Farobiy (870–950)

Farobiy Farob (hozirgi Qozogʻiston/Oʻzbekiston chegarasiga yaqin)da tugʻilib, Buxoro, Samarqand va Bagʻdodda ilm oʻrgangan. U yunon falsafasini chuqur oʻrgandi va Aristotel, Platon asarlarini islomiy kontekstga moslab sharhladi.

Asosiy nazariyalari va asarlari:

Aql nazariyasi: faol aql, potensial aql va universal aql (kosmik aql) tushunchalari. U aqlni kosmik tartib va insoniy kamolotning vositasi sifatida koʻradi.

Siyosiy falsafa: Fozil odamlar shahri (ideal jamiyat modeli) — jamiyatning axloqiy va epistemik taraflari, hukmdarning vazifalari va siyosiy ijtimoiy tuzilma.

Mantiq va ilmiy tarbiya: mantiqiy mulohaza va taʼlim tizimini ishlab chiqdi.

Musiq nazariyasi: tovush, ritm va melodiyaning psixologik va matematik asoslari haqida yozdi.

Bundan tashqari, Farobiy falsafiy tizimlar yaratishda sintezchi yondashuvni — yunon mantiqʼi bilan islomiy maʼrifiy anʼanalarni uygʻunlashtirdi. Uning taʼlim va siyosatga oid tushunchalari keyingi musulmon va gʻarb olimlari tomonidan keng oʻrganildi.

2. Abu Ali ibn Sino (980–1037)

Tugʻilgan joyi — Buxoro viloyatiga yaqin (Afshona hududi deb koʻrsatiladi). Yoshligida tibbiyot va falsafani oʻrgandi, koʻplab kitoblar yozdi. U shifokor, faylasuf va tabib sifatida tanildi.

Asarlari va ilmiy hissi:



Tibbiyot: Qonun fi-t-Tibb (al-Qonun) — kasalliklarni tavsiflash, dori-darmon, diagnostika, davolash usullari bo'yicha tizimli asar. Samarqanddan tortib Yevropagacha tibbiyot ta'limida darslik vazifasini bajardi.

Falsafa: Kitab al-Shifa — metafizika, mantiq, tabiatshunoslik bo'yicha keng qamrovli asar.

Psixofiziologiya: ruh va tananing munosabati, aqlning bosqichlari (potensial aql, faol aql) haqida tafakkur.

Qolaversa, Ibn Sinoning tibbiyotga yondashuvi empirik va sistematik edi: kasalliklar klassifikatsiyasi, klinik kuzatuvlar, farmakologiya asoslarini ishlab chiqdi. Uning ilmiy-epistemologik qarashlari sharq va g'arb akademiyalariga yetib bordi.

3. Muhammad ibn Muso al-Xorazmiy (780–850)

Xorazm (hozirgi Xorazm viloyati)dan bo'lgan; Bag'dodda faoliyat yuritgan. U matematik va astronom bo'lib, davlat darajasidagi hisob-kitob ishlarida ishtirok etgan.

Asarlari va yangiliklari:

Algebra: Al-Kitab al-Mukhtasar fi hisab al-jabr wa-l-muqabala — algebraik tenglamalarni tizimlashtirish (jabr so'zining kelib chiqishi bilan bog'liq).

Hisob va arifmetika: hind-aro raqam tizimining tushuntirilishi va arifmetik qoidalar haqida yozgan.

Astronomiya va geodeziya: jadvallar, koordinatalar va trigonometrik hisoblar.

Al-Xorazmiy nomi «algoritm» atamasi bilan bog'lanadi; algebra va zamonaviy matematik metodlarning poydevorini yaratdi. Uning asarlari islomiy dunyoda ham, keyinchalik Yevropada ham asosiy manba bo'ldi.

4. Abu Rayhon Beruniy (973–1048)

Beruniy Xorazm hududida tug'ilgan, keyinchalik Hindistonda va boshqa joylarda ilmiy tadqiqotlar o'tkazgan. U tillar, madaniyatlar bilan qiziqdi va ko'plab tabiiy fanlarga oid asarlar qoldirdi.

Asarlari va yangiliklari

Etnografiya va tarix: Hindiston haqida keng qamrovli tadqiqot (til, din, urf-odatlarining batafsil tasnifi).

Astronomiya va geodeziya: Yer radiusi, geografik koordinatalarning aniqligi va astronomik kuzatuvlar.

Mineralogiya va tabiiy fanlar: moddalar tavsifi va taqsimoti.

Beruniy manbalarni solishtirish, lokal kuzatuv hamda matematik hisob-kitoblarni uyg'unlashtirish orqali elegans metodologiyani ishlab chiqdi. Uning etnografik yondashuvi zamonaviy antropologiyaga yaqin.

5. Abu Ali Hasan ibn al-Haysam (965–1040)

Bag'dod va Misr atrofida faoliyat yuritgan. Optika va ilmiy metod bo'yicha inqilobiy ishlarga imzo chekkan.

Asarlari va ilmiy hissi

Optika: Kitab al-Manazir — yorug'lik va ko'zning ishlashini tajriba asosida tahlil qilib, ko'rish nazariyasini tubdan qayta ko'rib chiqdi.

Ilmiy metod: nazariy farazlarni tajriba bilan tekshirishni sistemalash va eksperimentning asosiy printsiplarini belgilash.

Ibn al-Haysamning eksperimental yondashuvi keyingi fizik va optik tadqiqotlarning poydevorini qo'ydi; u zamonaviy ilmiy metodning dastlabki aniq ko'rinishlaridan birini shakllantirdi.

6. Abu Homid G'azzoliy (1058–1111)

Nishopurda tug'ilgan G'azzoliy shariat, kelom (ilohiyot) va tasavvufni integratsiyalashga urinib, diniy tafakkurda yangi yo'nalish yaratdi.

Asarlari va ta'siri

Ihyo ulum ad-din — diniy amaliyot, axloq va ruhiy tarbiya bo'yicha keng qamrovli asar.

Tahafut al-Falasifa — faylasuflarni tanqid qilgan asar; falsafa va ilohiyot o'rtasidagi munosabatni muhokama qilgan.

G'azzoliy musulmon jamiyatlarining diniy va ma'naviy hayotida uzoq vaqt davomida asosiy referens bo'lib qoldi; uning tanqidlari falsafa tarafdorlari va tanqidchilari o'rtasida intellektual dialogni kuchaytirdi.

7. Ibn Rushd (1126–1198)

Ispaniyada tug'ilib o'sgan; Andalusiya (Qurtuba) mafkurasida Aristotel sharhlovchisi sifatida tanildi.

Asarlari va yangiliklari

Aristotel sharhlari — falsafiy matnlarni ochiq-oydin tushuntirish va rasionalizmni himoya qilish.

Tibbiyot va huquq: amaliy yondashuv va sistematik izohlar.

Ibn Rushd G'arb renessansiga ta'sir ko'rsatgan asosiy shaxs — uning asarlari latinchaga tarjima qilinib, Yevropa universitetlarida o'rganilgan.

Allomalarning o'zaro ta'siri va intellektual tarmoq

Islom olimidagi bu buyuk shaxslar bir-birining asarlaridan foydalangan, sharhlar yozgan va ba'zan qarama-qarshi fikrlar bilan javob qaytargan.

Masalan:

Farobiy va Ibn Sinoning ontologik savollar bo'yicha muloqotlari;

G'azzoliyning faylasuflarga tanqidi va Ibn Rushdning ularga javoblari;

Al-Xorazmiy va Beruniy orasidagi matematik hamkorlikning imkoniyatlari (ko'p hollarda ideyalarning parallel rivoji).

Bu intellektual tarmoq ilmiy tartib va nazariy dialogning mustahkamlanishiga xizmat qildi.

Islom allomalari metodologiyasining zamonaviy ahamiyati

1. Interdisiplinerlik: bugungi ilmiy tadqiqotlar bir nechta fanni birlashtirishni talab qiladi — bu islom allomalari yondashuviga juda o'xshaydi.
2. Empirizm va nazariy muvozanat: tajriba va mantiqiy sharhni muvozanatda ishlatish — zamonaviy ilmiy metodning markaziy elementi.
3. Bilimlarni tizimlashtirish: ensiklopedik ishlash va darslik yozish an'anasi ta'lim tizimlariga qo'shgan ulkan hissa.
4. Madaniy dialog va tarjima: eski bilimlarni qayta ko'rib chiqish va boshqa madaniyatlar bilan integratsiya bugungi globalizatsiyalashgan ilm-fanga juda mos.

Islom sivilizatsiyasida yetishgan buyuk allomalar — Abu Nasr Forobiy, Abu Ali ibn Sino, Muhammad ibn Muso al-Xorazmiy, Abu Rayhon Beruniy, Abu Ali Hasan ibn al-Haysam, Abu Homid G'azzoliy, Ibn Rushd va boshqalar — ilm-fanni keng qamrovli va interdisipliner tarzda rivojlantirdi. Ularning metodologiyasi: tarjima, tanqidiy sharh, tizimlashtirish va tajriba — bugungi ilmiy amaliyotning muhim elementlariga to'g'ri keladi. Ushbu merosni chuqur o'rganish va zamonaviy ilm bilan bog'lash bugungi ilmiy hamjamiyat uchun ham qimmatli manbadir.

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**MAKTABGACHA TA'LIMDA O'YINLI TEXNOLOGIYALAR ASOSIDA
TA'LIM-TARBIYA JARAYONINI TASHKIL ETISHNING INNOVATSION
YONDASHUVLARI**

Sohobova Oyshaxon Asatullo qizi

Andijon Davlat Pedagogika Instituti

"Maktabgacha ta'lim va maxsus

Pedagogika "fakulteti sirtqi ta'lim

305-guruh talabasi

Annotatsiya: Maqolada tarbiya haqida tushuncha, tarbiyaning asosiy turlari, o'yin texnologiyasi, tarbiya to'g'risida fikrlar, STEAM texnologiyalari, maktabgacha yoshdagi bolalarga tarbiya berishda o'yin texnologiyalarini qo'llashdagi innovatsion yondashuvlar haqida so'z boradi.

Kalit so'zlar: tarbiya, aqliy tarbiya, jismoniy tarbiya, axloqiy tarbiya, iqtisodiy tarbiya, mehnat tarbiyasi, estetik va ekologik tarbiya, STEAM, o'yin texnologiyasi, innovatsiya, zamonaviy innovatsion yondashuvlar.

Аннотация. В статье рассматриваются понятие образования, основные виды образования, игровые технологии, представления об образовании, STEAM-технологии, инновационные подходы к использованию игровых технологий в образовании дошкольников.

Ключевые слова: образование, умственное воспитание, физическое воспитание, нравственное воспитание, экономическое воспитание, трудовое воспитание, эстетическое и экологическое воспитание, STEAM, игровые технологии, инновации, современные инновационные подходы.

Abstract; The article discusses the concept of education, the main types of education, game technology, ideas about education, STEAM technologies, innovative approaches to the use of game technologies in the education of preschool children.

Keywords: education, mental education, physical education, moral education, economic education, labor education, aesthetic and ecological education, STEAM, game technology, innovation, modern innovative approaches.

"Aslida, farzandlarimiz tarbiyasida eng asosiy bo'g'in hisoblangan maktabgacha ta'lim tizimining jamiyatimiz hayotidagi o'rni va ahamiyatini hech narsa bilan o'lchab bo'lmaydi. Aynan maktabgacha ta'lim sohasiga bo'lgan e'tibor mamlakatning ertangi taraqqiyoti uchun mustahkam zamin yaratadi". SH.MIRZIYOYEV.

"In fact, the role and importance of the preschool education system in the life of our society, which is considered the most important link in the

upbringing of our children, cannot be measured by anything. It is precisely the attention paid to the field of preschool education that creates a solid foundation for the future development of the country." SH. MIRZIYOYEV.

“Tarbiya bizlar uchun yo hayot ,yo mamot, yo najot, yo halokat, yo saodat, yo falokat masalasidir” (Abdulla Avloniy).

Tarbiya – bu shaxsda jismoniy, ruhiy, axloqiy va ma’naviy sifatlarni shakllantirishga qaratilgan amaliy pedagogik jarayon. Bu jarayon odamning jamiyatda yashashi uchun zarur bo’lgan xususiyatlarni o’zida namoyon etishini ta’minlashga xizmat qiladi va insoniyatning qadriyatlari bir avloddan ikkinchi avlodga o’tishini ta’minlaydigan eng qadimiy va abadiy qadriyat hisoblanadi.

Tarbiya jarayonining ham o’ziga yarasha bir qancha metodlar va turlari mavjud. Tarbiya turlarini kengroq talqinda o’rganadigan bo’lsak u quyidagilardan iborat.

1. Aqliy tarbiya
2. Jismoniy tarbiya
3. Axloqiy tarbiya
4. Iqtisodiy tarbiya
5. Mehnat tarbiyasi
6. Estetik tarbiya
7. Ekologik tarbiya

Aqliy tarbiya - ijtimoiy tarbiyaning eng muhim jihatlaridan biri. Aqliy tarbiya bu aqlni rivojlantirish maqsadida yosh avlodga muntazam va maqsad asosida pedagogik ta’sir ko’rsatishdir. Demak, aql keng ma’noda sezish va idrok etishdan boshlab to tafakkur va xayolni o’z ichiga oladigan bilish jarayonlari yig’indisi bo’lib, u yosh avlodning insoniyat to’plagan bilimlar, konikma va malakalar, me’yorlar, qoidalar va boshqalarda ro’y beradi. Bu holat kattalar tomonidan amalga oshiriladi va bolalarning aqliy rivojlanishi ni ta’minlovchi xilma-xil vos talar, metodlarni, kerakli shart-sharoitlarni yaratishni o’z ichiga oladi.

Jismoniy tarbiya – bu maktabgacha yoshdagi bolalarning jismoniy rivojlanishi, harakat malakalarini shakllantirish, salomatlikni mustahkamlash va harakat madaniyatini tarbiyalashga oid ilmiy asoslangan qarashlar tizimidir.

Axloqiy tarbiya- ijtimoiy ong shakllaridan biri bo’lib ,insonlarning o’zi ,do’st-birodarlari ,jamo a’zolari va tabiatga bo’lgan munosabatlarini tartibga solib turuvchi xulq-odob qonun -qoidalarining majmui .Axloq kishining xulq-atvori, e’tiqod-iymoni, yurish-turishi ,fikir-mulohazalari ,mushohada va muloqotida



namoyon bo'ladi. Axloqli inson o'zini qattiq hurmat qiladi, unda ichki intizom kuchli bo'ladi.

Iqtisodiy tarbiya – bu maktabgacha yoshdagi bolalarda iqtisodiy tushunchalar, tejamkorlik, mehnatga hurmat, buyumlarni qadrlash, resurslardan oqilona foydalanish kabi ko'nikmalarni shakllantirish jarayoni.

Mehnat tarbiyasi – bu maktabgacha yoshdagi bolalarda mehnatga ijobiy munosabat, oddiy mehnat ko'nikmalari, mas'uliyat, tartiblilik va jamoada ishlash malakasini shakllantirish jarayoni.

Estetik tarbiya – bu maktabgacha yoshdagi bolalarda go'zallikni ko'ra bilish, qadrlash, his qilish va yaratish qobiliyatlarini rivojlantirish jarayonidir.

Ekologik tarbiya - bu insonni tabiatga ehtiyotkorona munosabatda bo'lishga, tabiatga nisbatan mehrli bo'lishi, atrof muhitni muhofaza qilishga oid ongli munosabatni shakllantirish jarayoni.

Tarbiya borasida Sa'diy Sheroziy shunday misralarni bitgan:

Minbarning poyida tursa ham eshak,

Tarbiya yuqmaydi, bo'lmaydi odam.

Tarbiya ko'rmayin ulg'aysa kishi.

Eshak bo'lib qolur yuzga kirsam ham.

Xitoy donishmandi Syun-Szi "Chaqaloqlar hamma erda bir xil yig'lashadi. Katta bo'lganlarida esa turli qiliqlar qilishadi. Bu – tarbiyaning oqibati", deb yozgan edi. Olmon faylasufi Immanuel Kant o'z asarida "Inson faqat tarbiya orqali inson bo'ladi, uning qandayligi tarbiyaning natijasidir", degan fikrni bildiradi.

Tarbiyaga e'tiborsizlikning oqibati nimalarga olib kelishini o'z vaqtida Abdulla Avloniy kuyunib, "Bugungi kunda jamiyatimizning yuzini qora qiluvchi pastkashlar, yomonlar, beboshlar, o'g'rilar, giyohvandlar va nashavandlar... kecha tarbiyalariga e'tibor berilmagan bolalardir", deb yozib qoldiradi.

Adabiyotshunos olim Abdurauf Fitrat "Xalqning harakat qilishi, davlatmand bo'lishi, baxtli bo'lib izzat-hurmat topishi, jahongir bo'lishi, zaif bo'lib xorlikka tushishi, faqirlik jomasini kiyib, baxtsizlik yukini tortib e'tibordan qolishi, o'zgalarga tobe va qul, asir bo'lishi bolalikdan o'z ota-onalaridan olgan tarbiyalariga bog'liq. Bolalar axloqiy tarbiyani muhitdan oladilar, boshqacha qilib aytganda, bolalar suvga o'xshaydi, suv idishning shaklini olganidek, bolalar ham muhitning odob-axloqini qabul qiladilar", deydi.

Maktabgacha ta'limda STEAM texnologiyalarini qo'llashning xususiyatlari.

STEAM an'anaviy o'qishga muqobil yondashuv hisoblanadi. Bunda bolalar Science (tabiiy fanlar), Technology (texnologiya), Engineering (muhandislik),

Art (san'at) va Mathematics (matematika)ni fanlararo bog'lanishlar va amaliy yondashuvga asoslangan holda o'rganadilar.

STEAM ta'limi asosida yondashuv bolalarda dunyoni tizimli ravishda o'rganishga, atrofda ro'y berayotgan jarayonlarni mantiqiy mushohada qilishga, ulardagi o'zaro aloqani anglab etishga o'zi uchun yangi, noodatiy va qiziqarli narsalarni kashf qilishga imkon beradi. Qandaydir yangilikni kutish orqali bolada qiziquvchanlikni rivojlantiradi, o'zi uchun qiziqarli masalani aniqlab olishni, yechimini topishning algoritimini ishlab chiqishni, natijalarni tanqidiy baholashni, fikrlashning muhandislik jihatlarini shakllantirishga olib keladi.

STEAM yondashuvining asosiy g'oyasi quyidagicha: amaliyot nazariy bilimlar kabi muhimdir. Bunda bolalar ta'lim jarayonida nafaqat o'z aqlini, balki yo'llarini ham ishlatishga majburlar. Ko'pgina mamlakatlarda STEAM-ta'limi quyidagi sabablarga ko'ra yuqori baholanadi. Hamkorlik - san'atga asoslangan ta'lim loyihalari boshqalar bilan yaxshi ishlaydigan bolalarni rag'batlantiradi va mukofotlaydi. STEAM ta'limi miyaning chap va o'ng tomonlarida ijodkorlikni rivojlantiradi.

Maktabgacha ta'lim tashkilotlarida o'yinli texnologiyalardan foydalanish orqali ko'p samarali yutuqlarga erishilayotgani bizga ma'lum. O'yinli texnologiyalar asosini o'yin tashkil qiladi. O'yin texnologiyasi ham o'yin metodidan o'zining aniq maqsadi, amalga oshirish kerak bo'lgan jarayonlarning mantiqiy izchilligi va o'zaro bog'liqligi, oldindan belgilangan natijalarga erishish kafolati bilan farq qiladi. L.S. Vigodskiy o'yinni bolaning ichki ijtimoiy dunyosi, ijtimoiy buyurtmalarni o'zlashtirishning vositasi sifatida ta'riflaydi. Bizga ma'lumki, har qanday o'yin muayyan vazifalarni bajaradi:

- maftunkorlik;
- kommunikativlik;
- o'z imkoniyatlarini amalga oshirish;
- tashxis;
- o'yin ishtirokchilari o'rtasidagi muloqot;
- ijtimoiylashuv.

Ma'lumki, o'yinlar quyidagi to'rt asosiy xususiyatga ega:

- erkin rivojlantiruvchi faoliyat, ya'ni bola o'yinni o'zi tanlaydi, unda faol ishtirok etadi. Bunda birinchi navbatda yakuniy natija emas, balki o'yin jarayoni muhim ahamiyatga ega;
- ijodiy xarakter, ya'ni o'yin jarayonida bolalar uchun ijod qilishga katta imkoniyatlar mavjud;
- emotsional ta'sir-bola o'yinda markaziy o'rin egallashni xohlaydi, g'olib bo'lishga intiladi, bu bolaning faolligini oshirishga yordam beradi;



-asosiy va qo'shimcha qoidalar o'yin mazmuni, uning mantiqiy ketma-ketligini belgilaydi.

Pedagogik adabiyotlarda o'yinga berilgan ta'riflarni ko'plab uchratish mumkin, masalan, L.P.Borzova o'zining izlanishlarida "O'yin-bu ta'lim oluvchi uchun tabiiy o'qish usuli" hamda "Didaktik o'yin esa - bu subyekt uchun ma'lum bir holatdagi o'quv mashg'ullik faoliyatidir"-deya e'tirof etgan.

O'yinli texnologiyalardan foydalanishning asosini maktabgacha yoshdagi bolalarning faollashtiruvchi hamda jadallashtiruvchi faoliyati tashkil etadi. Shuningdek, o'yinli texnologiyalar (o'yinli ta'lim)-bolalarning ijtimoiy tajribalarini o'zlashtirishining bari ko'rinishlari ya'ni bilim, ko'nikma, malaka hamda hissiy baholovchi faoliyat jarayonini hosil qilishga qaratilgan shartli o'quv vaziyatlarini ifodalovchi shaxsga yo'naltirilgan ta'lim turlaridan biri ya'ni pedagogik texnologiya hisoblanadi. Maktabgacha ta'lim jarayonida o'yinli texnologiyalar didaktik o'yinli faoliyat shaklida qo'llaniladi. Ushbu faoliyatlarda bolalarning bilim olish jarayoni o'yin faoliyati orqali uyg'unlashtiriladi. Shu sababli tarbiyalanuvchilarning ta'lim olish faoliyati o'yin faoliyati bilan uyg'unlashgan mashg'ulotlar didaktik o'yinli faoliyatlar deb ataladi.

Maktabgacha talim tashkilotida faoliyatlarni tashkil qilish jarayonida bu davrni qiziqarli kechishi uchun tarbiyachi-pedagog, turli xil o'yinlar, o'yinli texnologiyalar tayyorlab qo'yishi zarur. Masalan tayyorlov guruhda elementar matematika faoliyati davomida yoki oxirida "ranglar" o'yinli texnologiyasini qo'llashimiz mumkin. Ushbu o'yinli texnologiyani o'tkazish jarayonida dastavval bolalarni guruhlariga ajratib olishimiz darkor. Guruhlarga ajratishni ham o'yin orqali amalga oshirishimiz mumkin.

Demak, o'yinli texnologiya ushbu bosqichlarda amalga oshiriladi:

1-bosqich, "Guruhlanish bosqichi" bunda ishtirokchilar soniga qarab rangli qog'ozlar (qizil, sariq, yashil) kerak. Mashg'ulotgacha 2 yoki undan ko'prok jetoncha tayyorlab qo'yamiz bolalarning soniga qarab. Jetonchalar aralashtiriladi, har bir ishtirokchiga ya'ni tarbiyalanuvchiga beriladi. Guruhni bo'lish zarur bo'lganda, ishtirokchilarga ma'lum qilish kerak, bir xil rangli jetonchalar-bu 1-guruhda, 2-xil rangli jetonchalar-bu 2-guruhda ekanligidan dalolat beradi.

2-bosqich, "Asosiy bosqich" deb ham atashimiz mumkin. Bunda biz har bir guruhga maxsus tayyorlangan" materiallarni ya'ni rangli geometrik figuralar va rangli qutichalar taqdim qilamiz va shartlarni tushuntiramiz. Shartlar quyidagicha, bolalarga taqdim qilingan materillar, rangli geometrik figuralarni rangli qutichalarga rangi va shaklini aytib, solishlari kerak bo'ladi. 3-bosqich, "Yakuniy bosqichimiz" esa o'yinli texnologiyalarni yakunlash hamda ishtirokchilarni rag'batlantirish kabi qismlardan iborat. Mazkur o'yinli



texnologiyani qo'llash orqali bolalarni faoliyatdan olgan bilimlari mustahkamlab olinadi, o'zaro do'stlik, hamjihatlik tuyg'ulari shakllanadi va kayfiyatlariga ham ta'sir qiladi.

Keyingi o'yinli texnologiyamiz esa "Blits o'yin" texnologiyasi ushbu o'yinli texnologiyadan foydalanish orqali biz har bir bolalarda chaqqonlik, hozirjavoblik hamda jamoada ishlash va o'zaro hurmat shakllanadi. Elementar matematika faoliyatida bu o'yinli texnologiyani fasllar, ulardagi hodisalarni anglash va fazoga qarab mo'ljal olish malakalarini mustahkamlash uchun qo'llashimiz mumkin.

Maktabgacha ta'limda **STEAM** metodining amaliy qo'llanilishi masalasiga to'xtaladigan bo'lsak, maktabgacha yoshdagi bolalar uchun **tajriba kuzatish eng samarali ta'lim metodlaridan biridir:**

Masalan, **"Suv va muhit" tajribasi** orqali bolalar suvning qaysi holatlarda oqishi, bug'lanishi va muzlashi haqida oddiy tajribalar o'tkazishi mumkin. Yana biri **Robototexnika va qurilish loyihalarida** STEAM metodida **Lego va oddiy muhandislik vositalari** yordamida **o'z qurilmalarini yaratish** bolalar uchun muhim amaliy tajribani ta'minlaydi.

Masalan, **oddiy shamol tegirmonini yasash** orqali bolalar shamol energiyasining ishlash tamoyillarini o'rganishi mumkin. Shuningdek, Tasviriy san'at va musiqa STEAM metodining ajralmas qismi hisoblanadi. Masalan, bolalar **tashqi muhitdagi tabiiy hodisalarni tasvirlash yoki musiqa orqali ifodalash** orqali o'z tasavvurini boyitadi.

Yana bir muhim texnikalardan biri bu o'yin orqali o'rganish bolalarning tabiiy rivojlanish jarayoniga mos tushadi. Pedagoglar o'yin jarayonida bolalarga muhim ijtimoiy qoidalar va hayotiy ko'nikmalarni singdirishlari mumkin. Bu usul bolalarning muloqot qilish, jamoa bo'lib ishlash va muammolarni hal qilish qobiliyatlarini mustahkamlaydi. O'yin paytida bolalar boshqalar bilan faol aloqada bo'lishadi. Ular umumiy til topishni o'rganadilar, birgalikdagi faoliyat ko'nikmalarini rivojlantiradilar. Ushbu o'zaro ta'sirlar nafaqat fikr va tajriba almashish imkoniyatini yaratadi, balki ijtimoiy me'yorlar va qoidalarini tushunish uchun asos yaratadi.

O'yin usullari bolalarga boshqa qahramonlar sifatida yashashga, o'zlarini joyida his qilishga va his-tuyg'ularini tushunishga imkon beradi. Masalan, "shifokor" o'ynaganda, bola "bemor" uchun javobgarlikni his qilishi va uning farovonligi haqida qayg'urishi mumkin. Ssenariylarda esa bolalar faol muloqot qiladilar, o'z fikrlarini bildiradilar va boshqalarning fikrlarini Tinglaydilar. Masalan, "do'kon" yoki "maktab" rolli o'yinlarida bolalar o'z fikrlarini aniq va aniq ifoda etishni, shuningdek, o'yindagi sheriklarining muloqotini idrok etish va tushunishni o'rganadilar. Shunday qilib o'yin



usullari jamoadahamkorlik va ishlash ko'nikmalarini rivojlantirishga yordam beradi.

Masalan, birgalikda qurish yoki konstruktorlar yordamida loyihalar yaratish orqali bolalar g'oyalarni muhokama qilishni, mas'uliyatni baham ko'rishni, nizolarni hal qilishni va birlik sifatida harakat qilishni o'rganadilar. Shuni aytish joizki, zamonaviy metodlar bolalarning **emotsional farovonligini** ham qo'llab-quvvatlaydi. Masalan, art-terapiya va musiqiy mashg'ulotlar bolalarga o'z his-tuyg'ularini ifoda etish va boshqarishni o'rgatadi. Bu esa bolalarning ruhiy holatini barqarorlashtirishga xizmat qiladi.

Innovatsion texnologiya - bu ilmiy izlanishlar, ishlanmalar yaratish, tajriba-sinov ishlari olib borish yoki boshqa fan-texnika yutuqlaridan foydalangan holda bolalarga yangi bilim berishdan iboratdir. Maktabgacha ta'lim tashkilotlarida mashg'ulotlarni tashkil etishda interfaol metodlardan samarali foydalanish bu pedagogning kreativligiga bog'liq. Maktabgacha yoshdagi bolalarda ijodkorlikni rivojlantirishda rasm chizish, loyihalash, modellashtirish, shuningdek, bolalar faoliyatining o'yin, dramatizatsiya kabi turlaridan muvaffaqiyatli foydalanish mumkin

Zamonaviy metodlar va innovatsion yondashuvlar maktabgacha ta'limda bir qancha amaliy natijalarni ta'minlashi mumkin, Xususan:

- **Mustaqil fikrlash va ijodkorlikning oshishi.**
- **Ijtimoiy va muloqot ko'nikmalarining rivojlanishi.**
- **Amaliy bilim va ko'nikmalarni mustahkamlash.**
- **Texnologik savodxonlikning oshishi va raqamli dunyo bilan tanishuv.**

Kelgusida, maktabgacha ta'limda ushbu yondashuvlarni keng joriy etish orqali bolalarning shaxsiy rivojlanishi va kelajakda murakkab muammolarni hal qilishga tayyor bo'lishlari ta'minlanishi kutilmoqda.

Maktabgacha ta'lim tizimida zamonaviy metodlar va innovatsion yondashuvlardan samarali foydalanish bolalarning intellektual, ijodiy va ijtimoiy rivojlanishiga bevosita ta'sir ko'rsatadi. Ushbu yondashuvlar bolalarning mustaqil fikrlash qobiliyatini shakllantirish, ijtimoiy muloqot ko'nikmalarini rivojlantirish va amaliy bilimlarini mustahkamlashga yordam beradi.

Yurtboshimiz Sh.Mirziyoyev maktabgacha ta'lim tizimi haqida quyidagi fikrlarni bejizga bildirmagan edilar: "Aslida, farzandlarimiz tarbiyasida eng asosiy bo'g'in hisoblangan maktabgacha ta'lim tizimining jamiyatimiz hayotidagi o'rni va ahamiyatini hech narsa bilan o'lchab bo'lmaydi. Aynan maktabgacha ta'lim sohasiga bo'lgan e'tibor mamlakatning ertangi taraqqiyoti uchun mustahkam zamin yaratadi".

Demak, tarbiyachining innovatsion faoliyati, bu uning pedagogik mahorati belgisidir. Innovatsion texnologiyalarning har bir turi bolalarda faqatgina yangi bilim hosil qilishga xizmat qilibgina qolmasdan, balki ularda har tomonlama rivojlanish xizmat qila oladi. Ma'naviy savodxonligi sust bo'lgan inson hayot davomida uchrashi mumkin bo'lgan qiyinchiliklar oldida esankirab qolishi mumkin.

FOYDALANILGAN ADABIYOTLAR:

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KICHIK ODATLARNI SHAKILLANTIRISH VA ULARNI INSON HAYOTIGA
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Annotatsiya.

Odatlar inson hayotining eng muhim boshqaruv tizimlaridan biri bo'lib, ular ko'pincha ong ostida, sezilmas ravishda shakillanadi, ammo hayot sifatiga ko'rsatadigan ta'siri nihoyatda katta bo'ladi. Ushbu maqolada odatlarning psixologik va biologik asoslari, ularning kundalik hayotdagi o'rni, odat shakllanish jarayoni hamda zararli odatlarni foydali odatlar bilan almashtirish startegiyalari tahlil qilinadi. Jeyms Klerning mashhur "Atomic Habits" asarida berilgan nazariy bilimlar asosida kichik odatlar yig'indisi qanday qilib katta natijalarga olib kelishi ko'rsatib beriladi. Tadqiqotning asosiy maqsadi – odatlarning inson hayotining turli jihatlariga ko'rsatadigan ta'sirimi ilmiy va amaliy asosda yoritishdan iborat.

Keywords: habit, behavior, atomic habits, psychology, routine, self-improvement.

Kirish. Inson xulq-atvorining katta qismi ongli ravishda emas, balki avtomatik tarzda – odatlar orqali bajariladi. Tadqiqotlarga ko'ra, kundalik harakatlarning 40 -45 foizi odatlar natijasidir. Odatlar insonning vaqtini tejaydi, qaror qabul qilish jarayonini yengillashtiradi, stressni kamaytiradi va samaradorlikni oshiradi. Shu bilan birga noto'g'ri shakllangan odatlar salbiy oqibatlarga – dangasalik, kechiktirish, vaqtni bekor sarflash, zararli ovqatlanish kabi muammolarga olib keladi.

Jeyms Kler 'Atomic Habits' asarida minimal o'zgarishlar maksimal natijalar berishini ta'kidlab, "1% yaxshilanish qoidasi" ni ilgari suradi. Uning fikricha, har kuni qilinadigan kichik yaxshilanishlar vaqt o'tishi bilan sezilarli ijobiy o'zgarishlarga aylanadi. Ushbu maqola odatlarning shakllanish jarayoni, ularning psixologik asoslari hamda amaliy usullari haqida batafsil ma'lumot beradi.

1. Odatlarning psixologik asoslari

Odatlar – miya energiyani tejash uchun yaratgan avtomatik xatti-harakat sxemalaridir.

Psixologiyada odat shakllanishi "cue-routine-reward" (signal-amal-mukofot) modeli orqali tushuntiriladi:

~Signal – odatni boshlovchi qo'zg'atuvchi omil (masalan, vaqt, joy).

~Amal – avtomatik bajariladigan xulq-atvor (telefonni tekshirish, choy ichish).

~Mukofot – miyani qoniqtiruvchi natija (roxat, taskin, quvvat).

Ushbu tsiklni chuqurroq tushunish odatlarni o'zgartirishning asosiy yo'lidir, chunki har qanday yomon yoki yaxshi odat aynan ushbu modelga asoslanadi.

2."Atomic Habits" tamoyillari asosida odat shakillantirish

Jeyms Kler odatlarni barqaror shakillantirish uchun quyidagi to'rt asosiy qonunni ilgari suradi:

1-qonun: Odatni aniq qiling

Odat qanchalik aniqlashtirilsa, uni bajarish shunchalik oson kechadi.

Masalan, "Ko'proq kitob o'qiyman" o'rniga – "Har kuni soat 21:00 da 10 daqiqa kitob o'qiyman".

2-qonun: Odatni jozibador qiling

Amal yoqimli bo'lsa, miya uni tez qabul qiladi. Klerning "temptation bundling" usuli: yoqimli amal bilan foydali amalni bog'lash.

Masalan, choy ichyayotganda grammatikadan 1 ta mashq bajarish.

3-qonun: Odatni oson qiling

Odatni kichik bo'laklarga ajratish shakillanishi yengillashtiradi.

Masalan, 30 daqiqa yoga o'rniga – 5 daqiqadan boshlash.

4-qonun: Odatni qoniqarli qiling

Odat zavq uyg'otsa, u tez mustahkamlanadi.

Masalan, bajarilgan kunlarni "habit tracker" da belgilash.

3.Yomon odatlarni yo'qotish strategiyalari

Yomon odatlarni bartaraf etish uchun Kler quyidagi strategiyalarni taklif qiladi:

1.Signalni ko'rinmas qiling

Chalg'ituvchi omillarni kamaytirish.

Masalan, telefonni boshqa xonaga qo'yish.

2.Odatni jozibadorsiz qiling

Salbiy oqibatlarini eslatib turish.

Masalan, shirinlik ko'p iste'mol --> teri yomonlashuvi.

3.Amalni qiyinlashtiring

Zararli odatni bajarishni murakkablashtirish.

Masalan, shirinlikni olisga ya'ni uzoqroq joyga yashirish.

4.Mukofotni qoniqarsiz qiling

Odatdan keyin salbiy his uyg'otish.

Masalan, dangasalikdan so'ng vaqt yo'qotilganini qayd etish.

4.Kichik odatlarning katta hayotiy natijalari

Klerning asosiy tezisi: "Katta natijalar – kichik odatlarning yig'indisi."

Real misollar bilan ko'rib chiqsak:

- Har kuni 1 bet kitob – 1yilda 10 – 12 ta kitob.

- Har kuni 10 ta squat – 3 yilda kuchli mushaklar
- Har kuni 5 daqiqa meditatsiya – 6 oyda stressning kamayishi

Bu oddiy misollar kichik odatlarning kuchini yaqqol namoyon qiladi.

5.Odatlarning uzoq muddatli ta'siri

Ijobiy taraflari:

- Aqliy salomatlik yaxshilanadi.
- Sertartiblik va samaradorlik ortadi.
- Motivatsiya barqarorlashadi.
- Sog'lom turmush tarzi shakllanadi.
- O'z-o'zini boshqarish kuchayadi.

Salbiy taraflari:

- Stress va kechiktirish kuchayadi.
- Hayot sifati pasayadi.
- Sog'liq yomonlashadi.
- Produktivlik keskin tushadi.

Odatlarning inson hayotidagi uzoq muddatli roli ularni to'g'ri shakllantirish zarurligini yana bir bor ko'rsatadi.

Xulosa . Odatlar – inson hayotining yashirin arxitekturasini bo'lib, kunlik hayotimizni sezilmasdangina boshqaradi. Kichik, muntazam takomillashtiriladigan odatlar insonni tartibli, muvaffaqiyatli va sog'lom shaxsga aylantiradi. "Atomic Habits" modeliga ko'ra haqiqiy o'zgarishlar keskin sakrashlardan emas, balki mayda qadamlarning to'planishidan kelib chiqadi. Har bir inson o'z odatlarini boshqara olganida, hayoti sifat jihatidan tubdan o'zgaradi. Demak, bugun tanlangan kichik, ijobiy odat ertangi kunning muvaffaqiyat poydevorini yaratadi.

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**MODERN TRENDS AND TECHNIQUES FOR FOOD PRESERVATION****Norqulova Zohida Toshboyevna**

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Abstract: Food preservation is the process of stopping or inhibiting the spoilage of food that prohibits foodborne diseases while keeping the food's nutritional value, flavor, and texture. Food preservation plays a vital role in food safety and quality. Food preservation techniques are also helpful in meeting the global food demand as these techniques provide an opportunity to store food for a long time. Food safety techniques, like salting, drying, and fermentation to increase the shelf-life of raw food, have been used since the dawn of humankind, and our ascendants must have used these techniques. A wide range of chemical and biochemical reactions could be the root of food spoilage. So, appropriate preservation is necessary to stock the food for as long as possible without contamination. Primary and fundamental techniques like drying, freezing, pasteurization, biopreservation, and Nanoencapsulation have been instigated to stop or slow down food's chemical and biochemical destruction. Bio-preservatives are now commonly used to meet people's demand for food preservation as chemical preservatives are rejected. This review summarizes the various physiochemical and microbial components that cause food spoilage and the use of different food preservative techniques like salting, dehydration, freezing, smoking, irradiation, antimicrobial agents, preservatives, and nanotechnology in the food industry during processing and packaging.

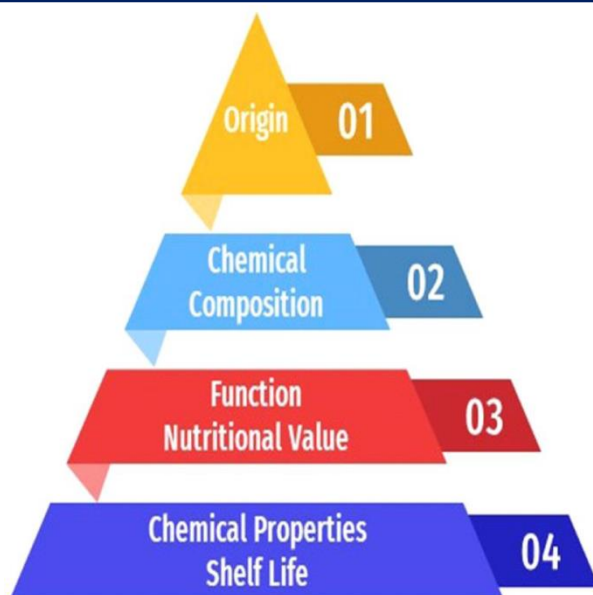
Keywords: food spoilage; food preservation; biopreservatives; nanotechnology; food processing

Introduction. Food is an organic substance that can be in solid or liquid form and can be absorbed, digested, and assimilated in the body of an organism to gain the energy that the body needs to work, repair tissue, grow, and perform other vital processes. It consists of all the essential nutrients like proteins, fats, carbohydrates, vitamins, and minerals. It can be obtained from animal or plant sources. The demand for food production is rising remarkably due to increasing population and changes in food diversity. As foods are nutritious enough, they can be spoiled by physical, chemical, and microbial

processes ([Rahman and Labuza, 2007](#)). According to the World Health Organization (WHO), about 1 out of 10 people become ill from eating spoiled food. According to [Fouladkhah et al. \(2019\)](#), 420,000 people die every year due to food poisoning. It has been observed that during food transportation, the surrounding environment, including bacteria, chemicals, and the enzymes present in food, can cause changes in the morphology of food and reduction of nutrients in food ([Gram et al., 2002](#)). Thus, the food needs to be preserved to avoid spoilage by contamination and maintain food quality. Food preservation increases food stock storage and shelf-life without affecting nutritional values and qualities (texture, aroma, freshness, flavor, color). Food Preservation is also helpful in avoiding the oxidation of fat in food by inhibiting microbial growth ([Prokopov and Tanchev, 2007](#)). Food preservation is also known as food processing ([Lianou et al., 2016; Necidová et al., 2019](#)). The history of "Food Preservation" goes back to ancient culture when primary troops felt that there was a need to preserve food when a large animal could not be eaten at once. Similar basic techniques were applied to keep food in a distant society, which was the utmost evolutionary step ([Nunmer, 2002](#)).

The food industry is trying to design new, less invasive technologies (use of high pressure, hurdle technology, radiations like UV light, Oscillating Magnetic Field) beyond the traditional conventional methods like drying, freezing, chilling, curing, heating, boiling, sugaring, salting, canning, pickling, and fermentation ([Blum, 2012; Rahman, 2014](#)). Bio preservatives are alternatives for preserving food to keep its characteristics, which is also helpful in fulfilling the demands of people who want to consume chemical-free food. Bio-preservation is a technique used to control microbes by adding natural antimicrobial compounds to increase the shelf-life of food products. It also uses beneficial bacteria to prevent spoilage and make pathogens inactive. Bio preservatives act by lowering the pH, changing the water activity, and adjusting the redox potential of food products ([Rehman, 2020](#)). Lactic acid bacteria (LAB) are widely used to preserve food ([Gemechu, 2015](#)).

Classification of Foods. Food classification is done on various occasions, as discussed in [Fig. 1](#) and further explained below.



Food classification based on shelf-life

There are three classes of food based on the shelf life of food (Perishable foods, Non-perishable foods, Semi-perishable foods).

Food classification based on functions

Based on the functionality of food, they can be classified into two classes.

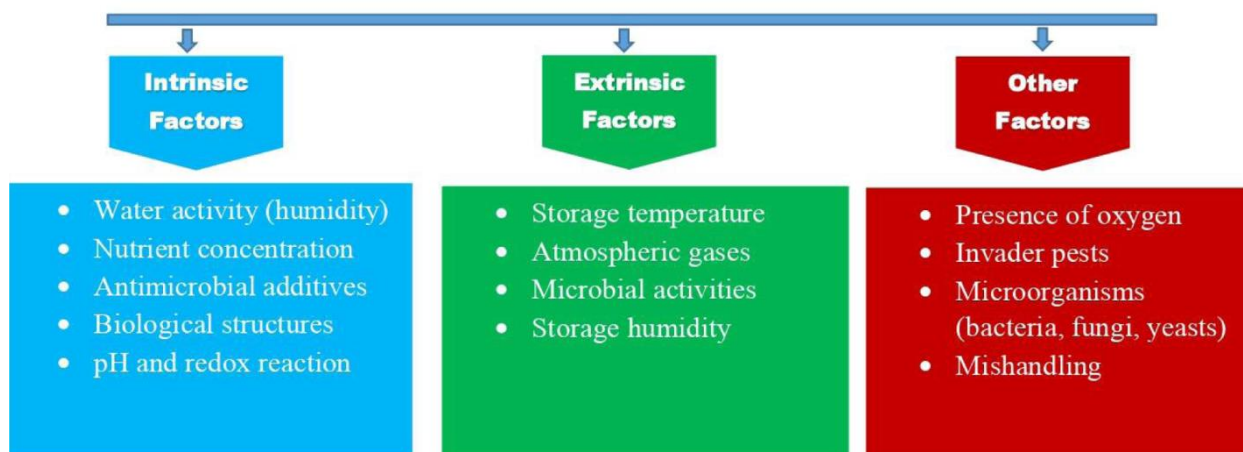
i) Bodybuilding and repairing foods, ii) regulatory and protective food, iii) energetic foods.

Bodybuilding and repairing foods

Food Spoilage Mechanism

The process that causes the reduction of food nourishing ability is known as food spoilage and is related to food safety (Steele, 2004). The extent of food spoilage can be determined by chroma, aroma, flavor, and taste. The mechanism of food spoilage is elaborated in the Fig. 2. Various factors that are the cause of food quality and causing food spoilage are explained below.

Fig. 2. Factors affecting food quality and causing food spoilage.



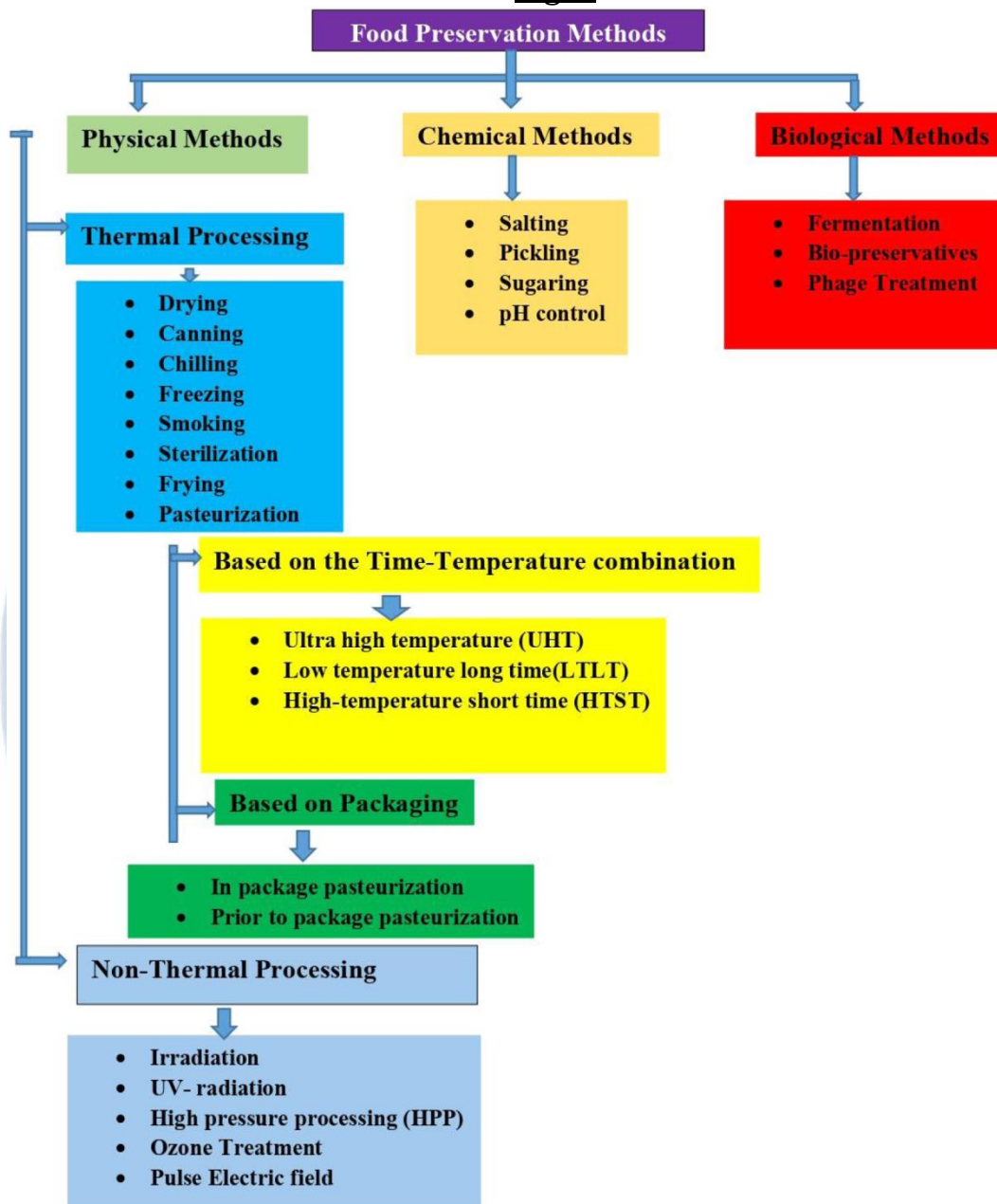
Microbial spoilage. It is the most common method of food deterioration. Microorganisms like bacteria, fungi, molds, and yeasts cause food deterioration and foodborne illnesses, especially in highly perishable foods. It can be prevented by lowering pH, controlling water activity, adjusting temperature, properly packaging, and using preservatives ([Tianli et al., 2014](#)). Nutrient concentration, water content, pH, and redox reactions are intrinsic factors of food spoilage ([Steele, 2004](#)). Meanwhile, humidity, temperature, and the presence of microorganisms are extrinsic factors ([Steele, 2004](#)). Antibiotic resistance is the major issue while microbial Spoilage can be controlled by antibiotics ([Samad, 2022](#)). So, we need to use an alternative to stop microbial spoilage.

Chemical spoilage. Physiochemical and biochemical reactions naturally occur in food, which may cause color, odor, texture, and taste changes. Microbial activity and metabolism, redox reactions, proteolysis ([Igarashi et al., 2007](#)), hydrologic rancidity ([Steele, 2004](#)), putrefaction, and toxic compound production are factors that cause chemical spoilage of food.

Dehydration. Dehydration or drying is the process of removing all the water content from the food items. The process of evaporation is used for drying purposes. It is one of the oldest preservation methods. After dehydration, microorganisms' growth is inhibited; they cannot cause spoilage as all the enzymes work at specific water activity, while in this process, moisture is lowered to the point where their functionality is lost. Most microbes grow at 0.95 water content and do not grow when water is lowered to 0.88 ([Troller, 1986](#)). It has diverse advantages, as lowering the density and quantity of food is the cheapest way to preserve food and making it easy to transport, store, and pack food. However, it also causes loss of aroma and flavor, vitamin C, proteins, lipids, and thiamine in dehydrated food products. Drying and freeze-drying methods preserve fruits, fish, vegetables, coffee, and tea.

Food Preservation Methods

There are several food preservation methods, which are explained below and also shown in the flow chart Fig. 3.



Physical methods

Pasteurization is a process in which food is heated to destroy all types of bacteria and enzymes (Shenga et al., 2010) to extend the shelf life of food items and keep them fresh for a longer period (Vieira et al., 2018). This process kills almost all pathogenic bacteria, yeasts, and molds, but the temperature and duration should be optimal. They must not destroy the vitamins and proteins of foods. This process is known to French scientist Loius Pasteur, who used this technique for the first time to preserve milk and

milk products. Wine and beer are also treated by this process. Modern procedures like low-temperature long time (LTLT), high-temperature short time (HTST), and ultra-high temperature (UHT) are also accessible. LTLT is done on small plants. This process must control proper holding and prevent overheating or burning (Rahman and Labuza, 2007). HTST is done to perish the pathogenic microorganisms. It is a continuous “Flash Pasteurization”. UHT is done to restrict heat-resistant spores and is more effective than LTLT and HTST. Foods are heat-treated and aseptically packed in sterile containers. High heat treatment pasteurization causes a loss of 20% of vitamin C, 10% of thiamine and vitamin B12, and 5% of calcium and soluble phosphorus, but this loss can be considered lower from a nutritional point of view

Freezing. Freezing is an ancient method that reduces the physiochemical and biochemical reactions and thus inhibits or deteriorates the growth of pathogenic. This method is preferable over canning and dehydration because it is effective for the long-term preservation of food and reduces metabolic responses (Fennema et al., 1973). In this method, water activity is reduced, and the temperature is reduced to 18°C or lower (Fennema et al., 1973). Though they have a vigorous and effective capacity to control pathogens, frozen foods are not acquired in developing countries. So, it is not widely used in industrial food preservation, but in upper-class and uptown, freezers are widely used (Amit et al., 2017). In recent years, freezing has been widely used to preserve fruits, vegetables, and meat. Meat contains 50%–75% water; it is converted into ice cubes in the freezer, which occurs at –20°C.

Irradiation. Irradiation is the physical method of food preservation which results in disinfection, inhibition of sprouting, inactivation of pathogenic microbes, and increasing the safety of grains, vegetables, fruits, and other food goods (Heldman and Moraru, 2010; Kanatt et al., 2006).

This process uses ionizing radiation (IR) of specific strength to destroy the microbes of frozen food. Gamma rays, X-rays, and ultraviolet rays (UV) are natural IR; Electron beams, which are artificial sources of IR, are used for this purpose. Vitamins, minerals, carbohydrates, and protein in food products are not affected at all by this process, but a minute amount of vitamins A, C, E, and B1 may be loosened.

Packaging. Packaging is placing minimally processed or completely processed foods into paper, plastic, or metal containers. This technique is becoming foremost because it is used to transport food from factories to sailing points with minimal changes in the characteristics of food. It preserves vegetables, fruit juices, and dairy products (Alvarez et al., 2014). Packaging materials may interact with food inside, so coatings of bio-edible films are

used to inhibit pathogenic effects and reduce the harmful interactions between materials and food. For instance, glycerol can be used to preserve potatoes by dipping them in it, and sorbitol or oil corn can be used for cheese protection.

Nanoencapsulation is a technique that is mainly used for packaging solid or liquid food in nanocapsules (called shells) (Bratovcic and Suljagic, 2019). It helps the release of packed (canned) food flavor continuously during food storage. This method is not significantly used in developing countries but has various beneficial applications for food preservation in developed countries. Heating is done before packaging proteins – foods are heated and packed in cans or jars, but plant-extracted food items should not preheated to canning.

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**FOOD INDUSTRY BY-PRODUCTS AS RAW MATERIALS IN THE PRODUCTION OF VALUE-ADDED CORN SNACK PRODUCTS****Norqulova Zohida Toshboyevna**

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Abstract: The addition of brewer's spent grain (BSG), sugar beet pulp (SBP) and apple pomace (AP), on the nutritional properties of directly expanded snack products based on corn grits was investigated. Snack products were produced in a laboratory single screw extruder with the addition of 5, 10 and 15% d. m. of these by-products in corn grits. Chemical composition, total phenolic content, antioxidant activity, dietary fiber, resistant starch, starch damage and pasting properties of the mixtures and extruded samples were determined. Extrusion process and by-product additions had a significant effect on the proximate chemical composition. All three by-products increased contents of both soluble and insoluble dietary fiber, while the extrusion caused a reduction of insoluble fiber and increase of soluble fiber. After the extrusion process starch damage and antioxidant activity increased, while resistant starch content and total polyphenol content decreased. According to obtained results, it can be concluded that the investigated by-products can be used in the production of nutritionally more valuable corn snacks.

Keywords: by-products; extrusion; corn snacks; chemical composition; nutritional value.

Introduction. The development of value-added foods in terms of maintaining and protecting health, improving consumer nutrition and promoting good health and nutrition has been prioritized by numerous researches in recent years. Since the United Nations published Sustainable Development Goals [1], which has been adopted in strategies worldwide, both science and industry have been challenged to look for solutions to utilize by-products of the food industry in such a way that they are first used as food, then as feed and finally for energy production. These by-products are of particular interest because they often contain significantly high amounts of certain compounds (bioactive components, dietary fibers, vitamins, minerals, etc.), which constitute a very valuable raw material for the production and

development of new products [2]. One of the most important products are directly expanded cereal-based snacks, which are currently high in carbohydrates, salt and fat and low in overall nutritional value, popular and consumed in large quantities by all generations, from babies to the elderly.

Although numerous studies have been conducted on the use of by-products as cheap and high-value raw materials in the development of new extruded products, most of them are focused on testing the formulations but not the overall sensory and nutritional quality of the developed products [3]. In this context, in our previous studies we investigated the physical and sensory properties of extruded products with added brewer's spent grain (BSG), sugar beet pulp (SBP) and apple pomace (AP) in order to obtain products acceptable for consumption. In first study we investigated influence of by-products addition on physical and sensory properties of corn extrudates, while in the second one, a safety of these products was carried out, manifested by the formation of potentially harmful components (acrylamide and hydroxymethylfurfural). The composition of all three by-products used in this study was presented in our previous research [4] and in other reviews.

AP was used in the production of extruded snacks based on sorghum flour or rice-wheat mixture and the extrudates based on pregelatinized starch combined with cheese whey or other protein sources. BSG was used in content of 10% for the production of barley-based snacks and in the production of extruded broken rice snacks with 15% and 30% of BSG. SBP as a by-product is mainly used for animal feeding, but as a good source of pectin this by-product is recently used for the pectin extraction although pectin extracted from SBP is known to have poor gelling property [5].

The aim of this study was to investigate how the addition of the above-mentioned by-products affect the nutritional value of the developed corn snack products in terms of chemical composition, total phenolic content, antioxidant activity, dietary fiber, resistant starch and starch damage.

Materials and Methods

Preparation of Extruded Corn Snack Products

Raw materials used in this study were: corn grits, brewer's spent grain (BSG), sugar beet pulp (SBP), apple pomace (AP) and pectin (GENU® Pectin 150 USA-SAG type D slow set, CP Kelco A Huber Company, SAD). The chemical composition of raw materials and the procedure of the blend preparation for the extrusion process were described in detailed in our previous article [9]. Briefly, BSG, SBP and AP were added in corn grits in the content of 5%, 10% and 15% d. m. In the case of BSG and SBP, samples with 1% of added pectin were prepared, which resolved the problem of expansion and poor texture

properties and enabled the production of sensory acceptable expanded snack products [2].

Table 1. Chemical composition of non-extruded and extruded samples.

Sample	NON-EXTRUDED				
	Dry Matter (%)	Protein (% d. m.)	Fat (% d. m.)	Ash (% d. m.)	Raw Carbohydrates (% d. m.)
Corn grits	85.25 ± 0.04 ^b	7.91 ± 0.05 ^d	1.33 ± 0.02 ^e	0.41 ± 0.02 ^a	90.35 ± 0.05 ^f
Corn + 5% BSG	85.11 ± 0.02 ^a	8.94 ± 0.06 ^f	1.52 ± 0.03 ^g	0.67 ± 0.01 ^e	88.87 ± 0.11 ^c
Corn + 10% BSG	85.78 ± 0.03 ^e	9.68 ± 0.07 ^g	1.47 ± 0.00 ^f	0.77 ± 0.01 ^f	88.08 ± 0.08 ^b
Corn + 15% BSG	85.39 ± 0.06 ^c	11.08 ± 0.14 ^h	1.91 ± 0.02 ^h	0.93 ± 0.01 ^h	86.08 ± 0.11 ^a
Corn + 5% SBP	85.19 ± 0.02 ^b	7.80 ± 0.10 ^d	1.18 ± 0.01 ^d	0.81 ± 0.03 ^g	90.21 ± 0.12 ^f
Corn + 10% SBP	85.05 ± 0.02 ^a	7.83 ± 0.14 ^d	1.04 ± 0.01 ^{b, c}	1.30 ± 0.02 ⁱ	89.83 ± 0.18 ^e
Corn + 15% SBP	85.20 ± 0.05 ^b	8.08 ± 0.01 ^e	0.99 ± 0.01 ^a	1.64 ± 0.01 ^j	89.29 ± 0.03 ^d
Corn + 5% AP	85.57 ± 0.03 ^d	7.57 ± 0.05 ^c	1.18 ± 0.01 ^d	0.46 ± 0.00 ^b	90.79 ± 0.07 ^g
Corn + 10% AP	85.35 ± 0.00 ^c	7.30 ± 0.09 ^b	1.07 ± 0.03 ^c	0.53 ± 0.03 ^c	91.10 ± 0.08 ^h
Corn + 15% AP	85.42 ± 0.02 ^c	7.07 ± 0.05 ^a	1.00 ± 0.01 ^{a, b}	0.62 ± 0.02 ^d	91.31 ± 0.03 ⁱ

The blends with 15% moisture content were extruded in a laboratory single-screw extruder (Brabender GmbH, Model 19/20DN, Duisburg, Germany) according to Ačkar et al. [3], at the temperature profile: 135/170/170 °C, using a screw with a compression ratio of 4:1, and a round die head with 4 mm nozzle diameter. The obtained snacks were air-dried overnight at ambient temperature, milled in a laboratory mill (IKA MF10, Staufen, Germany) with a 1 mm sieve and stored in sealed plastic bags at 4 °C until further analysis.

Chemical Composition

The chemical composition of non-extruded samples and obtained extrudates were determined according to standard methods for moisture content (ISO 6540), protein (ISO 5983-2), fat (ISO 6492) and ash (ISO 5984), while the contents of raw carbohydrates were calculated by difference.

Results and Discussion

3.1. Chemical Composition

Brewer's spent grain (BSG), sugar beet pulp (SBP) and apple pomace (AP) as food industry by-products used in this study for the development of new value-added corn snack products represent a great potential due to their chemical composition presented in our previous article. The influence of the addition of BSG, SBP and AP in corn grits and the effect of the extrusion process on the chemical composition is shown in [Table 1](#).

Increasing the proportion of BSG and SBP in the mixtures, the protein content increased, and the increase was more pronounced with the addition of BSG. Thus, the protein content in the mixture with 15% BSG was $11.08\% \pm 0.14\%$ d. m., and in the mixture with 15% SBP was $8.08\% \pm 0.01\%$ d. m., compared to the corn grits, in which the protein content was $7.91\% \pm 0.05\%$ d. m. On the other hand, the addition of AP to the mixture proportionally reduced the protein content, so the lowest protein content was recorded in the mixture containing 15% AP ($7.07\% \pm 0.05\%$ d. m.). The fat content decreased with the addition of AP and SBP to the mixture, while the increase in fat content was recorded in the mixtures with the addition of BSG. The lowest fat content was in the sample with 15% SBP ($0.99\% \pm 0.01\%$ d. m.), and the highest in the sample with 15% BSG ($1.91\% \pm 0.02\%$ d. m.). The ash content was increased by the addition of all by-products in proportion to the added content, with the highest value recorded for the mixture containing 15% SBP ($1.64\% \pm 0.01\%$ d. m.). The content of raw carbohydrates decreased with the addition of BSG and SBP to corn grits, while the opposite trend was observed in mixtures with AP, so the mixture with 15% AP had the highest content of raw carbohydrates ($91.31\% \pm 0.03\%$ d. m.).

From the results obtained for the extruded samples, it is visible that the extrusion process resulted in a decrease in the values of protein and fat content for all samples, while the ash content increased, but this increase was not so high. This trend of decreasing protein and fat content and not so high increase in ash content after the extrusion process is consistent with previous studies. In short, the most significant change in proteins during the extrusion process is denaturation due to the applied high temperatures, pressure and shear. Sobota et al. concluded that the extrusion process resulted in a decrease of protein content, which is in accordance with the results of our study. The lack of nitrogen content due to the extrusion process is explained by Stanley as the effect of the formation of isopeptide bonds between the ϵ -amine group of lysine and the amide groups of asparagines or glutamine, which is associated with ammonia release. Furthermore, the reaction of lysine with reducing sugars formed during the extrusion is also stated. As for fats, their proportion is reduced mainly by loss at the die after leaving the extruder and by the formation of fat complexes with starch and proteins. In agreement with the effect of extrusion on the reduction of protein and fat content, the content of raw carbohydrates increased in all samples after the extrusion process, so that the highest content was recorded in the extruded sample with 15% AP ($91.88\% \pm 0.02\%$ d. m.). The results obtained in this research are in accordance with previous studies, where it was found that the content of

protein, fat and ash in extruded products increases with the addition of used by-products [6,31,32,33].

Dietary Fiber

The by-products used to fortify corn snack products in this study were selected in part because of the high fiber content found in the literature [34,35,36], and confirmed by the results shown in our previous study [9]. Namely, all by-products had significantly higher content of total, soluble and insoluble dietary fiber (TDF, SDF and IDF), compared to the corn grits. While corn grits contained $3.39\% \pm 0.01\%$ d. m. of TDF, this content was >10 times higher in AP ($40.47\% \pm 0.26\%$ d. m.), >15 times higher in BSG ($60.56\% \pm 0.53\%$ d. m.) and >20 times higher in SBP ($70.98\% \pm 0.29\%$ d. m.) [9]. The results for dietary fiber content in non-extruded mixtures and produced snack products are shown in the Table 2. The obtained results show that by increasing the amount of added by-products in the mixtures, the content of IDF and SDF increased proportionally, with BSG having the most significant influence on the increase of IDF content ($11.22\% \pm 0.07\%$ d. m., for the mixture with 15% of BSG), and SBP on the SDF content ($3.45\% \pm 0.08\%$ d. m., for the mixture with 15% SBP). Despite the fact that the addition of AP increased the fiber content less than other by-products, the values obtained were significantly higher compared to corn grits, which is confirmed by the fact that the TDF content doubled already with the addition of 10% AP. The effect of higher fiber increment in the case of SBP and BSG is also related to the fact that in the application of these two by-products also 1% d. m. of pectin was added, which belongs to the group of SDF.

The extrusion process had the same effect on all samples, regardless of the type of by-product used. Namely, a decrease in the IDF content and an increase in the SDF content was found. Since the decrease in the IDF content was more pronounced than the increase in the SDF content in all cases, this also affected the decrease in the TDF content in all extrudates. However, it should be emphasized that even after these changes due to the extrusion process, the obtained extrudates with satisfactory expansion and sensory acceptability had a significantly higher content of dietary fiber compared to the control sample of extruded corn grits. Namely, while the extruded sample of corn grits had $2.36\% \pm 0.03\%$ d. m. of TDF content, extrudates with BSG and SBP had double the amount of TDF content already at 5% added by-products ($5.13\% \pm 0.08\%$ d. m. and $5.56\% \pm 0.21\%$ d. m., respectively), and a similar trend was observed with the addition of AP, where the sample with 5% AP had $4.57\% \pm 0.05\%$ d. m. of TDF content.

Previous studies have shown that the extrusion process generally reduces the content of IDF, with the usual accompanying increase in the

content of SDF, which would imply that a conversion from insoluble to soluble fibers occurs during the extrusion process [4]. Such results have been obtained by Sobota et al.

Table 2. The dietary fiber content in non-extruded and extruded samples.

Table 2. The dietary fiber content in non-extruded and extruded samples.

Sample	NON-EXTRUDED		
	IDF (% d. m.)	SDF (% d. m.)	TDF (% d. m.)
Corn grits	3.18 ± 0.03 ^a	0.21 ± 0.04 ^a	3.39 ± 0.01 ^a
Corn + 5% BSG	5.98 ± 0.05 ^d	1.29 ± 0.09 ^c	7.26 ± 0.04 ^d
Corn + 10% BSG	8.72 ± 0.07 ^g	1.44 ± 0.12 ^c	10.16 ± 0.20 ^g
Corn + 15% BSG	11.22 ± 0.07 ⁱ	1.64 ± 0.06 ^d	12.86 ± 0.01 ⁱ
Corn + 5% SBP	5.69 ± 0.17 ^c	1.97 ± 0.11 ^e	7.66 ± 0.06 ^e
Corn + 10% SBP	8.34 ± 0.10 ^f	2.51 ± 0.03 ^f	10.85 ± 0.13 ^h
Corn + 15% SBP	10.70 ± 0.10 ^h	3.45 ± 0.08 ^g	14.15 ± 0.18 ^j
Corn + 5% AP	4.44 ± 0.07 ^b	0.75 ± 0.09 ^b	5.19 ± 0.02 ^b
Corn + 10% AP	5.62 ± 0.07 ^c	1.29 ± 0.02 ^c	6.91 ± 0.08 ^c
Corn + 15% AP	6.89 ± 0.05 ^e	1.92 ± 0.02 ^e	8.80 ± 0.07 ^f

Pérez-Navarrete et al. and Jing and Chi, which particularly point out the increase in IDF content after the extrusion process. Therefore, the results of this research are in accordance with all the above studies. Furthermore, in terms of the impact of the by-products used in this study on the increase in fiber content, the obtained results are also consistent with previous studies. Namely, the addition of BSG increased the dietary fiber content in the production of wheat bread and in various extruded products. So, Kirjoranta et al. used 10% of BSG in the production of barley based snacks and concluded that obtained extruded were “high fiber”. Similarly, the “high fiber” extrudates were developed with application of 20–40% BSG in extruded products based on rice flour and wheat semolina mixture. The use of sugar beet fiber increased the content of dietary fiber in spaghetti production and corn extrudates. The same effect has also been reported with the use of AP in cake making and in corn extrudates. Additionally, the results obtained in our research are in agreement with the results obtained in the preparation of rice-wheat based extruded samples with AP (10–30%), where it was found that the addition of AP increased the TDF content [5]. In addition, incorporation of 22% AP in snacks based on pregelatinized starch the dietary fiber content

increased from 0.8 g/100 g in the control sample to 14 g/100 g in the sample containing AP [6].

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INTERNET VA AXBOROT TEXNOLOGIYALARINING O'SMIR TAFAKKURIGA
PSIXOLOGIK TA'SIRI

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Annotatsiya. Ushbu maqolada internet va axborot texnologiyalarining o'smir tafakkuriga ko'rsatadigan psixologik ta'siri tahlil qilingan. Raqamli muhitda ulg'ayayotgan o'smirlar ongida yuz berayotgan kognitiv, emotsional va ijtimoiy o'zgarishlar ilmiy nuqtai nazardan yoritilgan. Maqolada internetdan foydalanishning ijobiy va salbiy jihatlarini, uning tafakkur jarayonlariga, tanqidiy va ijodiy fikrlashga, diqqat va refleksiya qobiliyatlariga ta'siri ko'rib chiqilgan. Shuningdek, raqamli texnologiyalar sharoitida o'smir tafakkurini sog'lom shakllantirish uchun ota-onalar, pedagoglar va psixologlarning o'rnini alohida ta'kidlangan. Tadqiqot natijalari o'smirlarning raqamli xulq-atvorini boshqarish, axborot gigiyenasini shakllantirish va internetdan samarali foydalanish bo'yicha amaliy tavsiyalar ishlab chiqish zarurligini ko'rsatadi.

Kalit so'zlar: o'smirlik davri, tafakkur, internet, axborot texnologiyalari, raqamli muhit, psixologik ta'sir, axborot gigiyenasi, tanqidiy fikrlash, diqqat, virtual muloqot.

Annotation. This article analyzes the psychological impact of the internet and information technologies on adolescent thinking. Scientific perspectives are provided on the cognitive, emotional, and social changes occurring in the minds of adolescents growing up in a digital environment. The article examines the positive and negative aspects of internet usage, its effects on thinking processes, critical and creative thinking, attention, and reflection abilities. Additionally, the role of parents, educators, and psychologists in fostering healthy adolescent thinking in the context of digital technologies is emphasized. The research results highlight the need to develop practical recommendations for managing adolescents' digital behavior, forming information hygiene, and using the internet effectively.

Keywords: adolescence, thinking, internet, information technologies, digital environment, psychological impact, information hygiene, critical thinking, attention, virtual communication.

Аннотация. В данной статье проанализировано психологическое влияние интернета и информационных технологий на мышление подростков. Научно освещены когнитивные, эмоциональные и

социальные изменения, происходящие в сознании подростков, растущих в цифровой среде. Рассмотрены положительные и отрицательные стороны использования интернета, его влияние на мышление, критическое и творческое мышление, способность к концентрации и рефлексии. Особое внимание уделено роли родителей, педагогов и психологов в формировании здорового мышления подростков в условиях цифровых технологий. Результаты исследования показывают необходимость разработки практических рекомендаций по управлению цифровым поведением подростков, формированию информационной гигиены и эффективному использованию интернета.

Ключевые слова: подростковый возраст, мышление, интернет, информационные технологии, цифровая среда, психологическое влияние, информационная гигиена, критическое мышление, внимание, виртуальное общение.

So'nggi yillarda raqamli texnologiyalar, internet tarmoqlari va ijtimoiy media platformalarining jadal rivojlanishi jamiyat hayotining barcha jabhalariga chuqur ta'sir ko'rsatmoqda [1,112]. Ayniqsa, o'smir yoshdagilar orasida axborot texnologiyalaridan foydalanishning keskin ortishi ularning tafakkur, hissiy holati, ijtimoiy munosabatlari va qadriyat tizimiga sezilarli o'zgarishlar kiritmoqda. [2,85] O'smirlik davri inson psixikasining shakllanishida eng muhim bosqich bo'lib, bu davrda tafakkur, dunyoqarash, mantiqiy fikrlash va o'z-o'zini anglash jarayonlari faol rivojlanadi. Shu bois, internet va axborot texnologiyalarining o'smir tafakkuriga ta'sirini o'rganish dolzarb ilmiy va amaliy ahamiyatga ega [3,56].

O'smirlar internetdan ta'lim, muloqot, o'yin yoki ko'ngilochar maqsadlarda foydalanadilar. Raqamli vositalar ularning axborotga tez kirishish, tahlil qilish va solishtirish qobiliyatlarini rivojlantiradi. Bu jarayon tafakkurning moslashuvchanlik va tezkor fikrlash jihatlarini kuchaytiradi. Shu bilan birga, axborotning haddan tashqari ko'pligi ularning diqqatini bo'lish, chuqur fikrlashga to'sqinlik qilish kabi salbiy oqibatlarni ham keltirib chiqaradi [5,36].

O'smirlarning tafakkuri shakllanayotgan paytda ularning aqliy faoliyati ko'proq obrazli va emotsional bo'ladi. Internet orqali turli vizual, dinamik va qisqa shakldagi kontentlarni ko'p iste'mol qilish natijasida ularda tezkor, ammo yuzaki tahlil qilishga moyillik kuchayadi. Bu holat tafakkur jarayonlarining chuqurligiga, sabr-toqatga va konsentratsiyaga salbiy ta'sir ko'rsatishi mumkin.

Internet va axborot texnologiyalari o'smirlarning intellektual salohiyatini oshirishda ham muhim omil hisoblanadi. Zamonaviy o'quv platformalari (Khan Academy, Coursera, Udemy va boshqalar) orqali



o'quvchilar o'z qiziqishlariga mos bilimlarni mustaqil egallaydilar. Bu esa tafakkurning mustaqilligi, ijodkorligi va tanqidiy fikrlashini rivojlantiradi.

Shuningdek, internetdagi muloqot platformalari o'smirlarning ijtimoiy tajribasini kengaytiradi, turli madaniyat va qarashlarga ochiqqligini oshiradi. Raqamli o'yinlar va interaktiv dasturlar esa strategik fikrlash, muammoli vaziyatlarda qaror qabul qilish ko'nikmalarini mustahkamlaydi [6,121]. Bundan tashqari, o'smirlar o'z qiziqishlariga mos onlayn jamoalarga qo'shilish orqali o'zini anglash, o'z fikrini ifoda etish va shaxsiy qadriyatlarni shakllantirish imkoniyatiga ega bo'ladilar. Bu jarayonlar tafakkur rivojiga ijobiy turtki beradi.

Internetning o'smir tafakkuriga ta'siri har doim ham ijobiy bo'lavermaydi. So'nggi yillarda olib borilgan psixologik tadqiqotlar shuni ko'rsatadiki, raqamli muhitga haddan tashqari berilib ketish o'smirlarning tafakkuri, hissiyati va ijtimoiy munosabatlariga salbiy ta'sir ko'rsatmoqda [8, 3]

Axborotning haddan tashqari ko'pligi o'smir tafakkurining konsentratsiya va tanqidiy tahlil qobiliyatini pasaytiradi. Har kuni yuzlab postlar, videolar, yangiliklar bilan to'qnash kelgan o'smir ongida "axborot charchoqligi" vujudga keladi. Bu esa ularning diqqatini bir joyga jamlashni qiyinlashtiradi, chuqur tahliliy fikrlash jarayonini sekinlashtiradi.

Ijtimoiy tarmoqlarda o'zini taqqoslash hodisasi o'smirning o'ziga bahosini o'zgartirib, psixologik bosimni kuchaytiradi. "Like"lar soni, obunachilar, tashqi ko'rinishga oid izohlar o'smirda o'zini boshqalar bilan solishtirish ehtiyojini uyg'otadi. Natijada, o'ziga ishonchsizlik, o'zidan norozilik, past baholash hissi shakllanishi mumkin. Bu holatlar tafakkurning barqarorligiga, real voqealarni mantiqan tahlil qilish qobiliyatiga salbiy ta'sir ko'rsatadi.

Internetga qaramlik muammosi ham keng tarqalmoqda. O'smirlar ko'pincha vaqtni onlayn o'yinlar, ijtimoiy tarmoqlar yoki video platformalarda o'tkazadilar. Natijada, ular real hayotdagi ijtimoiy muloqot, o'qish, sport yoki ijodiy faoliyatga qiziqishni yo'qotadilar [8,780]. Internetga qaramlik tafakkurning passivlashuviga, voqelikni virtual ko'rinishda qabul qilishga olib keladi.

Shuningdek, internetdagi anonimlik va chegarasiz erkinlik hissi o'smirlarni ba'zan mas'uliyatsiz yoki beparvo fikrlashga o'rgatadi. Bu holat ularning tafakkurida tanqidiy yondashuv o'rniga impulsiv (tezkor, emotsional) fikrlashni kuchaytiradi. Axborot texnologiyalaridan noto'g'ri foydalanish natijasida o'smirlar orasida diqqat buzilishi, virtual qaramlik, informatsion stress kabi psixologik muammolar ko'paymoqda. Bu holatlar tafakkurning tahliliy, refleksiv va mantiqiy jihatlariga salbiy ta'sir ko'rsatadi.

O'smir tafakkuriga internetning ijobiy ta'sirini kuchaytirish va salbiy oqibatlarini kamaytirishda ota-ona, o'qituvchi hamda psixologlarning o'rni beqiyosdir. Ota-onalar farzandlarining raqamli faoliyatini nazorat qilish bilan birga, ularni tanqidiy fikrlashga, vaqtni to'g'ri taqsimlashga o'rgatishlari lozim. Maktab psixologlari o'smirlarning internetdan foydalanish madaniyatini shakllantiruvchi treninglar o'tkazishlari, ijobiy kontent tanlash bo'yicha tavsiyalar berishlari zarur. O'quv jarayonida raqamli texnologiyalarni to'g'ri qo'llash -masalan, onlayn testlar, vizual o'quv dasturlari, psixologik o'yinlar - tafakkur faoliyatini rivojlantirishda samarali vosita bo'la oladi.

Xulosa

Internet va axborot texnologiyalari o'smir tafakkurini shakllantiruvchi eng muhim omillardan biridir. Ular orqali o'smirlar yangi bilimlar, madaniyatlar va tajribalarga ega bo'ladilar. Shu bilan birga, raqamli muhitning haddan tashqari ta'siri tafakkurning yuzaki, tezkor, ammo emotsional shakllanishiga olib kelishi mumkin.

Shu sababli, internetdan oqilona foydalanish, raqamli gigiyena qoidalariga amal qilish, axborotni tanqidiy tahlil qilishni o'rgatish o'smir tafakkurini sog'lom shakllantirishning asosiy shartlaridandir. Ota-onalar, pedagoglar va psixologlar birgalikda bu jarayonni boshqarish orqali o'smirlarning aqliy va ruhiy salomatligini himoya qilishlari mumkin.

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PARAMETRLI KVADRAT TENGLAMALAR

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Ma'lumki oily ma'lumotli muhandis yoki iqtisodchi ishlab chiqarish bilan bog'liq turli modellarni tahlil qila olishi lozim bo'ladi. Odatda bunday modellar tenglama va tengsizliklardan tashkil topib, ularda noma'lum parametrlar ham qatnashadi. Bu noma'lum parametrlarning turli qiymatlarida o'rganilayotgan model hossalarni to'g'ri talqin qilishni bilish uchun avvalo maktab dasturi doirasida parametrlarga bog'liq tenglama va tengsizliklarni yahshi tahlil qila olish zarur deb hisoblaymiz.

Ushbu ilmiy-uslubiy risolada parametrlarga bog'liq kvadrat tenglamalarni tahlil qilish bo'yicha ba'zi mulohazalarimizni keltirdik.

Teorema-1 $ax^2 + bx + c = 0$, ($a \neq 0$) kvadrat tenglama ildizlari va koeffitsiyentlari orasida quyidagi munosabatlar o'rinlidir:

- A) $ac < 0$ bo'lganda tenglama ikkita turli ishorali ildizlarga ega;
- B) $ac < 0$ va $b = 0$ bo'lganda tenglama ildizlari qarama -qarshi sonlardan iborat;
- C) $ac > 0, D = b^2 - 4ac > 0$ bo'lganda tenglama ikkita bir hil ishorali ildizlarga ega va bu ishora "ab" ishorasiga qarama-qarshi bo'ladi;
- D) $ac > 0, D = 0$ bo'lganda tenglama bitta $x_0 = -\frac{b}{2a}$ ga teng ildizga ega;
- E) $ac > 0, D < 0$ bo'lganda tenglama ildizlari mavjud emas.

Bu teorema isboti bizga yahshi ma'lum bo'lgan kvadrat tenglama ildizlarini topishning quyidagi formulasini

$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

tahlil qilishdan kelib chiqadi.

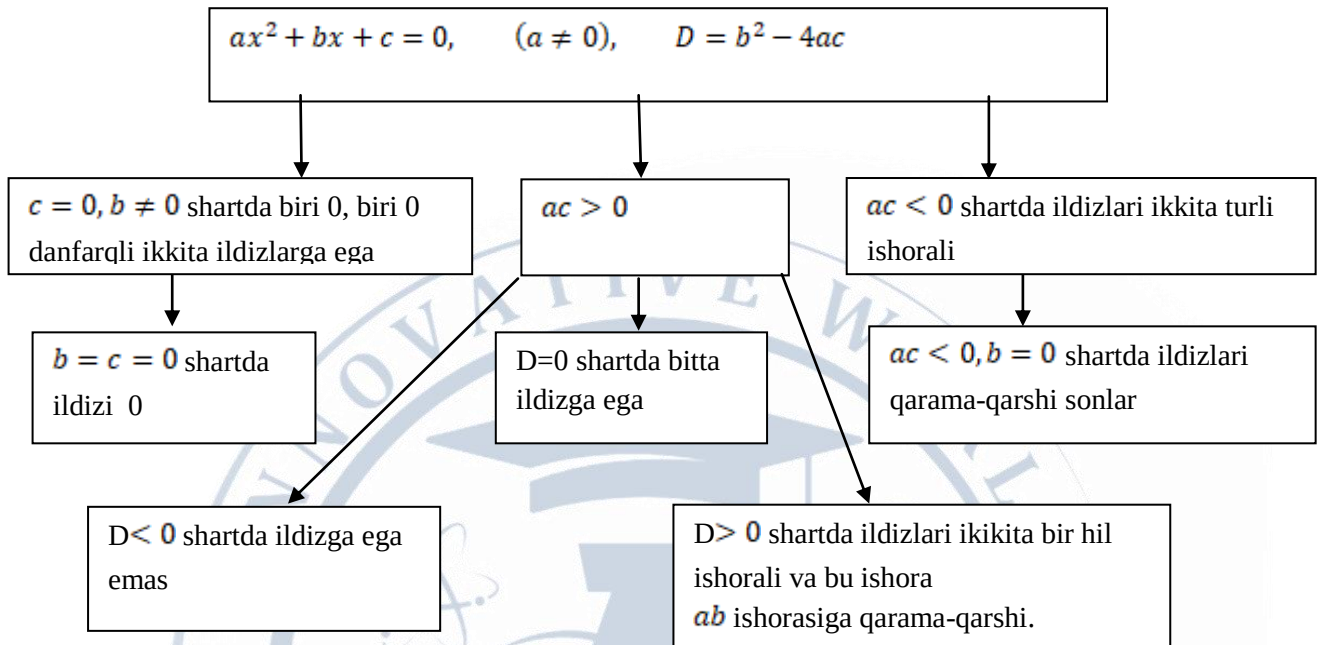
Misol-1. a parametrlarning qanday qiymatlarida $ax^2 - 2(a+1)x + a - 3 = 0$ tenglama ikkita manfiy ildizlarga ega.

Yechish: Teoremaning C) bandiga ko'ra quyidagi shartlar sistemasi bajarilishi lozim:

$$\begin{cases} 4(a+1)^2 - 4a(a-3) > 0 \\ a(a-3) > 0 \\ -a(a+1) > 0 \end{cases}$$

Bu tengsizliklar sistemasini birgalikda yechib, $a \in (-\frac{1}{5}; 0)$ javobni olamiz.

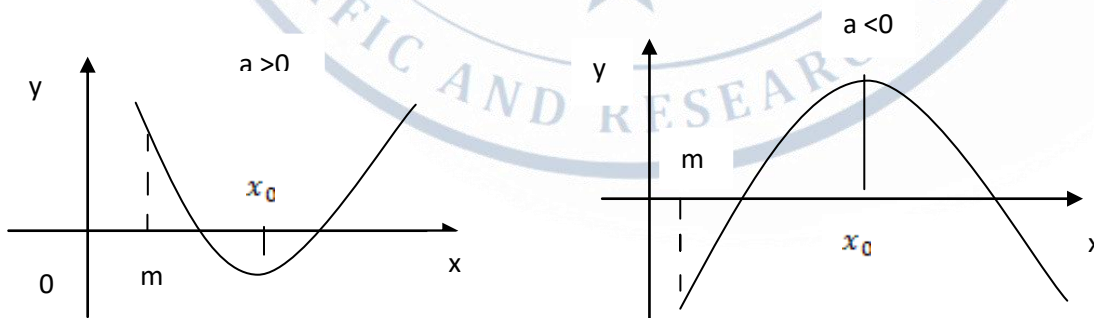
Kvadrat tenglama ildizlari va koeffitsiyentlari orasida munosabatlarni quyidagicha sxematik tasvirlash ham mumkin:



Teorema - 2. $F(x) = ax^2 + bx + c$ kvadrat uchhadning har ikkala ildizlari biror m sonidan katta bo'lishi uchun quyidagi shartlarni bajarilishi zarur va etarlidir:

$$\begin{cases} D \geq 0 \\ x_0 = -\frac{b}{2a} > m \\ a \cdot F(m) > 0 \end{cases}$$

Ushbu teorema isboti quyidagi shakllardan osonlikcha kelib chiqadi:



Natija: $F(x) = ax^2 + bx + c$ kvadrat uchhadning har ikkala ildizlari biror m sonidan kichik bo'lishi uchun quyidagi shartlarni bajarilishi zarur va etarlidir:

$$\begin{cases} D \geq 0 \\ x_0 = -\frac{b}{2a} < m \\ a \cdot F(m) > 0 \end{cases}$$

Misol-2. a parametrning qanday qiymatlarida $ax^2 - (2a+1)x + 3a - 1 = 0$ tenglamabarcha ildizlari 1 dan katta bo'ladi?

Echish:

$a = 0$ bo'lganda tenglama $x = -1$ ildizga ega. Shuning uchun $a \neq 0$ bo'lgan holni qaraymiz. Teorema shartiga ko'ra biz quyidagi sistemani echamiz:

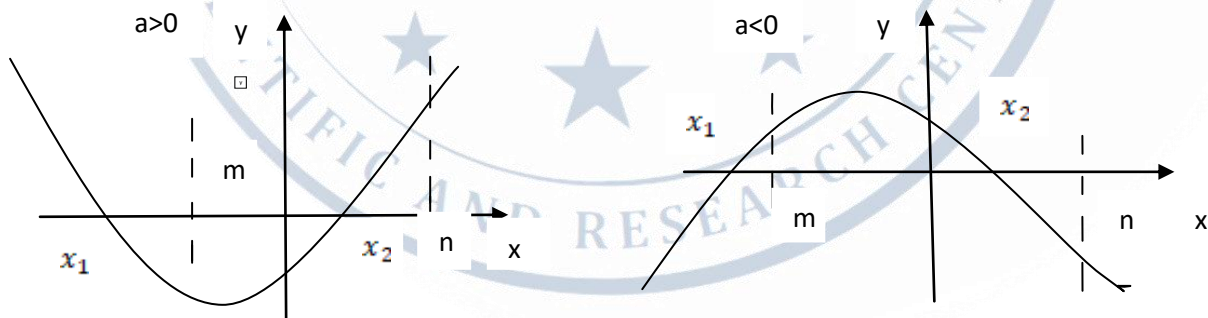
$$\begin{cases} (2a+1)^2 - 4a(3a-1) \geq 0 \\ \frac{2a+1}{2a} > 1 \\ a(a - 2a - 1 + 3a - 1) > 0 \end{cases}$$

Bu sistemani echib, $1 < a \leq \frac{2+\sqrt{6}}{4}$ javobni olamiz.

Teorema - 3. $F(x) = ax^2 + bx + c$ kvadrat uchhadning x_1, x_2 ildizlari $x_1 < m < x_2 < n$ tengsizlikni qanoatlantirishi uchun quyidagi shartlarni bajarilishi zarur va etarlidir:

$$\begin{cases} a \cdot F(m) < 0 \\ a \cdot F(n) > 0 \end{cases}$$

Ushbu teorema isboti quyidagi shakllardan osonlikcha kelib chiqadi:



Misol-3. a parametrning qanday qiymatlarida $(3a+2)x^2 + (a-1)x + 4a+3 = 0$ tenglamaning ildizlari quyidagi $x_1 < -1 < x_2 < 1$ tengsizlikni qanoatlantiradi?

Ushbu misolni yuqoridagi teorema asosida echib, $-1 < a < -2/3$ javobni olamiz.

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