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METHODOLOGY FOR INCREASING THE EFFICIENCY OF NATURAL SCIENCE TEACHING ORGANIZATION IN HIGHER EDUCATIONAL INSTITUTIONS

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This scientific work is relevant as a recommendation for increasing the effectiveness of lessons and awakening interest in learning among students. In the modern world, students increasingly want to learn from teachers who can teach the lesson more interestingly and using modern methods. The seemingly simple recommendations in this scientific work will significantly increase the effectiveness of lessons in universities with minimal expenditure of monetary resources on the part of the teacher [1,3].

There are various methods for increasing the effectiveness of lessons in educational institutions, but all methods are limited within two factors:

- 1) contingent (pupils of junior, middle and senior classes at school, as well as university students);
- 2) technical equipment of the audience (low, average or good).

This scientific work is aimed at a target audience of university students and “average” classroom equipment, since most educational institutions in Uzbekistan have this level of classroom equipment (with the exception of universities in which the subject “Biology” is one of the core subjects). The “medium” level of equipment includes the following: a board, a projector, a plotter, a marker or chalk, desks, chairs and an extension cord.

To increase the effectiveness of natural science lessons, three recommendations must be followed:

Compliance with cultural and ethical standards of teacher behavior in the classroom. It is recommended that the teacher lecture standing (except in cases that limit the physical capabilities of the teacher), speak clearly and in an audible voice for all students in the room, lecture with constant eye contact with students, avoid explaining topics to students with books and other aids in their hands. . The explanation of the topic should be accompanied by gestures and expressed facial expressions. All of the above recommendations are aimed at attracting students' attention and reducing the degree of student fatigue in the classroom.

- 2) Application of special techniques.

Rice. 1. Epson EH-TW750 projector



Fig.2. Electronic pointer



Rice. 3. Projector board



In the classroom/office, in addition to the projector and projector boards (Fig. 1, 3), it is recommended to use electronic pointers to facilitate the teacher's activities (Fig. 2). Electronic pointers allow you to remotely switch between slides and not lose eye contact with students. The use of such gadgets during lessons shows the seriousness of preparation for the lesson, as well as the modernity of the teacher.

- 3) Use of various methods of questioning during lectures.

Knowledge control is an integral component of the lesson. Most university teachers do not use questioning methods during lectures, leaving this procedure for seminar classes [2]. It is recommended to use surveys during lectures using Kahoot or similar programs. In the Kahoot program, each student can connect to a survey using their



phone and answer pre-written tests and questions, and the results are displayed immediately on the screen. This survey method is based on competition among students, which increases student interest in the lesson. The survey takes 10-15 minutes from the lesson.

In conclusion, it should be noted that all of the above recommendations are based on the high interest among students in competition and the desire to see a “modern” teacher who understands and applies modern technologies.

Thus, the methodology for increasing the efficiency of organizing the teaching of natural sciences in higher educational institutions will improve the quality of knowledge and students.

References:

1. Vdovin V. M. Information technologies in education / V. M. Vdovin, L. E. Surkova. – M.: Dashkov and Co., 2012. – 248 p.
2. Tulaganov D. D., Shakhmurova G. A. Educating an ecological worldview through computer and mobile gaming technologies //Scientific journal" Bulletin of the NUUZ. – 2021. – T. 1. – №. 4.
3. Shakhmurova G. A., Egamberdieva L. N. The Use Of Digital Gaming Technologies In Solving The Problems Of Environmental Education // International Journal of Progressive Sciences and Technologies (IJPSAT). Vol. 26 No. 1 April 2021, pp. 558-561. DOI: <http://dx.doi.org/10.52155/ijpsat.v26.1>

THE IMPORTANCE AND EFFICIENCY OF QUALITY IN HIGHER EDUCATION

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Abstract: Quality of education has a great deal of significance in higher education and in the modern higher education system. Nowadays, great attention is paid to the quality that ensures the competitiveness of the educational institution in the market of educational services by training qualified specialists who meet the requirements of international standards. These scientific and methodological materials cover a wide range of issues related to the use of innovative technologies to ensure the quality of world education and are designed to help create and implement a quality management system at the university, as well as other higher and secondary educational institutions.

Keywords: Quality of Education, trend, accreditation, monitoring, attestation.

Particular attention is paid to the issues of radical reform of the higher education system in our country, the introduction of innovative methods of work in the field, the popularization of advanced foreign experiences, the improvement of the quality of Education. During the study on the quality of Education, a critical analysis of the existing problems, qualifications of educators, issues related to the educational process is carried out. In this regard, the mistakes and shortcomings of higher education institutions are indicated and recommendations are made on the tasks that need to be carried out.

On the basis of the proposal, opinions and considerations expressed during the study, the Center for Higher Education Development Research and application of Advanced Technologies conducted a seminar-training on the topic "Improving the effectiveness of the quality of education in higher education and personal management" with the participation of the dean of faculties, head of departments and heads of departments of higher education institutions in the region. The work carried out in the system of Higher Education on this day, innovations will help to form and strengthen the professional qualifications and potential of the teacher.

The quality of education is the quality of life of society, the condition for its prosperity. Those who disagree with the idea that improving the quality of education should be better than now should not be found. Modern life requires a wider and deeper knowledge and, therefore, a better education. Economic changes in the country are forcing state universities, along with traditional activities, to engage in marketing research, to improve financial management, to carry out strategic planning of their development, to expand the scope of additional professional

education. The quality of education as a narrow concept is the result of a direct educational process, depending on the level of pedagogical personnel qualification, the organization of the educational and methodological process, the state of the material and technical base, intellectual potential.

In addition to the quality of education, the demand for graduates of the educational institution, their success, the success of employers of graduates includes assessment of Professional Skills, University and production relations, absence or presence of criticism. Analysis of the modern legal framework of Education shows that the need to ensure the quality of education is not a temporary reform of the Ministry of education and science, but a long-term public policy. Understanding the content of the concept and the conditions for ensuring quality education has undergone a long evolution. The meaning of the concept of “quality of education” in official documents has changed and expanded. Accordingly, following these trends in the regulatory framework in the Republic of Uzbekistan, the requirements for higher education institutions have also changed. If we refer to the words of our president, which are regularly heard in their appeals about the idea of the quality of education, the issues of its control and provision, we can clearly see the main stages of this process. The concept of accreditation in the field of education is inextricably linked with the concept of quality: accreditation is the formal recognition by the competent authorities of training in a particular educational program, in a particular university, etc., meets the established quality standards. [1]

Accreditation is the central means of ensuring important reform processes in European Higher Education Systems. Like assessment, accreditation serves to measure quality and monitor existing ones while implementing new degree programs. Accreditation, that is, the minimum standards of the content and specialization of the certification of the diploma program, professional compatibility of the given degree, consistency and harmony of the general concept of the scientific degree program are carried out after verification. The educational program is accredited for a certain period, taking into account the transparency of the assessment procedures. The process of professional expertise by professionals is managed by agencies, which also regularly review it through external evaluation. In the context of the growth in the volume of educational services provided by the network of educational providers, the problem of the quality of education they provide remains extremely relevant. [2,3]

Accreditation is not a relatively new phenomenon in European educational culture. The state accreditation of the higher education institution has been in force since 1992. This is a mechanism by which the state guarantees the quality of education for all citizens and carries out the determination of state status. The procedure for recognizing the state consists of three stages:

- licensing-assessment of the compliance of the conditions of educational activities with the requirements of the state for the level of classrooms, laboratory equipment, the composition of professors and teachers, educational literature;
- certification - assessment of the content, level and quality of training of graduates in compliance with the requirements of the state educational standard;
- accreditation-determination of the status of state accreditation by Types (institution of higher education) and types (Institute, Academy, University) of the University with the designation of the list of educational programs of higher professional education (confirmation for the next term). It has the right to issue documents on education of the state sample of the University. One of the main factors in the success of any organization is the quality of the results of its activities. One of the effective methods of ensuring the quality of education is the use of international quality management standards, which, along with accreditation, regulate various aspects of the organization's activities. A similar approach is used in many foreign universities. Achieving the required level of quality that meets the requirements of all interested parties is the result of the performance of a quality management system created, introduced and certified by a third party.

References:

1. Соатов А. М., Мухитдинов А. А., Абдуллаев У. Учебно производственные задачи в кружковых работах //Передовые инновационные разработки. Перспективы и опыт использования, проблемы внедрения в производство. – 2019. – С. 200-202.
2. Абдуганиев А. и др. Межпредметные связи черчения с геометриейважный фактор активизации мышления студентов //Передовые научнотехнические и социально-гуманитарные проекты в современной науке. – 2018. – С. 85-87.

3. Nunan, D. (2005). Important tasks of English education: *Asian EFL Journal*, 7(3), 5-8.
- Oxford, R. (2001). Integrated skills in the ESL/EFL classroom. *ERIC digest ERIC Clearinghouse on Languages and Linguistics*.
4. Narimanova J.Y The Role of Teachers' Cultural Awareness in Preparing to work with Multicultural Students. *The American Journal of Social Science and Education Innovations* (ISSN – 2689-100x) Published: September 18, 2020. P: 172-181.
5. Narimanova J.Y. The Significance of Comprehending Cultural Diversity Through Movies in English Lessons. *International Journal of Engineering and Information Systems (IJEAIS)* ISSN: 2643-640X Vol. 4, Issue 7, July – 2020, Pages: 53-58
6. Narimanova J.Y. Raising EFL Students' Intercultural Communication through Short Stories. *International Journal of Academic Pedagogical Research (IJAPR)* ISSN: 2643-9603 Vol. 4, Issue 7, July – 2020, Pages: 24-32.

Ёш футболчиларнинг машғулот жараёнида жисмоний тайёргарликни ошириш хусусиятлари

Махмудов А.М. ЎзДЖТСУ.

Аннотация. Ушбу мақолада ёш футболчиларни жисмоний тайёргарлигини оширишда эътиборга олинган жихатлар ёритиб берилган.

Калит сўзлар: футбол, машқ, сакраш, тайёргарлик, ҳаракат, даража.

Бугунги кунга келиб юртимиз спортчиларининг кўлга киритаётган ютуқларини алоҳида эътироф этиш мумкинки улар кўлга киритаётган натижалар юртимиз довуғини таратиб келмоқда. Бу ҳолат футболчилар миқёсида ҳам ўз исботини келаётганлиги соҳа мумоҳасисларини меҳнати самарасидир. Бунинг замирида ётган асосий омил сифатида Юртбошимизнинг футболга бераётган эътиборлари эканини мамнуният билан таъкидлаш лозим. Шу билан бирга соҳада хали ўз ечимини кутиб турган муаммолар мавжуд бўлиб, асосий масала жаҳон чемпионати ва олимпияда йўлланмаларига мутлақо эга бўлмаганимиз билан характерланади. Бу эса футболчиларимизнинг интеграл тайёргарлигини ошириш жумладан жисмоний тайёргарликка алоҳида эътибор қаратишимиз лозимлигини тақозо этмоқда.

Футболчиларни тайёрлашда жисмоний тайёргарлик ўқув машғулоти жараёнининг муҳим бўлими ҳисобланади. Жисмоний тайёргарлик организмнинг функционал имкониятларини умумий даражасини ошириш, ҳар томонлама жисмоний ривожлантириш, соғлиқни мустаҳкамлаш билан узвий боғлиқ бўлган жисмоний қобилиятларни тарбиялаш жараёнидир. Жисмоний тайёргарлик умумий ва махсус тайёргарликка бўлинади. Ўқув-машғулоти жараёнида умумий ва махсус жисмоний тайёргарлик вазифалари ўзаро узвий боғлиқдир. Футболчини умумий жисмоний тайёргарлиги жисмоний қобилиятларни ҳар томонлама тарбиялаш, умумий иш қобилиятини ошириш вазифаларини ҳал қилади. Умумривожлантирувчи машқлар ва шуғулланувчилар организмга умумий таъсир кўрсатувчи спортнинг бошқа турларидан олинган машқлар бунда асосий воситалар сифатида қўлланилади. Бунда мушак-пайларнинг ривожланиши ва мустаҳкамланишига, ички аъзо ва тизимлар функциясининг такомиллашишига, ҳаракатларни координация қилишни яхшилаш ва ҳаракат сифатлари умумий даражасини оширишга эришилади.

Умумий жисмоний тайёргарлик организмга ҳар томонлама таъсир кўрсатади, айни чоғда уларнинг ҳар бири у ёки бу сифатларни кўпроқ ривожлантиришга

қаратилган бўлади. Умумий жисмоний тайёргарликнинг мақсади, футболчи учунгина хос бўлмаган жисмоний сифатлар ва функционал имкониятларни ривожлантиришдан иборатдир,

Футболчининг тайёргарлигида бажараётган ҳаракати интенсивлигининг доимо ўзгартириб туриш билан амалга оширилади. Жадал югуриш, илгари ташланиш, сакрашлар, енгил югуриш, тўхташ билан алмашинади, ҳаракат йўналиши, мароми ва суръати ўзгариб туради. Бундай фаолият муайян жисмоний юкломани амалга ошириш билан боғлиқ бўлиб, бу вегетатив жараёнлар биринчи навбатда модда алмашинуви, нафас олиш ва қон айланишдаги жиддий функционал ўзгаришлар билан давом этади.

Ҳар бир ўйин ўйинчидан ҳар хил жисмоний сифатларнинг максимал даражада намоён этишни талаб қилади. Жисмоний сифатларнинг намоён бўлишини машғулотларда, айниқса, аниқ ўйин вазифалари ҳал этиладиган машқларда ўрганиш керак. Ўйинда максимал жисмоний сифатларни намоён этиш учун аввал машғулотларда максимал даражада кўрсатишни ўрганиш керак. Шунинг ҳам ёдда тутиш керакки, футболчи қанчалик иқтидорли бўлишидан қатъий назар, у фақат тўлиқ тайёргарлик босқичларидаги машғулотларда шуғулланиб, максимал спорт ютуқларига эришиши мумкин.

Умумий таҳлиллар асосида шунинг таъкидлаш лозимки жисмоний тайёргарликни ривожлантиришда инструментал методдан устувор фойдаланиш лозим. Жумладан юрак қисқариш сони ва қон босимини назорат қилиш орқали юқори шиддатда бажариладиган машқларни организмга таъсир этиш жараёнини мунтазам назорат қилиш керак бўлади. Буёса юкломаларни меъёрлаштиришга катта ёрдам бериб футболчиларни машғулотларини гуруҳли ёки индивидуал тарзда ташкил этиш масаласига ойдинлик киритилади.

Фойдаланилган адабиётлар.

1. Ўзбекистон Республикаси Президенти Ш.М.Мирзиёевнинг 2019 йил 4 декабрдаги “Ўзбекистонда футболни ривожлантиришни мутлақо янги босқичга олиб чиқиш чора-тадбирлари тўғрисида”ги ПФ-5887-сонли фармони. Халқ сўзи газетаси. 6-декабр 252-сон.
2. Годик М.А. Совершенствование физической подготовленности спортсменов. «Современная система спортивной подготовки». - М.: СААМ, 1995. - С. 136-165.

3. Итаналиев Т.Т. Сопряженная физическая и технико-тактическая подготовка футболистов на этапе спортивного совершенствования. – М., 1993. – 24 с.
4. Костюкевич В. Адаптация футболистов к физическим нагрузкам // Наука в спорте.- Москва, 2007.-№1.-С.59-65.

AQSh qonunchiligini qo'llagan holda O'zbekiston hududida spirtli ichimliklar savdosini cheklash

Xomidova Oyshaxonim Ulug`bek qizi

Toshkent davlat yuridik universiteti

2-bosqich talabasi

Annotatsiya: Maqolada O`zbekiston Respublikasida AQSH Konstitutsiyasi qonunchiligi hamda chet el tajribasini qo`llagan holda mamlakat hududida spirtli ichimliklar, alkogol mahsulotlar, shuningdek, mast qiluvchi ichimliklarning savdosini cheklash; spirtli ichimliklar iste`mol qilish natijasida yuz beradigan jinoyatlarni oldini olish; ushbu harakatni qonun yo`li bilan amalga oshirish; jamiyatni sog`lom turmush tarziga o`rgatish va ularni alkogolizm hamda ichkilikbozlikdan uzoqlashtirish masalalari ko`rib chiqiladi.

Kalit so`zlar: AQSH Konstitutsiyasi, O`zbekiston Respublikasi, spirtli ichimliklar, alkogolizm, xavfli oqibatlar, sog`lik, odam o`ldirish, normative-huquqiy hujjat, qonun, xalq manfaati.

Kirish

Hozirgi **globallashuv** jarayonida odamlarni ayni bir narsaga o`rgatish, ularni bir oqimga yo`naltirish juda oson ish hisoblanadi. Ajablanarlisi shundaki, bunday vaziyatda ular faqatgina oson yo`lga talpinadilar. Hozir dunyoda juda ko`p yoshlar, yoshi kattalar ham bunday oqimlarga tushib qolishmoqda. Ulardan biri — ichkilikbozlikdir. Alkogolizm — tibbiyot nuqtai nazaridan spirtli ichimliklarni mudom ichaverish oqibatida ro`y beradigan surunkali kasallik; ashaddiy ichkilikbozlik. Keng ma`noda — spirtli ichimliklarni me`yoridan ortiq ichishning kishilar sog`ligi va mehnat qobiliyatiga, ma`naviy va maishiy hayotiga, shuningdek jamiyat farovonligiga zarar yetkazadigan zararlari majmui. Alkogolizm individual va ijtimoiy hayotning hamma shakllariga ta`sir ko`rsatadi. Ichkilik ta`sirida odamlar jamiyat va davlat oldida mas`uliyat sezish hissini yo`qotib qo`yadi, bezorilik va qonunni buzishga aloqador boshqa xatti-harakatlarni qilishi mumkin. Alkogolizm ishlab chiqarishga zarar yetkazadi, mehnat intizomining buzilishi va unumdorligining pasayishi, odamlarning xastalanib qolishi va hatto bevaqt halok bo`lishiga olib keladi. *Mastlikda odamning muvozanatni yaxshi saqlay olmasligi, diqqat chalg`ib, atrofdagi vaziyatni aniq bila olmasligi baxtsiz hodisalarga sabab bo`ladi.* Buning natijasida ichkilikka ruju qo`ygan odamlar jamiyatga turli xavfli oqibatlarni olib kelishlari mumkin.

Ushbu kasallikka qarshi kurashish uchun ko`pdan ko`p tadbirlar, namoyishlar o`tkazilmoqda, sport mashg`ulotlari, hayotga yangicha nazar bilan qarash kishilar

ongiga singdirilmoqda. Biroq ushbu harakatlar ko`pincha samara berish o`rniga aks ta'sir ko'rsatmoqda. Ichkilikbozlikni man etuvchi asosiy himoya vositasi din hisoblansa-da, hozirgi globallashuv jarayonida ko`pchilik diniy qadriyatlar, madaniyatlar toptalmoqda. Odamlar ularga amal qilmay qo`ymoqdalar. Garchi hukumat demokratiya prinsipiga asoslanib ish ko`rsada, ular jamiyat farovonligi hamda tinch-totuv hayotini birinchi o`ringa qo`yishlari lozim.

Asosiy qism

Ma'lumki, **AQSh Konstitutsiyasiga** 1919-yilda "*Mast qiluvchi ichimliklarni man etish*" to`g`risida **XVIII O`zgartirish** kiritilib ratifikatsiya qilingan. Unga ko`ra, ushbu modda ratifikatsiya qilinishidan boshlab 1 yildan so`ng, aholini ichimlik bilan ta'minlash maqsadida mast qiluvchi ichimliklarni ishlab chiqarish, sotish yoki tashish, ularni import qilish yoki Qo'shma Shtatlardan eksport qilish uning yurisdiksiyasi ostidagi barcha hududlarda ta'qiqlanadi, deb yozib o`tilgan. Ayni ushbu modda kuchga kirganidan so`ng mamlakatda butunlay alkogol mahsulotlari savdosi to`xtatilgan. Tarixiy faktlarga qadaydigan bo`lsak AQShda 1920-1930-yillar oralig`ida, garchi moliyaviy jihatdan retsessiyaga uchragan bo`lsa ham, **ishlab chiqarish kuchlari shiddatli ravishda ko'tarilgan**. Mamlakat YaIMi hisob bo`yicha **bir yarim baravarga** oshgan. Mening fikrimcha aynan mast qiluvchi ichimliklar savdosi mam etilishi mamlakatning iqtisodiy jihatdan rivojlanishiga ko`mak bergan. Biroq keyinchalik bu O`zgartirish bekor qilingan.

JSST statistika ma'lumotlariga ko`ra ichkilikbozlik ortidan yiliga **3 milliondan ortiq** inson hayotdan ko`z yummoqda. JSST hukumatlar va sog`liqni saqlash tuzilmalari tashkiloti rahbari **Tedros Gebreyesus** quyidagi gaplarni aytib o`tgan:

- "*Spirtli ichimliklar yoshlarning nafaqat sog`ligi, hayoti va oilasiga, balki butun jamiyatga tahdid solmoqda, shunga qaramay, ularning savdosi va reklamasi ustidan o`rnatilgan nazorat boshqa psixotrop moddalarga nisbatan ancha zaif*".

O`zbekiston Respublikasida ham bunday holatlar juda ko`p marotaba uchramoqda. Ma'lumotlarga ko`ra, **odam o`ldirish** kabi jinoyatlarning **80 foizi** ichkilikbozlik natijasida yuz bergan. Ushbu holatlar jamiyat manfaatlariga zid kelib, ularning hayotini xavf ostida qoldiradi. Davlat bu yerda demokratiyani emas, avvalo aholi xavfsizligini, uning faravon hayotini hisobga olishi lozim.

Spirtli ichimliklar to`g`risida O`zbekiston Respublikasida bir qator normativ-huquqiy hujjatlar qabul qilingan. O`zbekiston Respublikasi "*Spirt va alkogolli mahsulotlar ishlab chiqarish va sotish ustidan davlat nazoratini kuchaytirishga doir qo'shimcha chora-tadbirlar to`g`risida*"gi Vazirlar Mahkamasining qarori asosan spirtli ichimliklarni ishlab chiqarish jarayonini tartibga soladi. O`zbekiston

Respublikasining "Reklama to'g'risida" gi Qonuniga muvofiq mamlakatimizda har qanday quvvatdagi alkogolli ichimliklar reklamasi taqiqlangan. Biroq ushbu mahsulotlar aholi o'rtasida qanday iste'mol qilinishi to'g'risida aniq bir norma mavjud emas yoki unga amal qilinmaydi. Bunday holatlarni oldini olish maqsadida davlat mamlakat hududida spirt va alkogolli mahsulotlar savdosini cheklashi yoki man qilishi lozim.

Chet el tajribasini oladigan bo'lsak, masalan, Yaman davlatida spirtli ichimliklarni sotilishiga ayrim mehmonxona, restoranlarga ruxsat beradi. Hatto turistlarga o'zlari bilan birga cheklangan miqdorda ichimlik olib kirishga va uni faqat uyda yoki mehmonxona xonasida ichishga ruxsat beriladi.

Birlashgan Arab Amirliklarida spirtli ichimliklar sotishga belgilangan qat'iy tartib bilan ruxsat beriladi, ya'ni mehmonxonalarga, restoranlarga va boshqa joylarga, agar sotuvchida bu faoliyat olib borishga ruxsat berilgan litsenziya mavjud bo'lsa. Jamoat joyida sotib olish, sotish yoki iste'mol qilish qamoq yoki darra urish kabi boshqa jazoga sabab bo'ladi. Musulmon bo'lmaganlar o'z uylarida va maxsus barlarda ichishlari mumkin.

Maldiv orollarida juda ko'p turistlar bo'lishiga qaramasdan, bu yerda spirtli ichimliklar butunlay taqiqlangan. Faqatgina dam olish maskanlari va bir necha mehmonxonalarga sotishga ruhsat berilgan. Shu bilan birga mijozlarda spirtli ichimlik ichish uchun maxsus ruxsatnoma bo'lishi kerak.

Xulosa

"Davlat — majburlov kuchiga ega!"

Tadqiqotlar shuni ko'rsatadiki, ichmaydigan inson ichkilikka ruju qo'ygan odamga qaraganda 60 foiz samaraliroq harakat qilar ekan. Agar inson spirtli ichimliklar ichishni tashlasa jismoniy jihatdan sog'lom bo'la boshlaydi. Ish jarayonida holsizlanish, bosh og'riq kabi simptomlar o'z-o'zidan yo'qolib boradi. Miyya faoliyati tiklanib, xotira yaxshilana boshlaydi. Shuningdek, saraton kasalligi xavfini maksimum ravishda yo'qqa chiqaradi.

O'zbekiston Respublikasi hukumati ham yuqorida keltirib o'tgan davlatlar tajribalaridan foydalangan holda davlat territoriyasida spirtli hamda alkogolli ichimliklar savdosini cheklash, iloji bo'lsa man etish to'g'risida qonun qabul qilishlari lozim. Bu qonun xalq manfaatiga, asosan inson sog'ligiga hech qanday zarar keltirmaydi. Aksincha, kishi madaniyatini yana bir pog'onaga ko'taradi.

Foydalanilgan adabiyotlar ro`yxati:

1. Amerika Qo`shma Shtatlari Konstitutsiyasi
2. O`zbekiston Respublikasi Konstitutsiyasi
3. O`zbekiston Respublikasi “Spirтли va alkogolli mahsulotlar ishlab chiqarish va sotish ustidan davlat nazoratini kuchaytirishga doir qo`shimcha chora-tadbirlar to`g`risida” gi Vazirlar Mahkamasining qarori.
4. O`zbekiston Respublikasining “Reklama to`g`risida”gi Qonuni.
5. O`zbekiston Respublikasi qonunchilik ma`lumotlari milliy bazasi

<https://lex.uz/uz/>

6. Wikipedia internet sahifasi

<https://uz.m.wikipedia.org/wiki/Alkogolizm>

7. Yangi O`zbekiston internet sahifasi

<https://yuz.uz/uz/news/jsst-ichkilikbozlik-har-10soniyada-bir-insonning-hayotiga-zomin-bolmoqda>

8. <https://zarnews.uz/uz/post/zamonaviy-dunyoda-taqiq-spirтли-ichimliklarni-sotish-qaysi-davlatlarda-mumkin-emas>

THE BASIC WAYS OF LEARNING TASK BASED LANGUAGE TEACHING (TBLT)

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Abstract: This article is intended to give essential information about learning and using Task-based language teaching (TBLT). Also it includes some basic ways of learning TBLT in English language. As we know, TBLT is an approach to language learning that focuses on engaging learners in meaningful tasks that require them to use the target language in authentic ways. TBLT can help learners develop their communicative competence, motivation, and autonomy, as well as their language skills.

Key words: TBLT, ways of learning TBLT, examples, experiment, reflection.

Task-based learning (TBL) is a teaching method that focuses on context and meaning. This approach is also called task-based instruction (TBI) or task-based language teaching (TBLT). In a task-based language learning class, teachers give students tasks to complete so that they can practise the language in a personalised and meaningful way. After completing the task, the teacher asks students to consider the language they used. However, the main focus of a task-based learning class is on the students actually doing the task itself. This reveals the language that is studied. Task-based language learning uses practical tasks to help students find their own useful vocabulary and language structures. Example tasks might be going [food shopping](#), [visiting the doctor](#), [dealing with issues in an airport](#), making a telephone call, being interviewed or conducting an interview, ordering a taxi, [complaining about a meal in a restaurant](#) or resolving an issue in a shop. Task-based learning allows students to uncover their own vocabulary during the task.

Actually, Task-based language teaching (TBLT) is a broadly defined approach to language teaching research and practice which uses task as a unit of analysis for research and practice in communicative language teaching. It has been situated within experiential “learning by doing” educational philosophy espoused by Dewey and others (Long, 2015; Samuda & Bygate, 2008). As such, TBLT can be seen as an extension of a so-called ‘strong’ version of CLT where communication is seen as the major driving force in language learning (Howatt, 1984). In contrast to such a holistic and experiential approach, a weak version of CLT is often supported by some kind of functional and/or formal syllabus, where communicative (production) tasks follow the presentation and practice of forms (Ellis, 2003). Ellis makes a similar distinction between task-based and task-supported language

teaching (TSLT), in that TBLT uses task as the only unit of analysis for syllabus design, while TSLT uses task plus another unit, such as linguistic forms, functions, skills, lexis or concepts. TBLT represents a development from CLT in its principled and systematic incorporation of a focus on formal properties of the language, on one hand, and a return to CLT's conceptual foundations in its ability to bring together content, methodology and experience, on the other hand (Samuda & Bygate, 2008, p. 57)

As we come to the basic ways of learning, understanding and using TBLT, there are many essential steps or tips to learn this approach completely.

1. Reading about TBLT

One of the first steps to developing your learning and understanding of TBLT is to read about its principles, benefits, and challenges. There are many books, articles, and websites that explain the theoretical and practical aspects of TBLT, such as the works of Rod Ellis, David Nunan, and Jane Willis. You can also find examples of task-based lesson plans, activities, and materials that you can adapt or use in your own classes. Reading about TBLT will help you gain a solid foundation and a critical perspective on this approach.

2. Observing TBLT in action

Another way to develop your learning, understanding and using of TBLT is to observe how other teachers implement it in their classrooms. You can do this by watching videos of task-based lessons, visiting other teachers' classes, or joining online communities of practice. You can also ask for feedback from your colleagues, students, or mentors on your own task-based lessons. Observing TBLT in action will help you see how it works in different contexts, levels, and settings, and what challenges and opportunities it presents.

3. Experiment with TBLT

A third way to develop your learning and understanding of TBLT is to experiment with it in your own teaching practice. You can start by introducing some simple tasks that relate to your students' needs, interests, and goals, and that provide opportunities for meaningful interaction and feedback. You can also try different types of tasks, such as information-gap, problem-solving, or project-based tasks, and see how they affect your students' engagement, performance, and learning outcomes. Experimenting with TBLT will help you discover what works best for you and your students, and how to adapt and improve your task design and implementation.

4. Reflecting on TBLT

A fourth way to develop your learning and understanding of TBLT is to reflect on your own experiences and beliefs about it. You can do this by keeping a journal, writing a blog, or participating in a discussion group. You can also use tools such as

surveys, questionnaires, or interviews to collect data from your students, colleagues, or managers on their perceptions and attitudes towards TBLT. Reflecting on TBLT will help you identify your strengths and weaknesses, challenges and solutions, and goals and actions related to this approach.

5. Learning from TBLT experts

A fifth way to develop your learning and understanding of TBLT is to learn from the experts who have researched, developed, and promoted this approach. You can do this by attending workshops, webinars, or courses on TBLT, or by joining professional associations or networks that focus on TBLT. You can also follow the latest trends, developments, and innovations in TBLT by reading journals, newsletters, or blogs, or by subscribing to podcasts, newsletters, or social media channels. Learning from TBLT experts will help you stay updated, inspired, and informed about this approach.

Basically, TBL is an approach to teaching that was originally used by second or foreign-language teachers. It is an approach that stems from **Communicative Language Teaching (CLT)** – a language teacher methodology – which emerged in the 1970s. Language teachers originally adopted Task-Based Learning for a variety of reasons with the most important being the desire to make their classrooms more **student-centered, communicative, and collaborative** by incorporating more interactive tasks.

In addition, Task-Based Language Teaching (TBLT) has got a principal focus that is on the completion of meaningful tasks. Such tasks can include **creating** a poster, **producing** a newsletter, video, or pamphlet, or **designing** a map of the school or neighborhood.

In conclusion, we can say that, Task-Based Learning (TBL) is all about your students' **creating, producing, or designing something** in class in which it could be anything or anything at all. TBL includes the **21st Century skills** of Communication, Collaboration, Creativity, and Critical Thinking and can also be described as a short interactive assignment that results in a finished product.

So, Task-Based Learning has many interpretations and you, the teacher, can adapt and make anything your own. Although TBL was originally developed with language teachers in mind, the core of every Task-Based Learning lesson, as the name suggests, is the task. A Task-Based approach offers an alternative for teachers who are interested in creating a more student-centered environment in their classroom. In a task-based class, the lesson is based on the completion of a central task and its presentation.

References:

1. Breen, M. 1989. The evaluation cycle for language learning tasks. In R. Johnson (ed.) *The second language curriculum* (pp. 187-206). Cambridge: Cambridge University Press.
2. Bygate, M., & Samuda, V. (2008). *Tasks in second language learning*. New York, NY: Palgrave Macmillan.
3. Ellis, R. (2003). *Task-based language learning and teaching*. Oxford, U.K: Oxford University Press.
4. Long, M. & Crookes. G. (1992). Three approaches to task-based syllabus design. *TESOL Quarterly*, 26(1), 27-55.
5. Willis D. and J. Willis (2007) *Doing Task-based Teaching*. Oxford: Oxford University Press.
6. Willis J. (1996) *A Framework for Task-based Learning*. Harlow: Longman Pearson Education.

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**ЭФФЕКТИВНОСТЬ ПРИМЕНЕНИЯ ТРАДИЦИОННЫХ МЕТОДОВ
ЛЕЧЕНИЯ ОСТРОЙ КИШЕЧНОЙ НЕПРОХОДИМОСТИ У
БОЛЬНЫХ ПОЖИЛОГО И СТАРЧЕСКОГО ВОЗРАСТА**

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Резюме: Оценка и анализ результатов традиционных методов лечения острой кишечной непроходимости у больных пожилого и старческого возраста выявила превалирование в 2,1 раза местных послеоперационных осложнений над общими. В 75,4% случаев в основе как местных, так и общих послеоперационных осложнений лежат патологические процессы, связанные с усилением процессов тромбообразования, приводящие к развитию ишемических (24,5%) и некротических (50,9%) процессов, а также послеоперационной летальности (28,3%).

Ключевые слова: пожилой и старческий возраст, кишечная непроходимость, тромбообразование.

Актуальность. Среди наиболее распространенных патологий в ургентной абдоминальной хирургии, у больных пожилого и старческого возраста, по настоящее время, лидирует острая кишечная непроходимость (1,3,5,7).

Проведенный анализ статических сведений по уровню смертности в общей структуре неотложных заболеваний, за период с 2000 по 2020 годы, показал вариационное значение по острой кишечной непроходимости среди больных пожилого и старческого возраста в пределах от 14,8% до 19,2% (2,4,6,8,9,11,13,15).

Разработка обоснованных критериев дифференцированной диагностики и раннего прогнозирования исхода заболевания можно считать одним из приоритетным направлением для проведения исследований. В этом направлении большую роль играют мультицентральные исследования, которые позволяют разработать конкретные практические рекомендации и оптимальные стандарты оказания лечебно-диагностической помощи. О важности таких исследований было неоднократно высказано и отражено в

резолуциях крупных международных конгрессах и конференциях (10,12,17,19,21).

В послеоперационном периоде в проведении контроля общего состояния больного, оценке динамики течения процесса и прогнозирования послеоперационных осложнений большую роль лабораторные и инструментальные методы исследования (1,7,12). Однако, имеющиеся литературные сведения относительно данного аспекта послеоперационного ведения больных не унифицированы и как указывают сами исследователи, результаты могут быть отличительными у больных пожилого и старческого возраста (14,16,18,20). Они характеризуются серьезными нарушениями в системе тромбообразования, развития эндотелиальной дисфункции, энтерального дистресс-синдрома (22,24,26).

Авторы приводят обоснование о роли острой странгуляционной кишечной непроходимости с нарушением кишечной микроциркуляции, образованием микротромбов, нарушении свертываемости крови, гипоксии, ишемии тканей вплоть до некроза органа, тем самым исследователи сделали предположение, что основные патологические изменения могут приводить к изменениям уровней показателей свертываемости крови (21,23,25).

Острые хирургические заболевания у больных пожилого и старческого возраста, имеют ряд особенностей в этиологии, в патогенезе и в клиническом проявлении которые напрямую определяют исход применяемых методов лечения. Именно освещение этих аспектов является актуальной и востребованной в медицинской практике.

Цель исследования: изучение результатов традиционных методов комплексного лечения острой кишечной непроходимости у больных пожилого и старческого возраста.

Материал и методы исследования: Проанализированы результаты 53 пациентов с кишечной непроходимостью, в пожилом и в старческом возрасте, которые находились на лечении и обследовании в клинике Сырдарьинского областного филиала Республиканского научно-практического медицинского центра экстренной медицинской помощи Республики Узбекистан с 2016 по 2019 годы. Распределение больных по полу из общего их количества выявило незначительное преобладание больных мужского пола (на 1,8%).

Результаты и их обсуждение. Клинические проявления острой кишечной непроходимости у больных пожилого и старческого возраста имели своеобразную картину, которая имела как сходства, так и свои отличительные стороны.

В целях сопоставления проявлений клинических признаков острой кишечной непроходимости у больных пожилого и старческого возраста нами проведен

однотипный анализ хронологии развития фаз данного заболевания согласно клиническим рекомендациям Российского общества хирургов.

Согласно данным клинической рекомендации различают 3 фазы клинического проявления острой кишечной непроходимости: первая фаза «илеусного крика», которая протекает на протяжении от 2 до 12 часов от начала заболевания, вторая фаза «интоксикации» 12-36 часов и третья фаза «перитонита» - более 36 часов.

Как показали наши исследования, средний уровень хронологии клинических проявлений острой кишечной непроходимости в целом соответствует данным клинических рекомендаций. Однако при анализе показателей доверительного интервала нами обнаружены выраженные расхождения, что принято нам за особенности клинического течения у больных пожилого и старческого возраста.

Особенностями развития и клинических проявлений острой кишечной непроходимости у больных пожилого и старческого возраста являются превалирование обтурационного вида поражения преимущественно опухолевого генеза, стертой патогномичных симптомов с пролонгированием первой фазы заболевания (на $8,28 \pm 1,3$ часа) и более ранним наступлением клинических признаков, характерных для второй (на $19,57 \pm 3,9$ часа) и третьей (на $8,2 \pm 2,3$ часа) фазы патологического процесса. Тяжесть проявления клинических признаков острой кишечной непроходимости обусловлена выраженным морбидным фоном, включающий в себя в среднем по 5,3 ед. и 5,6 ед. нозологических наименований у больных пожилого и старческого возраста соответственно.

Исследование клинических параметров в первую очередь включала в себя показатели гемодинамики по интегральной шкале «M-SAPS».

Динамика послеоперационного периода у больных с острой кишечной непроходимостью в пожилом и в старческом возрасте характеризовалась стойкой тахикардией на всем протяжении исследования. Максимальный и минимальный уровни доверительного интервала не превышал 1 балла по системе интегральной шкалы M-SAPS. В то же время, максимально пиковое значение тахипноэ приходилось только на 1-сутки после операции.

Дооперационный период у больных с острой кишечной непроходимостью в пожилом и в старческом возрасте характеризовался гипкалиемией, которая на уровне минимального значения доверительного значения достигала 4 балла по системе интегральной шкалы M-SAPS [CI: 1,37; 3,03]. Протромбиновое время в целом имело склонность к ускорению достигая в среднем на 6-7 сутки послеоперационного периода референс значений ([CI: 9,42; 12,61] и [CI: 9,72; 13,24] соответственно). При этом минимальные значения доверительного

интервала свидетельствовали о сохранении все еще склонности к тромбообразованию (таблица 8).

На уровне референс значений находилась средняя скорость тромбинового времени ($15,70 \pm 1,94$ сек), хотя минимальное значение доверительного интервала начиная со 2-суток послеоперационного значения имела склонность к укорочению, что могло приводить к нарушению в микроциркуляторной системе.

Уровень среднего значения фибриногена в целом за весь период проведенного исследования находился на уровне референс показателя за исключением 2-суток послеоперационного периода ($p < 0,05$). Между тем максимальный диапазон доверительного интервала в дооперационном периоде и на 1-5 сутки послеоперационного периода имела склонность к формированию тромбоза.

Среднее высокое значение показателя Д-димер за весь период проведенного исследования, составившее $1,87 \pm 0,37$ мкг/мл свидетельствовало о повышенном его уровне. Уровень С-реактивного белка был высоким на всем протяжении динамики послеоперационного периода. В среднем у больных пожилого и старческого возраста его значение приравнивалось $18,41 \pm 1,69$ мг/л [CI: 16,72; 20,1]. Максимальное его значение приходилось на дооперационный период [CI: 20,83; 29,94], однако минимальное значение доверительного интервала был выше у больных на 1-сутки послеоперационного периода [CI: 22,56; 24,87]. Хотя в динамике проведенного исследования уровень С-реактивного белка в крови постепенно уменьшался, тем не менее он оставался выше референс значений, что свидетельствовало о сохранении воспалительных явлений даже на 7-сутки послеоперационного периода [CI: 8,98; 10,93].

Таким образом, анализ изменения показателей свертываемости крови по всем основным параметрам свидетельствовал о склонности к тромбообразованию как в предоперационном, так и в послеоперационном периодах. При этом процесс изменения этих параметров был не однозначным и должен учитываться при оценке динамики течения послеоперационного периода. Вместе с этим, мы считаем, что не маловажное значение в данном аспекте должно было так же отводиться внимание уровню изменения интраабдоминального и интраэнтерального давления, так как они косвенно свидетельствуют о развитии ишемии в стенке кишечника.

Сопоставительный анализ изменения динамики интраабдоминального и интраэнтерального давления выявил расхождение характера значений в ближайшие и совпадение в ранние сроки послеоперационного периода.

В целом, особенностями изменений показателей клинико-лабораторных и инструментальных методов исследования в динамике проведенного лечения

острой кишечной непроходимости у больных пожилого и старческого возраста являются достоверные различия лабораторных показателей по интегральной шкале M-SAPS: ЛИИ ($p < 0,025$), гематокрита ($p < 0,031$), и калия плазмы ($p < 0,016$), динамика которых имеет общую картину с изменением уровня интраабдоминального ($p < 0,022$) и интраэнтерального ($p < 0,036$) давления. На этом фоне имеет место повышения в крови Д-Димера (в 5,2 раза) и С-реактивного белка (в 25,4 раза), а также укорочения протромбинового времени (в 1,9 раза) и активированного частичного тромбопластинового времени (в 1,5 раза), что свидетельствует о высокой вероятности развития тромбообразования, ишемии кишечника и энтерального дистресс-синдрома. Все больные были оперированы в экстренном (ущемленные грыжи, заворот кишечника, странгуляционная кишечная непроходимость) или в срочном порядке (обтурационная кишечная непроходимость) после неэффективности проводимых консервативных мероприятий, направленных на разрешение острой кишечной непроходимости.

Все предоперационные консервативные методы лечения у больных контрольной группы проводились согласно утвержденным стандартам министерства здравоохранения Республики Узбекистан. Они основывались на стадии острой кишечной непроходимости и уровню интраабдоминальной гипертензии.

В большинстве случаев местные послеоперационные осложнения были представлены нагноением послеоперационной раны (17,0%), краевым некрозом и несостоятельности швов послеоперационной раны (15,1%), эвентрацией внутренних органов (15,1%), развитием ранней спаечной кишечной непроходимостью (13,2%) и сформированными абсцессами брюшной полости (13,2%).

В меньшей степени развивались перфорации десерозированных участков кишечника (9,4%), некрозом колостомы (7,5%), несостоятельностью швов кишечного анастомоза (5,7%) и некрозом илеостомы (3,8%).

Общие послеоперационные осложнения у больных развивались в меньшей степени (47,1%). Они были представлены различными послеоперационными пневмониями (13,2%), острым инфарктом миокарда (11,3%), развитием тяжелого сепсиса (7,5%), тромбоэмболией легочной артерии (7,5%), острыми нарушениями мозгового кровообращения (5,7%) и печеночно-почечной недостаточности (1,9%).

Следует отметить, что ряд послеоперационных общих и местных осложнений у больных контрольной группы комбинировались, что повышала тяжесть состояния больного.

В целом, уже на 1-3 сутки послеоперационного периода умерло 1/3 всех больных. А на протяжении 1-4 суток можно выделить наиболее опасный срок для возможного летального исхода (до 60%) в послеоперационном периоде у больных пожилого и старческого возраста. Именно в данный промежуток времени в причинах летальности мы можем проследить развитие тяжелых общих осложнений, в основе которых лежат ишемические и некротические процессы в результате повышенного тромбообразования.

Таким образом, оценка и анализ результатов традиционных методов лечения острой кишечной непроходимости у больных пожилого и старческого возраста выявила превалирование в 2,1 раза местных послеоперационных осложнений над общими. В 75,4% случаев в основе как местных, так и общих послеоперационных осложнений лежат патологические процессы, связанные с усилением процессов тромбообразования, приводящие к развитию ишемических (24,5%) и некротических (50,9%) процессов, а также послеоперационной летальности (28,3%).

Выводы:

1. Стартовую позицию в развитии неудовлетворительных результатов лечения больных с острой кишечной непроходимостью в пожилом и в старческом возрасте, следует определять в пользу функциональных, а в последующем и структурных нарушений самого кишечника. Именно развивающаяся интраабдоминальная и интраэнтеральная гипертензия приводит к комбинированному сдавлению стенки кишечника и нарушает микроциркуляцию в данном органе.
3. Выявлены грубые нарушения в коагуляционной системе в виде повышенной склонности к тромбообразованию, что является стартовой позицией в развитии энтерального дистресс-синдрома при острой кишечной непроходимости..
4. Более углубленное исследование в системе показателей микроциркуляторных нарушений, в частности показателей эндотелиальной дисфункции в стенке кишечника и в организме в целом в разрезе исхода заболевания позволит определить основные возможности для прогнозирования и профилактики послеоперационных осложнений острой кишечной непроходимости у больных пожилого и старческого возраста.

Литература

1. Землянский И.Л. К вопросу профилактики, диагностики и лечения спаечной болезни брюшной полости // Здоровье населения и качество жизни : электронный сборник материалов VIII Всероссийской с международным участием заочной научно-практической конференции, Санкт-Петербург, 30 марта 2021 года. Том Часть 1. – Санкт-Петербург: Северо-Западный государственный медицинский университет имени И.И. Мечникова, 2021. – С. 203-210.
2. Зенков Н.К., Меньщикова Е.Б., Реутов В.П. NO-синтазы в норме и при патологии различного генеза // Вестник РАМН. 2020. - №4. - С. 30-34.
3. Какубава М.Р. Роль внутрибрюшной гипертензии в развитии осложнений при кишечной непроходимости у геронтологических больных: дисс. канд. мед. наук. М., 2012. 116 с.
4. Косинец В.А. Коррекция биоэнергетических процессов в тонкой кишке при экспериментальном распространенном гнойном перитоните. Экспериментальная и клиническая фармакология. 2022;75(8):39-43.
5. Курбонов К.М., Назирбоев К.Р., Даминова Н.М. Интубация тонкой кишки как компонент лечения острой странгуляционной тонкокишечной непроходимости // Вестник Авиценны. – 2018. – Т. 20, № 4. – С. 436-441.
6. Лабезник Л. Б. Практическая гериатрия (избранные клинические и организационные аспекты). М., 2022. С. 14-22.
7. Лазебник Л. Б., Дроздов В. Н. Заболевания органов пищеварения у пожилых. М.:Анахарсис, 2023. С. 3-18.
8. Лапароскопический метод в хирургическом лечении спаечной тонкокишечной непроходимости / С.Ж. Антонян, П.А. Ярцев, А.Г. Лебедев, и др. // Доказательная гастроэнтерология. – 2019. – Т. 8, № 2. – С. 5-11.
9. Khamdamov I.B., Khamdamov A.B. Fertil yoshdagi ayollarda endovideo surgeon hernioplasty // Tibbiyotda yangi kun. Bukhoro, 2021.-№6 (38/1) -S. 25-

10. Khamdamov I.B. Improving tactical approaches in the treatment of hernias of the anterior abdominal wall in women of fertile age // Tibbiyotda Yangi kun. Bukhoro, 2022.-№10(48)- pp. 338-342.

10. Острая кишечная непроходимость / Под редакцией академика Российской академии наук И.И. Затевахина // Клинические рекомендации общероссийской общественной организации «Российское общество хирургов» – 2021.- 52 стр.

11. Стойко Ю. М., Зубрицкий В. Ф., Забелин М. В. Профилактика и лечение абдоминального компартмент-синдрома у больных с острой кишечной непроходимостью // Вестник Национального медикохирургического Центра им. Н.И. Пирогова. 2020. Т. 5. №4. С.73-77.

12. Хамдамова М.Т., Жалолдинова М.М., Хамдамов И.Б. Состояние оксида азота в сыворотке крови у больных кожным лейшманиозом // Тиббиётда янги кун. - Бухоро, 2023. - № 5 (55). - С. 638-643.

13. Хамдамова М.Т., Жалолдинова М.М., Хамдамов И.Б. Значение церулоплазмينا и меди в сыворотки крови у женщин носящих медьсодержащих внутриматочной спирали // Тиббиётда янги кун. - Бухоро, 2023. - № 6 (56). - С. 2-7.

14. Хамдамов Б.З. Comparative evaluation of methods of amputation related to tidiotarus with severe forms of diadetic foot syndrome. European Science Review. Austria, Vienna 2014 Septemba-October №9-10. - С. 58-60.

15. Хамдамов Б.З. Диабетик товон синдромида бажариладиган юкори ампутациялардан сунг беморларнинг хаёт кечириш сифатидаги узгаришлар тахлили. Самарканд. Биология ва тиббиёт муаммолари. №1, 2019., (107) - С. 115-117.

16. Хамдамов Б.З. Комплексное лечение синдрома диабетической стопы с критической ишемией нижних конечностей. Журнал биомедицины и практики. Ташкент 2020, Специальный выпуск. 5 часть. – С. 801-814.

17. Хамдамов Б.З. Метод лазерной фотодинамической терапии в лечении раневой инфекции при синдроме диабетической стопы. Биология ва тиббиёт муаммолари №1 (116) 2020. – С. 142-148
18. Хамдамов Б.З. Морфологические изменения при применении фотодинамической терапии в лечении раневой инфекции в эксперименте. Журнал Морфология. Санкт-Петербург. 2020. Том 157 (2-3). –С. 223-224.
19. Хамдамов Б.З. Оптимизация методов местного лечения гнойно-некротических поражений стопы при сахарном диабете. Журнал. Тиббиётда янги кун. 2018, №4 (24) - С. 112-115.
20. Khamdamov B. Z., Akhmedov R. M., Khamdamov A. B. The use of laser photodynamic therapy in the prevention of purulent-necrotic complications after high amputations of the lower limbs at the level of the lower leg in patients with diabetes mellitus. Scopus Preview. International journal of Pharmaceutical Research. Volume 11, Issue 3, July-Sept, 2019
21. Khamdamov B. Z., Nuraliev N.A. Pathogenetic approach in complex treatment of diabetic foot syndrome with critical lower limb ischemia. American Journal of Medicine and Medical Sciences, 2020 10 (1) 17-24 DOI: 10.5923/j.20201001.05.
22. Khamdamov B.Z. Indicators of immunocytocine status in purulent-necrotic lesions of the lover extremities in patients with diabetes mellitus. American Journal of Medicine and Medical Sciences, 2020 10 (7): 473-478 DOI: 10.5923/j.20201001.08
23. Khamdamov, B., & Dekhkonov, A. (2022). Clinical and laboratory parameters of the wound process complicated by the systemic inflammatory response syndrome in patients with diabetes mellitus. Journal of education and scientific medicine, 2(3), 25-29. Retrieved from <https://journals.tma.uz/index.php/jesm/article/view/349>

24. Khamroev, U., & Khamdamov, B. (2022). Features of changes in endothelial system parameters in patients with diffuse toxic goiter. Journal of education and scientific medicine, 2(3), 62-67. Retrieved from <https://journals.tma.uz/index.php/jesm/article/view/358>

WAYS OF ADDRESSING AND IDIOMS

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Abstract: This paper explores the various ways of addressing individuals in different cultures and languages, focusing on the use of idioms as a form of address. It examines the role of idioms in communication, their cultural significance, and the challenges they present to language learners. The study also investigates strategies for teaching idiomatic expressions and their integration into language teaching programs. Through a comparative analysis of idiomatic expressions in several languages, the paper highlights the diversity and complexity of addressing conventions and their impact on intercultural communication.

Keywords: Ways of Addressing, Idioms, Intercultural Communication, Language Teaching, Cultural Significance

Introduction Addressing individuals is an integral part of communication, reflecting cultural norms, social hierarchies, and personal relationships. Idioms, on the other hand, are expressions that convey a figurative meaning different from the literal interpretation of the words used. The use of idiomatic expressions in addressing individuals adds depth and nuance to language, but it also poses challenges for language learners and users, especially in intercultural communication contexts. This paper aims to explore the ways of addressing individuals and the use of idiomatic expressions in different languages and cultures. It will examine the cultural significance of idioms and their role in communication, as well as the challenges they present to language learners. The study will also discuss strategies for teaching idiomatic expressions and their integration into language teaching programs. Ways of addressing and idioms are essential aspects of language that reflect the social, cultural, and historical contexts in which they are used. Ways of addressing refer to the linguistic forms used to refer to or address others, such as pronouns (e.g., "you," "he," "she") and honorifics (e.g., "Mr.," "Mrs.," "Sir," "Madam"). Idioms, on the other hand, are expressions whose meanings cannot be inferred from the meanings of the individual words, such as "kick the bucket" (meaning to die) or "hit the nail on the head" (meaning to describe something accurately).

Addressing Strategies:

Addressing strategies vary across cultures and social contexts, reflecting the intricacies of social hierarchy, politeness norms, and familiarity between speakers. In some cultures, formal titles and honorifics are employed to show respect and deference, while in others, first-name basis is preferred to signify egalitarianism. The choice of addressing can convey power dynamics, social distance, and intimacy. For instance, using honorifics such as "Mr." or "Mrs." in English-speaking cultures implies a level of formality and respect, whereas using first names suggests familiarity and informality.

Sociolinguistic Perspectives on Ways of Addressing

The choice of address forms in a language is influenced by various sociolinguistic factors, including social status, age, gender, and the relationship between the speaker and the addressee. For example, in many languages, there are different pronouns or honorifics used to address someone of higher social status, such as a boss or an elder, compared to someone of equal or lower status.

Cultural Influences on Ways of Addressing

Culture plays a significant role in shaping ways of addressing. In some cultures, there are strict rules about how to address others based on age, gender, and social status. For example, in Japanese culture, the choice of honorifics when addressing someone reflects the level of respect and politeness the speaker intends to convey.

Globalization and Ways of Addressing

Globalization has led to increased cultural exchange and the spread of languages around the world. This has influenced the ways of addressing in many languages, as people come into contact with new ways of speaking and interacting. For example, English has become a global lingua franca, leading to the adoption of English pronouns and honorifics in many non-English-speaking cultures.

Idioms and Cultural Expression

Idioms are an important part of cultural expression, reflecting the values, beliefs, and experiences of a particular culture. Idioms often derive from cultural practices, historical events, or natural phenomena. For example, the English idiom "raining cats and dogs" is thought to have originated from the idea of heavy rain washing stray animals into the streets.

Digital Communication and Idioms

The rise of digital communication has also influenced the usage of idioms. Idioms are often used in online communication, such as social media and messaging apps, to add humor, convey emotions, or express ideas concisely. However, the use of idioms in digital communication can also lead to misunderstandings, especially among speakers of different languages and cultures.

Conclusion

Ways of addressing and idioms are integral parts of language that reflect the complex interplay of social, cultural, and linguistic factors. Understanding the sociolinguistic aspects of ways of addressing and idioms is crucial for effective communication and intercultural understanding in a globalized world.

LIST OF REFERENCES:

1. Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage* (Vol. 4). Cambridge university press.
2. Crystal, D. (2008). *A dictionary of linguistics and phonetics*. John Wiley & Sons.
3. Gibbs Jr, R. W. (1989). Understanding and literal meaning. *Cognitive science*, 13(2), 243-251.
4. Koestler, A. (2013). *The act of creation*. Pickle Partners Publishing.
5. Kramsch, C. (2009). *The multilingual subject*. Oxford University Press.
6. Lakoff, G., & Johnson, M. (2008). *Metaphors we live by*. University of Chicago press.
7. Mieder, W. (2004). *Proverbs: A handbook*. Greenwood Publishing Group.
8. Nunberg, G. (1979). The non-uniqueness of semantic solutions: Polysemy. *Linguistics and Philosophy*, 3(2), 143-184.
9. Searle, J. R. (1976). A classification of illocutionary acts. *Language in society*, 5(1), 1-23.
10. Talmy, L. (2000). *Toward a cognitive semantics* (Vol. 1). MIT press.

APPROACHES TO INCLUSION OF MODERN AND INNOVATIVE TECHNOLOGIES IN THE PROGRAM OF BOTANY SCIENCE

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Abstract. This paper involves the increase in students' learning motivation because of using technology-based media in a botany class. The differences between the academic results of the students who used computer technology in botany and the students who studied according to the traditional teaching method are analyzed.

Key words: digital age, technology, simulation, web 2.0 tools, 3-D printers, virtual laboratories, reality, virtual reality, digital hologram.

Introduction. In this era, which we call the digital age, technology is considered an integral part of our lives. In addition, many national and international reports expect the next generation of students to be IT literate during their education and employable in their future life, which is an important quality for them (Hills et al., 2019). Accordingly, it is important to know and use technology [1].

Technology is also seen as a tool that can be used in various fields and plays an important role in easing the work of individuals (Saettler, 1968). The integration of technology into education, which can be used in almost every field, is also on the agenda, and in this regard, efforts are being made in the education policy of countries [2].

Modern and innovative technologies should be included in the curriculum, and students should be offered the opportunity to interact closely with technology. The introduction of innovative and effective approaches to the education and training processes of the new generation, which is born and growing up in the digital age, is of great importance in increasing the effectiveness of education. In this sense, technology is used as a teaching tool and can play a supporting role in teaching, especially in areas such as science where technology is readily adaptable (Commission on Educational Technology, 1970).

Discussion. Science education has used various technologies from past to present, including computer, projection, simulation, web 2.0 tools, 3-D printers, virtual laboratories, reality, virtual reality and digital hologram. These technologies are included in educational programs as teaching tools in order to increase the effectiveness of education. In particular, reality, virtual reality and digital hologram technologies, which are often mentioned recently and used in various fields, are considered important from the point of view of the relevance of education and are the main component of this.

In 2008, the International Society for Educational Technology (ISTE) published a set of visionary standards for supporting student learning and creative thinking, designing digital youth activities and assessments, and modeling, modeling, and modeling digital studies (Trust, 2018). The ISTE Standards for Teachers are standards that describe teachers' competencies in using technology. These standards include subcategories such as learner, leader, citizen, partner, designer, facilitator, and analyst. The aforementioned standards encourage peer collaboration, deepen practice, and guide student learning by rethinking traditional approaches (ISTE, 2020). In addition, these standards cover areas of competency such as designing learning environments for the digital age and being role models for working and learning in the digital age.

The teaching quality framework (TQF - The Teaching Quality Framework) has identified eight key competence areas: “communicating in the mother tongue, communicating in foreign languages, mathematical competence and key competences in science/technology, digital competence, inquiry learning, social and civic competences, sense of initiative and entrepreneurship, cultural awareness and self-expression” (MOV, 2018).

Thus, teaching includes seven key components of science education: conceptualization in terms of goals, content, and alignment; preparation for teaching; teaching methods and practices; presentation and student interaction;

student outcomes; mentoring and advising; reflection, development and training service / scholarship [3].

In particular, key competencies in mathematical competence, science/technology and digital competence cover the use of information and communication technologies in everyday life. On the other hand, 21st century skills are considered in three categories and include learning and innovation skills, life and career awareness, and media and technology skills. Information, media and technology skills also feature in 21st century skills (Partnership for 21st Century Skills, 2013). The skills of effective use of information and communication technologies are noted as one of the main skills of the 21st century.

Science education is one of the areas that can easily adapt to technology, and science education often has reflections of technology. Recently, in our country, special attention has been paid to digitization and technological competencies in the science curriculum, and the infrastructure of using innovative technologies in the classrooms has been observed and paid attention to.

A study that examined the updated current science curriculum in Turkey from the perspective of innovative technology revealed that the following units are suitable for using innovative technology applications. So: Grade 5 - Sun, Earth and Moon, Life, Humans and Environmental World; Grade 6 - Solar system and eclipses, matter and heat, systems in our body and our health; Class 7 - Solar system and beyond, cells and divisions; and 8th grade - DNA and genetic code, pressure.

Azuma (1997) highlights three characteristics of augmented reality; combines reality and virtuality to allow simultaneous interaction and includes 3-D objects.

A digital hologram is defined as a tool that can transfer 3D images of selected objects to different locations and provides continuity of images even in the absence of these objects (Katsioloudis & Jones, 2018). Thus, thanks to holograms, it is possible to access 3-D images of objects that do not exist in the environment and need to be examined. Holograms, which are used in fields such as architecture, tourism and

entertainment, medicine, and industry, have recently started to be used in the field of education as well (Rahim, Abdullasim, Saifudin & Omar, 2018; Turk, 2020).

It is especially used in science education to teach difficult-to-understand topics and concepts, and is also preferred as a teaching tool for materializing abstract concepts and topics. Digital holograms can be made as videos in programs such as Powerpoint or Camtasia, and images can be created using hologram pyramids. In science education, holograms are preferred for subjects that require microscopic observation, such as cells, genes, and chromosomes.

Orcos and Magrenan (2018) used hologram technology to teach cells and divisions in science education and concluded that digital holograms should be used as a teaching tool to increase student motivation and increase student satisfaction with holograms (Figure 1) [4].



Fig.1. A digital hologram of a young plant growing out of an open book

In recent years, lifelong learners will be needed. These individuals are expected to learn how to learn under any circumstances and to take responsibility for their own learning. In addition, technological competence, which is one of the requirements of our time, can be acquired through educational programs adopted by countries with

the necessary technological equipment. Thus, in the future, individuals who have no problems with technology, who have the ability to use technology, and who know technology well will be educated.

It is also seen as an indicator of the level of development of countries. Developed countries produce well-equipped individuals, tech-savvy individuals have easy access to job opportunities, and technologically skilled individuals are employed in almost every industry due to the active use of technology that supports this idea.

Conclusion. The use of technology-based media in a botany class affects students' learning motivation. There was a difference in student achievement between students who was exposed to computer technology in botany and students who were exposed to traditional teaching methods. The use of multimedia to enhance the understanding of abstract concepts can be supported by the use of both formal academic language and the informal discourse of teachers and students. Therefore, it is recommended that the integration of computer technology into the teaching of Botany will increase the academic performance of students.

References

1. Hills et.al. Digital technology and outdoor experiential learning. April 2019, Journal of Adventure Education & Outdoor Learning 20(2):1-15. DOI:[10.1080/14729679.2019.1604244](https://doi.org/10.1080/14729679.2019.1604244)
2. Saettler, Paul (1968). *History of Instructional Technology*. New York: McGraw-Hill.
3. (<https://www.colorado.edu/teaching-quality-framework/about-t>).
4. https://ru.freepik.com/premium-photo/a-digital-hologram-in-the-form-of-a-young-plant-grows-out-of-an-open-book_52255607.htm

ASPECTS OF USE OF INTERACTIVE EDUCATIONAL TECHNOLOGIES IN TEACHING SUBJECTS OF THE CLASS OF MAMMALS

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Abstract. Aspects of the use of interactive educational technologies that allow to increase educational efficiency in the course of teaching the topics of the zoology class of mammals of future biology teachers studying in higher educational institutions are highlighted.

Key words: interactive educational technologies, vertebrate zoology, systematics, mammals, insectivores, invertebrates.

To improve the professional competence of future teachers along with pedagogues engaged in pedagogical activities in world scientific and research institutions, to systematically organize their pedagogical activities based on innovative approaches, to prioritize the process of effective implementation of interactive educational technologies for the development of professional skills is viewed from the point of view. In particular, for the purpose of forming and developing the innovative activities of future teachers, the ability to think creatively, to continuously work independently on oneself, the conditions for independent education, to objectively analyze one's own achievements and shortcomings Extensive practical research is being organized to develop skills. In countries such as Great Britain, China, Russia, the USA, Germany, Korea, the innovative activity of students has been established as a mandatory component of pedagogical activity in order to constantly develop the innovative activity of students.

In recent years, in the education system of our country, many scientific and research works have been carried out to improve the professional and methodological training of future teachers based on foreign experiences. In particular, the possibilities of improving the methodology of teaching biology based on advanced foreign scientific researches, applying innovative educational technologies in the field of biological science, and effectively using information and communication technological educational resources in the educational process, A. Gofurov , J. Tolipova, I. Azimov, U. Rakhmatov, S. Fayzullaev, M. Koychiyeva and other specialists' research can be cited as an example. Also, J. Azimov, O. Mavlonov, S. Dadayev, K. Saparov, M. Jumanov, Ya. Ametov were effective in improving the scientific and theoretical foundations of teaching zoology.

In the course of studying zoology, to activate the cognitive activity of students, to properly organize cognitive independence, to determine to what extent the acquired knowledge, skills and qualifications have been developed based on the subject content of the credit-module system, and to systematize them. , monitoring and evaluation of acquired knowledge, skills and abilities on a new topic, as well as effective use of interactive educational technologies in the process of learning a new topic, is one of the urgent issues of today.

In order for the future biology teacher to effectively use the interactive educational technologies used during his future pedagogical activities in the process of organizing zoology lessons, in addition to fully mastering the content of zoology, interactive educational technologies and their characteristics, should have formed and developed methodological aspects of using this educational technology.

Interactive educational technologies used in the educational process are of great importance in the situations of modeling of life processes, use of didactic game exercises, solving existing problems based on the establishment of mutual cooperation. Teaching based on the principles of interactivity, in addition to forming a high level of activity, creativity, and independence from students in the process of mastering the learned knowledge, makes it possible to fully achieve educational goals in the process of teaching.

In the process of teaching zoology, like all subjects, interactive educational technologies and active methods that serve to actively organize the educational and cognitive activities of students and increase the effectiveness of education include the following "SWOT-analysis", "Concept analysis", "Assessment ", "Siquain", "Case-study", "6x6x6", "Brainstorming", "Venn diagram", "Problem situation", "How-hierarchical diagram" can be included. Future biology teachers should be able to distinguish the types of interactive educational technologies and active methods used during the organization of all forms of teaching, based on the content of the subject being mastered, which are suitable for learning this subject. Based on the above comments, we will focus on the methodology of using some interactive educational technologies and methods used in the teaching of zoology.

SWOT analysis. The main idea of this method in educational practice is to determine the solution to the existing problems by analyzing and comparing the acquired theoretical knowledge and experiences of a practical nature, to strengthen the acquired knowledge, and to evaluate the obtained results, to develop independent, critical and creative thinking. formation of skills is considered.

S - (strength) - strong aspects. W - (weakness) - weak aspects.

O - (opportunitu) - opportunities. T - (tnreat) - existing obstacles.

As an example, in the process of conservation and protection of mammal species included in the Red Book of Uzbekistan, list the strengths and weaknesses, internal opportunities, and external risks that hinder their preservation in this table (Table 1).
Table 1

S	Strengths of conservation and protection of mammal species included in the Red Book of Uzbekistan	The preservation of rare and endangered species of mammals in Uzbekistan is achieved
W	Weaknesses of conservation and protection of mammal species included in the Red Book of Uzbekistan	Slowdown of special scientific research on preservation of rare and endangered species of mammals in Uzbekistan
O	Possibilities of preservation and protection of mammal species included in the Red Book of Uzbekistan	Organization of campaign work among the general public on preservation of rare and endangered species of mammals in Uzbekistan, formation of scientific imagination
T	Barriers (external)	Species breeding and high levels of illegal hunting by the population

Assessment. As a result of the use of this method in the process of teaching zoology, it is possible to assess, control, and form practical skills of students' mastery of science subjects. This process focuses on direct testing, practical skills, problem situations, comparative analysis, and symptom identification.

In particular, it is recommended to use the assessment on the topic "Brief description of the main groups of infraclasses Placentalia" from the textbook of vertebrate zoology. It is desirable to evaluate up to 5 points for the correct answer in each box given by students (Table 2).

Table 2

Test Determine how many satellite subclasses there are. A) 5-6 B) 22-23 C) 17-18 D) 11-12	Comparative analysis Compare and contrast the differences between the order Insectivores and Invertebrates?
Symptom The system of satellite subclasses...	Practical skills

	List 3 families and the species belonging to the families belonging to the order Insectivores and Invertebrates?
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The use of the "Analysis of Concepts" method in zoology classes in order to systematize and ensure the stability of the knowledge acquired by students in zoology is of great practical importance in pedagogical higher education organizations.

Concept analysis. Since there are a lot of concepts in zoology classes, in the process of mastering these concepts, they are used to determine the level of students' mastery of basic concepts, to independently check and evaluate their knowledge of zoology. In particular, the use in the study of "Systematics of the Class of Mammals" topics from vertebrate zoology gives high results, the application of the method is given in Table 3 below.

Table 3

Basic concepts of the subject	This is what you think what is the concept means?	Information provided in addition to the basic concepts provided
Prototheria		First of all, carnivores
Monotremata		One-holed, that is, cloacal
Theria		Real carnivores
Metatheria		Bottom carnivores
Placentalia		Companions

By assigning this type of tasks in zoology classes, students take an important place in the process of learning the Latin (scientific) names of terms.

Summary. In the process of improving the knowledge of zoology of the future biology teachers studying in higher education institutions, every professor-teacher should use interactive educational technologies as much as possible in the design of the training during his pedagogical activity. and, as a result, prepares the ground for the formation and development of high-level knowledge, skills, qualifications and competencies.

References:

1. Decree of the President of the Republic of Uzbekistan No. PF-60 of 28.01.2022 on the Development Strategy of New Uzbekistan for 2022-2026. Collection of legal documents of the Republic of Uzbekistan. 2022, No. 6, Article 70.

2. Dadayev S., Saparov K. Zoology of vertebrates. - T .: 2022. - 490 p.
3. Ergashevich, R. U. (2019). Cognitive tasks in educational-upbringing process on biology. International scientific review, (LVII), 60-61.
4. Shakhmurova, G. A., Rakhmatov, U. E., & Saidjanova, U. S. A complex of entertaining tasks and exercises on Biology as one means of enhancing the cognitive skills of students. Asia life sciences, 30(1), 87-97.
5. Shakhmurova, G. A., Azimov, I. T., Rakhmatov, U. E., & Akhmadaliyeva, B. S. Solution of biological problems and exercises (human and health). Teaching-methodological guidance." Literature sparks.
6. Shakhmurova, G. A., & Azimov ЁТ, R. U. Problem solving from biology (zoology). Teaching-methodological guidance. Brok Class Servis LLC.
7. Ergashevich, R. U. (2018). A perfection of the professional competence of teachers by using of creative works in biology lessons under solving tasks and exercises. European science review, (3-4), 225-227.
8. Rakhmatov, U. E., & Shakhmurova, G. A. (2020). Methodical Instructions of Improving Biology Teachers' Professional Competence for Conducting Modern Lesson (based on Solutions of Issues and Tasks). Eastern European Scientific Journal, 3, 123-16.
9. Shaxmurova, G. A., Azimov, I. T., & Raxmatov, U. E. (2016). Biologiyadan masala va mashqlar yechish. Elektron darslik. Toshkent-2017 y. Internet saytlari, 15.
10. Kholmurodova, O. S., & Rakhmatov, U. E. (2022). Problems of improving teaching in the process of biological education. Current research journal of pedagogics, 3(02), 62-67.
11. Ergashevich, R. U., Salimovna, P. M., & Mamayusufovich, A. S. (2023). Ways to use pedagogical technologies at the local level in biology lessons. European International Journal of Pedagogics, 3(05), 22-29.

12. Ergashevich, R. U., & Mamayusufovich, A. S. (2023). Issues of using integrative knowledge in forming students' professional competence.

13. Rakhmatov, U. E. (2018). Development of creative abilities of pupils under using tasks and problems in biology lessons. In XLIII International scientific and practical conference" international scientific review of the problems and prospects of modern science and education" (pp. 112-113).

14. Ergashevich, R. U. (2024, January). Methodological principles of professional competence development of the future biology teacher. In *International Scientific and Current Research Conferences* (pp. 1-5).

THE IMPORTANCE OF MISPRONUNCIATION DETECTION IN NON-NATIVE LANGUAGE

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Abstract: This article is based on providing basic information on mispronunciation detection in non-native language. In [linguistics](#), mispronunciation is the act of [pronouncing](#) a word incorrectly. The matter of what is or is not mispronunciation is a contentious one, and there is disagreement about the extent to which the term is even meaningful. [Languages](#) are pronounced in different ways by different people, depending on such factors as the area they grew up in, their level of [education](#), and their [social class](#). Even within groups of the same area and class, different people can have different ways of pronouncing certain words.

Key words: Mispronunciation detection and diagnosis, Acoustic, Phonetic and Linguistic (APL) embedding.

Mispronunciation detection and diagnosis (MDD) is designed to identify pronunciation errors and provide instructive feedback to guide non-native language learners, which is a core component in computer-assisted pronunciation training (CAPT) systems. However, MDD often suffers from the data-sparsity problem due to that collecting non-native data and the associated annotations is time-consuming and labor-intensive. To address this issue, we explore a fully end-to-end (E2E) neural model for MDD, which processes learners' speech directly based on raw waveforms. Compared to conventional hand-crafted acoustic features, raw waveforms retain more acoustic phenomena and potentially can help neural networks discover better and more customized representations. To this end, our MDD model adopts a co-called SincNet module to take input a raw waveform and covert it to a suitable vector representation sequence. SincNet employs the cardinal sine (sinc) function to implement learnable band pass filters, drawing inspiration from the convolutional neural network (CNN). By comparison to CNN, SincNet has fewer parameters and is more amenable to human interpretation. Extensive experiments are conducted on the L2-ARCTIC dataset, which is a publicly-available non-native English speech corpus compiled for research on CAPT. We find that the sinc filters of SincNet can be adapted quickly for non-native language learners of different nationalities. Furthermore, our model can achieve comparable mispronunciation detection performance in relation to state-of-the-art E2E MDD models that take input the standard handcrafted acoustic features. Besides that, our model also provides considerable improvements on phone error rate (PER) and diagnosis accuracy.

Many mispronunciation detection and diagnosis (MD&D) research approaches try to exploit both the acoustic and linguistic features as input. Yet the improvement of the performance is limited, partially due to the

shortage of large amount annotated training data at the phoneme level. Phonetic embeddings, extracted from ASR models trained with huge amount of word level annotations, can serve as a good representation of the content of input speech, in a noise-robust and speaker-independent manner.

These embeddings when used as implicit phonetic supplementary information, can alleviate the data shortage of explicit phoneme annotations. We propose to utilize Acoustic, Phonetic and Linguistic (APL) embedding features jointly for building a more powerful MD&D system.. Index Terms — Computer aided Pronunciation Training, Mispronunciation Detection and Diagnosis, Phoneme Recognition, Acoustic-phonetic-linguistic Embeddings.

The development of Computer-aided Pronunciation Training(CAPT) system empowers language learners a convenient way to practice their pronunciations[1, 2, 3], especially for those who have little access to professional teachers.

Mispronunciation Detection and Diagnosis (MD&D) is a key part of CAPT and several methods have been proposed to tackle it. Goodness of Pronunciation (GOP)[4], developed by Witt and Young, computes scores based on log-posterior probability from acoustic models and then detects mispronunciation with phone-dependent thresholds. Even though these kinds of approaches provide scores for mispronunciation detection[5, 6, 7], they cannot provide sufficient diagnosis information for pronunciation correction. To better obtain diagnosis information, Extended Recognition Network (ERN)[8, 9, 10] extends the decoding stage of Automatic Speech Recognition (ASR) by modeling pre-defined context-dependent phonological rules. However, ERN fails to deal with the mispronunciation patterns which are absent in training data or manual rules. Additionally, when too many phonological rules are included in Work performed as intern in Microsoft ERN, recognition accuracy may be affected, thus leading to unreliable MD&D feedbacks.

Actually, Computer-aided pronunciation training (CAPT) systems provide feedback to second language learners on their pronunciation quality, with positive impacts on learning and motivation [1]. One family of CAPT systems frames the problem as a phone recognition task, using non-native data during training. These systems identify pronunciation errors by comparing the phonetic transcription of a student's speech to a native target sequence using dynamic programming algorithms. Another family of CAPT systems frames the problem as detection of mispronunciations, generating scores that are then thresholded for the final decision. These systems can be classified into two groups. Those that do not use non-native data during training rely on automatic speech recognition (ASR) systems trained with native speakers, and generate pronunciation scores using the acoustic model's outputs. The most

widely used approach in this family is called Goodness of Pronunciation (GOP). The second group uses non-native data to directly train the system to distinguish correctly- from incorrectly-pronounced segments using a variety of input features and classifiers. Recently, transfer learning techniques have been used to mitigate the problem of data scarcity that is the norm in the task. In these approaches, deep neural networks (DNNs) models trained for ASR or on a self-supervised fashion are fine-tuned to detect mispronunciations.

With the growing population of second language learners, there is a strong need for additional language learning resources. Kachru estimates there are 533 million English learners in India and China alone a number greater than the total population of the USA, UK, and Canada combined. With such a huge demand, there is an acute shortage of qualified teachers. Computer-assisted language learning (CALL) applications can supplement existing learning resources and provide unique benefits to learner in terms of accessibility, reduced anxiety, and individualized instruction. Effective language learning tools, and particularly pronunciation training, needs to provide learners with detailed corrective feedback. The automatic pronunciation scores at the word-level or sentence-level correlate highly with human raters but fail to lead to measurable improvement in learner's overall pronunciation.

However, locating mispronunciations at the phone-level to learners has been shown to lead to statistically significant improvement for the production of those targeted phones. Speech recognition systems must be specially designed for computer-assisted pronunciation training (CAPT) in order to support detailed corrective feedback while still obtaining satisfactory performance.

Basically, using computers to help students learn and practice a new language has long been seen as a promising area for the use of automatic speech recognition (ASR) technology. It could allow spoken language to be used in many ways in language-learning activities, for example by supporting different types of oral practice and enabling feedback on various dimensions of language proficiency, including language use and pronunciation quality. A desirable feature of the use of speech technology for computeraided language learning (CALL) is the ability to provide meaningful feedback on pronunciation quality. In this area of pronunciation scoring, the smaller the unit to be scored, the higher the uncertainty in the associated score. Currently, the most reliable estimates of pronunciation quality are overall levels obtained from a paragraph composed of several sentences that can be used to characterize the speaker's overall pronunciation proficiency. At this level, it has been shown that automatic scoring performs as well as human scoring. For many CALL applications we would like to score smaller units, to allow the student to focus on specific aspects of his or her speech production. For instance, overall pronunciation scoring can be obtained at the sentence level with a level of accuracy that, while lower than that of human scoring, can nonetheless provide valuable feedback for language learning. More detailed feedback, at the level of individual phones, can direct attention to specific phones that are mispronounced.

REFERENCES:

- [1] Keelan Evanini and Xinhao Wang, “Automated speech scoring for non-native middle school students with multiple task types,” in Proc. Interspeech 2013, 2013, pp. 2435–2439.
- [2] Yanlu Xie, Xiaoli Feng, Boxue Li, Jinsong Zhang, and Yujia Jin, “A mandarin l2 learning app with mispronunciation detection and feedback,” in Proc. Interspeech 2020, 2020, pp. 1015–1016.
- [3] Ke Shi, Kye Min Tan, Richeng Duan, Siti Umairah Md. Salleh, Nur Farah Ain Suhaimi, Rajan Vellu, Ngoc Thuy Huong Helen Thai, and Nancy F. Chen, “Computer-assisted language learning system: Automatic speech evaluation for children learning malay and tamil,” in Proc. Interspeech 2020, 2020, pp. 1019–1020.
- [4] S.M.Witt and S.J.Young, “Phone-level pronunciation scoring and assessment for interactive language learning,” *Speech communication*, vol. 30, no. 2-3, pp. 95–108, 2000.
- [5] Joost van Doremalen, Catia Cucchiarini, and Helmer Strik, “Using non-native error patterns to improve pronunciation verification,” in Proc. Interspeech 2010, 2010, pp. 590–593.
- [6] Wenping Hu, Yao Qian, Frank K.Soong, and Yong Wang, “Improved mispronunciation detection with deep neural network trained acoustic models and transfer learning based logistic regression classifiers,” *Speech Communication*, vol. 67, pp. 154–166, 2015.

URBANIZATION AND ITS ENVIRONMENTAL CONSEQUENCES

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Annotation. This article studies the environmental impacts of urbanization, focusing on the transformation of natural landscapes into urban areas and the associated consequences for ecosystems, biodiversity, and natural resources. It examines key drivers of urbanization, such as population growth, rural-to-urban migration, and economic development, and their implications for land use, air and water quality, and climate change. Additionally, the article discusses the challenges and opportunities of sustainable urban planning and development, including strategies for mitigating environmental degradation and promoting resilience in urban areas. By synthesizing scientific research and empirical evidence, the article aims to raise awareness about the environmental consequences of urbanization and inspire efforts to foster more sustainable and livable cities.

Keywords: urbanization, environmental consequences, land use, biodiversity loss, air and water quality, climate change, sustainable urban planning, resilient cities.

Introduction. In an increasingly urbanized world, the transformation of natural landscapes into sprawling cities and metropolitan areas is reshaping the face of the planet and profoundly impacting the environment. Urbanization, driven by population growth, rural-to-urban migration, and economic development, represents one of the most significant demographic trends of the 21st century. However, this rapid expansion of urban areas comes with a host of environmental consequences, ranging from habitat destruction and biodiversity loss to air and water pollution, and climate change.¹ Urbanization is a multifaceted process that involves the conversion of rural and natural landscapes into built-up areas, characterized by infrastructure, buildings, and human settlements. As cities and metropolitan regions expand, they encroach upon surrounding ecosystems, fragmenting habitats, and disrupting ecological processes.² Moreover, urbanization alters land use patterns, replacing forests, wetlands, and agricultural lands with impervious surfaces such as roads, buildings, and parking lots, which exacerbate issues such as stormwater runoff, heat islands, and loss of biodiversity.

¹ Seto, K.C., et al. (2011). Urban land teleconnections and sustainability. *Proceedings of the National Academy of Sciences*, 108(20), 814-818.

² Grimm, N.B., et al. (2008). Global change and the ecology of cities. *Science*, 319(5864), 756-760.

The environmental consequences of urbanization are wide-ranging and profound, affecting ecosystems, natural resources, and the health and well-being of human populations. Habitat destruction and fragmentation associated with urban expansion pose significant threats to biodiversity, leading to the loss of species and degradation of ecosystems.³ Furthermore, urban areas are hotspots of air and water pollution, with emissions from vehicles, industries, and households contributing to poor air quality, respiratory diseases, and water contamination. Moreover, the urban heat island effect exacerbates temperature extremes, while impervious surfaces disrupt natural hydrological cycles, leading to flooding, erosion, and water scarcity.

Addressing the environmental consequences of urbanization requires a multifaceted approach that integrates principles of sustainability, resilience, and equity into urban planning and development. Sustainable urban development aims to minimize the negative impacts of urbanization while maximizing the benefits of cities as engines of innovation, economic growth, and cultural diversity.⁴ This involves adopting strategies for compact and efficient urban design, promoting green infrastructure and ecosystem-based approaches to urban planning, and enhancing access to green spaces and environmental amenities for all residents. As urban areas expand, they encroach upon natural habitats and ecosystems, leading to habitat destruction, fragmentation, and loss of biodiversity. Forests, wetlands, and other natural landscapes are cleared or degraded to make way for roads, buildings, and infrastructure, resulting in the displacement and extinction of plant and animal species. Moreover, urbanization fragments habitats, isolating populations and disrupting ecological processes such as migration and gene flow. The loss of biodiversity not only diminishes the intrinsic value of ecosystems but also compromises their ability to provide essential ecosystem services such as pollination, water purification, and climate regulation.⁵

Urbanization is a major contributor to air and water pollution, with emissions from vehicles, industries, and households degrading air and water quality in urban areas. Vehicle exhaust, industrial emissions, and combustion of fossil fuels release pollutants such as particulate matter, nitrogen oxides, and volatile organic compounds into the atmosphere, leading to smog, respiratory illnesses, and cardiovascular diseases.⁶ Similarly, urban runoff, sewage discharge, and industrial effluents contaminate surface waters, threatening aquatic ecosystems and public

³ Angel, S., et al. (2005). The dimensions of global urban expansion: Estimates and projections for all countries, 2000-2050. *Progress in Planning*, 63(4), 265-293.

⁴ McDonald, R.I., et al. (2019). Research gaps in knowledge of the impact of urban growth on biodiversity. *Nature Sustainability*, 2(12), 1111-1119.

⁵ IPCC. (2014). *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.*

⁶ Pickett, S.T.A., et al. (2001). Urban ecological systems: Linking terrestrial, ecological, physical, and socioeconomic components of metropolitan areas. *Annual Review of Ecology and Systematics*, 32(1), 127-157.

health. Moreover, urban areas are susceptible to heat island effects, where concrete and asphalt surfaces absorb and retain heat, leading to elevated temperatures and increased energy consumption for cooling.

The urbanization phenomenon is intricately linked to climate change, with cities and metropolitan areas both contributing to and being impacted by global warming. Urban areas are major sources of greenhouse gas emissions, with energy consumption, transportation, and industrial activities releasing carbon dioxide (CO₂), methane (CH₄), and other greenhouse gases into the atmosphere. Moreover, deforestation and land use change associated with urban expansion release stored carbon into the atmosphere, further exacerbating the greenhouse effect.⁷ Climate change impacts, such as rising temperatures, extreme weather events, and sea-level rise, pose significant challenges for urban areas, increasing the risk of heat-related illnesses, flooding, and infrastructure damage. Addressing the environmental consequences of urbanization requires a comprehensive approach that integrates principles of sustainability, resilience, and equity into urban planning and development. Sustainable urban design and land use planning can minimize the ecological footprint of cities by promoting compact, mixed-use development, preserving green spaces, and reducing reliance on fossil fuels.⁸

Green infrastructure, such as parks, green roofs, and urban forests, can enhance biodiversity, improve air and water quality, and mitigate the urban heat island effect. Additionally, efforts to promote public transportation, energy efficiency, and renewable energy sources can reduce greenhouse gas emissions and enhance the climate resilience of urban areas. In the face of climate change impacts, building resilience in urban areas is essential to protect communities and infrastructure from the growing threats of extreme weather events, sea-level rise, and heat waves. Climate-resilient cities employ a range of strategies, including green infrastructure, floodplain management, and heat mitigation measures, to reduce vulnerability and enhance adaptive capacity. Green spaces such as parks and urban forests serve as natural buffers against flooding and heat stress, while green roofs and permeable pavements help absorb stormwater runoff and reduce urban heat island effects.⁹

Additionally, nature-based solutions such as wetland restoration and coastal protection can provide effective and cost-efficient defenses against sea-level rise and storm surges. As cities grow and evolve, it is crucial to address social inequalities and ensure that the benefits of urban development are equitably distributed among

⁷ McGranahan, G., et al. (2007). Urbanization and its implications for food and farming. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 363(1491), 3011-3022.

⁸ Elmqvist, T., et al. (2013). *Urbanization, biodiversity and ecosystem services: Challenges and opportunities*. Springer Netherlands.

⁹ Gómez-Baggethun, E., et al. (2013). *Urbanization, biodiversity conservation, and ecosystem services: Challenges and opportunities*. Springer Netherlands.

all residents. Environmental justice principles emphasize fair and inclusive decision-making processes that prioritize the needs and interests of marginalized communities, which often bear the brunt of environmental degradation and pollution.¹⁰ This involves empowering communities to participate in urban planning and decision-making, advocating for policies that promote affordable housing, public transportation, and access to green spaces, and addressing legacy issues of environmental racism and discrimination. By fostering social cohesion and equity, cities can build resilience and create vibrant, inclusive communities that thrive in harmony with nature. Urbanization is a global phenomenon, with cities and metropolitan regions around the world facing similar environmental challenges and opportunities. However, the experiences of urbanization vary widely across different regions, reflecting diverse cultural, economic, and geographical contexts.

Learning from successful urban initiatives and best practices from diverse cities can provide valuable insights and inspiration for addressing common environmental challenges and promoting sustainability.¹¹ International collaboration and knowledge exchange networks, such as the C40 Cities Climate Leadership Group and the Global Covenant of Mayors for Climate & Energy, facilitate dialogue and cooperation among cities, enabling them to share lessons learned and collectively tackle pressing environmental issues.

Conclusion. As urbanization continues to reshape the global landscape, the environmental consequences of rapid urban expansion are becoming increasingly apparent. From habitat destruction and biodiversity loss to air and water pollution, urbanization poses significant challenges for ecosystems, natural resources, and human well-being. However, amidst these challenges lie opportunities for innovation, collaboration, and transformative change.

By embracing principles of sustainability, resilience, and equity, cities can navigate the urban landscape with foresight and creativity, promoting environmental stewardship and enhancing the quality of life for all residents. Sustainable urban development strategies, such as green infrastructure, compact urban design, and community engagement, offer pathways to mitigate the ecological footprint of cities and promote resilience in the face of climate change. Moreover, by prioritizing environmental justice and ensuring equitable access to resources and opportunities, cities can build inclusive communities that thrive in harmony with nature. Through international collaboration and knowledge exchange, cities can learn from diverse urban experiences and collectively address pressing environmental challenges on a global scale.

¹⁰ Alberti, M. (2008). *Advances in urban ecology: Integrating humans and ecological processes in urban ecosystems*. Springer Science & Business Media.

¹¹ Kennedy, C., et al. (2015). The study of urban metabolism and its applications to urban planning and design. *Environmental Pollution*, 159(8-9), 1965-1973.

In conclusion, the environmental consequences of urbanization demand urgent attention and concerted action from policymakers, planners, and communities worldwide. By embracing the urban environmental challenge with determination and commitment, we can create sustainable urban futures that benefit both people and the planet, ensuring a vibrant and resilient future for generations to come.

REFERENCES:

1. Seto, K.C., et al. (2011). Urban land teleconnections and sustainability. *Proceedings of the National Academy of Sciences*, 108(20), 814-818.
2. Grimm, N.B., et al. (2008). Global change and the ecology of cities. *Science*, 319(5864), 756-760.
3. Angel, S., et al. (2005). The dimensions of global urban expansion: Estimates and projections for all countries, 2000-2050. *Progress in Planning*, 63(4), 265-293.
4. McDonald, R.I., et al. (2019). Research gaps in knowledge of the impact of urban growth on biodiversity. *Nature Sustainability*, 2(12), 1111-1119.
5. IPCC. (2014). *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.*
6. Pickett, S.T.A., et al. (2001). Urban ecological systems: Linking terrestrial, ecological, physical, and socioeconomic components of metropolitan areas. *Annual Review of Ecology and Systematics*, 32(1), 127-157.
7. United Nations. (2018). *World Urbanization Prospects: The 2018 Revision.*
8. McGranahan, G., et al. (2007). Urbanization and its implications for food and farming. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 363(1491), 3011-3022.
9. Elmqvist, T., et al. (2013). *Urbanization, biodiversity, and ecosystem services: Challenges and opportunities.* Springer Netherlands.
10. Gómez-Baggethun, E., et al. (2013). *Urbanization, biodiversity conservation, and ecosystem services: Challenges and opportunities.* Springer Netherlands.

11. Alberti, M. (2008). Advances in urban ecology: Integrating humans and ecological processes in urban ecosystems. Springer Science & Business Media.
12. Kennedy, C., et al. (2015). The study of urban metabolism and its applications to urban planning and design. Environmental Pollution, 159(8-9), 1965-1973

RESEARCH OF THE SYNTHESIS OF NITROGEN, PHOSPHORUS, AND SULFUR CONTAINING OLIGOMERS

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Abstract: Oligomer is a low molecular weight substance with the same chemical structure as polyester fiber, which is a by-product of the polyester spinning process. This article talks about oligomers, their composition of nitrogen, sulfur, phosphorus, synthesis process and their structure.

Key words: Oligomer, organic oligomers, chemical structure, nitrogen, sulfur, phosphorus, mass, molecule, substance.

An oligomer is a low molecular weight substance with the same chemical structure as polyester fiber, a by-product of the polyester spinning process. Polyester contains 1% to 3% oligomers. An oligomer is a polymer composed of fewer repeating units and its relative molecular weight is between small and high molecules. Most polyester oligomers are cyclic compounds formed from three ethyl terephthalates.

The effect of oligomers: colored spots and stains on the fabric surface; a white powder produced by dyeing yarn. When the temperature exceeds 120°C, the oligomer can dissolve in the dye bath and come out of solution and combine with the condensed dye. Defects such as spots and dots accumulated on the surface of machines or fabrics during cooling. Dispersion dyeing is usually held at 130°C for 30 minutes to ensure color depth and speed. Therefore, as a solution, the light color can be kept at 120°C for 30 minutes, and the dark color must be pre-cleaned before painting. In addition, dyeing under alkaline conditions is also an effective method for dissolving oligomers.

It is recommended to add nitrogen, sulfur and phosphorous substances during the synthesis of oligomers obtained from external symptoms. These substances make it possible to change the properties of oligomeric molecules, facilitate their reactions or introduce new properties. During the synthesis, these substances can also be used as catalysts for bulk reactions.

There are other details about the composition, structure and synthesis of nitrogen, sulfur and phosphorus stored in oligomers. These compounds are used in the synthesis of nitrogen, sulfur and phosphorous substances, to provide important properties such as polymer multiplication, cross-linking, sizing, etc. These oligomers allow variable reactions and facilitate cross-linking. Their structure and

composition depends on the amount of these substances, their functional groups and main constituent elements. Such oligomers can be more complex, but their structure allows us to identify the chemical bonds in them and allow them to be modified to study and implement special properties.

The synthesis of oligomers containing nitrogen, sulfur, and phosphorus is a studied chemical process. In these processes, please use phosphorus ligands, metzones, which contain the structure of oligomers of nitrogen, sulfur and phosphorus elements. These phosphorligands retain the structure and properties of oligomers. In the synthesis process, a chemical reaction is created to create oligomers, and the structure and properties are studied using spectral analysis methods. The studied data is obtained using spectrometry, absorption spectroscopy, molecular measurement, infrared spectroscopy and other methods.

Spectral methods can be used to study the structure and properties of oligomers containing nitrogen, sulfur, and phosphorus. These methods make it possible to obtain information on changes in electromagnetic radiation.

Infrared methods (IR-spectroscopy): allow to determine the properties involved in the molecular structure of oligomers. Infrared methods are used to study functional groups, binaries and protein compounds created by substances containing nitrogen, sulfur, and phosphorus.

NMR-spectroscopy: In NMR methods, it is possible to determine protons, phosphorus, sulfur and nitrogen atoms associated with the oligomer molecule. In this method, information is obtained about the chemical environment of the oligomer molecule, the external compatibility of one or more components, and the properties used by the field.

UV-Vis spectrophotometry: Used to study the electronic energy level and electronic spectrum of the oligomer molecule. UV-Vis spectrometry is used to determine the unique optical properties of nitrogen, sulfur, and phosphorus reserves in oligomers. These spectral methods have been used to determine the structure, properties, and chemical properties of oligomers. Their combination allows you to get a complete picture of the properties of the oligomer text.

Experiments are carried out with advanced laboratories in the field of chemistry, organic chemistry and polymer chemistry for the synthesis of oligomers containing nitrogen, sulfur and phosphorus and to study their structure and properties using spectral methods.

In these experiments, infrared (IR) and nuclear magnetic resonance (NMR) spectra are studied. Information about the molecular structure of oligomers and their functional group can be obtained through IR spectra. NMR spectra provide information about the structure and configuration of oligomer molecules and how they block phosphorus, sulfur, and nitrogen elements.

The information obtained using such methods helps to determine the properties of oligomers, their chemical and physical properties, for example, their properties in plastic bags, photosensitivity and other properties.

Analysis of obtained results: Physico-chemical properties were studied: density, melting point, solubility, IR spectroscopy and DSC in oligomers containing sulfur, nitrogen and phosphorus. Data on the physicochemical properties of the synthesized NMA-5 highly filling oligomer (with sodium tetrasulfide and ammonium polyphosphate organic halogen compounds) are presented in Table 1.

Physico-chemical parameters of thiokol oligomer

Indicators	thiokol oligomer
	NMA-5
Density , g/sm ³ ГОСТ 15139-69	1,28
T _{pl} °C	124
η _{xB}	0,065
Solubility	dimethylformamide
Appearance and color	brown viscous substance

In the IR spectrum of NMA-5, there are absorption bands confirming the presence of -CH₂- groups in the 2850-1470 cm⁻¹ region and absorption bands confirming the presence of - in the 1650 cm⁻¹ region. CONH₂ groups are free. The IR spectrum includes absorption bands in the 3400 cm⁻¹ region corresponding to primary - CONH₂ groups and absorption bands in the 3300-3440 cm⁻¹ region corresponding to secondary -CONHR groups. Bending vibrations of all active groups appear in the form of strong narrow lines between the typical bands of -CH₂-CO- bending vibrations in the region 1400 - 1465 cm⁻¹. Absorption bands in the regions of 800 and 1600 cm⁻¹ confirm the presence of -NH₂ groups. The presence of groups with phosphorus R=O and R-O-C in the region 1000-1180 cm⁻¹ is confirmed by a wide intense band and sulfur-containing compounds in the regions 400-900 cm⁻¹, 1040-1000 cm. ⁻¹060 cm⁻¹ and 1100-900 cm⁻¹.

In addition, in the regions of 600-800 cm⁻¹ and 1460 cm⁻¹, narrow lines of low intensity appear in IR spectroscopy, which contain bonds of the sulfur-containing

compound. When looking at the IR spectra of NMA-5, a strongly intense $-\text{CH}_2\text{-N}$ -group is observed at $1400\text{-}1440\text{ cm}^{-1}$ and organic phosphates at 1180 cm^{-1} - 1150 cm^{-1} (Fig. 1).

LIST OF REFERENCES

1. Аскарлов М.А., Банк С. Химическая стабилизация полимеров. –Т.: Фан.1974. –143 с.
2. Шляпников Ю.А., Кирюшкин С.Г., Марьин А.П. Антиокислительная стабилизация полимеров. –М.: Химия. -1986. –227 с.
3. Шляпников Ю.А., Миллер В.Б. Старение и стабилизация полимеров. –М.: -Химия. –1986. –с.
4. Гордон Т.Я. Стабилизация синтетических полимеров. –М.: химия. -1963. -300 с
5. Нормуродов Б.А. Синтез модифицированных тиоколовых олигомеров на основе местного сырья и их применение / автореферат дисс. на. соиск. степ. доктора философии по т.н. по спец. 02.00.14., Термез, 2019. – 44, с. 23.
6. Хакимуллин Ю.И. Герметики на основе полисульфидных олигомеров: синтез, свойства, применение / Ю. И. Хакимуллин, В. С. Минкин. Ф. М. Малютин [и др.] - М.: Наука, 2007.- С.301.
7. Deryagina E. N., Levanova E. P., Grabel'nykh V. A., Sukhomazova E. N., Russavskaya N. V., Korchevin N. A. Thiylation of Polyelectrophiles with Sulfur in Hydrazine Hydrate Amine Systems // Russian Journal of General Chemistry, - 2005, -V.75, -I. 2, p.194 -199.
8. Шостак Т. С., Будащ Ю. А., Пахаренко В. В., Сташкевич И. А., Пахаренко В. А. Композиции на основе ПЭ, наполненные алюмосиликатом//Пластические массы, 2011.№4 .С. 39-43.

BO'LAJAK O'QITUVCHILARDA VERBAL MULOQOTNI RIVOJLANTIRISHNING PSIXOLOGIK XUSUSIYATLARI

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Chirchiq shahar kasb-hunar maktabida
xorijiy tili (ingliz tili) o'qituvchisi

Annotatsiya. Ushbu maqola talabalar - bo'lajak o'qituvchilar o'rtasida verbal muloqotni rivojlantirishning psixologik jihatlarini o'rganadi. Mualliflar bo'lajak o'qituvchilarning muloqot qobiliyatlari samaradorligiga ta'sir qilishi mumkin bo'lgan psixologik xususiyatlarni tahlil qiladilar. Maqolada empatiya, hissiy intellekt va ijtimoiy moslashish darajasi kabi omillar va ularning ta'lim faoliyati kontekstida verbal nutq ko'nikmalarini rivojlantirishga ta'siri ko'rib chiqiladi. Shuningdek, u o'quvchilar bilan muvaffaqiyatli muloqot qilish va qo'llab-quvvatlovchi ta'lim muhitini yaratish uchun talabalar o'qituvchilariga verbal muloqot qobiliyatlarini rivojlantirish va yaxshilashga yordam beradigan usullar va strategiyalarni muhokama qiladi. Ushbu maqola bo'lajak o'qituvchilarni tayyorlashga qaratilgan ta'lim muassasalari va o'qituvchilar malakasini oshirish dasturlari uchun muhim amaliy tavsiyalar beradi.

Kalit so'zlar: psixologik xususiyatlar, o'qitishga psixologik tayyorgarlik, ta'lim muhitidagi psixologik muammolar, o'qitishning psixologik jihatlarini, o'qitishning psixologik jihatlarini, bo'lajak o'qituvchilarga qo'yiladigan psixologik talablar.

Verbal muloqot insonning o'zaro ta'sirining asosiy jihatlaridan biridir. Ayniqsa, bo'lajak o'qituvchilar haqida gap ketganda ta'lim va tarbiyada muhim o'rin tutadi. Pedagogik ta'lim muassasalari o'quvchilari o'rtasida verbal muloqotni rivojlantirishning psixologik xususiyatlari nafaqat ularning muvaffaqiyatli ta'lim olishlari, balki kelajakdagi kasbiy faoliyati uchun ham muhim ahamiyatga ega. Keling, kelajakdagi o'qituvchilarda verbal muloqotning rivojlanishiga qanday omillar ta'sir qilishini ko'rib chiqaylik. Empatiya va tushunish. Pedagoglar turli shaxslar, jumladan, bolalar va o'smirlar bilan samarali muloqot qila olishlari kerak. Bu yuqori darajadagi hamdardlik va boshqalarning his-tuyg'ulari va ehtiyojlarini tushunish qobiliyatini talab qiladi. Ta'lim jarayonida bo'lajak o'qituvchilar sinfdoshlari, o'qituvchilari bilan muloqot qilish va, albatta, bolalar bilan muloqot qilish amaliyoti orqali empatiya ko'nikmalarini rivojlantiradilar. Nutq madaniyati va til ko'nikmalari. Verbal muloqotning asosi tildir. Bo'lajak o'qituvchilar yuqori darajadagi til bilimiga ega bo'lishi, nutq madaniyatiga ega bo'lishi kerak. Pedagogika oliy o'quv yurtida ta'lim grammatika, stilistika va tilshunoslik

qoidalarini o'rganishni o'z ichiga oladi, bu esa to'g'ri va madaniy nutq qobiliyatlarini rivojlantirishga yordam beradi. Treningning o'ziga xos xususiyatlari. Bo'lajak o'qituvchilarni tayyorlash bolalar va o'smirlar bilan muloqot qilish amaliyotini o'z ichiga oladi. Bunga darslar, o'quv suhbatlari, individual maslahatlar va boshqalar kiradi. Bunday amaliyot jarayonida pedagogika oliy o'quv yurtlari talabalari sinfni boshqarish bo'yicha tajribaga ega bo'lib, o'z muloqot uslubini har bir talabaning ehtiyojlariga moslashtira oladi. Aloqa strategiyalarini ishlab chiqish. O'qituvchilar materialni samarali tushuntira olishlari, talabalarni rag'batlantirishlari va nizolarni hal qilishlari kerak. Buning uchun ular turli vaziyatlarda turli suhbatdoshlar bilan muvaffaqiyatli muloqot qilishlariga yordam beradigan muloqot strategiyalarini ishlab chiqishlari kerak.

O'z-o'zini anglashni rivojlantirish. Verbal muloqotda o'z-o'zini anglash muhim rol o'ynaydi. Bo'lajak o'qituvchilar muloqotda o'zlarining kuchli va zaif tomonlarini tushunishlari, shuningdek, o'z-o'zini aks ettirish va o'zini takomillashtirishga tayyor bo'lishlari kerak. O'z-o'zini anglashning psixologik jihati bo'lajak o'qituvchilar o'rtasida verbal muloqotni rivojlantirishda asosiy rol o'ynaydi. Tolerantlik va madaniy xilma-xillik. Zamonaviy jamiyat madaniyati va milliy xususiyatlari jihatidan xilma-xildir. Bo'lajak o'qituvchilar bag'rikenglik va farqlarga hurmat bilan munosabatda bo'lishlari, shuningdek, muloqot uslubini turli madaniy kontekstlarga moslashtira olishlari kerak. Shunday qilib, verbal muloqot bo'lajak o'qituvchilar faoliyatida markaziy o'rinni egallaydi. Empatiya, nutq madaniyati, o'rganishning o'ziga xos xususiyatlari, muloqot strategiyalari, o'z-o'zini anglash va bag'rikenglik kabi psixologik jihatlar ushbu malaka kompetensiyasini rivojlantirishga muhim ta'sir ko'rsatadi. Bo'lajak o'qituvchilar o'rtasida verbal muloqotning muvaffaqiyatli rivojlanishi qulay ta'lim muhitini yaratish va talabalar bilan mustahkam munosabatlarni shakllantirishning zaruriy shartidir. Bo'lajak o'qituvchilarda verbal muloqotni rivojlantirishning psixologik xususiyatlari ularning kasbiy muvaffaqiyatlarida muhim rol o'ynaydi. O'zining kuchli va zaif tomonlarini tushunish, tinglash va verbal ifodalash qobiliyatlarini rivojlantirish, nizolarni boshqarish va kasbiy rivojlanishni davom ettirish - bularning barchasi muvaffaqiyatli pedagogik faoliyatning asosini tashkil qiladi. Bu jihatlarga jiddiy e'tibor qaratilishi bo'lajak pedagoglarning o'z kasbida samarali va ta'sirchan bo'lib yetishishiga, kelajak avlodlarga munosib ta'lim-tarbiya berishga xizmat qiladi.

Foydalanilgan adabiyotlar ro'yxati

1. Д.И. Фельдштейн, О.В. Литовская. "Психология общения". - Москва,
2. Д. Карнеги. "Как завоевывать друзей и оказывать влияние на людей". - Москва, 2019.

3. Дж. Максвелл. "5 уровней лидерства". - Москва, 2014.
4. А. В. Петровский. "Психология как образ жизни. Учебник по социальной психологии". - Москва, 2007.
5. Vakhobovna N. K. Current Transformational Processes and Prospects for the Development of Intercultural Cooperation in Uzbekistan //International Journal on Integrated Education. – 2022. – Т. 5. – №. 5. – С. 132-136.
6. В.А. Ядов, Е.М. Тализина. "Педагогическая психология". - Москва, 2010.
7. Л.С. Выготский. "Мышление и речь". - Москва, 1982.
8. М. Льюис. "Человек, его гонорар и его мозг". - Москва, 2008.

БОЛАЛАРДА ПАРАЗИТАР КАСАЛЛАНИШДА КЛИНИК- ЛАБАРАТОР КЎРСАТКИЧЛАР СОЛИШТИРМА ТАҲЛИЛИ

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Муаммонинг долзарблиги: Жаҳон соғлиқни сақлаш ташкилоти маълумотларига кўра, дунёда 5 миллиардга яқин одам паразитар касалликлар ва гельминтозлар билан касалланган, яъни бу сайёрамиз аҳолисининг катта қисмини ташкил этади. Шу билан бирга, ЖССТ экспертларининг фикрига кўра, гельминтозлар маълум даражада “Эътибордан четда қолган касалликлар” га айланди - уларнинг тиббий ва ижтимоий аҳамияти бутун дунёда етарлича баҳоланмайди. Ҳатто эндемик мамлакатларда ҳам соғлиқни сақлаш органлари ва аҳоли томонидан уларга етарлича эътибор берилмайди. Гельминтозларни келтириб чиқарадиган гижжалар сайёрамиздаги энг қадимий ва кўп сонли ҳаёт шакллари билан бирдир. Одамларда гельминтларнинг 350 дан ортиқ турлари паразитлик қилади.

Европада ҳар учинчи аҳоли гельминтлардан азият чекмоқда. Жаҳон миқёсида гельминтозлар билан 1,7 миллиард киши касалланган (Кусур С.Ж эт ал., 2014). Ўзбекистонда гельминтозлар билан касалланишнинг йиллик кўрсаткичи 100 000 аҳолига тўғри келади.

Паразитозлар асосан иссиқ ва тропик иқлим мамлакатларида кўплаб учраши аниқланган (Лернер П.М. ва бошқ., 1973; Лернер П.М. ва Лемелев В.р., 1977; Норкина Н.А., 1988).

Ўзбекистон шароитида гельминтозларга мансуб гименолепидозлари асосан Наманган, Фарғона, Сирдарё ва Сурхондарё вилоятларнинг тоғли ва тоғ олди туманларида қолган туманларга нисбатан кўп қайд қилинмоқда. Масалан 2011 йил Республика ДСЭНМдан олинган маълумотлар асосида: Наманган -556, Фарғона-435,5, Сирдарё-330,3 ва Сурхондарё-220,4 интенсив кўрсаткичларга эга эканлиги.

Болалар паразитларга нисбатан аҳолининг заиф тоифаси эканлиги аниқланган. Бу, бир томондан, санитария-гигиена меъёрларига риоя қилишнинг қуйи даражасига, иккинчи томондан, паразитар инвазия натижасида жадал ўсиш ва ривожланишнинг пасайиши билан боғлиқ. Болаликда паразитлар инвазиясига кўпинча овқатланишнинг сурункали бузилиши, ошқозон-ичак дисфункцияси, интоксикация, организм сенсibiliзацияси ва иммун тизимининг заифлашуви олиб келувчи омиллар сабаб бўлади. Гельминт личинкалари кўчиб висцерал мембраналар, мия, кўз, ўпка, ва асаб тизимига зарар етказиши мумкин. Larval

мигрантларнинг 5-7% и мияга киради, 30 дан ортиқ паразит турларининг личинкалари ўпка тўқимасига таъсир қилади [2, 3, 9, 10].

Тадқиқот мақсади: Болаларда паразитлар билан касалланишда клиник-лаборатор кўрсаткичларни солиштирма таҳлилини олиб бориш.

Тадқиқот материаллари ва усуллари: Олдимизга қўйилган мақсадга эришиш учун биз “Республикамизда паразитар касалликлар профилактикаси бўйича чора тадбирлар такомиллаштириш тўғрисида” ги Ўзбекистон Республикаси ССВнинг 25.03.2005 йилдаги № 121, Ўзбекистон Республикаси Давлат Эпидемиологик назорати марказларида ўтказиладиган лаборатория текширишлар номенклатуралари тасдиқлаш тўғрисида” ги №34 буйруқ ва УҚ №012-3/0134 “Гельминтозлар ва протозоозларнинг лаборатория диагностикасида паразитологик усуллар” услубий қўлланмасидан фойдаландик.

Текширув 2022-2023 йиллар мобайнида Сурхондарё вилояти Термиз шаҳар юкумли касалликлар шифохонасининг Паразитар касалликлар бўлимида 140 нафар 5-14 ёшгача бўлган бемор болаларда ўтказилди. Тадқиқотга олинган бемор болаларда анамнез маълумотлари, эпидемиологик маълумотларга, умумий қон, сийдик, Копрологик текшириш усули, бактериологик, инструментал (ултратовуш, рентгенорафик) текширувлар ўтказилди.

Бемор болалар жинсий таркиби бўйича ўрганилганда асосий гуруҳда ўғил болалар 48 нафарни (53%), қиз болалар 42 нафарни (47%), назорат гуруҳида эса ўғил болалар 26 нафарни (52%) ва қиз болалар 24 нафарни (48%) ташкил этди. Жинсий таркиби бўйича гуруҳларда статистик аҳамиятли фарқлар кузатилмади.

Тадқиқотдаги бемор болаларнинг ёши ҳақида маълумот.

Ёши	Асосий гуруҳ Н=90		Назорат гуруҳ Н=50		Жами Н=140	
	М	%	М	%	М	%
5-7 ёш	17	19	5	10	22	15,7
7-10 ёш	36	40	18	36	54	38,6
11-14 ёш	37	41	27	54	64	45,7

Тадқиқот натижаси: Текширув учун 140 нафар ичак паразитар касалликлари: геминолипидоз, ва энтеробиоз ташхисланган бемор болалар олинди. Асосий гуруҳга- геминолипидоз ташхиси билан 90 нафар, Назорат гуруҳ- энтеробиоз ташхисли 50 нафар беморларни каслликл тарихлари ретроспектив таҳлилини олиб борилди. Геминолипидознинг клиник синдромлари орасида қуйидагилар энг статистик аҳамиятга эга бўлди: Диспептик (81,6%) – кўнгил айниши, қусиш, қориндаги оғриқ, иштаҳанинг пасайиши ва ич келишининг бузилиши; Астеновегетатив (61,6%) – холсизлик, тез толиқиш, уйқунинг бузилиши ва бош оғриғи; холестатик

(86,7%) – тери ва склеранинг сариқлиги, жигарнинг катталашиниш (гепатомегалия 2см дан зиёд). Шу билан бир қаторда ичак паразитар касалликларининг ҳам бошқа ўзига ҳос килиник белгилари ўрганилди яъни терида қичишиниш белгилари (80%), конъюнктивит, артрит, лимфаденопатия ва эозинофилиянинг юқори даражаси. Биокимёвий текширувларда олинган маълумотларга кўра паразитар инфекциянинг бирга келиши болаларда ичак ва жигар функционал ҳолатида маълум даражада ўзгаришлар борлиги аникланди. Гипербилирубинемия (95,5%), гиперферментемия (77,6%) ва диспротеинемия (69,2%) аникланди.

Паразитар гелментлар беморларнинг нажаси орқали ажралиб чиқади. Бемор фойдаланган идиш-товоқлар, чойшаб, ёстиқ жилди, кийим-кечаги, ўйинчоқлари, сўрғичлари, ҳожат туваклари ва бемордан қолган овқат қолдиқлари ҳам паразитлар билан зарарланади.

Хулоса: Шундай килиб, геминолипидоз, ва энтеробиоз биргаликда кечганда унинг клиник белгиларининг кучайиши, биохимик кўрсаткичларни юқори даражада ўзгариши ва ичак паразитар касалликларга ҳос белгиларни учрашиниш кўрсаткичи аникланди. Изланиш жараёнида шу нарса маълум бўлдики, энтеробиоз касаллиги ривожланишининг ҳавф омилларига боланинг ўтказган ёндош касалликлари, олган ҳар-хил муолажалари сабаб бўлади. Геминолипидоз билан оғриган беморларнинг 27% да субфебрил тана харорати, 67% ҳолларда клиник белгилар ва соғайиш даврининг чўзилиши билан кечиши қайд қилинди. Шу билан бир қаторда аҳоли ўртасида тиббий маданиятни ўстириш ва гигиеник чора- тадбирларни қўллаш мақсадга мувофиқ саналади.

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