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Economic Sciences

Internationalization Strategy of National Firms: Global Challenge in Digital Global Economy

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Abstract

The growing process of globalization alongside with fast development of IT and ICT technologies and digitalization create a demanding need for national firms to internationalize their activities and seek for the global markets in order to maintain competitive advantages ta national and international level or simply to increase their market shares for more economic and commercial benefits. The apparent advantages of internationalization is expressed in access to new foreign markets, resources out of the national countries, international customers, bigger fool of talents, new knowledge, as well as expanded value chain participation, brand strengthening, acquiring international business experience, risk diversification. The article outlines key benefits and strategy directions for national firms, among them SMEs to compete globally and underlines the importance of national economic policy to advance and support national companies through different measures and policy tools.

Keywords: Digitalization, Economic policy, Global Economy.

National firms conduct a vital role in fostering economic growth, hence job creation, invention and introduction of innovations and novelties through creation of knowledge and technology in the country's economic, commercial and social development. The growing process of globalization alongside with fast development of IT and ICT technologies and digitalization create a demanding need for national firms to internationalize their activities and seek for the global markets in order to maintain competitive advantages ta national and international level or simply to increase their market shares for more economic and commercial benefits. Appropriate evidence and numerous empirical analyses prove that large companies often use the strategy of internationalization of their activities in seeking better conditions for their business, while comparatively smaller companies experience some difficulties to pursue such strategy.

According to the OECD report on SME and Entrepreneurship (OECD 2019), SMEs comprise 99% of all businesses and generate 50-60% of added value. Moreover, approximately third of total work force is employed in a company with less than 10 employees. In addition, two third of employs are involved in SME activities. SMEs are gradually gaining pace with R&D and digitalization processes by developing disruptive innovation or breakthrough innovations.

The apparent advantages of internationalization is expressed in access to new foreign markets, resources out of the national countries, international customers, bigger fool of talents, new knowledge, as well as expanded value chain participation, brand

strengthening, acquiring international business experience, risk diversification. However, the process of internationalization generate additional costs on in regard with wider logistics and

coordination, organization changes within companies, dependence on currency fluctuations, institutional and business culture differences across countries.

Globalization can be regarded as a “catalyst” for increasing uncertainty in turbulent business and economic environment. Globalization makes high instability of the business

environment, as an economic or political turmoil in a region or a country directly and immediately impose impacts other regions and countries, thus creating permanent tension. Consequently, the attention and strategic goal of international business has shifted from assessing and considering the risks and benefits of internationalization as such to developing proper internationalization strategies of companies operating in the international market. The unpredictability and turbulence of business environment does not give the possibility companies to peruse inflexible pre-developed strategies, since predicting the future is incredible. The only right strategy is to observe and monitor current conditions and select appropriate managerial decisions which have to lead the company to success in created environment. For this purpose, any company have to create its own strategy able to proper describe and predict the future and set relevant decisions responding existing developments. Uncertainty is an inseparable feature of international business,

requiring numerous strategic resolutions and solutions to manage uncertainty and mitigate risks.

SMEs participation in international markets and global value chains is represented by international new venture companies and “born global” companies which are extremely innovative SMEs completely integrated into global markets (“small multinationals”) and SMEs that export or are embedded in global value chains as suppliers of exporters.

Outsourcing has developed into a widespread global business practice with the prior incentive to reduce production costs and increase benefits among them knowledge

allowing companies to strengthen their competitive position. Taking into account the incentives that encourage SMEs’ internationalization, outsourcing is fundamentally related to cost reduction aim in terms of purchase or production. Traditionally, outsourcing is approached to cost-containment purposes, companies outsource their non-core activities to foreign firms in order to intensively focus on their core activities and competencies which provide these firms with a stronger competitive advantage in global markets. The recent researches suggests that SMEs are highly motivated to outsource to gain access to new knowledge, modern technologies and high skilled labor force. This tendency is clearly observed in the sector that heavily relied on scientific-technical development and modern high technologies. Nowadays, new technologies and knowledge is broadly recognized as the key driver of increasing productivity and economic growth. Economic, technological and social changes in the world’s economy have been recently explained by the concept of knowledge-based economy. This means that good and services production based on knowledge-intensive processes greatly contribute to an acceleration of technical and scientific progress. SMEs are important economic agents in

knowledge-based economy as they create demand for new technological solutions and mobilize highly skilled human resources. SMEs collective initiatives directed to operate in the international markets comprise a great potential not only to drive innovation introduction, but also produce greater synergy of improving the quality and standard of lives. The need is increased to enhance internationalization intelligence of SME’s i.e. to advance systemic process of acquiring new knowledge and information on global opportunities for SMEs that aims at active participation in various international networks. Therefore, the ability to initiate, create and sustain international networking is the important aspect for SMEs to obtain information and new knowledge about the means and methods of internationalization.

The development of SMEs’ internationalization intelligence is an significant decision-making tool to evaluate the company’s readiness to internationalize business operations, make choice for

foreign markets, introduce new products, identification of the entry strategies, development of internationalization strategy comprising the directions to overcome the entry barriers to foreign markets; international expansion and growth; to ensure long-term stay in international markets; to reduce the uncertainty related to venturing abroad; to enhance study of international business cultures.

The key networks include but not limited to the institutions such as relevant ministries or other governmental agencies, SMEs development agencies, Chambers of Commerce, International Trade Organizations, international business associations and NGOs, business associates, i.e. other suppliers/companies, foreign customers/clients, multinational companies, foreign partners, economic or business agents and distributors, experts, participants of global supply chain and etc. The EU's small and medium business support programs include but not limited:

- COSME: aiming at entrance the European market and starting a business in Europe, includes consultation and mentoring, as well as supporting networking platform;
- InnovFin (Horizon 2020): aiming at financial and consultative support to innovative businesses in Europe;
- SME Instrument: full-cycle support of high-risk and high-potential SMEs to develop and market new products, services and business models that can drive economic growth;
- Creative Europe: aiming at SMEs' consultative and financial support in the cultural and creative industries.

Supporting internationalization intelligence also takes place and happens during various business networking platforms such as trade shows, conferences, forums, business exhibitions, seminars and ect. Greater access to different appropriate networking business platforms boost international awareness which in its turn, generates stronger incentives to SMEs to accelerate and intensify their internationalization process. Despite the clear tendency that in great extents SMEs have to be self-motivated for seeking opportunities to internationalize their business, once such decision is made and relevant strategy is in place, the share of success is caused by relevant economic policy developed and pursued by national policy-makers, which as a rule, include difference supportive measures and activities such as assistance programs, financial aids, coordination and marketing activities assisting national SMEs to internationalize and gaining greater access to the international markets.

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Koronavirus xəstəliyi 2019 (COVID-19) aşağı tənəffüs yollarının infeksiyasına (SARS-CoV-2) aiddir və ilk dəfə 2019-cu ilin dekabr ayının sonunda Wuhand (Çin) aşkar edilmişdir. O vaxtdan bəri, COVID-19-un yoluxma sayı qlobal miqyasda hər gün artmışdır [Larson, Shin, 2018]. 2020-ci ilin mart ayında Ümumdünya Səhiyyə Təşkilatı (ÜST) COVID-19 epidemiyasını qlobal pandemiya elan etmişdir. Sonradan, bir neçə milli hökumət virusun yayılmasını azaltmaq üçün uzunmüddətli tam və ya qismən qapanma tədbirləri həyata keçirmişdir. Bu sərt tədbirlər virusun sonrakı yayılmasının qarşısını almaqda kifayət qədər effektiv olduğunu sübut etsə də, onlar qlobal iqtisadi sistemə ciddi təsir göstərmiş və ölkə iqtisadiyyatları və əmək bazarlarında görünməmiş şoka səbəb olmuşdur [Hesham, Riadh, Sihem, 2021]. Əslində, COVID-19 pandemiyası cəmiyyətlərə və iqtisadiyyatlara daha çox təsir etdiyi üçün sağlamlıq böhranı ilə müqayisədə daha böyük əhəmiyyət kəsb edir. COVID-19 epidemiyası bu onillikdə baş verən hər hansı dağılmadan daha çox insanların işləmək, ünsiyyət qurmaq və alış-veriş tərzini gözlənilməz şəkildə dəyişmişdir. Satışlar üzrə iqtisadi məlumatların təhlilindən görüldüyü kimi, bu dramatik vəziyyət istehlakçıların münasibət və davranışlarına böyük təsir göstərmişdir. Nielsen şirkəti tərəfindən aparılan araşdırmaya görə, COVID-19 pandemiyasının yayılması istehlakçı davranışı ilə bağlı xərc səviyyələrində qlobal şəkildə açıq-aşkar dəyişikliyə səbəb olmuşdur [Rajagopal, 2020]. Konkret olaraq, tələbat məhsullarının satışında artan tendensiya müşahidə olunur: istehlakçıların prioritetləri qida, gigiyena və təmizlik məhsulları daxil olmaqla ən əsas ehtiyaclar üzərində cəmləşmişdir. Azərbaycanda istehlakçıların alış-veriş seçimləri pandemiya dövründə dəyişmişdir. İstehlakçı davranışı, xüsusilə qoruyucu vasitələr və dezinfeksiyaedici gel kimi virusun qarşısının alınması ilə əlaqədar olaraq məcburi malların alınmasına diqqəti yönəltmişdir. Pandemiya istehlak modellərini dəyişdirdi, məsələn, bəzi məhsul kateqoriyaları (məsələn, geyim) üçün satışları azaltdı və digər kateqoriyalar (məsələn, əyləncə məhsulları) üçün satışları yarıtdı. Həmçinin, araşdırmalar göstərdi ki, pandemiya zamanı yaşanan iş etibarsızlığı və həyat qeyri-müəyyənliyi işçilərin istehlakçı davranışlarına mənfi təsir göstərmişdir. Təəccüblü deyil ki, belə bir fəvqəladə vəziyyətdə ehtiyacların satın alınması ehtiyacı üstünlük təşkil edir. Bununla belə, COVID-19 pandemiyası zamanı istehlakçı davranışında dəyişikliklərin əsasını təşkil edən münasibət, hisslər və davranışlar da daxil olmaqla, əvvəlki psixoloji amillərin araşdırılmasına daha az diqqət yetirilmişdir. Buna baxmayaraq, istehlakçı davranışını və məhsul seçimlərini idarə edən psixoloji amilləri başa düşmək iki əsas səbəbə görə həlledici elementi təmsil edə bilər. Birincisi, bu cür araşdırma COVID-19-un misli görünməmiş kontekstində istehlakçı davranışındakı dəyişikliklərin əsasları haqqında anlayışımızı genişləndirə bilər. İkincisi, əldə edilmiş nəticələr faktiki istehlakçıların ehtiyac və hisslərini qarşılamaq üçün psixoloji amilləri nəzərə alan yeni marketing strategiyalarının işlənilməsində faydalı ola bilər. Bir tərəfdən, müəssisələr COVID-19 pandemiyası zamanı satışları artırmaq üçün bu tədqiqatın nəticələrindən faydalana bilər. Bundan əlavə, bu ehtiyacları və hissləri başa düşmək

bazarın gələcək pandemiya və fəvqəladə hallarla üzləşməyə hazırlığını artırmaq üçün əsas ola bilər. Digər tərəfdən, istehlakçılar bu yeni bazarın öz real ehtiyac və hisslərinə cavab verməyə hazır olmasından yararlana bilər. Nəticədə, gələcək fəvqəladə hallar zamanı narahatlıq və zəruri malların qəbul edilən çatışmazlığı kimi faktorlar azaldıla bilər, halbuki istehlakçıların rifahı və özünü yaxşı hiss etməsi dəstəklənə bilər. Bundan əlavə, bu tədqiqatın yeniliyi iki əsas aspektdən ibarətdir. Birincisi, böhranların insanların ehtiyac və qeyri-lazım məhsullarını almaq istəyinə fərqli təsir göstərdiyini vurğulayan əvvəlki araşdırmalara əsaslanaraq, incə bir yanaşmaqəbul etməklə ehtiyaclar və qeyri-zərurətlər arasında fikir ayrılığı yaradılmışdır. İkincisi, COVID-19 pandemiyasının misli görünməmiş kontekstini nəzərə alaraq, istehlakçı davranışına təsir göstərən qorxu, narahatlıq, stress, depressiya, özünə haqq qazandırmaq, şəxsiyyət xüsusiyyətləri və qəbul edilən iqtisadi sabitlik kimi müxtəlif psixoloji amillərin rolunu araşdırmaq üçün integrativ yanaşma tətbiq edilmişdir. Maraqlıdır ki, bütün bu amillər əvvəlki tədqiqatlarda istehlakçı davranışına təsir göstərmişdir, lakin bildiyimizə görə, heç bir araşdırma onların hamısını bir anda nəzərdən keçirməmişdir. Buna görə də, həm bu amillərə birdən-birə diqqət yetirən tədqiqatların azlığını, həm də belə bir misli görünməmiş global pandemiya kontekstində onları öyrənmək üçün unikal fürsəti nəzərə alaraq, istehlakçı davranışına təsir edən bir sıra psixoloji amilləri öyrənmək məqsədilə bu tədqiqat işində integrativ yanaşma qəbul edilmişdir.

İstehlakçı psixologiyası və davranış iqtisadiyyatı sahəsində əvvəlki tədqiqatlar bir neçə psixoloji faktorun istehlakçı davranışına fərqli təsir göstərdiyini vurğulamışdır. İstehlakçı davranışı, ehtiyaclarını ödəmək üçün məhsul və xidmətləri almaq, istifadə etmək, qiymətləndirmək və sərəncam vermək üçün axtarış prosesində olan fərdlərin və ya qrupların öyrənilməsinə aiddir. Əhəmiyyətli olan odur ki, o, həmçinin istehlakçının bu proseslərdən əvvəl və ya sonra gələn emosional, zehni və davranış reaksiyalarının öyrənilməsinə əhatə edir. İstehlakçı davranışında dəyişikliklər şəxsi, iqtisadi, psixoloji, kontekstual və sosial amillər də daxil olmaqla, müxtəlif səbəblərə görə baş verə bilər. Bununla belə, xəstəliyin baş verməsi və ya təbii fəlakət kimi dramatik kontekstlərdə bəzi amillər istehlakçı davranışına digərlərindən daha çox təsir göstərir. Həqiqətən də, potensial olaraq sosial həyatı pozan və ya fərdlərin sağlamlığını təhdid edən vəziyyətlərin güclü davranış dəyişikliklərinə səbəb olduğu sübut edilmişdir. Buna misal olaraq çaxnaşmaalışını göstərmək olar, qorxu və çaxnaşma davranışa təsir etdikdə, insanları adi haldan daha çox şey almağa vadar edən bir haldır. Xüsusilə, çaxnaşmaalışı, istehlakçılar bir fəlakət ərafəsində, zamanı və ya sonrasında əhəmiyyətli miqdarda məhsul aldıqda baş verən sürü davranışı kimi müəyyən edilmişdir. Çaxnaşmaalışının psixoloji səbəbləri ilə bağlı son araşdırma, satın alma qərarları qorxu və narahatlıq kimi mənfi emosiyalar tərəfindən pozulduqda istehlakçı davranışında oxşar dəyişikliklərin baş verdiyini göstərmişdir. Diqqətə layiqdir ki, COVID-19 pandemiyası kontekstində Lins və Aquino [Lins, Aquino, 2020] çaxnaşmaalışının impuls alışıla müsbət korrelyasiya olduğunu göstərdilər, belə ki, bunu mürəkkəb alış davranışı kimi müəyyən etməklə qərar vermə prosesinin sürətinin alternativ məlumat və düşünülmüş seçimin nəzərə alınmasına mane olduğunu bildirmişlər. İstehlakçı davranışında və satınalma qərarlarında dəyişikliklərdə iştirak edən müxtəlif psixoloji amillərin təhlili hələ də çox az araşdırılan bir sahədir. Mübahisə etmək olar ki, sağlamlıq böhranı və ya pandemiya kimi qeyri-müəyyən bir təhdid edici vəziyyət zamanı beynimizin primitiv hissəsi adətən daha qabarıq olur və insanları sağ qalmaq üçün zəruri olan (dərək edilmiş) davranışlarla məşğul olmağa sövq edir. Əhəmiyyətli olan odur ki, bu primitiv instinktiv davranışlar adi istehlakçı davranışına böyük təsir göstərərək rəasional qərar qəbuletmə prosesini üstələyə bilər. Buna görə də, insanların əsas primitiv reaksiyası sağlamlıq böhranı zamanı istehlakçı davranışının dəyişməsinə cavabdeh olan əsas amili təmsil edir. Xüsusilə, güvənsizlik və qeyri-sabitlik hisslərindən yaranan qorxu və narahatlıq bu davranış dəyişikliklərinə səbəb olan amillərdir. Xaosun idarə edilməsi nəzəriyyəsinə [Greenberg, Solomon, Pyszczynski, 1997] uyğun olaraq, əvvəlki tədqiqatlar göstərmişdir ki, fərdlərin təhlükəsizliyini təhdid edən xarici hadisələr qorxu və narahatlığı azaltmaq üçün kompensasiyaedici reaksiya proseslərini stimullaşdırır. Bu cavab

prosesləri fərdləri təhlükəsizlik, rahatlıq hissi qazanmaq və bir anlıq qaçmaq üçün alış-veriş etməyə sövq edə bilər ki, bu da stressi azaltmaq üçün kompensasiya mexanizmi kimi xidmət edə bilər. Bununla belə, bu cür satınalma motivasiyası fərdlərin mənfi emosiyalarını tənzimləmək cəhdini təmsil etdiyindən, satın alınan məhsullara olan faktiki ehtiyac çox vaxt əhəmiyyətsiz olur.

Pandemiyalar və təbii fəlakətlər yüksək stresli vəziyyətlərdir və asanlıqla neqativ emosiyalara və mənfi psixi sağlamlıq vəziyyətlərinə səbəb ola bilər, məsələn, fəvqəladə halların əsas aspektləri olan nəzarətsizlik və qeyri-sabitlik birbaşa olaraq stressə səbəb olur. Öz növbəsində, tədqiqat stressin istehlakçı davranışına təsir edən həlledici amil olduğunu vurğulanmışdır. Məsələn, əvvəlki tədqiqatlar göstərdi ki, fərdlər stressə cavab olaraq geri çəkilmə və passivləşmə bilər və bu hərəkətsizlik reaksiyası alışın azalmasına səbəb ola bilər.

Bununla belə, bəzi tədqiqatlar vurğulayır ki, stress impulsiv xərcləmə davranışlarını artırmaqla aktiv reaksiyaya səbəb ola bilər. Üstəlik, hadisələrin səbəb olduğu stress depressiv əhval-ruhiyyəyə səbəb ola bilər. Bəzi hallarda depressiv əhval-ruhiyyə impulsiv (həddindən artıq emosional reaksiya ilə müşayiət olunan qəfil nəyisə almaq istəyi) və/və ya kompulsiv satınalma (qeyri-mümkün olması səbəbindən təkrarlanan alış) kimi disfunksional istehlakçı davranışının inkişafına çevrilə bilər. Bu kontekstdə Sneath və həmkarları [Sneath, Lacey, Kennett-Hensel, 2009] vurğuladı ki, istehlakçı davranışındakı dəyişikliklər çox vaxt müsbət mənlilik hissini bərpa etməklə depressiv vəziyyətləri və mənfi emosiyaları idarə etməyə yönəlmiş özünü qoruyan strategiyaları təmsil edir. Əhəmiyyətli odur ki, COVID-19 pandemiyası zamanı bu yaxınlarda aparılan bir araşdırma göstərdi ki, depressiya insanların bəzi zəruri malların alışını artırma dərəcəsi kimi çərçivələnən həddindən artıq alış tendensiyasını proqnozlaşdırır.

Bu yaxınlarda aparılan bir araşdırma, stresli vəziyyətlərə cavab olaraq istehlakçı davranışını daha yaxşı başa düşmək üçün zərurət və zərurət olmayan məhsullar arasında fərqləndirməni tövsiyə etdi [Durante, Laran, 2016]. Müəlliflərin fikrincə, stress və istehlakçı davranışı arasındakı əlaqəyə dair ziddiyyətli nəticələr, araşdırılan məhsulun növündən asılı olaraq stressin müəyyən alış davranışlarına mənfi, digərlərinə isə müsbət təsir göstərməsi ilə bağlı ola bilər. Bir tərəfdən, istehlakçıların gündəlik həyatda qalma məhsullarını asanlıqla əldə etmək yolu ilə ehtiyacları (qeyri-zərurətlərə qarşı) pul xərcləməyə daha çox həvəsli ola biləcəyi iddia edildi. Müvafiq olaraq, son tədqiqatlar travmatik hadisə zamanı və ondan sonra zərurət mallarının (yəni utilitar alış-veriş) alınmasının artdığını sübuta yetirdi. Bununla belə, digər tapıntılar göstərdi ki, impulsiv qeyri-zərurət alış-verişi (yəni, hedonik alış-veriş) vəziyyətin ağrısını azaltmaq və ya minimuma endirmək cəhdi kimi də arta bilər. Yəni qeyri-lazım malların alınması stress və mənfi emosional vəziyyətləri idarə etmək üçün emosional mübarizə strategiyası kimi istifadə olunur. Bu tapıntıları uzlaşdırmaq üçün Durante və Laran [Durante, Laran, 2016] insanların stresli vəziyyətlərdə nəzarət hissini bərpa etmək üçün strateji istehlakçı davranışını mənimsəmələrini təklif etdilər. Beləliklə, yüksək stress səviyyələri ümumiyyətlə istehlakçıları pula qənaət etməyə və ehtiyac kimi qəbul edilən məhsullara strateji xərcləməyə gətirib çıxarır. Əhəmiyyətli odur ki, COVID-19 pandemiyasına görə qəbul edilən stressin istehlakçı davranışına təsiri ilə bağlı son araşdırma göstərdi ki, qəbul edilən stress səviyyəsinin yüksək olması ilə adi haldan daha çox miqdarda ərzaq almaq ehtimalı artıb. İstehlakçı davranışında xüsusi diqqətə layiq olan digər psixoloji amil özünə haqq qazandırma strategiyalarıdır. Özünə haqq qazandırma insanların inanclar, dəyərlər və davranışlar arasındakı ziddiyyətdən irəli gələn koqnitiv dissonansı azaltmağa çalışdıqları idrakın yenidən qiymətləndirilməsi prosesinə aiddir. İnsanlar tez-tez müsbət mənlilik hissini qorumaq, səhv olmaq hissindən qaçmaq üçün qərarlarını əsaslandırmağa çalışırlar. İstehlakçı davranışı tədqiqatlarında istehlakçıların seçimlərini dəstəkləyən müsbət arqumentləri gücləndirdikləri və davranışlarını sual altına qoyan əks arqumentləri aşağı saldıqları geniş şəkildə qəbul edilir. Əvvəlki araşdırmalara əsaslanaraq inandırıcıdır ki, COVID-19 pandemiyası kontekstində qeyri-lazım məhsulları almaq üçün özünü doğrultmaq azadlığacan atmağı və cansıxıcılığa qarşı durmağı da əhatə edə bilər. Bundan əlavə, "Sabah ölə bilərdim" və ya "Sən yalnız bir dəfə yaşayırsan" hedonist münasibəti, şübhəsiz ki,

COVID-19 fəvqəladə vəziyyət zamanı yenidən canlanma görə bilər və istehlakçı davranışında fərdi fərqləri nəzərə alan həlledici mexanizmə çevrilə bilər. Bu mülahizələrə əsaslanaraq, COVID-19 pandemiyası kontekstində, özünü əsaslandırma strategiyaları zərurət olmayan şeylər üçün aktual ola bilər, çünki əyləncə və ya əyləncə məhsulları azadlıq axtarışına və cansıxıcılığa qarşı daha uyğun ola bilər. Əksinə, zərurətlərlə bağlı özünü doğrulama strategiyaları məhsulların təbiətinə görə daha az dərəcədə həyata keçirilə bilər. Pandemiyanın görünməmiş konteksti artıq bu zəruri malların alınmasına haqq qazandıra bilər və əlavə əsaslandırılmalara ehtiyac olmaya bilər. Bundan əlavə, bir sıra tədqiqatlar göstərmişdir ki, ev təsərrüfatlarının gəlirləri insanların xərclərinin müəyyən edilməsində əhəmiyyətli təsirə malikdir. Təəccüblü deyil ki, tədqiqat gəlir və xərc səviyyələri arasında müsbət əlaqəni vurğuladı. Gəlir işdən və ya investisiyalardan müntəzəm olaraq alınan pul kimi müəyyən edilir. Maraqlıdır ki, fərqli bir tədqiqat xətti, özünün qəbul etdiyi iqtisadi sabitliyin faktiki gəlirdən daha çox istehlakçı davranışının müəyyənedicisi olduğunu qeyd etdi. Adətən insanlar, hətta onların obyektiv maliyyə vəziyyəti bu cür münasibəti dəstəkləməsə belə, subyektiv gəlir çatışmazlığı hisslərini bildirməyə meyllidirlər. Bu qərəzin maraqlı izahı sosial müqayisə prosesinə əsaslanır.

Həqiqətən də, Karlsson və həmkarlarının [Karlsson, Gärling, Dellgran, Klingander, 2005] araşdırması göstərdi ki, özlərini yaxşı maliyyə vəziyyətinə malik hesab edən ailələrlə müqayisədə, iqtisadi cəhətdən özlərini digərlərinə nisbətən daha pis hesab edən ev təsərrüfatları daha az mal aldığını bildirmişlər. Bundan əlavə, COVID-19 fəvqəladə vəziyyət kontekstində aparılan son araşdırma göstərdi ki, maliyyə resurslarının məhdud olduğuna inanan insanlar gələcək üçün ən çox narahat olanlardır. Buna görə də, hazırkı tədqiqatda biz müvafiq olaraq obyektiv iqtisadi məlumatı və respondentlərin subyektiv qavrayışını nəzərə almaq üçün respondentlərin həm gəlirlərini, həm də qəbul edilən iqtisadi vəziyyətini ölçdük. Bununla belə, COVID-19 pandemiyası zamanı bir çox ev təsərrüfatlarının yaşadığı qeyri-müəyyənlik vəziyyətini nəzərə alaraq, biz fərqli zaman çərçivələrində digər ailələrlə müqayisədə iştirakçıların iqtisadi vəziyyətinə dəyişdik. Respondentlərdən fəvqəladə haldan əvvəl, zamanı və ondan sonra qəbul edilən iqtisadi sabitlik barədə məlumat vermələrini xahiş etdik.

Nəhayət, xüsusi fəvqəladə vəziyyətlə bağlı situasiya faktorları ilə yanaşı, fərdlərin şəxsiyyət xüsusiyyətlərinin də istehlakçı davranışının müəyyən edilməsində rolu ola bilər. Keçmiş tədqiqatlar vurğuladı ki, Beş Böyük şəxsiyyət xüsusiyyətləri istehlakçı davranışını fərqli şəkildə proqnozlaşdırı bilər. Xüsusilə, vicdanlılıq, açıqlıq və emosional sabitlik kompulsiv alış, impulsiv alış və utilitar alış-verişlə əlaqəli idi. Buna baxmayaraq, müxtəlif şəxsiyyət xüsusiyyətlərinin istehlakçı davranışı ilə necə əlaqəli olduğu hələ də açıq sualdır.

COVID-19 pandemiyası ilə əlaqədar karantin mərhələsində istehlakçı davranışını öyrənmək üçün İtaliya əhalisi arasında ümummilli sorğu keçirdik. COVID-19 fəvqəladə halı qeyri-vacib məhsullarla (məsələn, paltar və aksesuarlar kimi dəbdəbəli əşyalar) müqayisədə vacib malların (məsələn, qida, dərmanlar və s.) faydalılığını vurğuladığı üçün araşdırmamızda məhsulları aşağıdakı kateqoriyalara ayırdıq: zəruri və qeyri-lazım olanlar. Bundan əlavə, COVID-19-un insanların xərclərinə təsirini təsdiqləmək üçün xərc səviyyələrindəki dəyişikliklər (zəruri və qeyri-zərurət) araşdırıldı. Bundan əlavə, biz xərclərin səviyyəsinin dəyişməsi ilə istehlakçı davranışındakı dəyişikliklər arasındakı əlaqəni aydınlaşdırmağa çalışdıq. Nəhayət, biz hədəf məhsullara qarşı istehlakçı davranışında dəyişikliklərin əsasını təşkil edən psixoloji amillərə diqqət yetirdik. Ədəbiyyata əsaslanaraq, zərurət məhsullarında daha nəzərəcarpacaq artımla alışlarda artım tapacağını gözləyirdik. Xüsusilə, biz əhval-ruhiyyəni və fəvqəladə vəziyyətə təsirli reaksiyanı, qəbul edilən iqtisadi sabitliyi, satınalma üçün özünü doğrultmağı və şəxsiyyət xüsusiyyətlərini tədqiq etməklə istehlakçı davranışının potensial əsaslarını araşdırdıq. Bütün bu amillər əvvəlki tədqiqatlarda istehlakçı davranışına təsir göstərmişdir, lakin bildiyimizə görə, heç bir araşdırma onların hamısını bir anda nəzərdən keçirməmişdir. Buna görə də, bu işdə müxtəlif psixoloji amillərin qarşılıqlı təsirini nəzərə alaraq onların töhfəsini öyrənmək üçün integrativ bir yanaşma

tətbiq edilmişdir. Xüsusilə, yuxarıda təqdim olunan empirik tapıntılara və nəzəri hesablara əsaslanaraq, COVID-19 pandemiyası zamanı fərz edildi ki:

Daha yüksək səviyyəli narahatlıq və COVID ilə əlaqəli qorxu istehlakçı davranışındakı dəyişiklikləri izah edərək, zəruri malların alınması ehtiyacını artıracaq.

Stressin daha yüksək səviyyələri istehlakçıları pula qənaət etməyə vadar edəcək və ya alternativ olaraq ehtiyaclara (yəni, utilitar alış-verişə) pul xərcləmək ehtiyacını artıracaq.

Depressiv vəziyyətin daha yüksək səviyyələri həm zərurət, həm də qeyri-lazım malların alınması ehtiyacının artması ilə əlaqələndirilir.

Özünə haqq qazandıran strategiyaların daha yüksək şəkildə həyata keçirilməsi, xüsusilə qeyri-lazım mallar üçün daha yüksək alış ehtiyacı ilə əlaqələndirilə bilər.

Daha yüksək qəbul edilən iqtisadi sabitlik həm ehtiyaclara, həm də qeyri-zərurətlərə olan ehtiyacın artması ilə əlaqələndiriləcəkdir.

Biological Sciences

Effectiveness of probiotic preparations in poultry

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Introduction

In many countries around the world, poultry farming takes a leading place in agricultural production. Among meat products, poultry meat is not only sold at the most affordable price, but is one of the most suitable solutions for food supply. That is why the development of poultry farming in our country depends on the feeding of birds with complete and vitamin-rich foods.

It is necessary not only to feed the birds with food rich in nutrients such as protein, calcium, phosphorus and carotene, but also to add a probiotic biologically active product. In this case, not only the productivity will increase, but also the consumption of food per product unit will decrease.

Currently, the development of poultry farming is hampered by the lack of rational feeding technology and technical means of feed preparation.

The purpose of the work: **to show the importance of increasing the quality of poultry meat, to reach the peak of meat productivity in a short time, and to cause a decrease in poultry waste by actively feeding probiotic biological products in poultry farming.**

In this regard, it can be concluded that poultry production can be developed not only by increasing the number of heads and with the help of new technologies, but also by the benefits of probiotic products [1].

Nowadays, it is of great importance to develop sets of veterinary measures aimed at increasing the life span and productivity of birds through the targeted use of pharmacological, environmentally friendly drugs and biologically active substances.

Main body

Probiotics are live microorganisms introduced into animal diets as feed additives. Adding probiotics to the diet improves bird health and performance by contributing to gut health and nutrient utilization. For example, it has been proven that probiotic supplements are beneficial to farm animals in terms of immunomodulation, structural modulation, and have a positive effect on the intestinal mucosa against pathogens [2].

Traditionally, dry food without microorganisms is used for feeding. The use of microorganisms with the necessary properties in obtaining live bio-food is of great practical

importance. Introducing new types of biofeeds into production using microorganisms (probiotics) is currently important for the development of poultry farming in Kazakhstan.

In the course of comparative work with chickens of the control group, it was found that vitamin E affects the immune organs of birds, increases the mass and size of internal organs, increases the strength of cells in the blood body [3].

Administration of succinic acid to the organism in poultry farming helps to increase the resistance of the organism, the bactericidal and lysozyme activity of blood serum by 10.4% and 18.2%, stimulates embryonic and postembryonic development, and increases the incubation capacity of chickens by 10% [3].

Preparations of succinic acid are commercially available and available on sale - "Yantavit", "Yantarin", "Yantarin Formula 2", Vitar-S preparations are vitamin complexes considered as biologically active supplements (BAD) for poultry.

Minerals are part of complex organic compounds that perform various physiological and metabolic functions in the body. Animals take them with food and partly with water. Deficiency or excess of some elements in feed leads to a decrease in productivity and fertility, worsens feed utilization, causes various diseases [4].

Feed additives for birds can be purchased at any specialized store. However, most chicken and chicken producers use them cautiously to feed poultry. But experts conclude that it is possible and necessary to introduce them into the diet of birds. In addition, food should be balanced in terms of proteins, fats, and carbohydrates. It should also contain a sufficient amount of vitamins and trace elements, because their lack, unfortunately, leads to a number of serious diseases of birds.

The daily ration of chickens should include grain, bran, dry grass, juicy feed, bone meal, and dry protein feed. All components should be given in a certain proportion in the diet. Even when the required level of balance is reached, it is very difficult to provide chickens with all the necessary amino acids, vitamins, and minerals. This applies especially to the spring-winter period. In addition, the introduction of expensive products into the diet significantly increases the cost of chicken meat and eggs. It is for these reasons that poultry farmers now prefer to actively introduce feed additives into the daily menu of birds [5].

Early feed availability in starter diets for chickens was studied by us during 30 days after they were born. We discovered that broilers' growth performance can be improved by early feeding. Concepts for hatching, such on-farm hatching, offer a chance to give freshly hatched birds the best nourishment possible, supporting their growth and the formation of a healthy gut.

The projected results from adding brown algae to one of the diets to improve growth performance, organ development, gut microbiome, and vaccine-induced antibody responses were not achieved [6].

Materials and methodology.

The experiment was held in Astana, in the Laboratory of "Republican Collection of Microorganisms". There were used several methods such as microbiology, molecular-biology and biotechnology.

We have carried out monitoring work on how much useful mixture should be given to each bird within 1 month. Taking the average number of about 20 birds, their average physique and physiological image were recorded on paper.

Depending on the average weight, age and breed of the bird, the following parameters were obtained:

A) in feed and garbage:

- hygroscopic humidity (by evaporation in the oven at a temperature of 105°C);

- raw ash (dry ash in a muffle furnace);

- crude oil - by distilling with ether in a Soxhlet apparatus (according to the method of V. Rushkovsky);
 - raw fiber (according to the Henneberg and Shtoman methods);
 - total nitrogen (according to the Kjeldahl method).
- B) meat:
- chemical composition.

Efficiency of biological active supplements usage in poultry		
I experimental group (7 birds)	I experimental group (7 birds)	II experimental group (6 birds)
Complex of research		

The most important link in the technological process for the production of chicken meat is the directed rearing of replacement young birds in a short time with no harm for their health and meat production.

For a more detailed study of the effect of new feed additives on the productive qualities of offspring, 3 groups of experimental day-old chicks obtained in the previous experiment were formed. Despite the difference in the weight of day-old chicks during the acquisition of experimental groups, the live weight of pullets during the growing process fluctuated within the limits of the normative indicators of this cross. However, the live weight of replacement pullets of the II experimental group at the age of 21 weeks reached 1776 g, which is 5% ($P < 0.001$) higher than the control group. The live weight of young animals of I and II experimental groups also exceeded the control by 2.4 ($P < 0.01$) and 1.9% ($P < 0.05$), respectively. Herd uniformity increased by 1.3; 2.3; 1.1% and amounted to 95.1; 96.1; 94.9% versus control - 93.8%. The homogeneity of the mass of birds allows in a shorter time to reach the standard level of egg-laying intensity, thereby obtaining a higher meat production, as a result, increasing the profitability of the production of broilers.

Feed costs per 1 kg of growth decreased in the experimental groups by 0.12; 0.23 and 0.12 kg due to a higher gain in live weight of pullets.

Livestock safety in all experimental groups was high and did not depend on the studied factors. The mass of internal organs throughout the entire period of cultivation in all experimental groups was within the physiological norm of this cross. However, upon reaching puberty, the mass of the muscular stomach of pullets of the II experimental group exceeded the control by 2.2 g ($P < 0.01$), in the I experimental group - by 1 g ($P < 0.05$) and in II- by 0.9 g ($P < 0.05$). The weight of the liver of the II experimental group also exceeded the control by 1.6 g and amounted to 40.8 g ($P < 0.01$).

Analyzing the development of the reproductive organs of replacement pullets in the age aspect, we found that up to 14 weeks of age, both the ovary and the oviduct were in their infancy. By the age of 17 weeks, the weight of the ovary in the control group increased by 10.3 g, in the experimental groups - by 10.4; 10.5 and 10.3 g respectively. Such a sharp increase in the mass of the ovary is explained by the beginning of maturation of the follicles before oviposition. By the beginning of oviposition, the mass of the ovary in all experimental groups increases by about 5 times. However, the weight of the ovary in chickens of the II experimental group was higher than the control by 1.5 g and amounted to 52.3 g ($P < 0.01$).

When pullets reach puberty, there is a sharp increase in both the length of the oviduct and its mass. The length of the oviduct in pullets of the II experimental group at the age of 21 weeks was 64.6 cm ($P < 0.05$), which is 1.9 cm more than in the analogues from the control group. The mass of the oviduct of all experimental groups exceeded the control by 7.4 ($P < 0.05$); 12.8 ($P < 0.01$) and 2.2%.

Conclusion

Taking these indicators forward, it is possible to see how effective the use of probiotic supplements is in poultry farming. In the Republic of Kazakhstan, the price of 1 ton of active ingredients is 190,000 tenge (412 US dollars), and in poultry farming, this amount is 70% of poultry meat. Due to the increase in the number of people in the world, there will be a shortage of poultry meat in the next 100 years. In order not to exaggerate the shortcomings, it is very necessary to use useful probiotic biological supplements in agricultural farms. Poultry waste is reduced and they increase fertility by 5% as an active ingredient in the soil.

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ПОЧВЕННО-ЭКОЛОГИЧЕСКИЕ УСЛОВИЯ, ПРОИЗРАСТАЮЩИХ РЕДКИХ, ИСЧЕЗАЮЩИХ РАСТЕНИЙ В ЕНБЕКШИКАЗАХСКОМ, КАРАСАЙСКОМ, ТАЛГАРСКОМ РАЙОНАХ АЛМАТИНСКОЙ ОБЛАСТИ

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Аннотация

Исследования почвенно-экологических условий под редкими исчезающими растениями показали антропогенные нарушения почвенно-растительного покрова, пастбищную дигрессию, эрозионные процессы в виде оползней, обрывов, разной степени смывости почв. Были исследованы почвы под редкими, исчезающими видами растений. Описаны морфогенетические особенности почв с интерпритацией их аналитических свойств. Приведены растения с описанием их морфологических и экологических характеристик.

Ключевые слова: почвы, почвенный покров, антропогенная и пастбищная дигрессия, эрозия, морфологические свойства почв, редкие и исчезающие растения.

Алматинская область, которая издавна носит название Жетысу, граничит со следующими регионами Казахстана: Жамбылская область на западе, Карагандинская область на северо-западе (водная граница проходит по озеру Балхаш), на северо-востоке

расположена Восточно-Казахстанская область. Область имеет довольно сложную географическую характеристику и очень разнообразный рельеф. Северная часть представляет полупустынную равнину, слабонаклоненную к озеру Балхаш и изрезанную древними руслами реки Или, самое значительное из которых - Баканас. Двумя отдельными массивами - на юге и востоке - простираются горные хребты: Илейский (Заилийский) Алатау и Жетысуский (Джунгарский) Алатау (горная система Тянь-Шань). На стыке их постепенно понижающихся склонов и расположено среднее русло реки Или. Сами склоны изобилуют конусами выноса её притоков (Чарын, Чилик, Алматинки, Курты и т. д.).

Для предгорных районов характерна степная растительность, с подъемом в горы лиственные леса сменяются хвойными, которые переходят в альпийские луга. Фауна представлена множеством биологических видов: 24 вида млекопитающих, 35 - птиц, 4 вида пресмыкающихся и рыб подлежат особой охране и включены в Красную Книгу республики.

Алматинская область относится к регионам аграрной направленности. Важным фактором является близость расположения культурного и финансового центра Казахстана - г. Алматы. Исследования проводились в рамках научно-технической программы BR10264557 «Кадастровая оценка современного экологического состояния флоры и растительных ресурсов Алматинской области как научная основа для эффективного управления ресурсным потенциалом» (2021–2023).

Объектом исследования является почвенный покров Енбекшиказахского, Карасайского, Талгарского районов Алматинской области.

Методы исследования: полевые - экспедиционные, лабораторно-аналитические.

Рекогносцировочный обход объекта исследования позволил разметить на карте ключевые точки закладки почвенных разрезов с учетом распространения редких, исчезающих видов растений в 3 районах Алматинской области (рисунок 1)

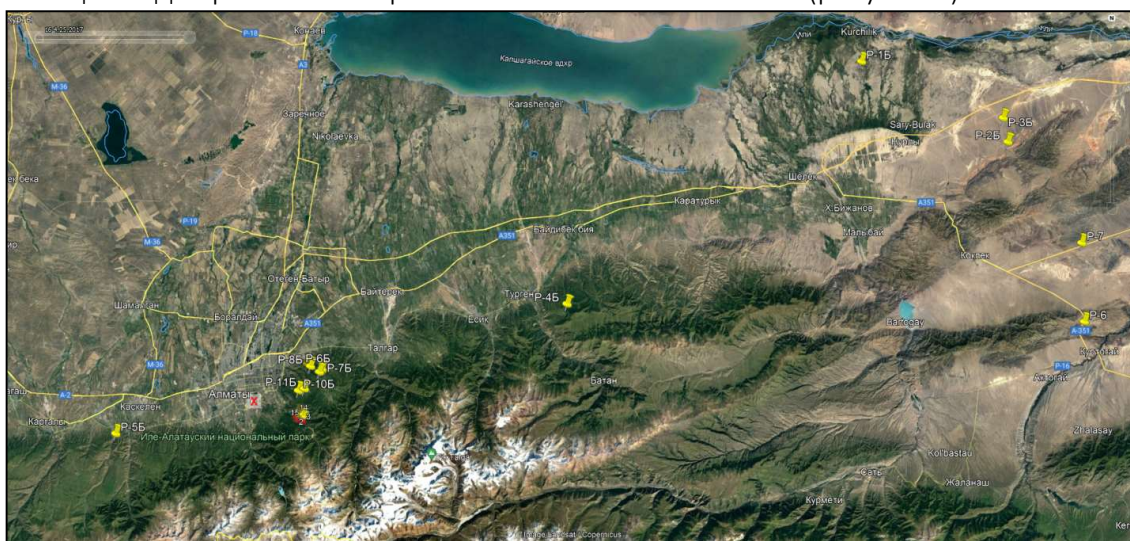


Рисунок 1 - Карта ключевых точек почвенных разрезов в Енбекшиказахском, Талгарском и Карасайском районах Алматинской области

Общие экологические условия почвенного покрова объекта исследования. Горный район в бассейнах рек Каскелен, Текес, Байынкол, Акколь отличается крутосклонным рельефом, глубоким врезом речных долин. Здесь на поверхности обнажаются скальные палеозойские породы. В горах идут интенсивные процессы физического и химического выветривания, многочисленные делювиальные осыпи, обвалы. Широкое развитие имеют тектонические нарушения [1].

Почвенный покров подчинен закономерностям высотного распределения. На высотах 900-1500 м на северных лугово-степных склонах с кустарниками формируются черноземы разной гумусности. На высотах 1500-1800 м под небольшими участками леса залегают темно-серые горнолесные почвы. Под открытыми остепненными участками распространены, в

основном, выщелоченные черноземы [2]. Рельеф – предгорья, пониженные периферические части горных систем и хребтов, имеющие холмистый или горный характер. Участки с уклоном 1–3° подвержены эрозионным процессам [3]. Помимо крутизны склона, на интенсивность эрозионных процессов оказывает влияние показатель длины склона, слабой интенсивностью смыва характеризуются склоны длиной до 500 м, максимально возможная интенсивность смыва характерна для склонов от 1000 м. Таким образом, исследования позволили установить, что интенсивность смыва почв определяется совокупностью природных условий, среди которых рельеф является основополагающим. В среднегорья интенсивность прогнозного смыва увеличивается до сильного и очень сильного уровня. Наиболее значимым фактором рельефа является крутизна склона [4].

За последние годы наблюдается устойчивая тенденция ухудшения экологической ситуации экосистем биосферы (почва, вода, воздух) и здоровья населения Республики Казахстан. Антропогенные воздействия на почвы обширней, чем на другие экосистемы биосферы [5].

В процессе исследований были определены общие экологические условия почвенного покрова, т.е. антропогенная, пастбищная дигрессия, деградация, оползни, эрозионные процессы. На крутых горных склонах преобладают незакрепленные участки с обрывами, скальными выходами пород. На склонах исследуемых объектов развиваются эрозионные процессы, образуются осыпи, местами – оползни. Особенно сильно разрушается почва в условиях пастбы табунов лошадей. Продолжительное разрушение растительной подстилки губительно для экосистем, так как при этом погибает микро- и мезофауна, снижается образование и круговорот азота в почве. На тропах, дорогах происходит распыление верхних слоев почвы до порошкообразного состояния, затем начинается эрозионный процесс. Нарушается круговорот питательных веществ и сокращаются популяции почвенных микроорганизмов и дождевых червей. Горные почвы подвергаются разрушению при отсутствии планового туризма [6].

В горной местности треть и более земель используется под пастбища, что приводит к деградации почвы, которая выражается в ее разрушении и распылении, уплотнении и эрозии.

Основным фактором деградации почвенно-растительного покрова горных территорий является пастбищная дигрессия. Перевыпас проявляется, прежде всего, в нарушении растительного покрова, местами до полного его уничтожения, сопровождаемым переуплотнением и разрушением поверхностных горизонтов почв. Это приводит к длительному сохранению подвижности грунтов на склонах, погребению под обломочным материалом почв, изменению их температурного и водного режимов.

На исследуемых объектах пасутся коровы и лошади. Нарушен растительный покров, в некоторых местах растительность полностью уничтожена, разрушены поверхностные горизонты почв. Имеются множество антропогенных, террасированных пастбищных троп. Воздействие туризма на почвенный покров может иметь различный характер. Удаление или перемещение верхнего слоя почвы является следствием поверхностной деятельности. Более разрушительное воздействие на почву оказывают туристы, передвигающиеся прямо вниз или вверх по склону *пешком или на лошадях*. Восстановить почвы и предотвратить их дальнейшее разрушение можно только в том случае, если туристы будут пользоваться специальными туристскими тропами и тропинками. Если на земной поверхности уже начали развиваться эрозионные процессы, они, скорее всего, будут усиливаться до подстилающих пород или до уровня грунтовых вод.

На исследуемом объекте мы обнаружили заброшенный яблоневый сад и очень много выпавших древесных растений.

Морфологическое описание разрезов. Разрез 1Б заложен в урочище Сарыбулак на бугристо-рядовых песках среди тростников (*Phragmites australis*) и туранги сизолистной (*Populus pruinosa*). Микрорельеф: впадины, возвышенность; макрорельеф: выровненная туранговое редколесье в дельте реки Или. Из растительности также встречаются терескен



Рисунок 2 – Р-1Б

роговидный (*Krascheninnikovia ceratoides*), солодка голая (*Glycyrrhiza glabra*), ажрек, прибрежница солончаковая (*Aeluropus littoralis*), цинанхум сибирский (*Cynanchum sibiricum*), спаржа персидская (*Asparagus persicus*), селитрянга Шобера (*Nitraria schoberi*), верблюжья колючка киргизская (*Alhagi kirghisorum*), марь белая (*Chenopodium album*), лебеда седая, кокпек (*Atriplex cana*), чингил серебристый (*Halimodendron halodendron*). Проективное покрытие 70-80%. На поверхности опад из неразложившихся листьев, веток (рисунок 2). Высота 487 м н.у.м. Координаты: 43°47'03.76"С.Ш., 78°24'17.99"В.Д.

0-21 см - серо-палевый, сухой, уплотненный, непочно-пластинчато-комковатый, комочки распадаются на пылеато-песчаные фракции, тонкопористый, встречаются живые и отмершие корешки растений, песчаные фракции разного цвета,

бурно вскипает от HCl, переход заметен по цвету и сложению.

21-39 см – светло-серый с желтоватым оттенком, свежий, плотный, непрочно-комковато-пылевато-порошистый, легкий суглинок, встречаются живые и мертвые корешки растений, бурно вскипает от HCl, переход заметен по цвету и сложению.

39-75 см - серо-палевый с буроватым оттенком, свежий, бесструктурный, комочки распадаются на песчаные фракции, тонкопористый, по горизонту идут крупные корни тростника, встречаются мелкие, тонкие корешки, встречаются кристаллы, возможно это песчаные фракции, слабо вскипает от HCl, переход заметен по цвету и сложению.

75-119 см – желто-бурый, сырой, рыхлый, легкий суглинок, множество крупных корней тростника, бесструктурный, с 75-78 см залегают дресвянисто-щебнисто-каменистый прослой и крупные, щебнистые, окатанные камни, это говорит о речном происхождении, слабо вскипает, от HCl, переход заметен по цвету и сложению.

119-145 см - палевый, прослой дресвянисто-щебнисто-каменистой фракции, увлажненный, рыхлый, легкий суглинок, крупные, мелкие корни тростника, слабо вскипает от HCl.

Разрез 2Б заложен в горах Малые Богуты, урочища Малыбай в русле высохшей реки Карасай. В межгорной котловинообразной долине, образованной в результате эрозионной деятельности реки в разновозрастном саксауловом лесу, каменисто-щебнисто-глинистая полупустыня, котловину образует - холмисто увалистый рельеф. Множество выпавшего саксаула. Проективное покрытие 70-80%. Поселение саксаула (*Haloxylon ammodendron*) отмечается на высоте 733 метров, до 740 метр редко, с 770 метров единично (рисунок 3). На поверхности возле саксаула опад из листьев и веток, также каменисто-щебнистые фракции. Весь профиль вскипает от HCl. Высота 726 м н.у.м. Координаты: 43°38'06.05"С.Ш., 78°45'35.11"В.Д. Почва из речной песчано-суглинистого наноса.

0-10 см – серо-палевый, сухой, местами рыхлый, местами плотный, тонкопористый, комковато-чешуйчато-пластинчатая, редко встречаются корневые волоски, каменисто-щебнистая, встречаются валунообразные камни, суглинок, по горизонту идет



Рисунок 3 – Р-2Б

крупный корень растений куйреуика, бурно вскипает от HCl, переход заметен по цвету и сложению.

10-27 см - палевый с желто-бурым оттенком, сухой, плотный, каменисто-щебнистый, местами встречаются темные пятна, образующиеся разложившимися корнями, много корневых остатков, также обуглившиеся корневые остатки, диаметр корней 10 см, корневые остатки придают пестроту этому горизонту, почвенные агрегаты слабо оструктуренные, распадаются на пластинчатые комочки и пыль, пластинчато-порошисто-пылеватая, крупные и мелкие корневые волоски, бурно вскипает от HCl, переход заметен по цвету и сложению и по каменисто-щебнистости.

27-69 см – серые, разноцветные, серый с вкраплениями коричневых-серых крупных песчаных фракции, они придают разноцветность, сухой, местами рыхлый, местами очень плотный, этот горизонт имеет большую мощность, по горизонту встречаются темные и светлые включения, бесструктурный, по всему горизонту идут мелкие, средние корни, вскипает бурно от HCl.

Разрез ЗБ заложен в урочище Малыбай в русле высохшей реки Карасай, где растет саксаул, хорошо выражен макрорельеф, на поверхности много опада только кустарниковых растений (рисунок 4). Высота 600 м н.у.м. Координаты: 43°40'41.21"С.Ш., 78°45'02.60"В.Д.

0-25 см – желто-палевый, сухой, уплотненный, непрочнo-комковато-порошистый, суглинок легкий, тонкопористый, множество корневых волосков, по профилю разноцветные песчаные фракции и камни, встречаются полуразложившийся корни, вскипает, переход заметен по сложению и по цвету.



Рисунок 4 – Р-ЗБ

25-45 см – палево-желтый, сухой, местами сильно уплотненный, местами менее уплотненный, тонкопористый, ореховато-комковато-пылеватая, встречаются разложившиеся и полуразложившиеся корневые волоски, различного цвета песчаные фракции, местами рыхлые пески, местами суглинистые, плотные, вскипает от HCl, переход заметен по цвету и сложению.

45-77 см - палево-желтый, свежий, тонкопористый, имеет более устойчивую структуру, комковато-ореховато-пылеватая, опесчаненный суглинок, встречаются разложившиеся и не разложившиеся корни, корневые волоски, следы корней, множество разного цвета песчаной фракции, бурно вскипает от HCl, переход заметен по цвету и сложению.

77-89 см – прослой каменисто-щебнистой породы вперемежку с суглинистой породой, вскипает от HCl, переход заметен по цвету и сложению.

89-125 см – желто-бурым, свежий, уплотненный до плотного, комковато-ореховато-пылеватая, наблюдаются поры, весь горизонт состоит из разных размеров песчаной фракции, встречаются тонкие неразложившиеся корни, бурно вскипает от HCl.

Разрез 5Б заложен в предгорьях Заилийского Алатау на северо-восточном склоне в ущелье Шольдаыр, рядом с речкой Чемолган в Карасайском районе. Из растительности встречаются боярышник джунгарский (*Crataegus songarica*), вяз низкий, карагач (*Ulmus pumila*), тополь (*Populus* sp.), ива (*Salix* sp.), вдоль реки облепиха крушиновидная (*Hippophae rhamnoides*), абрикос обыкновенный (*Prunus armeniaca*). По склону проложены тропы. Крутизна склона 35°. На поверхности опад из листьев, веток, каменные породы (рисунок 5). Высота 1142 м н.у.м. Координаты: 43°08'21.38" С.Ш., 76°34'12.40" В.Д. Почва темно-каштановая маломощная каменная.



Рисунок 5 – Р-5Б

0-27 см – темно-серый, рыхлый, комковато-зернисто-порошистый, весь дресвянисто-щепнистый, встречаются остроугольные, валун образные, плоские горные породы, суглинок, тонкопористый, весь пронизан корневыми волосками, встречаются крупные корни, бурно вскипает от HCl, переход заметен по цвету и сложению.

27-51 см – серый с буроватым оттенком, сухой, прочно-комковато-зернисто-порошистый, местами плотный, местами рыхлый, суглинок, по горизонту сложение различной величины грубообломочных горных пород, встречается мелкая щепнистая дресва, копролиты червей, полуразложившиеся и разложившиеся корневые волоски, бурно вскипает от HCl, переход заметен по цвету и сложению.

51-87 см - серо-бурый, песчанисто-суглинистый, местами плотный, местами рыхлый, сухой, комковато-песчанистый с дресвой, в этом горизонте встречаются грубообломочные остроугольные и различной формы горные породы, ходы корневой системы растений, гнезда, ходы насекомых, копролиты, ракушки.

Разрез 6Б заложен в Талгарском районе в ущелье Котырбулак на северо-западном склоне. Доминантами растительного покрова являются абрикос обыкновенный (*Prunus armeniaca*), разнотравье, солодка голая (*Glycyrrhiza glabra*), несколько видов полыни (*Artemisia*), злаки, чертополох (*Cárduus*). На поверхности обильный опад 1-1,5 см травянистых растений, проективное покрытие 100%. Высота 1335 м н.у.м. Координаты: 43°14'51.45"С.Ш., 77°04'04.78"В.Д. (рисунок 6). Выщелоченный чернозем.



Рисунок 6 – Р-6Б

0-35 см – темно-серый до черного, сухой, рыхлый, комковато-зернистый, весь переплетен корневыми волосками, суглинок, обилие копролитов, по горизонту имеются крупные и мелкие, свежие, полуразложившиеся и разложившиеся корни растений, имеются ходы и гнезда насекомых, не вскипает от HCl, переход заметен по цвету и сложению.

35-59 см – темно-серый, местами плотный, местами рыхлый, свежий, комковато-зернистый, где плотный – комковато-пылеватый, суглинок, в горизонте выделяется большое пятно, заполненное зернистой почвенной массой, переплетен корневыми волосами, встречаются крупные корни, обилие различной величины корневых волосков, встречаются гнезда насекомых, не вскипает от HCl, переход заметен по цвету и сложению.

59-80 см – палево-желтый, свежий, плотный, тонкопористый, суглинок, комковато-порошисто-пылеватый, имеются различные поры, корневые волоски и встречаются сгнившие корни, есть микро и макропоры, не вскипает от HCl, переход заметен по цвету и сложению.

80-94 см – палевый с желто-бурый оттенком, более уплотненный, чем предыдущий горизонт, комковато-ореховато-порошистый, встречаются корни солодки, гнезда

насекомых, микро и макропоры, карбонатная присыпка, бурно вскипает от HCl, переход заметен по цвету и сложению.

94-125 см – палевый, с желтоватым оттенком, свежий, плотный, комковато-ореховато-порошистый, суглинок, больше карбонатного налета и присыпки, встречаются корневые волоски, бурно вскипает от HCl.

Разрез 7Б заложен в ущелье Котырбулак на восточном склоне, в заброшенном старом яблоне-вом саду, среди деревьев. Много сухостоя. Все деревья находятся в угнетенном состоянии. Территория сильно вытравлена, вытоптана. Очень много выпавших деревьев, деревья поражены, какими-то вредителями (рисунок 7). Высота 1356 м н.у.м Координаты: 43°15'09.62" С.Ш., 77°04'27.34" В.Д.. Почва чернозем выщелоченный.

0-22 см – темно-серый до черного, сухой, прочно-комковато-зернистый, суглинок, хорошо выражены микро и макропоры, слегка уплотненный, местами рыхлый, обилие копролитов, по всему горизонту встречаются крупные корни, корневые волоски множество нор и гнезд насекомых, не вскипает от HCl, переход заметен по цвету и сложению.



Рисунок 7 – P-7Б

22-40 см – серо-бурый, свежий, более уплотненный, комковато-зернисто-порошистый, устойчивый, суглинок, обилие мелких и крупных корней, гнезд насекомых, хорошо выражены микро и макропоры, не вскипает от HCl, переход заметен по цвету и сложению.

40-64 см – серо-бурый, свежий, плотный, комковато-зернисто-порошистый, встречаются корневые волоски, крупные корни, гнезда насекомых, хорошо выражены микро и макропоры, в гнездах насекомых встречаются копролиты, не вскипает от HCl, переход заметен по цвету и сложению.

64-85 см – палево-бурый, свежий, плотный, ореховато-комковато-зернистый, хорошо выражены микро и макропоры, суглинок, встречаются корневые волоски, крупные корни, гнезда насекомых, встречаются кротовины, слабо вскипает HCl, переход заметен по цвету и сложению.

85-110 см – палевый, свежий, плотный, комковато-ореховатый, структура устойчивая, суглинок, на поверхности карбонатная присыпка и прожилки, множество полуразложившихся и разложившихся корневых волосков, хорошо выражены микро- и макропоры, бурно вскипает от HCl.

Разрез 8Б заложен на горном массиве Заилийского Алатау на северо-западном склоне в Прямой щели реки Тиксай под абрикосом. На юго-восточном склоне растут густые заросли абрикоса (*Prunus armeniaca*). Редколесье абрикосов, на более высоких отметках они растут по гуще. В составе растительности встречаются заросли солодки голой (*Glycyrrhiza glabra*), яблони Сиверса (*Malus sieversii*), боярышника джунгарской (*Crataegus songarica*). На поверхности растительный опад, экскременты животных, абрикосовые косточки. Высота 1083 м н.у.м Координаты: 43°15'27.97"С.Ш., 77°02'44.85"В.Д. (рисунок 8).



Рисунок 8 – P-8Б

0-20 см – темно-серый, сухой, рыхлый, местами плотноватый, весь задернованный, прочно-комковато-зернистый, обилие копролитов, по горизонту крупные древесные корни, корни солодки, корни травянистых растений, тонкопористый, суглинок, имеются гнезда и ходы насекомых, не вскипает от HCl, переход заметен по цвету и сложению.

20-48 см – серый, местами серо-палевый, горизонт разноцветный, местами серый с темноватым оттенком, местами палевый, серо-палевый, свежий, местами рыхлый, местами плотный, ореховато-комковато-зернистый, суглинок, тонкопористый, встречаются корни растений, весь горизонт в корнях солодки, травянистых, древесных растений, весь этот горизонт биогенный, обилие копролитов, гнезд и ходов насекомых, не вскипает от HCl, переход заметен по цвету и сложению.

48-61 см – палевый с желтоватым оттенком, свежий, местами плотный, метами менее уплотненный, комковато-зернисто-пылеватая, встречаются полуразложившиеся и разложившиеся корни растений, гнезда и ходы насекомых, вскипает от HCl, переход заметен по цвету и сложению.

61-92 см – желтый, свежий, плотный, ореховато-пластинчато-комковатый, тонкопористый, суглинок, имеются карбонатные прожилки, встречаются полуразложившиеся и разложившиеся корни растений, бурно вскипает от HCl, переход заметен по цвету и сложению.

92-110 см – желто-палевый, свежий, пластинчатый, суглинок, множество пор, карбонатная присыпка, прожилки, вкрапления, плотный за счет карбонатов, обилие корневых волосков, бурно вскипает от HCl.

Заключение. В процессе исследования были выявлены общие почвенно-экологические нарушения почвенного покрова, т.е. антропогенное, пастбищная дигрессия, деградация, оползни и эрозионные процессы. На крутых горных склонах преобладают незакрепленные участки с обрывами, скальными выходами пород. На склонах исследуемых объектов развиваются эрозионные процессы, образуются осыпи, местами – оползни.

На исследуемых объектах: ведется интенсивный выпас крупного, мелкого рогатого скота, овец и лошадей. Нарушен растительный покров, в некоторых местах растительность полностью уничтожена, разрушены поверхностные горизонты почв. Имеются множество антропогенных, террасированных пастбищных троп; более разрушительное воздействие на почву оказывают туристы, передвигающиеся прямо вниз или вверх по склону пешком или на лошадях. Обнаружен заброшенный яблоневый сад с большим количеством выпавших древесных пород.

Встречаются глубоко выщелоченные черноземы, черноземы маломощные, темно-каштановые малоразвитые на щебнистом элювио-делювии плотных пород, серо-бурые пустынные малоразвитые на галечниковом и щебнисто-галечниковом элювии и пролювии, пойменно-луговые, пески пустынные слабогумусированные карбонатные грядово-бугристые почвы.

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ИДЕНТИФИКАЦИЯ ООЦИСТ ЭЙМЕРИЙ И КРИПТОСПОРИДИЙ ОВЕЦ В ЛЕНКОРАН-АСТАРИНСКОМ ЭКОНОМИЧЕСКОМ РАЙОНЕ АЗЕРБАЙДЖАНА

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ВВЕДЕНИЕ. Эймерии- простейшие паразиты. Они паразитируют в слизистой оболочке кишечника, иногда локализуются в печени и почках. Эймериями заражаются крупный и мелкий рогатый скот, кабаны, верблюды, кролики, куры, индейки, гуси, свиньи и лошади. Развитие всех видов эймерий происходит в теле одного хозяина т. е. они являются моноксенными паразитами. Ооцисты эймерий выделяются в окружающую среду в неспоробразующем состоянии. Образование спор происходит во внешней среде. У некоторых видов эймерий рептилий и рыб споры образуются в организме хозяина (6,8).

Криптоспоридиоз овец – инфекция, вызываемая простейшими вида *Cryptosporidium*. При этом заболевании у овец наблюдается водянистая диарея и нарушение функции желудочно-кишечного тракта. Криптоспоридии – простейшие облигатные внутриклеточные кокцидии, размножаются в эпителиальных клетках тонкой кишки животных. Виды *Cryptosporidium* наиболее широко распространены у домашних животных и у человека. Особенностью эндогенного развития этого паразита, локализованного в эпителиальных клетках кишечника позвоночных является то, что паразит не проникает в клетку хозяина, а прикрепляется к клеточной мембране через специальные адгезивные органеллы (1,2).

Наиболее распространенным видом *Cryptosporidium* является *Cryptosporidium parvum*. *Cryptosporidium parvum*, в основном поражает новорожденных телят, ягнят и телок, вызывая при этом сильную диарею, вялость и потерю аппетита.

В Азербайджане, а также за рубежом проведены ряд исследований при изучении видов *Eimeria* и *Cryptosporidium* у мелкого рогатого скота, в том числе овец, и эти исследования продолжают в настоящее время (4,5,7,9).

Учитывая вышеуказанное перед нами поставлена цель по изучению и определению видового состава простейших кишечных паразитов - эймерий овец и ооцист криптоспоридий в Ленкоран-Астаринском экономическом районе.

МАТЕРИАЛЫ И МЕТОДИКА

Исследования проведены в 2020 году в частных овцеводческих хозяйствах Ленкоран-Астаринского экономического района, а также в лаборатории отдела «Паразитология» Азербайджанского Ветеринарного Научно-Исследовательского Института. Патологический материал, доставленный в лабораторию подвержен тщательным исследованиям. Для выявления ооцист *Eimeria* проводились копрологические исследования фекальных масс овец по методу Дарлинга-Фюллеборна. Для определения ооцист *Cryptosporidium* из собранного патологического материала приготовлены тонкие мазки, затем препараты

зафиксированы метиловым спиртом и окрашены карболфуксином по Циль-Нильсену. Окрашенные препараты исследованы в иммерсионном масле под микроскопом.

Размеры ооцист *Eimeria* и *Cryptosporidium* определены и препараты сфотографированы во время исследований при применении микроскопа BEL Solaris при камере HD-CAM и программном обеспечении Image Score. Видовой состав эймерий определен по размерам и морфологическому строению паразита. Измерено не менее 50 экземпляров ооцист из каждого вида, и полученные результаты обработаны статистически в программе MS Excel 2016.

Для определения видов использован определитель паразитических простейших (3).

РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЙ И ОБСУЖДЕНИЕ

Идентификация *Eimeria* и *Cryptosporidium* проводилась по ооцистам паразитов. В зависимости от вида ооцисты эймерий овальной, округлой, эллиптической, яйцевидной формы. Стенка ооцист обычно двухслойная, цитоплазма зернистая. При идентификации эймерий важное значение имеет морфологические признаки ооцист эймерий и стадии их развития в организме животного.

Таблица 1

Идентификация видов из рода *Eimeria*

№	Виды эймерий		Размеры ооцист, в мкм		ИФ	
			Min-Max	M±SD	Min-Max	M±SD
1	Ооцисты	Длина	27,84-32,48	30,81±1,63	1,27-1,44	1,32±0,07
		Ширина	20,88-25,52	23,39±2,03		
	Спороцисты	Длина	16,24-20,88	18,74±2,03	1,40-2,00	1,78±0,18
		Ширина	9,28-11,60	10,57±1,16		
2	Ооцисты	Длина	23,20-27,84	25,30±1,95	1,33-1,43	1,38±0,04
		Ширина	16,24-20,88	18,34±1,95		
	Спороцисты	Длина	13,92-16,24	14,63±1,07	1,40-2,00	1,63±0,23
		Ширина	6,96-11,60	9,15±1,51		
3	Ооцисты	Длина	25,52-30,16	28,51±1,89	1,22-1,71	1,52±0,19
		Ширина	16,24-20,88	18,92±1,90		
	Спороцисты	Длина	11,60-16,24	13,74±1,61	1,25-2,00	1,61±0,29
		Ширина	6,96-9,28	8,68±1,03		
4	Ооцисты	Длина	11,60-16,24	14,24±1,62	1,00-1,20	1,09±0,09
		Ширина	11,60-13,93	13,09±1,13		
	Спороцисты	Длина	4,64-9,28	7,27±1,62	1,00-1,50	1,20±0,21
		Ширина	4,64-6,96	6,12±1,12		
5	Ооцисты	Длина	48,72-53,36	51,18±1,72	1,47-1,62	1,54±0,06
		Ширина	30,16-34,80	33,30±1,98		
	Спороцисты	Длина	16,24-18,56	17,63±1,15	1,33-1,75	1,52±0,17
		Ширина	9,28-13,92	11,74±1,72		
6	Ооцисты	Длина	16,24-20,88	19,02±1,69	1,13-1,29	1,17±0,06
		Ширина	13,92-18,56	16,24±1,17		
	Спороцисты	Длина	6,96-11,60	9,28±1,41	1,00-1,33	1,19±0,16
		Ширина	6,96-9,28	7,89±1,15		

Ооцисты эймерий *E. ahsata*, выявленные у овец наблюдались овальной формы. В результате исследований размеры ооцист (длина и ширина) варьирует в пределах 27,84-32,48x20,88-25,52 мкм (ИФ=1,27-1,44). При этом средний размер ооцист составляет 30,81±1,63x23,39±2,03 (ИФ=1,32).

Ооцисты *E. faurei* имеют яйцевидную и овальную форму. Размеры их варьируют в пределах 23,20-27,84x16,24-20,88 мкм (ИФ=1,33-1,43). Средний размер ооцист 25,30±1,95x18,34±1,95 (ИФ=1,38).

Ооцисты *E. arloingi* эллиптической и овальной формы, размеры варьируют в пределах 25,52-30,16x16,24-20,88 мкм (ИФ=1,22-1,71). Средний размер ооцист составляет 28,51±1,89x18,92±1,90 (ИФ=1,52).

Ооцисты *E. parva* округлой и эллиптической формы. Размер этих ооцист варьируют в пределах 11,60-16,24x11,60-13,93 мкм (ИФ=1,00-1,20). Средний размер ооцист 14,24±1,62x13,09±1,13 (ИФ=1,09).

Ооцисты *E. Intricata*- овальной и эллиптической формы, размеры их в пределах 48,72-53,36x30,16-34,80 мкм (ИФ=1,47-1,62). Средний размер ооцист эймерий составляет 51,18±1,72x33,30±1,98 (ИФ=1,54).

Ооцисты *E. ninaekohlyakimovae* также овальной, эллиптической формы. Размер ооцист варьируют в пределах 16,24-20,88x13,92-18,56 мкм (ИФ=1,13-1,29). Средний размер ооцист составляет 19,02±1,69x16,24±1,17 (ИФ=1,17) (таблица 1).

Размеры спороцист указанных видов: *E. ahsata*, *E. faurei*, *E. arloingi*, *E. parva*, *E. intricata*, *E. ninaekohlyakimovae* приведены в соответствующей таблице 1.

Таблица 2

Сравнительные размеры ооцисты и спороцист видов рода *Eimeria*

Виды	По нашим данным		По литературным данным			
			М.В.Крылов, Н.А.Колабский, П.И.Пашкин		М. В. Якубовский, Н.Ф. Карасев	
	Размеры ооцист	Размеры спороцист	Размеры ооцист	Размеры спороцист	Размеры ооцист	Размеры спороцист
<i>E. ahsata</i>	27,84-32,48x 20,88-25,52	16,24-20,88x 9,28-11,60	29,7-42,9x 16,5x27,5	-	30-29x19-30	18-20x7-10
<i>E. faurei</i>	23,20-27,84x 16,24-20,88	13,92-16,24x 6,96-11,60	20,9-36,3x 16,5-27,5	11-17x8-11	22-23x19-24	14-16x8-9
<i>E. arloingi</i>	25,52-30,16x 16,24-20,88	11,60-16,24x 6,96-9,28	20,9-31,9x 16,5-23,1	11-17x6-10	25-33x16-21	13-17x6-10
<i>E. parva</i>	11,60-16,24x 11,60-13,93	4,64-9,28x 4,64-6,96	9,9-18,7x 7,7-13,3	6-13x5-8	13-22x11-13	-
<i>E. intricata</i>	48,72-53,36x 30,16-34,80	16,24-18,56x 9,28-13,92	38,5-4,3x 25,9-40,0	17-22x8-14	40-56x30-41	16-18x8-10
<i>E. ninaekohl- yakimovi</i>	16,24-20,88x 13,92-18,56	6,96-11,60x 6,96-9,28	16,5-27,5x 13,3-23,1	9-14x4-10	17-25x13-20	5-6x3- 4,5

При сравнении ооцист и их спороцист видов *Eimeria* с литературными данными видно, что в зависимости от различных факторов в размерах ооцист могут происходить определенные изменения. Изменения размеров ооцист зависит от их локализации, возраста животного, состояния иммунной системы, климатических условий и ряда других причин (табл. 2).

Изменения размеров ооцист зависит от степени заражения паразитами, при высокой интенсивности заражения размеры ооцист уменьшаются. На ранних стадиях развития эймерий при низкой интенсивности ооцисты увеличиваются в размерах, потому что для их развития достаточно места. Изменения размеров ооцист зависят также от возраста животного, иммунного статуса, применения химических препаратов, уменьшения внутренней влаги в ооцистах при условии сухого климата и ряда других причин.

Таким образом, в Ленкоран-Астаринском экономическом районе впервые зарегистрированы 6 видов рода *Eimeria*, паразитирующих на овцах. При определении

размеров, форм и органоидов ооцист видно, что в зависимости от различных факторов окружающей среды происходят определенные изменения в размерах ооцист рода *Eimeria*.

Ооцисты *Cryptosporidium spp.*, выявленные у овец, имеют круглую и овальную форму. В результате проведенных исследований установлено, что длина ооцист составляет 4,0-5,5 мкм при ширине - 3,5-5,0 мкм, средний размер - $4,8 \pm 0,53 \times 4,2 \pm 0,5$ (ИФ=1,13) (таблица 3).

Таблица 3

Размеры ооцист криптоспоридий овец

<i>Cryptosporidium spp.</i>		Размеры ооцист, мкм		ИФ	
		Min-Max	M \pm SD	Min-Max	M \pm SD
ооциста	длина	4,0-5,5	4,8 \pm 0,53	1,00-1,25	1,13 \pm 0,08
	ширина	3,5-5,0	4,2 \pm 0,5		

ЗАКЛЮЧЕНИЕ. В Ленкоран-Астаринском экономическом районе впервые у овец изучены и определены размеры ооцисты из рода *Eimeria* и *Cryptosporidium*. В зависимости от различных факторов внешней среды в ооцистах происходят определенные изменения. Локализация ооцист, возраст животных, состояние иммунной системы, климатические условия и ряд других причин оказывают определенное влияние на ооцисты *Eimeria* и *Cryptosporidium*.

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MARKERS OF ADAPTATION TO THE EXPERIMENTAL ANIMALS EXPOSURE TO LOW DOSES OF TOXIC METALS

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Excess toxic elements causes various changes in the endocrine system and can lead to disruption of their function. Exposure to toxic metals showed that nanoforms of metals such as Mn and Cr citrates NP showed poor adaptation rats to comparison with to Al₂O₃ and Ag₂O NPs and their microparticles.

Key words: adaptation, animals, hormones, toxic metals.

The problem of environmental pollution determines the interest of scientists in the study of heavy metals as a stress factor, the study of mechanisms of action and the identification of means of protecting organisms from their toxic effects [1]. It is well known, that an endocrine system is a frontline hand in maintaining the homeostasis during the development of long-term body adaptation including adaptation to heavy metals. In order to address this issue, the search for criteria for early detection of their harmful effects on human body is performed [2-5]. Toxic metals lead to changes in the adaptive and compensatory mechanisms of homeostasis regulation [3], the violation of which causes morphological, biochemical and other changes in the body of animals and humans [4, 5]. That is why one of the aspects of this investigation is the study of the effect of different form of metals on the endocrine system, as one of the main links in response to the action of numerous endocrine disruptors.

Materials and methods.

In the experiment, the oral route of administration of metals (metal nitrates - Al, Ag, Cr, Mn) was chosen as one of the closest to the natural conditions of the element, and intraperitoneal, which to some extent reflects the alimentary route of administration. The duration of oral exposure was 14 days. Intraperitoneal administration of metal compounds was performed for 30 days. The concentration for NP Ag₂O, Al₂O₃ and Cr-Ctr, Mn-Ctr was the same as for microparticles of metals (Ag, Al, Cr, Mn) under conditions of oral administration. The dimensions of the NP were as follows: NP Ag₂O-32 nm, NP Al₂O₃ - 70 nm, NP Cr-Ctr - 40 nm, NP Mn-Ctr - 25 nm. A total of 58 females and 96 males were used in the experiment to study the biological action of the studied metals. In the experiment, rats were divided into 9 groups (6 animals each) [5]. Microelement analysis was used to determine the content of 4 in the biosubstrates of rats (whole blood, thyroid and pancreatic tissues) and was determined by the OES-ICP method on the Optima 2100 DV [6]. Biochemical studies included determination of the level of albumin, glucose, adenosine triphosphate (ATP) and the activity of oxidative shock proteins - ceruloplasmin (CP) of serum and metallothionein (MT) of whole blood by spectrometric methods [5]. Assessment of hormone levels (free thyroxine (free T4) and thyroid-stimulating hormone (TTH) was performed by enzyme-linked immunosorbent assay (ELISA) [5] using a set of reagents from Vector-Best. C-peptide was performed by radioimmunological method [53] using standard commercial reagent kits from Immunotech (Czech Republic). The obtained results were processed using statistical analysis

software packages Statistica v.6.1., Microsoft Excel and Libre Office Calc based on the Linux operating system and software package R 3.2.5 [7].

Results and their discussion.

The biochemical markers of Ag and Al effect on adaptation process in animals (imbalance in oxidant and antioxidant processes, disruption of hormone metabolic process), which characterize the process adaptation molecular and cellular level, are as follows. At "training" stage: in case of AgNO₃ exposure, increase in CP levels up to 2.87 μmol/l and C-peptide up to 0.15 ng/ml (p<0.05); in case of exposure to Ag₂O NPs, increase in albumin levels up to 83.77 g/l, in erythrocyte ATP up to 157.30 μmol/l and in MT up to 0.40 μmol/l (p<0.05); in case of Al(NO₃)₃ exposure, increase in albumin up to 72.0 g/l, MT up to 0.40 μmol/l and free T₄ up to 2.56 ng/ml (p<0.05); in case of exposure to Al₂O₃ NPs, increase in CP up to 2.32 μmol/l (p<0.05). At "tension" stage: in case AgNO₃ exposure, decrease in erythrocyte ATP down to 26.33 g/l, in serum glucose down to 0.68 g/l and in ThG iodine down to 35.10 μg/g and in serum TTH (thyrotropic hormone) to 0.18 ng/ml (p<0.05); in case of exposure to Ag₂O NPs, decrease in serum CP down to 1.42 μmol/l and in ThG iodine down to 56.36 μg/g (p<0.05); in case of Al(NO₃)₃ exposure, decrease in ThG iodine content down to 46.06 μg/g (p<0.05); in case of exposure to Al₂O₃ NPs, decrease in serum albumin down to 37.18 g/l and in serum free T₄ down to 1.14 ng/ml (p<0.05). At exhaustion stage: in case of AgNO₃ exposure, decrease in ThG iodine down to 24.37 μg/g and in serum TTH down to 0.18 ng/ml (p<0.05); in case of Al(NO₃)₃ exposure, increase in erythrocyte ATP up to 230.48 μmol/l and in whole blood MT up to 0.1 μmol/l (p<0.05).

When Mn and Cr compounds are affecting the biochemical processes, the state of the adaptation process at molecular and cellular level is characterized by certain parameters as follows. At "training" stage: in case of Mn(NO₃)₃ exposure, increase in albumin up to 160.0 g/l, CP up to 5.98 μmol/l and in whole blood MT up to 1.63 μmol/l (p<0.05); in case of exposure to Mn-Ctr NPs, increase in serum albumin up to 320.0 g/l, CP up to 5.08 μmol/l, MT up to 1.72 mg/l and ThG iodine up to 85.91 μg/g (p<0.05); in case of Cr(NO₃)₃ exposure, increase in erythrocyte ATP up to 285.01 μmol/l, in whole blood MT up to 1.63 μmol/l and in serum free T₄ up to 2.61 ng/ml (p<0.05); in case of exposure to Cr-Ctr NPs, increase in erythrocyte ATP up to 399.02 μmol/l, in serum MT up to 1.72 μmol/l, in serum C-peptide up to 0.15 ng/ml and TTH up to 0.26 ng/ml (p<0.05); at "tension" stage: in case of Mn(NO₃)₃ exposure, decrease in erythrocyte ATP down to 67.06 g/l, in ThG iodine down to 24.54 μg/g, in serum TTH down to 0.20 and glucose down to 2.84 g/l (p<0.05); in case of exposure to Mn-Ctr NPs, decrease in erythrocyte ATP down to 97.24 μmol/l (p<0.05); in case of Cr(NO₃)₃ exposure, decrease in serum albumin down to 52.40 g/l (p<0.05); in case of exposure to Cr-Ctr NPs, decrease in serum albumin down to 31.80 g/l and glucose down to 0.24 g/l (p<0.05); at exhaustion stage: in case of Mn(NO₃)₃ exposure, decrease in ThG iodine down to 24.54 μg/g and increase in serum free T₄ up to 2.56 ng/ml (p<0.05); in case of Cr(NO₃)₃ exposure, increase in erythrocyte ATP up to 215.24 μmol/l and decrease in serum CP down to 1.14 μmol/l (p<0.05). Thus, the obtained preliminary toxicological results indicate in favor of existing ideas about the higher toxicity of nanomaterials as endocrine disruptors [8- 12]. The experimental evaluation of histological changes observed in endocrine organs demonstrated that the effects of salts of metals on ThG tissue are non-specific. When metal salts are administered intraperitoneally, the morphological transformation of ThG follicular cells is characterized by dystrophic changes in thyroid epithelium; follicles around incorporated parathyroid gland (PThG) tend to enlarge, and more deep aggregation is observed in PThG occasionally. When silver, aluminium and chromium were individually orally administered, the disruptions were limited to changes in the functional state of thyrocytes and apoptosis observed in their small fraction; but when manganese was administered, massive necrosis and apoptosis were observed in ThG. Morphological transformations of PG were characterized by functional changes; and it is namely

in case of aluminium and manganese exposure, when the reduced number of islets of Langerhans was registered; and in case of chromium exposure, the hypertrophy of islets was detected.

Changes of the studied indicators at the cellular and molecular level are presented in fig. for Al and Ag. Summing up the obtained results, it should be noted the different nature of the molecular and cellular effects of action depending on the form of the metal.

Этапи	Al		Ag	
	Micro-	Nano-	Micro-	Nano--
"training" stage Al-B – 0,16-0,36 mg/l Ag-B- 0,015-0,022 mg/l	<i>Effect markers on the molecular level</i>			
	albumin ↑ , MT↑, freeT ₄ ↑	CP ↑	CP ↑, C-peptide ↑	albumin ↑ , ATP ↑,MT↑
	<i>Effect markers on the cell's level</i>			
	Neutrophils ↑, Coloid of thyrocytes ↑	Neutrophils ↑, Thyrocytes ↑, a-cells of the pancreas ↑	Largengan cells ↓	monocytes ↑, lymphocytes ↑
"tension" stage Al-B-0,36-0,48 mg/l Ag-B- 0,024-0,048 mg/l	<i>Effect markers on the molecular level</i>			
	Iodine ↓	albumin ↓, freeT ₄ ↓	ATP ↓, TTH ↓, glucose ↓, Iodine ↓	CP ↓, Iodine ↓
	<i>Effect markers on the cell's level</i>			
	Thyrocytes ↑, Coloid of thyrocytes ↓	Neutrophils ↓, Thyrocytes ↑, Monocytes ↑	Eosinophils ↓, Thyrocytes activity ↓	Coloid of thyrocytes ↓, Hypertrophy of a-cells of the pancreas ↓
"construction" stage Al-B- 0,64-1,23 mg/l Ag-B- 0,050-0,092 mg/l	<i>Effect markers on the molecular level</i>			
	ATP ↓, MT ↑	C-peptide ↓ TTH ↑	Iodine ↓, TTH ↑	-
	<i>Effect markers on the cell's level</i>			
	Thyrocytes ↓	Apoptosis of thyrocytes ↑	Largengan cells ↓	Follicles of the thyroid gland ↑, Apoptosis of a-cells in the pancreas ↓

Fig. Markers of the toxic effect of micro- and nanoparticles of metals, aluminum and silver at different stages of adaptation (Indication of growth of the indicator -↑, decrease of the indicator -↓).

Conclusion.

1. Modeling of intoxication with toxic compounds, both with micro- and nanoparticles leads to an increase in the metal content in the blood with its subsequent distribution to the endocrine organs.

2. The results showed that biochemical markers of endocrine effects of AgNO_3 and $\text{Al}(\text{NO}_3)_3$ are an increase in free T4 and a decrease in serum TTH, and under the influence of Ag_2O NPs - a decrease in thyroid iodine and Al_2O_3 NPs increase in MT in total blood. Under the action of Mn and Cr, only the effect of $\text{Mn}(\text{NO}_3)_3$ led to a decrease in iodine in the thyroid gland and an increase in free T4 in the serum of rats, but the effect of Mn-Ctr NPs increased iodine in the thyroid gland and the hormone C-peptide on the serum of rats after influence Cr-Ctr NPs.

3. Under the conditions of oral administration of metal salts, the degree of adaptation was higher for the compound Ag and Al, which determined the effect of Mn and Cr salts for the conditions of intraperitoneal administration of metals. The comparison of metal NP effects demonstrated greater adaptation to Al_2O_3 and Ag_2O NPs, but inferior adaptation to Mn and Cr citrate NPs.

4. Sex-dependent differences in animal adaptation to metal salts have also been detected. For instance, the "training" stage was distinctive in male adaptation in case of Al exposure, but the "tension" stage was distinctive in female adaptation in case of Ag exposure. The latter conclusion supports the assumption that TTH in females is more sensitive to Ag exposure than in males.

5. Excess or lack of certain chemical elements disrupts the balance of metabolic processes in the body, which causes various changes in the endocrine system and can lead to disruption of their function.

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Pedagogical Sciences

ҚОЛДАНБАЛЫ МІНЕЗ-ҚҰЛЫҚТЫ ТАЛДАУ (АВА ТЕРАПИЯСЫ) ЖӘНЕ АУТИЗМ СПЕКТРІНІҢ БҰЗЫЛЫСЫ

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Аннотация: Бұл мақалада арнайы білім беру саласындағы өзекті проблемалардың бірі - аутизм спектрінің бұзылысы және оны емдеу жолы ретінде қарастыратын АВА терапиясына талдау жасалынған. АВА терапиясының қолданбалы ғылым ретінде қалыптасу тарихын, осы саланың көрнекті зерттеушілерінің аутизм спектріні түзетудегі тұжырымдамалары мен әдістерін және АВА терапиясының негізгі ұстанымдарын қарастыра отырып, аутизмді спектрінің бұзылысын түзетуге арналған терапия екен көрсетті.

Тірек сөздер: Аутизм спектрінің бұзылысы, бихевиоризм, АВА терапия, И. Ловаастың әдісі, принциптер.

Аутизм спектрінің бұзылысын (АСБ) түзетуге бағытталған кез-келген әдіс-тәсілдердің негізгі мақсаты - баланың өмір сүру сапасын жақсарту, сонымен қатар, аутизм спектрі бұзылысы бар балаға білім алуға және тәуелсіз өмір сүруге кедергілерді жоюға мүмкіндік беретін дағдыларды игерту. Осы аталған мақсаттарға қол жеткізуде нәтижелі әрі қолданбалы әдістің бірі - Қолданбалы мінез-құлықты талдау немесе АВА терапиясы (ағылшынша: Applied Behavior Analysis; орысша: Прикладного Анализа Поведения) (Maurice 2001; Anagnostou 2014).

Қолданбалы мінез-құлықты талдаудың тарихы дамуына қысқаша тоқталсақ.

Мінез-құлықты талдау 3 негізгі саланы қамтиды:

- Бихевиоризм - мінез-құлық туралы философиялық ғылым. Ағылшынның “behavior” - “мінез-құлық” деген сөзінен шыққан. Өткен ғасырдың 60 жылдарынан ғылыми түрде бастау алған.
- Мінез-құлықты эксперименттік талдау (ағылшынша: Applied Behavior Analysis; орысша: Экспериментальный Анализ Поведения) - мінез-құлыққа қатысты іргелі зерттеулер.
- Қолданбалы мінез-құлықты талдау (АВА терапиясы) - мінез-құлықты жақсартуға арналған технологияларды әзірлеу.

Бұл саладағы негізгі зерттеу тұжырымдамалары мен нәтижелерін философия мен негізгі дәстүрлі зерттеулер тұрғысынан ғана түсінуге болады.

1900 жылдардың басында психологияда сана, қиял және басқа психикалық процестердің жағдайын зерттеу бағыттары басым болды. John Watson психология саласында жаңа бағыт құруда танымал болды. Ол өз жұмыстары арқылы:

- психология саласы психикалық күйлер мен психикалық процестерді емес, көзге көрінетін, байқалатын мінез-құлықты зерттеу болуы керек деп жұмыс жасады. Ол мінез-құлықты объективті зерттеуде, белгілі бір мінез-құлықты тудыратын *ынталандыру (стимул)* мен *реакциялар* арасындағы байланысты тікелей бақылауға негіздеді.

-Дж. Уотсонның бихевиоризмі, яғни, мінез-құлықтың ерте формасы стимул-реакция психологиясы (SR-ps) деген түсінік енгізді.

-мінез-құлықты жаратылыстану ғылымы ретінде зерттеу үшін негіз жасалды.

Беррес Фредерик Скиннер (1904-1990) мінез-құлықты қолданбалы талдаудың (ABA терапиясы) негізін қалаушы. Мінез-құлық талдауының эксперименттік саласы 1938 жылы Б.Ф. Скиннердің "Тірі организмдердің мінез-құлығы" еңбегі жарияланғаннан кейін басталды. Бұл кітапта ол 1930-1937 жылдары өзінің зертханалық зерттеулерін жинақтап, мінез-құлықтың екі түрін ұсынды: респонденттік (respondent) және операнттық (operant).

Респонденттік мінез-құлық - Иван Павловтың зерттеулерінде (1927/1960) бұл мінез-құлықты ғылыми түрде зерттеуге мүмкіндік болып, рефлексі түрде болатынын анықтады. Реакциялар реакциялардан бұрын пайда болатын стимулдар арқылы туындайды. Стимул және оған реакция "рефлекс" деп аталатын функционалды блокты құрайды. Бұл еріксіз реакциялар, стимулдар пайда болған сайын көрініс табады. басқаша SR моделі деп те атауға болады. Респонденттік мінез-құлық еріксіз және әр кезде қоздырғыш пайда болған кезде пайда болады. Мысалы, бетіңізге қатты жел соғып тұрғанда қабақтың жыпылықтауы немесе кенеттен күтпеген дыбыстан денеңіздің дірілдеуі және т.б. Алайда, бұл "стимул-реакция" блогы адам өмірінде болып жатқан мінез-құлықтың көп бөлігін, әсіресе өздігінен болатын мінез-құлықты түсіндіре алмайды (стимулсыз болған мінез-құлықты).

Скиннер осы мінез-құлықтағы жаңа бағытты ашты. *Оперантты мінез-құлық* - бұл себеп-салдар арқылы қалыптасатын мінез-құлық. "Үштік шарт" деп те аталады. Я болмаса SRS моделі деп те.

Адамға оперантты мінез-құлық принциптерін қолдану туралы алғашқы зерттеуді Фуллер (1949) жүргізді. Зерттеу нысаны ретінде терең даму бұзылыстары бар 18 жастағы бала болды, ол сол кездегі тілде "вегетативті ақымақ" деп аталды. Ол шалқасынан жатып, айнала алмайды. Фуллер шприцті қант пен сүттің жылы ерітіндісімен толтырып, оң қолын жылжитқан сайын жас жігіттің аузына аз мөлшерде сұйықтық енгізді (бұл оң қол оны сирек қозғалатындықтан таңдалды). Төрт сессия барысында бала қолдарын минутына үш рет тік күйге келтірді. Ол баламен жұмыс жасаған дәрігерлер оған ештеңе үйрену мүмкін емес деп ойлаған. Бірақ оперантты кондиционерлеу техникасын қолдана отырып, төрт тәжірибелік сессияда оның мінез - құлқына қосымша әрекет қосылды. Экспериментке қатысқандар немесе оны бақылағандар, егер уақыт мүмкіндік берсе, басқа реакцияларды анықтап, айырмашылықты білуге болады деген пікірде болған.

1950 жылдары және 1960 жылдардың басында адамдардың қатысуымен жүргізілген алғашқы зерттеулердің көпшілігі клиникада немесе зертханада жүргізілді. Қатысушылар бұл зерттеулерден жаңа мінез-құлық үлгілерін үйренді. Ал, зерттеушілердің басты мақсаты зертханада табылған мінез-құлықтың негізгі принциптері қоғамда адамдармен өзара қарым-қатынасы кезінде жұмыс жасайтынын анықтау болды. Мысалы, Сидни Бижу (1955, 1957, 1958) қалыпты дамып келе жатқан субъектілердің және ақыл-ойы шектеулі адамдардың мінез-құлықтарындағы бірнеше принциптерді зерттеді; Дон Бэр (1960, 1961, 1962) мектеп жасына дейінгі балалардағы күтпеген жағдайларда болатын жазаның, қашудың және тапсырмадан бас тартудың әсерін зерттеді; және Огден Линдсли (1956; Линдсли және Скиннер, 1954) шизофрениямен ауыратын ересектердің мінез-құлқына оперантты

кондиционерлеудің әсерін бағалады. Бұл алғашқы зерттеушілер мінез-құлық принциптері адамның мінез-құлқына қатысты екенін нақты анықтады және олар қолданбалы мінез-құлықты талдаудың одан әрі дамуына негіз болды.

Биоховеризмнің жаңа саласы болып табылатын және кейінірек қолданбалы мінез-құлықты талдау (АВА) деп аталатын бағытын 1959 жылы Айллон мен Майклдың "Психиатриялық медбике мінез-құлық инженері ретінде" мақаласының жариялануынан байқауға болады. Мақалада авторлар мемлекеттік аурухананың тікелей медициналық қызметкерлері психотикалық бұзылулары немесе ақыл-ой кемістігі бар тұрғындардың жұмысын жақсарту үшін мінез-құлық принциптеріне негізделген әртүрлі әдістерді қалай қолданғанын сипаттаған. 1960 жылдары көптеген зерттеушілер әлеуметтік маңызды мінез-құлықты жақсарту үшін мінез-құлық принциптерін қолдана бастады, бірақ бұл алғашқы шынайы қолданыстар көптеген қиындықтарға тап болды. Мінез-құлықты өлшеудің зертханалық әдістері, сондай-ақ мінез-құлықтағы өзгерістерді бақылау және басқару кейде қол жетімді болмады немесе оларды кейбір жағдайларда қолдану орынсыз болды. Мінез-құлықты қолданбалы талдаудың ерте тәжірибесі нәтижесінде жаңа тәжірибелік процедураларды жасауға тура келді. Алайда, жаңа бағытты қаржыландыру аз болды және зерттеушілер өз зерттеулерін жариялауға дайын болмады. Себебі, зерттеушілердің тұжырымдары мен әдіснамалық мәселелерді шешу туралы өзара байланысы болмады. Ал, журнал редакторларының көпшілігі негізгі әлеуметтік ғылымға таныс емес эксперименттік әдісті қолдана отырып жүргізілген зерттеулерді жариялағысы келмеді.

Мінез-құлықты талдау бойынша университеттік бағдарламалар 1960-1970 жылдары Аризона мемлекеттік университетінде, Флорида университетінде, Стоун Брук қаласындағы Нью-Йорк мемлекеттік университетінде, Иллинойс университетінде, Индиана университетінде, Канзас университетінде, Огайо университетінде, Орегон университетінде, Оңтүстік Иллинойс университетінде, Вашингтон университетінде, Батыс Вирджиния университетінде және Батыс Мичиган университетінде және басқаларында басталды. Оқыту мен зерттеудің арқасында факультеттер осы саланың тез өсуіне айтарлықтай үлес қосты.

1968 жылғы екі маңызды оқиға болды. Осы жылды қазіргі заманғы қолданбалы мінез-құлықты талдаудың ресми бастауы ретінде атауға болады. Біріншіден, қолданбалы мінез-құлықты талдау журналы (ағылшынша: the Journal of Applied Behavior Analysis (JABA) жариялана бастады. JABA Америка Құрама Штаттарында эксперименттік мінез-құлықты талдау әдістемесін қолданатын зерттеушілерге өз нәтижелерін жариялауға мүмкіндік беретін қолданбалы мәселелерге арналған алғашқы журнал болды. JABA қолданбалы мінез-құлықты талдаудың жетекші журналы болды және болып қала береді. JABA-дағы көптеген алғашқы мақалалар қолданбалы мінез-құлықты талдауды қалай жүргізу және түсіндіру туралы үлгілі демонстрацияға айналды, бұл өз кезегінде қосымшалар мен эксперименттік әдіснаманың жақсаруына әкелді.

1968 жылғы екінші ірі оқиға, ол - Дональд М. Бирдың (Donald M. Baer), Монтроз М. Вольф (Montrose M. Wolf) және Тодд Р. Рисли (Todd R. Risley) -дің "Мінез-құлықты қолданбалы талдаудың кейбір заманауи аспектілері" мақаласының жариялануы болды. Бұл авторлар, жаңа пәннің негізін қалаушылар ретінде қолданбалы мінез-құлықты талдау саласындағы зерттеулер мен практиканың жеткіліктілігін бағалау критерийлерін ұсынды. Олардың мақаласы қолданбалы мінез-құлықты талдау саласындағы ең көп айтылатын басылым болып табылады және әдетте пәннің стандартты сипаттамасы ретінде қарастырылады.

Баер, Вольф және Рисли (1968) қолданбалы мінез-құлық талдауының нәтижелерін *қолданбалы, мінез-құлықты, аналитикалық, технологиялық, тұжырымдамалық жүйелі, тиімді және жалпылама* түрінде қолданылуын ұсынды. 1987 жылы Баер және оның әріптестері 20 жыл бұрын ұсынған "қолданбалы мінез-құлықты талдауға арналған жеті өзін-

өзі тану нұсқаулығы (жоғарыда айтқан) функционалды болып қала береді; олар әлі де жұмыстың қазіргі аспектілерін көрсетеді" деп тұжырымдады. Олар тұжырымдаған жеті елшем қолданбалы мінез-құлықты талдау саласындағы зерттеулерді анықтау үшін пайдалы және маңызды нұсқаулық ретінде қызмет етуді жалғастыруда.

1965 жылы Ловаас, Фрейтаг, Голд және Кассорла қолданбалы мінез-құлықты талдауды (АВА) аутизм спектрінің бұзылысы бар балалардың мінез-құлығының шектен шығуы мен жетіспеушілігіне сәтті қолданды. Алайда, Ловаасдың 1987 жылы шыққан ерте және қарқынды түрде мінез-құлыққа араласуы (ағылшынша: Early and Intensive Behavioral Intervention (EIBI) туралы іргелі зерттеулер мен Макичин, Смит және Ловаасдың (1993) кейінгі зерттеулері және Кэтрин Морис (1993) "Сіздің дауысыңызды естуге рұқсат етіңіз" атты мақаласы жарияланғаннан кейін ғана АВА терапиясы арқылы аутизмді түзету әлемге кеңінен тарала бастады. 1987 жылы Ловаас, Андерсон, Авери, Дипиетро, Эдвардс және Кристиантың зерттеуі, 1991 жылы Харрис, Гандлман, Гордон, Кристофф және Фуэнтестің зерттеулері аутизмді түзетуде АВА терапиясын қолданғандағы күрделілігі мен қарқындылығымен (мысалы, аптасына 40 сағатқа дейін) бағаланып ерекшеленді. Сонымен қатар, Ловаас (1987) EIBI көмегімен аутизмі бар кейбір балалар қалыпты интеллектуалды жұмыс істей алатындығын көрсетті.

Ивар Ловаастың АВА негізделген аутизм спектрінің бұзылысын түзетуде қолданған Ерте және қарқынды түрде мінез-құлық араласуы (EIBI) деп аталатын әдісі аптасына 5-7 күн, күніне бірнеше сағат, ал, аптасына 40 сағатқа дейін жүргізілетін кешенді емдеу моделі. Бастапқыда емдеу атиптік емес мінез-құлықты жоюға және оқу дағдыларын қалыптастыруға баса назар аудара отырып, "жеке оқыту" форматында жүзеге асырылады. Осыдан кейін емдеу неғұрлым күрделі танымдық және әлеуметтік дағдыларға назар аудара отырып, топтық оқыту бойынша жүргізіле бастады. Бұл әдіс бұзылыстарды бөлектеп түзету (discrete-trial instruction) (Smith, 2001), қарқынды ем жүргізу (intensive treatment delivery) және даму жүйелілігі бар оқу бағдарламасынана (developmentally sequenced curriculum) (Leaf & McEachin, 1999; Lovaas 1981, 2003) тұрады. Ловаас жасаған EIBI моделі (1981, 2003) соңғы жылдары мінез-құлық практиктері қолданған оқыту әдісіне айтарлықтай әсер етті.

Қолданбалы мінез-құлықты талдаудағы (АВА) *мінез-құлық принципі* мінез-құлық пен оның нәтижесі арасындағы байланыс болып табылады. Қолданбалы мінез-құлықты талдаудың көптеген стратегиялары үш негізгі қағидаға негізделген. Олар:

- мінез-құлықты күшейту принципі;
- мінез-құлықты әлсірету принципі;
- мінез-құлықты жою принципі.

Көрсетілген мінездің нәтижесі 2 түрі болып келеді: күшейту (усиление) және әлсірету (ослабление)

Олардың әрқайсысының екі түрі бар:

- Жағымды күшейту (положительное усиление) және жағымсыз күшейту (отрицательное усиление);
- Жағымды әлсірету (положительное ослабление) және жағымсыз әлсірету (отрицательное ослабление).

Осы төртеуінің әрқайсысы "шартты" және "шартсыз" болып табылады.

Жағымды күшейту мінез-құлық пайда болғаннан кейін (үй тапсырмасын орындағаннан кейін) күшейтетін және жағымды ынталандыру ұсынылған кезде пайда болады (бес деген бағасын алды) және болашақта мінез-құлық жиі пайда бола бастайды.

Жағымсыз күшейту мінез-құлық пайда болғаннан кейін бірден пайда болады (кітап оқу кезінде жылау), белгілі бір жағымсыз ынталандыру жойылады (кітапты жап, оқу аяқталды) және болашақта мінез-құлық жиі пайда бола бастайды.

Жағымды әлсірету мінез-құлық пайда болғаннан кейін (еденге түкіргеннен кейін) әлсірететін, жағымсыз ынталандыру (еденді жуу) ұсынылған кезде пайда болады және болашақта мінез-құлық аз немесе адамның репертуарынан жоғалады.

Жағымсыз әлсірету мінез-құлық пайда болғаннан кейін бірден пайда болады (еденге түкіріп), белгілі бір жағымды ынталандыру жойылады (компьютердегі ойынды жоғалтады) және болашақта мінез-құлық аз немесе адамның репертуарынан жоғалады.



1- Сурет Мінез-құлықты күшейту және әлсірету принциптері

Мінез-құлықтың үшінші қағидасы – жою (принцип гашения). Жою кезінде мінез-құлықты қолдайтын күшейтетін ынталандыруды беру тоқтатылады. Күнделікті өмірде бұл мінез-құлықты елемей деп те атайға болады (бірақ адам емес!). Егер мінез-құлықты күшейтуді тоқтатсақ, уақыт өте келе мінез-құлықтың жиілігі, қарқындылығы мен ұзақтығы төмендейді немесе ол мүлдем болмайды. Мысалы, егер біреу көршілерімен амандасуды тоқтатса және бүгін де, ертең де, апта мен айдан кейін де амандаспаса, онда көршілер бұл адаммен кездескенде амандаспайтын болады.

Сонымен, қолданбалы мінез-құлықты талдау (АВА) - бұл ғылыми пән, оның бағыттарының бірі аутизм спектрінің бұзылуы және басқа да даму бұзылыстары бар адамдардың әлеуметтік маңызды мінез-құлық өзгертуге бағытталған және оны дамыту болып табылады. Мінез-құлық принциптеріне негізделген бұл әдістер баланың даму траекториясын “түзету” мүмкіндігі ретінде қарастырады.

АВА терапиясы бүкіл әлемде аутизмді және дамудың басқа да психикалық ауытқуларын қауіпсіз және тиімді емдеу ретінде кеңінен танымал. Қолданбалы мінез-құлықты талдаудың принциптері мен әдістері адамдардың көздеріне қарауға, сөздерді түсіну және имитация сияқты негізгі дағдыларды, сондай-ақ вербалды сөйлеу, оқу және басқа адамның көзқарасын түсіну (ақыл-ой моделі) сияқты күрделі дағдыларды дамытуға ықпал ете алады.

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METHODOLOGICAL INNOVATIONS IN AZERBAIJAN LANGUAGE TEXTBOOKS AND METHODOLOGICAL TOOLS FOR TEACHERS (FOR VI-VII CLASSES)

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First of all, it should be noted that a textbook as a pedagogical concept is a document compiled as an element of educational programs. The textbook occupies an important place in the learning process. As Konstantin Dimitriyevich Ushinsky once said, even a middle-level teacher with a textbook and methodical level can achieve good results.

Two aspects are taken as a basis in the preparation of the textbook: motivation (element 1) and didactic processing of the material (element II). In terms of these elements, four types of textbooks are defined:

- a) didactic type (both elements are considered);
- b) congenital type (element I is missing);
- c) decorative type (element II is missing);
- d) monographic type (both elements are missing).

Of these, type I is considered the most efficient, types II-III ineffective, and type IV completely useless types of textbooks.

As it can be seen, while the concept of textbook is interpreted in the scientific-pedagogical sense in explanatory dictionaries, classical pedagogy is also referred to today. Because the classical pedagogical interpretation has historical and social roots, and those roots are used in modern times. The lexical-semantic capacity of this word gives subject to wide explanations, interpretations and comparisons. In the phraseological semantics of that word, life textbook, educational textbook, etc. are also associative derivatives from the school textbook.

In the sense that we emphasize, that is, the school textbook is a teaching tool, in the modern sense, it is a curriculum, education, teaching tool.

Currently, concepts such as textbooks and textbook sets are considered part of the curriculum. Curriculum (lat. curriculum -course, science) is one of the progressive education models. The concept of curriculum is used in two senses: broad and narrow.

In a broad sense, the curriculum is understood as a conceptual document reflecting the state's policy in the field of education, the goals of Education, National educational standards, curricula and programs, all areas related to training and educational processes – the content, strategy and assessment standards of education and allowing their effective organization and consistent implementation.

The curriculum covers all levels of education: the total learning outcomes that students will receive at each level of education during the years of study – knowledge, skills and competencies, qualifications to be instilled-are determined by the levels and classes of education and are included in the curriculum as content-standards (norms that need to be studied) of the subject (subjects). The general results of each subject curriculum are concretized by the subject and reflected in the subject Content Standards, strategy and assessment standards.

All the specific aspects that are extracted here will be enough to understand the understanding of the Azerbaijani language textbooks.

The Azerbaijani language textbook has always been a powerful tool in the systematic study of our native language, and now it is a valuable document that retains this functionality. The teaching of the Azerbaijani language with programs and textbooks has a very ancient history. It is known that the works of Muhammad Fuzuli "Leyli and Majnun", Sadi Shirazi "Gulistan and "Busitan" were used as tools before the textbooks. As well as educational poets used their own didactic works for children as training material.

Speaking about textbooks written on the basis of scientific and pedagogical requirements, we can mention the work of Mirza Kazim Bey, who is considered the grandfather of Azerbaijani linguists, written in 1839 for university students. We can cite as an example our classical teachers Mahmudbay Mahmudbayov, Aleksey Osipovich Chernyayevsky, Rashid Bey Efendiyev, Rajab Efendi and others who have studied the Gori Teachers Seminary in the creation of the textbook of the native language for primary and secondary schools.

The work "grammar of the Turkic-tatar language" (1839-1846). The following period also includes small grammar works (N.Narimanov, S.M.Grammar of ganizade, etc.).

By the way, since the second half of the XIX century, the Azerbaijani language has been used as a linguistic term, the term "mother tongue", that is, the Azerbaijani language. Textbooks "native language", "native language" are intended for primary classes. Those who wrote textbooks with such a name K.D.They were those who acted according to ushinsky traditions. Instead of writing "Azerbaijani language" on the language textbook for senior students, they wrote the word grammar of the Azerbaijani language. This is also M.It is a kazimbey tradition. The same way M.Shiraliyev and M.Huseynzade also repeated and compiled the textbook "grammar of the Azerbaijani language" for VII-VIII classes. Those textbooks also lasted 50 years.

And the tongue that speaks [E] proud things, Shiraliyev and M.Huseynzade played a great role. Those scientists who are famous as linguists of Azerbaijan wrote textbooks "grammar of the Azerbaijani language (volumes I-II)" for secondary schools and this textbook had a life of more than 50 years and entered the history of the stable textbook of Azerbaijan.

It should be noted that this textbook covered the V-VII classes earlier and V-VIII classes later in the school course of the Azerbaijani language. (prof.Y.Seyidov and G.(For the fruit of light consists in all goodness and righteousness and truth).

Stable Azerbaijani language textbooks for secondary schools have been prepared since the 20s of the XIX century, and later improvements have been made on them.

It was Heydar Aliyev who headed the Azerbaijani state at that time who directed the development of stable Azerbaijani language textbooks in the 70s of the last century.

Those textbooks that are currently used in our schools are also considered an example. Like all textbooks written on the basis of the program, textbooks written on the basis of the curriculum are considered the content of the training.

It should only be said that new textbooks are compiled on the basis of new standards.

VI-VII class "Azerbaijani language" textbooks also differ from their predecessors in some peculiarities of content lines. Such differences are due to the principles of methodological design and are also considered innovations.

We are forced to recall this issue once again, since in the past the school course covered the courses of morphology and syntax of grammar in VI-VII grades, textbook developers wrote grammar on textbooks. At the same time, this tradition has another history. Previously, scientists believed that grammar includes even phonetics, and therefore a language textbook for a school course should also be called grammar.

For the first time the word grammar Greek scholar Aflatu (e.A.427-348) was used in the work "Kratil": Gramma – in the Greek meaning of letter, writing, tike –science, the word in the

initial sense means "science of letter", "art of writing". In the arastun period (e.A. 384-322), used in the sense of Reading, Writing, by Dionysius of Thrace (e.A. 2nd century), the meaning of which has been further expanded – it has acquired the meaning of learning the rules of speaking in the native language.

In the 20-30s of the XX century, the language textbook for VI-VII classes was also called the grammar of the Azerbaijani language. And as the clearest example of this, academician M.Shiraliyev and prof.M.Huseynzade's stable textbooks on those classes can be shown. This tradition of drawing up textbooks for secondary schools began to change since the 1970s. Of The Scholars.D. Demirchizadeh, H.I. Mirzazade, I.Z.Taghizade, A.Both theoretical linguists and Methodist scientists, such as Gurbanov, have already considered the exaggeration of the role of grammar incorrect. The absolute influence of literature in the Russian language on this issue is also undeniable. At one time, Russian scientists also called oratory blunt without grammar, poetry stammer, philosophy unfounded, history incomprehensible (M.V.Lomonosov), and they probably thought that grammar is not language, but speaking language. Grammar is the change and combination of words in a sentence.

The compilers of the textbook on the Azerbaijani language were finally convinced that the textbook for VI-VII grades in the school course should be called "Azerbaijani language". Because the textbook contains language rules, as well as communicative and non-communicative speech skills and habits. In other words, it is possible to master the language with spelling, expression, essay skills and habits. These are literacy, speech tools. None of them have any grammatical categories.

The compilers of the textbook finally determined for themselves the meaning and function of the subject of the Azerbaijani language from the 60-70s.

A new generation of scientists formed on the didactics and methods of language comprehended the language as speaking, writing, expressing. Agammad Abdullayev, Aziz Efendizade, Bashir Ahmadov, Aghamusa Akhundov, Salim Jafarov, Ali Farajov, Ahet Ahmadov, Rasim Asadov, Hasan Baliyev, Nadir Abdullayev, Vagif Gurbanov, Anvar Abbasov, Atesh Abdullayev and others compiled the "Azerbaijani language" textbooks for V-XI grades in accordance with the content of the school course, i.e. programs.

VI-VII grade "Azerbaijani language" textbooks have always been interesting, content and correspond to improved programs, so they have won the sympathy of teachers.

The "Azerbaijani language" textbooks of Salim Jafarov and Ali Farajov, as well as Bashir Ahmadov and Aghamusa Akhundov, Mukhtar Nuseynzade and Gazanfar Kazimov were used for more than 25-30 years by regular improvement. We highly appreciate the role of these textbooks. But if we evaluate the cycle, time in terms of textbook policy, we can say the following:

1. Traditional or old Azerbaijani textbooks of VI-VII classes could not go beyond the requirements of the programs. Therefore, how, what requirements were set in the programs, the textbooks also retained the principle of compliance with the program;

2. According to the compilers of traditional textbooks, the content (i.e. language rules) taken from linguistics in the school course is the Main Line– Action, goal and main strategy, spelling, expression, essay are tactical moves that serve that strategy. That is, in VI-VII grades, when instilling knowledge, skills and skills on parts of speech in the "morphology" Department, spelling is for literacy, to be able to spell new words, expressions and essays on the development of communicative speech are for building a text. In other words, knowledge is supposedly fundamental in mastering the language. This knowledge also serves not to speak in Azerbaijani, but to master the language, that is, linguistics.

When the old programs and textbooks were also improved on their basis, not innovations were made in the spelling, expression and essay methodology, but improvements in the language rules. For example, "Modal words", "exclamations", "verb conjugation, verb adjective

constituents", etc. it was understood and implemented as removing subjects, reducing them, bringing them back to the program and textbook.

According to this stereotype, the Azerbaijani language was not intended to teach speech and writing, but to teach the rules of linguistics.

3. What could be said about the "Azerbaijani language" program and textbooks for Russian-language schools of the Republic?

The following can be said about VI-VII class "Azerbaijani language" textbooks for schools where training is conducted in Russian:

a) the principles of compiling textbooks for these classes were completely different. Thus, the programs required the preparation of speech-oriented textbooks. Textbooks begin with text (approximately as in current curriculum textbooks), given the role and function of the intended keywords in the text, reading is carried out, skills and habits are disclosed, as well as the question on the content is used with the analysis of lexical-phonetic works, a new analogous text is created, the content is spoken and evaluation is carried out;

b) the training process would begin with the work on the main text and be completed with the creation of additional text.

Why was this model not taken as the basis for the model of teaching national languages? The following can now be said about the reasons:

First of all, both of these models corresponded to the principles of compiling programs and textbooks on the Russian language. It could not be considered objective to get out of the stereotype of this approach. Because both programs and textbooks were carried out by analogy and alignment.

In programs and textbooks for National Russian schools, parts of speech were taught in VI-VII grades. The subjects were also placed in a roughly appropriate style. At one time, Russian language programmers and textbook compilers removed "Modal words" from the seventh grade, and we removed them, reduced "imitative words", and we reduced them. They returned these topics to programs and textbooks, and we returned them.

Secondly, our methodical thinking worked so much, no more than that. We were not authorized to search and find a new model. We could not use the Turkish school model. Because we did not have national independence. When carrying out reforms in education after gaining national independence, i.e. after 1991, we learned the world experience and chose the strategy of integration into European education, which developed thanks to the foresight of the great leader Heydar Aliyev.

We studied the programs, studied the methods, moved away from the influence of the Soviet education system and chose the Bologna philosophy of education, and the current textbooks "Azerbaijani language" for VI-VII grades and methodological manuals for the teacher are also the fruits of the subject curriculum of the Azerbaijani language, compiled by the interactive teaching methodology.

Both textbooks for the realization of the development of cultural, speech and National thinking, which consist not only of language rules, but are tuned to a lively speech, decorated with expressive and artistic texts, are opened to students with the brighter face of the great son of the Azerbaijani people Heydar Aliyev than aydan. Students read wise sayings of the Great Leader about education, teachers, science and culture there. Also understand.

European education is considered the leading education system in the world because in Europe the work is assigned to ishbil. There, everyone clings to what they can do. Excellent education is everyone's future life cat. And in our country, sometimes specialization is not done correctly. The teacher does not like teaching, does not want to be a methodologist, etc.

As well as all primary and secondary school textbooks with curriculum material, Azerbaijani textbooks on VI-VII grades have been compiled and submitted to production in 2013-2014.

It should be noted that not only textbooks, but also a complete set of textbooks have been developed with the curriculum.

It is known that this model is derived from the Western education system. Education in developed European countries works according to the Bologna Process methodology, and its results have clearly shown themselves in modern European culture.

Speaking about the innovations in VI-VII class "Azerbaijani language" textbooks in our research, we will talk about the theoretical and practical aspects of these innovations based on the pedagogical concepts based on the analysis of specific facts.

Regarding theoretical concepts, we can say the following:

1) on the principles, requirements of training in the curriculum model:

a) pedagogical studies show that the principles of teaching in the curriculum model – the characteristic features, the main requirements that are guided in training on the curriculum model. What is included in this concept: personality orientation, demand orientation, development orientation, etc. In traditional teaching, requirements were mainly based on these principles: knowledge-oriented, teacher-oriented, memory-oriented, etc.

Each of them, of course, needs to be interpreted.;

b) the pedagogical curriculum has an interactive methodology. What is it? Active (interactive) training (Eng. Inter-active-mutual activity) is a training based on mutual activity. The foundation is built not only on the "teacher-student" scheme, but on the "teacher-student-student" interaction. In other words, in active interactive training, the student enters into interaction, cooperation not only with the teacher, but also with his comrades.

Belə təlimdə şagirdlər bilikləri hazır almır, müxtəlif informasiya mənbələri üzərində işləyərək, bir-biri ilə əməkdaşlıq edərək müstəqil şəkildə əldə edir, onları yeni hallara yaradıcı tətbiq edirlər. Fəal təlimdə şəxsiyyətin özünü inkişafı üçün əlverişli şərait yaranır.

And now let's briefly tell about the peculiarities of the subject curriculum.

This is how this issue is put in pedagogical literature.

c) curriculum (lat.curriculum-means Course, path, science)

- it is a type of curriculum that reflects the objectives and results of training in each subject, training strategy and evaluation standards.

The general goals and learning outcomes reflected in each level of education in the national curriculum are concretized in a separate subject curriculum. The content provided in the form of conclusions (knowledge and skills) is included in the content line for each educational step and class. On this basis, the goals and results of each subject (knowledge, skills and qualities to be instilled) are determined and reflected in the content standards (basic and sub-standards) for the level of education and classes.

D) for the time being, the following can be said about the content lines and content standards of the curriculum model:

Content standards (ind.standard-measure, norm – - are the norms and requirements necessary for measuring the educational achievements of students in the subject.

In the subject content standards, the knowledge, skills and habits to be instilled in the subject are determined by classes and included in the standards.

Two types of standards are distinguished:

1. Basic standards;
2. Bottom standards.

The main standards reflect the intended content (knowledge, skills and qualities) in a general way for each line of content (major topics, deals).

And sub-standards (each basic standard is divided into several sub-standards) reflect the content (knowledge, skills and qualities), which are given in a general way in the main standard, in

a kind, concretizing, simplified way. Basic standards do not change when moving from class to class, they remain constant. Sub-standards, however, vary.

They are also connected between themselves by interdisciplinary connections and interdisciplinary interactive wires.

d) it should be noted that integration (lat.interaction-communication – - is one of the important requirements of training, which serves for the coherent assimilation of knowledge in order to create a holistic, complete image and idea of the world in students.

Integration is a process that allows you to establish and systematize relationships between all its content components, being an integral part of the training strategy in the curriculum model of Education.

This is how we can interpret the methodological meaning of this process. It is known that the methodology (wool.methodological – method, system) is a system of principles and methods of approaching the process of understanding and changing being, as well as a philosophical teaching about this system. The methodology of pedagogical science is understood as a philosophical teaching about the principles, methods, forms and processes of understanding and changing pedagogical reality.

e) it is necessary to look for the most accurate cost of textbooks in innovations. When we say innovation in the methodological sense, we are talking about innovative innovations. In fact, innovation as a term was also present in the Soviet education system. Textbooks would also be designed in accordance with innovative, i.e. new requirements.

What is innovation in the broadest sense?

We have to keep in mind that innovation (Eng. Innovation (lat. innovation) is an innovation of a progressive nature, identified and implemented on the basis of various initiatives, scientific research. Innovation occurs at the expense of the internal resources of a certain system, including the pedagogical one (meaning in – internal).

Innovation refers to new ideas, processes, technologies, means and methods, new paradigms, concepts, etc. it is understood. Innovation is implemented in two main ways:

1. Intensive way;
2. Extensive way.

The intensive road is due to internal resources, and the extensive one is due to additional resources, time and effort. Sometimes it is also possible to combine these two paths (integration of innovations). In this case, it becomes necessary to carefully study the unused resources of the system.

a) there is also a way of discovering an innovative training methodology. The method of learning by Discovery is a method of learning aimed at creative thinking of students, that is, independently obtaining information and drawing conclusions.

Great Azerbaijani composer and educator U.Hajibeyli's idea was formed as a special theory in western pedagogy and psychology in the 90s of the XX century (S.Bruner, Q.Lefransua and b.) the method of teaching by Discovery is aimed at creating a searchable situation in the lessons, developing students ' skills to collect information, draw conclusions by conducting observation, experiment, research the method of learning by Discovery has the opportunity to be widely used in the modern (interactive) learning process.

The path of discovery, the path of search is a developmental path, in a broad sense it is training.

f) it is known that developmental training is one of the functions of training, which is expressed in the organization of mental processes, characteristics, in the general mental development of learners in the learning process. In training, it is necessary to specially orient it in order to ensure mental, psychic development.

Developmental learning functioned as a theory in the Soviet education system. It is also called The Theory of Davydov and Elkolin.

Developing means that training does not only arm students with general knowledge, skills and habits, but prepares them to demonstrate skills in research and innovation in order to achieve future inventions and discoveries. The most necessary means of possession of skill is to begin to pave new paths in a good way, both in training and in upbringing.

In the school laboratory, there were schoolchildren who made discoveries, inventions, received the title of innovators and amazed the world with their initiatives.

From the Azerbaijani language, the student can identify new ways of mastering the culture of speech, etc.

Mastering the culture of speech means, first of all, speaking clearly and fluently, showing skills in logical and expressive reading of the text. Norms of literary pronunciation are a regulatory and regulating factor of oral speech, especially modern cultural speech.

The purpose of teaching parts of speech in VI-VII grades is to teach students the whole speech on the basis of parts of speech. Isn't it adjectives, adverbs that give brightness to speech, conjunctions that give a logical connection, adverbs, modal words, exclamations that give feeling-excitement?

The culture of speech should be reduced to competence by automating the intonation, accent and orthoepy of each word – part, turning it into a habit.

Thus, it is possible to benefit from creative repairs in accordance with these known ways and opportunities, for example, artistic reading, declamation, various "five-minute" ones as innovations.

g) the work on the book is very relevant today, although it remains traditional. Because these methods are training methods aimed at the independent acquisition of knowledge by a person, deepening his knowledge, mastering the skills of working on books. Methods on the book can be organized in two forms – under the guidance of the teacher and in the form of independent work of students with the text. There are many such methods. They include: summary compilation (concise written interpretation of the text); thesis compilation (recording of the main ideas); abstract compilation (compilation of reviews on various sources on the topic); quoting (as it were, writing the necessary thoughts without distortion); annotation (yibcam written interpretation of the content of the text); opinion (writing a concise review, at least with a comment on the text); reference compilation (autobiographical, statistical, terminological, etc. information); drawing up a formal logical model (description of what has been read in the form of a word-scheme); drawing up thematic topics (introducing basic concepts into the system on a particular topic, section and subject), compiling a matrix of ideas (compiling a comparative table of ideas of different authors on the same issue), etc.

G) competence is one of the terms that has become very relevant in curriculum training. It is well said that every novelty is actually a remnant of the well-forgotten old. History repeats itself. Therefore, competence (lat.compotense-competence, competition) – the ability, competence of a person to affectively and effectively apply the acquired knowledge and skills in practical activities.

Competence ensures the transformation of knowledge and skills acquired by a person into the result of a specific activity. Competence-based education has a more effective impact on socio-economic development.

There are many competencies related to the teaching profession: managerial, educational, diagnostic, Correctional, monitoring, organizational, information and communication competencies, etc. Each teacher can achieve high efficiency in his work by acquiring professional competence and keep pace with modern times.

In addition, we must say that it is necessary to train a competent teacher from his student days.

There is a need to demand, albeit in the form of a sense, the formation of this ability in them when a student passes trial lessons during pedagogical practice. Methodists should know this.

h) student orientation is the main principle in the curriculum model. The program, textbook and methodical manual should be built with this strategy. The literature on preparation for curricula says that the textbook should be student-oriented. The principle of student orientation is the main distinguishing feature, the main requirement of modern training. Present learning as a whole focuses on the development of students as a person; the purpose, content, methods and technologies of training serve this.

The teacher enters into a dialogue with students, gives them freedom, supports, helps. The student acts in the learning process not only as an object, but rather as a subject. Modern training is based on the cooperation of teacher and pupil, pupil-pupil.

Cooperation training is presented as intra-group work in dialogue-discussion, research work given in the methodological manuals for the teacher. The tasks of the group leaders are assessed as summarizing the ideas of the students and putting them into the form of a result. Textbooks should provide opportunities for this work on the condition of their questions and tasks and implementation of their work.

x) when working with VI-VII grade "Azerbaijani language" textbooks, serious attention is paid to essay training. The essay possibilities of textbooks should be wide. The methodical manual teaches that the essay method is a method of active training of students on a certain topic, individually or in a small group, in connection with the compilation of a short essay (essay). After the essay is finished, it is discussed and evaluated collectively.

This type of writing could not be found in traditional teaching. And now there are also standards for writing about the methodology of the essay.

The essay looks like an essay, a new type of it. The essays of the writers have not been less. Essay to essay is the most interesting type of essay. It is from Free Essays. With this method, the student can think independently and freely express his feelings and emotions.

In the subject standards for I-XI grades, we can indicate that there are many standards in each class.

l) speaking about the innovations in the "Azerbaijani language" textbooks on VI-VII grades, we can mention some seemingly complicated methods. One such method is the zigzag too difficult insert method.

According to teachers, VI-VII class "Azerbaijani language" textbooks also have didactic opportunities for this method. In the pedagogical-cyclopedic literature, it is indicated that the insert method is a method of training that aims or pursues a conscious reading and learning of a given text using a certain system of signs with the help of thinking.

Students, divided into small groups, perform the assigned task (namely the work on it); new issue+, known issue v, issue requiring additional information ?, and they mark the issue that contradicts the previous knowledge – with their signs. The group that completes the task quickly and correctly is considered the winner.

If we talk about all the concepts in theoretical aspects, i.e. methods, principles and laws, we will have a very wide network.

When we talk about experimental innovations, we can mention models that have been in use for their time (or have been encountered in practice of one quality or another). What are these?

a) practical innovations are related to aspects, tools, resources in the work of advanced teachers. For example, there was a method of working with groups before. Dividing students into options, performing independent tasks;

b) the method of mutual evaluation has been in school before;

c) work in a non-normative way or violation of stages;

d) explanation of a new lesson with problem situation or teacher's comment;

d) using tables, blocks;

e) repeated and summative assessment based on the Journal, etc.

VI-VII class Azerbaijani textbooks have didactic opportunities in every aspect.

SUBJECT AND RESOURCES OF TRAINING AND TEACHING PROCESS

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If the number of unsuccessful students in schools increases every year, then such a question should make the pedagogical community think: How to make learning more effective? What teaching strategy should be chosen for this?

The problem is that sometimes the teacher has difficulty deciding on the choice of teaching strategies, because there are so many of them in the methodological literature that the teacher is faced with a choice. In addition, the teacher's lack of free time and the variety of methodical processing of lessons described in Internet resources lead to the risk of choosing an ineffective strategy for teaching the subject.

The article describes what teaching strategies exist in the school, what are their features and advantages. This will help the teacher to choose the best teaching strategy to increase the student's learning success.

A modern school is impossible without the integration of teaching and education, and the personality of the teacher is the center of its educational activity. In the 11 years we have been studying at the school, up to 50 teachers teach various subjects. At the same time, studies confirm that 4-6% of these teachers leave a noticeable mark on our lives. Graduates remember these teachers because they had a sincere relationship with students, used various and effective strategies to master the subject, explained the learning material in an understandable way, and created favorable conditions for students to learn and master.

It is known that the didactic principles developed by the pedagogues who lived in the classical and Soviet era could not fully solve the problems of educational standards of general education in "digital" conditions. Now it is more important to ask ourselves such a question: "What should we learn and what should we give up?" What can help us and what prevents us from achieving an effective result? This applies to how we teach, how we learn, how we share knowledge, how we each "see" the learning process. Here we are talking about the need to form a "new didactics" of the digital age, which will ensure visible learning and teaching in a modern school. The concept of appearance is taken from the eye or vision in its original source and gradually spreads to other sense organs, the imagination, and through this it becomes more colorful. It is no coincidence that Y.A.Komensky specifically mentioned the principle of visually as the leading principle in teaching, which he defined as the "golden rule of pedagogy".

In recent years, many studies have been devoted to the problem of the quality of education, among which "visible learning" is specially mentioned. The authors specify the characteristics of "visible teaching" and "visible learning" by dividing it into two leading processes:

- teachers look at the learning process through the eyes of their students;
- students see themselves as their own teachers.

Points that can be criteria for achieving excellent teaching quality are mentioned as follows: the most important influence of the teacher on the learning process; teachers should guide their students, have an effective influence on them, treat them with attention and care, and involve them enthusiastically in the teaching and learning process;

- teachers have an understanding of each student's knowledge and way of thinking in order to provide students with meaningful experiences on this basis;

- teachers know the learning goals and success criteria of their lessons. At what level they deliver these criteria to the students; knows where to go next ("What are we trying to do?", "How are we doing?", "What's the next step?") to bridge the gap between the student's current level of knowledge and understanding and the success criteria;

teachers move from one idea to several, connect them, and widen the circle so that students can create and rethink knowledge and ideas. The decisive role is not played by knowledge and ideas, but by their construction by the student;

A safe psychological environment has been created in schools and classrooms where mistakes and misconceptions are not ignored or condemned, but instead are valued as learning opportunities, where all participants of the educational process are provided with conditions to acquire, rethink and expand knowledge.

In this regard, an important professional competence of the teacher is updated. This competence involves the interaction of the teacher and the student in the context of subject-subject relations, which allows the teacher to be an embedded mediator between the child's developing personality and the surrounding social space.

In this case, the process of socialization of students is not only the development of the skills of using modern information and computer technologies, but also, in principle, the formation of new communication spaces, worldviews, digital ethics and behavioral rules and norms in social networks.

Referring to the latest achievements of psychology and didactics, we can note that it is possible to distinguish the main features of visible learning and visible teaching in the conditions of the individualized education model.

This model is based on the following basic principles:

- strategies for achieving the goals of education in new cultural conditions;
- development of personal potential: self-evaluation is more important than external evaluation; diagnosis and adjustment of individual learning style;
- effective use of class time, rejection of ineffective educational technologies;
- synergy (cooperation) of the educational community of all educational subjects.

At the same time, the focus is not on the activity of the teacher who presents new material, but on the stimulation of the student's own activity, that is, on the creation of a stimulating educational environment. Positive emotions of all participants of the educational process; Ambitious duties of students; the student is the master of the process, and the teacher is the mentor; research and design; formative assessment, the suitability of learning objectives to the student's experience; personalized learning is not an exhaustive list of the hallmarks of effective teaching and learning.

Personalized learning is most often considered as a type of learning characterized by the interaction of subjects in the process of mastering the surrounding world. As a result, an ideal idea is formed about another topic that affects the transformation of consciousness and behavior. This training envisages the formation of an individual educational route (FTM) for students. In our opinion, the most complete approaches are the organization of the selection of the individual educational route (EPI) for the student and the use of the portfolio model.

The FTM map of the student is a working tool that allows not only to monitor the dynamics of the student's individual educational achievements, but also to identify the problems that arise both for individual children and for the whole class, and therefore control and analyze.

In addition, the inclusion of students, their parents and teachers in the process of creating an IEM map allows to take into account and coordinate the interests of all participants of the educational relationship, which in turn reduces the level of conflict in the school and increases the level of satisfaction with the organization and quality of their educational activities. It is possible

to monitor and evaluate the student's progress using the FTM card. The student portfolio increases feedback, which is one of the factors for improving the quality of teaching and learning.

It is extremely important for teachers to view learning through the eyes of their students, who must gain knowledge and understand the material that is the purpose of the lesson to be learned. From the point of view, such a change for the better does not happen immediately and without mistakes, this process requires serious efforts, intensive feedback, conscious experience, as well as the assimilation of previous knowledge and concepts, as well as the desire and desire to change the current situation.

Experience shows that today's children easily solve tasks that sometimes do not correspond to each other, focus on several problems at once, and demonstrate an amazing ability to complete tasks. A modern child constantly communicates through multiple channels. It perceives the world as a complex open system. He is in constant dialogue with other people and with himself. Children live in a constant stream of information. It is impossible to hide from this flow.

It is necessary to understand that learning is primarily a social activity that requires the participation of the student. New knowledge builds on what is already understood and mastered, and learning occurs through the use of efficient and flexible strategies that help grasp knowledge, make cause-and-effect relationships, retain information, and solve problems. Students should know how to plan and execute their learning, how to define learning objectives and how to correct errors, how to eliminate internal inconsistencies and, if necessary, reconstruct existing concepts.

People of the 21st century need choice. remove unnecessary, suspicious and dangerous ones. Navigators and road maps are needed to choose a reasonable movement strategy. Checking what was said in the lesson is not only possible, but also important and very interesting. Only this education creates motivation, the modern child asks more and more questions: why? why why and why? Who can help him? Who will mediate?

We are talking about a teacher who is willing and able to learn throughout the entire period, who must ensure the formed position of the student based on the rejection of the priority of the position of the information consumer and the recognition of the active and independent creation of his knowledge. At the same time, a prototype of the school of the future should be built in the teacher's mind, where he should understand his own role and participation, form basic pedagogical ideas and gain experience in implementing the author's ideas. It is important to redefine the teacher's place in school and life, to offer him a meaningful role. What could these roles be?

According to foreign researchers, teachers should be "learning adaptation specialists" who not only apply various effective strategies, but also have sufficient intellectual flexibility to innovate in the learning process when traditional means are insufficient.

"Adaptation specialists" know "what's next," can adapt resources and strategies to help students achieve their learning goals, and create classroom environments conducive to achieving learning goals. They have the emotional and cognitive empathy needed to "consider and take the student's point of view"; they pay special attention to how children identify, describe and interpret events and situations, and to see the world from a student's unique perspective.

Various roles that teachers of modern schools should be able to perform have been determined in the researches of Russian scientists.

Moderator teacher. Students should learn to cooperate, be able to express their position and listen carefully to others. Thus, the moderator of the discussion platform is of vital importance. The ability to moderate is a special art; the moderator hears everyone, stirs up the debate with questions, but does not apply his interpretation too strictly. It gradually leads debaters to common conclusions.

Teacher-academic advisor. First of all, he relies on the child's tendencies, interests, abilities, knows what the student is more successful in, how to find it, and builds the educational program based on this. Based on success, the teacher develops the child in the areas where he is still weak, not by forcing the student to achieve the result, but by encouraging him to succeed.

Project organizer. The teacher looks for interesting problems in the surrounding world, plans project work and conducts creative research with students. It does not answer, but it asks questions and begins a lively search for answers through the school curriculum.

Game technical. The game is not just a means of entertainment, but an opportunity to experience any topic deeply and truly. The game gives rise to a whole role-playing fan: he needs to develop, escape and fulfill the functions of the characters. And in this sense, modern game technologies are not a threat to pedagogy, but another opportunity for the child's development.

Subject teacher. He is a highly professional who understands the characteristics of the child's age development and is perfectly oriented in his field of study.

Teacher-communicator. A standard (regular, repetitive) learning process can be implemented by the computer, and the teacher should focus on creative and interpersonal interaction. There is nothing more valuable than the joy of human communication and the possibility of co-creation and understanding - this is the main content of living pedagogical work, and the role of the teacher-communicator here is undeniable.

The digital competence of the teacher occupies a special place in the implementation of all roles. The teacher's digital competence index consists of four components: knowledge, skills, motivation and responsibility. Each of these components can be implemented differently in four areas of activity on the Internet: communication (contact), content (search, selection, content creation, placement), consumption of the techno sphere and its components (use of services, payments, online shopping). and spheres of consumption (content, communication, consumption, techno sphere).

Teachers are in direct communication with the entire teaching and student team in the school. Today, the teacher does not explain the material extensively and does not convey new information to students in an interesting form. Because students can do it easily through Google. However, the teacher knows well how to motivate students, establish mutual relations between them, cooperate, and organize a creative environment. Therefore, a teacher should be an integrative personality with psychological and pedagogical training, professional and culture, innovative creative thinking, competence and image, organization and management ability. In this context, the teacher-manager should be ready to develop the ability to solve future problems of students in different life situations. Therefore, a modern teacher should be able to independently choose teaching materials, additional resources, and teaching strategies.

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POETRY LANGUAGE AS A FACTOR OF PROFESSIONAL QUALITY

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It is no coincidence that in Azerbaijani philology, the attention to language skills and stylistic issues is increasing more and more. This is directly related to the increase in quality and quantity in the development of the literary process, and it is noteworthy that the poem itself provides a lot of linguistic material for a specific discussion of the language of poetry. In reference to this, poetic linguistics, literary studies and literary criticism have made a number of important considerations regarding the artistic language, commented on some confusing and contradictory ideas, and clarified long-controversial propositions.

The researchers focused on language craft, presenting the intersection of language issues with a number of actual aspects of the literary process as a whole as a very natural situation. It is commendable that both linguists and literary scholars choose poetic language as a specific object of research and analyze it, approaching each word artist based on his creative activity. It clarifies from the position of revealing the specificity of the art of the master of words. As a result, the series of works dedicated to the interpretation of the important features of artistic language and literary criticism by our outstanding philologists-scientists, whose works are the subject of research, have been of great interest to readers for several years.

Theoretical thoughts and scientific generalizations about the language of poetry are one of the most reliable tools for the improvement of artistic creativity, they are food sources of poetic thinking. The progress of the literary process is related to the scientific interpretation of language problems. Thus, the studies written as a result of the expansion and deepening of the interest in poetic language bring to the fore the very important problems and tasks of modern poetry, open a detailed conversation about the language rules of poetry, and pay attention to its linguistic and stylistic defects against the background of the success of our poetry.

The aspect that increases the value of the works dedicated to language problems is the scientific interest and novelty of the considerations in them. In all of them, such an idea is unanimously confirmed that even though the poem, materialized in words in the pen products of eternal personalities, is transmitted to the future as an eternal relic from the time of its creation, language is the guarantor of its longevity. Language has an exceptional position in the development of idea-aesthetic principles of poetry. The eternal pen products of our art luminaries are shown as characteristic examples of what has been said.

Research works on the language of poetry provide a lot of material in terms of opening the multifaceted problems of the word, artist and creative process in unity. The complexity of the problem of the artist and the language, the breadth of expression potentials hidden in the artistic word, and their harmony with the artist's identity, his aesthetic vision and position, are summarized against the background of the intensive development of our poetry. We have formed clear ideas about the secrets of poetic language craftsmanship, the intricacies of using lively spoken language, the artist's effort to adapt every word from the poet's pen to the rhythm of the literary process, the ability to direct language units to the essence of the poetic rock, and his ideas based on other important regularities of the poetic language.

According to the authors, the issue of language in poetry is primarily a matter of talent and creative work in the highest sense of the word. Creative talent, as the most necessary argument, is the first step, the starting point of the process of word sense and idiom, the first initiative to

visualize the materials of life with high artistry. Respect and reverence for the language and its fixed laws is the honorable creative duty of the penman.

According to the researchers, the answer to the question "how should the language of poetry be?" should be understood in the sense of a language that reflects reality with maximum artistic subtlety and thorough adherence to aesthetic requirements.

Linguistic poetics, literary studies and literary criticism have devoted a lot of space to the problems of artistic language in poetry. In consistent research works, the most important image-creating components of poetry, including language and stylistic issues, have not been overlooked and have not remained outside the scope of researchers' interest. Such an opinion is substantiated that the special attention of creative organizations to this issue is related to the permanence and responsibility of taking care of language and style problems, it is a factor that manifests itself in the poet's poetic activity and tests the artist. Because the right and wise attitude to language directs poetic activity to a more visible, more useful and more meaningful course.

Familiarity with the theoretical issue of the language helps to reveal the level of the aesthetic view of the word, the secrets of the artistic word that cannot be easily revealed. Attempts at the scientific interpretation of these issues continue throughout the entire scientific creativity of a number of researchers.

Along with the development prospects and tasks of the artistic style, this has also found its scientific solution, that the creative activity of the word artist, the uniqueness and uniqueness of the line is revealed directly by the individual aspects of the aesthetic attitude to the language. Individual style is a system of internal features of language-related stylistic-aesthetic categories closely related to each other, complementing each other and accompanied by originality. Individual sense of words, aesthetic taste is such a decisive stimulus within the norms of the literary language of the artist that the fate of each poem, the possibility of life as a work of art, is conditioned by this. Feeling the figurative nature of the language in an inspired-natural way and realizing it in artistic speech is the first successful step of language culture, language use culture, language use skill, approach to the word and determining its unique place in the text. Accurately sensing the stylistic-semantic color of the language and correctly defining the processing environment, increasing the cultural-aesthetic level of the word is a real creative operation.

Poetics determines that it is a creative skill to penetrate the deepest layers of the language and set it in motion, to reveal the imagery in all lexical layers, its emotionality-expressiveness, and aesthetic elegance with original methods.

The principles of artistry are sharply defined in the scientific literature on poetry, and it is clear from the scientific analysis that the language has a decisive and central position in the harmony of the means of imagery. Language bears the fruit of imagery in its fullness when that image is born from the demands of inner creativity. The poem becomes a level when the poet is deeply familiar with the poems of the art of words, the development stages of poetry, and the development trends of craftsmanship.

He brings to the fore the relevance of the linguistic problems, especially the theoretical and experimental issues of the language of poetry, which he embarked on the study of poetry, and considers its development directions to be very useful in terms of directing them to the true folk expression. One of the main attributes of the poetic language is that the energy of the word is properly mobilized and distributed to the verses neatly, and the syntagms are adapted to the flow of the melody in an active stylistic position.

Both linguists and literary scholars paid serious attention to the theory of artistic language through in-depth research and analysis, and gave ample space to the ideas based on rich evidence about the language skills of our prominent poets. Here, opposing the superficial analysis of the poem, along with the positive impressions, the flawed aspects are rightly touched upon, and a conversation is opened about it in a principal form.

When talking about the intricacies that emerge from the beauty of the form of the poem, it is concluded that simplicity is a high merit for an artistic work. However, if it falls to the level of simplicity, then hiding under the veil of simplicity is nothing more than creating an artificial image that seems ordinary at first glance, but actually does not meet the criteria of art, for the sake of external and objective simplicity. It is impossible to correctly understand the difference between true art and khalturism without correctly defining the boundaries of conflicting and conflicting artistic positions.

In the scientific work of some of our poets, in the creation of literary criticism, the issues related to the art of language do not appear by chance. Its consistent and constant character, consistent illumination of poetic language problems from an objective position occupies an important place in the system of aesthetic views. Language and style issues are reflected in their problem-rich and principled articles as an important artistic factor, a sign of artistry. In order to fully and comprehensively revive the general picture of the literary process, the art of language is criticized from a principled position. As the central problem of art and craft, issues of language and style are presented as the fruit and successful conclusion of creative pursuits.

Stylistic originality is presented as an indicator of true artistic originality, in the aspect of the regularity of the structure of the form in accordance with the content. The most important aspect is that the language and stylistic concerns of poetry are resolved against the background of a modern view of the art of words. The depth in the simplicity of the language and the wisdom in the clarity of the style are passed through the filter of poetic-analytical thinking and conveyed to a wide readership with arguments that are thought-provoking for the future development of the art of poetry.

As a problem of aesthetic importance, it is also brought to special attention that, for the sake of external effect, artificially constructed simplicity and clarity tend to look primitive because they are far from naturalness, ordinary didactic and rhetorical judgments cannot be loaded with poetic force and remain outside the dimensions of art.

In the context of the rich poetic experience of ancient Azerbaijani literature, the development of poetry criticism should be considered as a great aesthetic event. The active intervention of literary criticism in the poetic process, close participation in this process encourages the development of poetry studies, as a direct result of which a special dynamism begins to be observed in poetry criticism.

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PROJECT-BASED METHOD AS ONE OF THE BASIC OF FUTURE MEDICINE

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Abstract

This paper focuses on how students of secondary schools of Baku are involved in project work in biology teachings, to change their abilities and attitudes about project work, constraints they may have encouraged in carrying out projects and some solutions to these constraints. It is based on a questionnaire given to students of biology classes on project work. The article includes didactic proof of the problem of using visual and practical techniques to improve the quality of assimilation of knowledge when studying the section "Seed plants". The article presents the impact of project-based learning on the quality of knowledge acquisition.

Introduction

One of main educational aims is to make our students learn to learn, think independently, so that they would face problems well prepared out of the school as well, they would use their knowledge and abilities for the sake of the environment and the society, to make them think creatively. For this they need positive experiences gained in the course of the learning process, which are sources of energy and enthusiasm for them. The creative problem solving method ensures a perfect aid to this. We can apply this method to individuals and groups in order to collect, process and carry out ideas. The basics of the creative problem solving were laid in the 1950s by Alex Osborn, who is also known for creating the technique of brainstorming. The theory, which later was improved with the contribution of Sidney Parnes, stands at the ground of several creative problem solving methods. [1. 3] It encourages people to handle issues they are facing efficiently and effectively, and it makes them able to treat them more easily and from a new perspective.

Creative problem solving is especially useful when designing and implementing environmental projects in schools. The project methodology consists of several stages: the teacher and students study a specific environmental topic, choose a problem that is important to them, then develop and implement an action plan. With each step, learners take on more and more the role of a manager capable of addressing environmental topics.

Responsibility is gradually transferred from teacher to student; first, the teacher leads the process and sets the guidelines, later the students take over the project management, and the teacher becomes the observer. The teacher controls the progress of students; he provides an opportunity to change roles, developing knowledge and skills of students, evaluating their work with criticism and introducing new ideas and methods into the educational process, thereby eliminating the factors that limit their development.

Lessons are the most basic form of teaching. The course is based on a state-approved program and curriculum. The school consists of a systematic study of the content of the biology

course, its nature, its laws, and the living world: plants, animals, the human body, and the characteristics of living things.

1.1. Teaching Biology in the Azerbaijan Middle schools

The biology curriculum has emerged as one of the steps taken to implement the education reform in Azerbaijan. This document, which summarizes the educational experience of the developed countries of the world, differs in its humanistic, democratic and integrative nature, focusing directly on the formation of students as a person. The provision of content standards, training strategies, content, tools and mechanisms for assessment shows that it is also a complex document.

The new content of biology covers the most necessary knowledge and skills related to man, his health, the social nature of man, the relationship between man and nature, the psychological characteristics of man.

The biology curriculum envisages the development of students' logical thinking, life skills related to the subject, integration, development from simple to complex, the organization of the interaction of content and activity, the application of new technologies in the teaching of the subject.

In general, learning resources should be prepared by teachers or already existed in schools (Carr, 2007; Carroll, 2012; Coe et al., 2014; Kohl et al., 2013). Most of the teachers have prepared and identified some types of learning resources that they are going to use for teaching by referring to lesson plans. Referring to the 2010 curriculum, teachers should use teaching resources to improve the quality of scientific knowledge in Azerbaijan republic.

Regarding the observation result (February 2018), it was reported that all biology teachers made some kind of attempt to obtain and use teaching resources in each study session. Learning resources can be media that existed in the school or were developed by teachers; or it could be any situation related to the learning environment. However, in reality, not all of the available learning resources covered the intended material. Consequently, teachers had to be more creative in planning the use of teaching resources. One possible solution was to instruct students to independently develop their own learning resources in a group through detailed study of learning objectives, literature review, and learning needs.

Today the creative project-based method is acknowledged all over the world, and it is used efficiently by many organizations and companies, including schools, firms and government offices. The model is flexible, it can be used both on long and short term, and it can be easily suited to special conditions.

Biological concepts, worldview, thinking, practical knowledge and skills are mainly developed in the classroom. Because the teaching of topics and discussions is carried out in a certain sequence and system in the teaching process.

We know that the quality of teaching depends on its forms and methods. Modern teaching methods used in the lesson ensure the independent acquisition of knowledge by students, their formation as individuals, and the effectiveness of result-oriented learning in the conditions of active use of creative thinking in the acquisition of knowledge.

The best way to beautify a **project** is to keep it clean. The pupils keep it as clean as possible, especially when it comes to gluing, and **make** sure that their lines are even. Once they are done, they can decorate their **project** with colored fonts, glitter, etc. The students must remember, less is more; if they overdo it, their **project** will look messy.

It is an attempt to implement desired change to an environment in a controlled way. By using **projects** a teacher can plan and do her/his activities, for **example**: builds a garage, runs a

marketing campaign, develops a website, organizes a party, goes on vacation, graduates a university with honors, or whatever else she/he may wish to do.

The hardest part about doing a **school project** can be figuring out **how to start**. The teachers can often feel so overwhelmed by the size, scope or complexity of what they have to do that they don't even know where to begin.

There are 7 Steps to Effective Project Design

- Define **Project Goal**.
- Determine Outcomes, Objectives, and/or Deliverables.
- Identify Risks, Constraints, and Assumptions.
- Prepare a Visual Aid.
- Ballpark Your Budget.
- Determine Approval and Monitoring Processes.
- Use Proper **Project Design** Documents.

Teaching methods when applied in a biology course are one of the most important and at the same time problematic aspects of preparing the educational process. The development of technology for teaching biology is influenced by the methods of biological science and practice, achievements in the field of didactics and methods of biology [3]. Thus, a learning system is understood as a way of orderly interconnection of students' activities aimed at solving educational problems. We analyzed two groups of methods used in biology lessons: visual and practical.

Demonstrative methods in biology lessons, they usually use various demonstrations of experience, tables, movies, drawings on a blackboard, and so on. In all these cases, it is important to organize correct observation, consideration of the studied object.

Drawing on the whiteboard has an important cognitive value in biology lessons. Drawing with an explanation helps students to follow the content, as students focus on the detail that the teacher talks about and draws.

Practical methods in teaching biology are very diverse. Among them - work on the recognition and identification of objects, conducting experiments, observing natural phenomena.

Recognition, description and definition, as well as observation as types of practical methods are widely represented in biology lessons. Basically, these methods are used in the study of morphological, anatomical, systematic material, as well as evolutionary and ecological content. The use of these practices usually requires specific handouts [1]

A person learns the external characteristics of the objects around him, the peculiarities of events and phenomena through direct contemplation. This type of cognition becomes possible, first of all, thanks to appropriately oriented contemplation, that is, observation, as well as various kinds of assessments. Therefore, demonstration and measurement belong to the group of visual methods that are of great value for the educational process.

The demonstration becomes the reason for the high-quality memorization of the material against the background of the fact that the attention of students is directed to the essential, and not to accidentally discovered, external characteristics of the studied objects, phenomena and processes [8].

The demonstration becomes the reason for the high-quality memorization of the material against the background of the fact that the attention of students is directed to the essential, and not to accidentally discovered, external characteristics of the studied objects, phenomena and processes [8].

To demonstrate the veracity of this statement, it was decided to develop and implement a school project "Plants of our land".

The study involved students of grade 7 in the amount of 16 pupils.

For stage 1 of the project, a questionnaire of 20 questions was drawn up to identify the level of knowledge of students on the topic of the project.

Participants were surveyed during the biology class as a preamble to the Conservation Week. The results are shown in Table 1.

Table 1 - Results at the initial stage of the questionnaire

Awareness level	% of group	Number of pupils
Deeply aware	25	4
Insufficient awareness	31	5
Little knowledgeable	44	7

Taking into account the results of the testing, the following dynamics of indicators is taking shape: a deep awareness of the diversity of the plants nature of their native land is observed in only 3 people (19% of the group), insufficient awareness - in 5 people (31% of the group), and low awareness - in 7 people (44% of the group).

The project "Plants of Our Land" is aimed at updating the current knowledge of students and deepening them in the segment of issues related to the diversity of the flora of the area in which the students live. This project fits into the framework of the biology course when studying the section "Plants" and is part of the educational aspect in the learning process.

After the initial survey and determination of the level of knowledge of the students on the required topic, the class was divided into groups, in accordance with their interests and wishes. The formed small groups have become part of a single environmental and research project, where each group undertakes to prepare a presentation on a topic related to the stated direction. The first stage was the discussion by each group of the topics of their private research.

So, with a class load of 20 people, project topics were distributed as follows, table 2.

Table 2 - Topics of mini-projects selected by students

Group	Subject of mini-projects
Group 1	An interactive game about the plant of medicine of the Baku region
Group 2	Virtual tour of the Botanic garden of the Baku region
Group 3	The Tale of the Plant Insects of the Baku Region
Group 4	Plot-intellectual game with competitive elements on the topic: green algae and red algae of the Caspian region

Each of the groups was given the following tasks:

1. explore the area of the plant world in accordance with the chosen topic;
2. choose a creative method of demonstrating results;
3. organize the display of research results in accordance with the chosen creative method;

After the groups completed the basic research, they determined what their project results would be.

Students' choices regarding their performances demonstrated a high level of creative skills that helped to expose research findings into the most accessible form possible. The task of the students was to collect information on a given topic and demonstrate the main findings in a manner that will show not only the results of the research, but also do it in a creative and visual way.

Visual and practical methods were used in the projects of the students, which we can observe in table 3.

Table 3 - Visual and practical methods in school projects

Mini-project topics	Visual methods	Practical methods
An interactive game about the plant of medicine of the Baku region	Illustrative material	Plant of medicine knowledge simulators and exercises
Virtual tour of the Botanic garden of the Baku region	Demonstration of the characteristics and appearance of plants	Training models
The Tale of the Medicine Plant of the Baku Region	Demonstration of the characteristics and appearance of medicine plants	Modeling the behavioral features of the studied objects
Plot-intellectual game with competitive elements on the topic: Green algae and red algae of the Caspian region	Illustrations, videos	Lesson-game, exercises

An interactive game about the plants of the Baku Region was a classroom game, where the tasks were media material: video clips about plants, images, presentation slides.

A virtual tour of the Botanic park of the Baku Region was held in a specially prepared room with the necessary equipment, where the excursion was demonstrated.

The Tale of medicine plants of the Baku Region was held in the classroom and represented the creative activity of students who invented and played on a story that explains the peculiarities of the plants world of the region under study.

Plot-intellectual game with competitive elements on the theme: "Plants of the Baku region." The game was a synthesis of a fairy tale and a game, in which the rest of the students played the role of "helpers" of the characters of the game and went through various tasks related to plants. Schoolchildren independently planned their work; set goals and objectives, looked for the information they needed, systematized it, removing unnecessary things, made grammatically correct speech for reporting documentation, and knew how to protect their project in the lesson. Since all the educational and methodological tasks were taken into account, the conducted research and its results can be considered significant and objective.

While completion of work on the projects, the students defended them, re-testing was carried out. The questionnaire that the pupils filled out had the same content and consisted of 10 main questions.

Retesting results are shown in Table 4.

Awareness level	% of group	Number of pupils
Deeply aware	50	8
Insufficient awareness	38	6
Little knowledgeable	12	2

Based on the results of the repeated testing, the following dynamics can be traced: a high level of knowledge on the topic under study is observed already in 8 people (50% of the group), an average level of knowledge - in 6 people (38% of the group), and a low level of knowledge - only in 2 people (12% of the group). Such a significant increase in the indicators of students' knowledge on a topic that is included in the "Plants" section of a school biology course shows how effective visual and practical methods are.

2. CONCLUSION

The project method can be effectively used in solving medical problems with students in biotechnology. The project method is a focused, challenge-based activity that promotes success and is effective cooperation, in which the activities of students acquire more weight than the transfer of knowledge through teacher. By the end of the project, students can develop a tangible or intellectual product that reveals a specific topic or thought in its broadest possible connections.

Based on the results of the study, the following conclusion can be drawn: students in the course of the lessons, consisting of a dense synthesis of practical and visual methods, demonstrated a deeper level of knowledge than without their use.

Based on the foregoing, it can be argued that the studied methods of presenting and assimilating the material are successful. As you know, research work and projects of this kind contribute to raising the level of key competencies among students, because require solving complex problems from different scientific and social areas, attracting knowledge obtained from various sources, quick reaction, skills of co-creation, understanding, ability to work in a team, reasoning solutions and defending their own opinion.

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ЖЕКЕ ТҰЛҒАҒА БАҒЫТТАЛҒАН БІЛІМ БЕРУДІҢ ТИІМДІЛІГІ

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Аңдатпа. Адамның жеке дамуы оның жеке ерекшеліктеріне байланысты. Оған адамның жеке қызметінің сипаты, ойлау ерекшеліктері, қызығушылықтар мен сұраныстар шеңбері, сондай-ақ оның қоғамдағы мінез-құлықтары жатады. Сондықтан оқыту мен тәрбиелеу процесінде жеке ерекшеліктерді ескеру қажет. Сонымен қатар, әрбір жас дамуында белгілі бір ерекшеліктермен сипатталады. Бала жасы мен жеке ерекшеліктерін есепке алу жаңа тұлғаға бағдарланған білім беру парадигмасын оқыту аясында белсенді қолдануға негіз болды.

Мақалада жеке тұлғаға бағытталған оқыту тәсілі және оның тұлғаның өзін-өзі дамыту мен өзін-өзі танытуына әсері қарастырылады.

Түйін сөздер: жеке тұлғаға бағытталған әдіс, білім беру парадигмасы, шығармашылық, зерттеушілік, гуманистік педагогика, психологиялық-акмеология, тұлғаның өзін-өзі дамыту және өзін-өзі дамыту .

Мемлекет басшысы Қасым-Жомарт Тоқаевтың «Абай және ХХІ ғасырдағы Қазақстан» атты мақаласында: «Абайдың шығармаларына зер салсақ, оның үнемі елдің алға жылжуына, өсіп-өркендеуіне шын ниетімен тілеулес болғанын, осы идеяны барынша дәріптегенін байқаймыз. Ал, ілгерілеудің негізі білім мен ғылымда екенін анық білеміз. Абай қазақтың дамылсыз оқып-үйренгенін бар жан-тәнімен қалады. «Ғылым таппай мақтанба» деп, білімді игермейінше, биіктердің бағына қоймайтынын айтты. Ол «Біз ғылымды сатып мал іздемек емеспіз», – деп тұжырымдап, керісінше, ел дәулетті болуы үшін ғылымды игеру керектігіне назар аударды. Ұлы Абайдың «Пайда ойлама, ар ойла, Талап қыл артық білуге» деген өнегелі өсиетін де осы тұрғыдан ұғынуымыз қажет.

Бұл тұжырымдар қазір де аса өзекті. Тіпті бұрынғыдан да зор маңызға ие болып отыр. Себебі, ХХІ ғасырдағы ғылымның мақсаты биікке ұмтылу, алысқа құлаш сермеу екенін көріп отырмыз.

Ал, біздің міндетіміз – осы ілгері көшке ілесіп қана қоймай, алдыңғы қатардан орын алу», –деген болатын.

Бүгінгі таңда оқытудың әдіс-тәсілдерін тиімді таңдап алу оқытуда табысқа жетуге негіз болады, әрі сабақтың тиімділігі мен сапасын барынша арттыруға мүмкіндік береді.

Білім беру жүйесіндегі жаңа инновациялық технологиялар-бұл оқыту процесінің тиімділігін арттыруға әсерін тигізетін, оқыту пәнінің мазмұнын терең ұғынуға ықпал ететін құралдар мен әдістердің жиынтығы. Оқу процесіне жаңа инновациялық технологияны енгізу бұл оқу процесінің пәрменділігін арттыруға, сабақ қарқынын жеделдетуге, оқу барысының барлық кезеңдерінде әрбір үйренушінің оқу-танымдық әрекетіне үздіксіз бақылау жасауға септігін тигізеді.

Қарыштап дамып келе жатқан дәуірде білім беру парадигмасыда өзгеруде. Білім беру бұрын пәнге бағытталған түрде жүргізілсе, енді жеке тұлғаға бағытталған түрде жүргізілуді талап етуде. Бұл-қоғамдағы өзгерістерге байланысты туындаған объективті үрдіс. Білім беру дегеніміз –әр түрлі педагогикалық тәсілдер жиынтығын сапалы пайдаланып, тұрақты шығармашылық ізденісте болу.

Кез келген мамандық бойынша білім берудің мақсаты –білімгерге шығармашылық, зерттеушілік қасиеттерін қалыптастыру болып табылатыны анық.

Жас ұрпақтың жеке тұлғасын, оның рухани әлемін, қабілеті мен ынтасын дамыту бүгінгі педагогтардың негізгі мәселелерінің бірі. Студенттің өзіне сенімін арттыру, шығармашылығын дамыту мақсатында оқытушының әр сабағы әр түрлі, жан – жақты болуы керек. Сонымен қатар әр баланың өз ерекшелігіне қарай тапсырмалар ұйымдастыру керек. Бұл ізденісті шыңдай түсетіні анық.

Жеке тұлғаға бағытталған технология-бұл тәрбие жүйесі, онда бала жоғары құндылық болып табылады және тәрбие үдерісінің негізі болады. Тұлғалық-бағдарлы тәрбие гуманистік педагогиканың белгілі принциптеріне негізделеді: тұлғаның өзін-өзі бағалауы, өзгелердің құрметі, тәрбиенің табиғатпен үйлесімділігі, балаға деген мейірімділіктің байқалуы. Нақтылап айтқанда, жеке тұлғаға бағытталған тәрбие-бұл баланың тұлғасына терең құрмет көрсету, оның жеке даму ерекшеліктерін есепке алу, оған саналы, толық құқылы қатысушы ретінде қарым-қатынас негізінде тәрбие процесін ұйымдастыру. Жеке тұлғаға бағытталған білім оқу, оқыту, дамытудың өзара байланысын жүйелі түрде құру болып табылатыны анық. Бұл әдістің дәстүрлі оқу–тәрбие үрдісінен айтарлықтай ерекшелігі тұтас әрі нақты білім беру жүйесі.

Бүгінгі таңда елімізде дені сау, рухы таза, ойлары биік жастар өсіп келе жатыр. Олар алдарына үлкен мақсаттар қойып, соған жетуге тырысатындай тұлғаларды тәрбиелеу ата-анамен қатар педагогтардың міндеті екені анық. Қорыта айтқанда, балалаларды жастайынан нағыз адам болуға, алдарына керекті мақсат қойып, оған жету жолында кездесетін қиындықтарды жеңе білетін тұлға ретінде дайындау керек. Аталған мақсаттарға жету үшін жеке тұлғаға бағытталған оқыту түрін пайдаланудың тигізер әсері зор деп санаймын. Бүгінгі таңда оқу-тәрбие үдерісінде жеке тұлғаға бағытталған технологияларды қолдану неғұрлым орынды болып саналады. Бұл " жаһандану үдерістерінің өсуі және олармен байланысты жаңа ғылыми-ақпараттық технологияларға көшу кезінде адам прогресінің парадигмасының өзі өзгереді, оның мәні мен негізгі өлшемі жеке тұлғаның дамуы болып табылады».

Жеке тұлға ретінде қалыптасып, өзі кез-келген жағдайда нақты шешім қабылдай алатын білімгер болашақта кемелденген маман бола алатыны нақты заңдылық.

Жеке тұлғаға бағытталған оқыту негізінде біз оқушының жеке тұлғасына деген ізгілікті көзқарасымызды атап өткеніміз дұрыс. Олар төмендегіше сипатталады:

- әлеуетті мүмкіндіктерді ескере отырып, оқушының жеке қасиеттерін, оның қабілеттілігі мен дарындылығының тұтас жиынтығын неғұрлым толық ашу және қалыптастыру;
- жағымды моральдық-этикалық қасиеттерді дамыту;
- оқушыға адамгершілік және демократиялық көзқарас, оның тұлғасына құрмет;
- оқушының психикалық және физикалық даму ерекшеліктерін, мінез-құлық қажеттілігі мен уәждерін түсіну;
- жеке тұлғаның қалыптасуына көмек;
- білім алушылардың қалауы мен мүдделерін ескере отырып қарым-қатынас жасау.

Бұдан шығатын қортынды жеке тұлғаға бағытталған оқыту нәтижесінде өз ойын еркін білдіре алатын, толыққанды оң шешімдер қабылдай алатын және айналасына өзін тұлға ретінде және білікті маман ретінде дәлелдейтін дарынды жастар қалыптаспақ.

Бұл "оқу үрдісінде оқушы тұлғасын үйлесімді қалыптастыру және жан-жақты дамыту, оның шығармашылық күштерін толық ашу, өзіндік "Мен", қайталанбас даралығын алу, оқушылардың белгілі бір білім, білік және дағды жиынтығын меңгерместен, тіршілік ету субъектісінің қалыптасуы жеке тұлғаға бағытталған тәсілдің басты мақсаты болып табылады. Педагогтың басты міндеті оқушының өзін табуға, адамның тұлғасын қолдауға және дамытуға, онда шығармашылық тұлғаның қалыптасуына ықпал ететін бейімделу, өзін-өзі анықтау, өзін-өзі дамыту, өзін-өзі жетілдіру, өзін-өзі жетілдіру тетіктерін қалыптастыруға көмектесу болып табылады".

Жоғарғы оқу орнында жеке тұлғаға бағытталған оқыту дегеніміз-студенттің барлық мүмкіндіктері мен қабілеттерін ескере отырып, оның жеке ерекшеліктерін дамытуға қажетті жағдайлар жасау деген сөз. Бұл жағдайда студент өзін қолайлы және сенімді сезінеді. Білімділіктің, адамгершіліктің, кәсіби шеберліктің және іс-әрекетке икемділіктің жаңаша түсінігі алдыңғы шепке студенттердің әрекеттері мен қатарымен араласуындағы өз орнын анықтау, өзін-өзі жетілдіру, адамның табиғи мүмкіндіктерін ашу, ойлау қабілетін жетілдіру, сөйлеу, әрекет ету сияқты қасиеттерін ашып, осылардың нәтижесінде-өмірдегі өз орнын нақты табуға және өз мамандығының шебері болуға көмектеседі. Тұлғаға бағыттап оқытуда студент жеке тұлға ретінде өз мүмкіндіктерін ашып, айналасына өзінің маңыздылығын таныта алуы болып табылады.

Қазіргі жағдайда еңбек нарығы сауатты, басқарушылық шешімдерді дербес қабылдай алатын, ойлы және жоғары білікті мамандарға деген жоғары сұраныспен сипатталады. Бұл сұранысты кәсіпорынның бәсекеге қабілеттілігін дамытуға ықпал ететін, әлеуетті қызметкердің белгілі бір тобының болуына мүдделі жұмыс берушілер тікелей қалыптастырады. Осыған байланысты жоғары оқу орындарының студенттерін оқыту процесін ұйымдастыруға жаңа талаптар қойылады. Жоғары оқу орындарында білім алу дәстүрлі түрде болатын, яғни студенттерге жеке көзқарастың жоқтығы, мызғымас постулаттар мен стереотиптерге негізделген. Мұндай жағдайда студент дәрістің пассивті тыңдаушысы ретінде әрекет етеді, семинар сабақтарындағы бастаманы сирек көрсетеді, пікірталасқа іс жүзінде қатыспайды. Бұрыннан келе жатқан білім беру студенттер үшін де, оқытушылар үшін де қызықсыз, олар бір-бірімен сабақ өткізу барысында аз байланысады. Осының барлығы бірінші кезекте, студенттердің ақпаратты өз бетінше табу және талдау, сауатты өзін-өзі бағалау және жаңа білім алу қабілетін дамытуға бағытталуы тиіс білім берудің қазіргі тетіктеріне өзгерту қажеттілігі туындады. Біздің ойымызша, қазіргі білім беру үрдісінің негізінде әрбір студенттің жеке тұлғасын дамытуға бағытталған тәсіл жатуға тиіс. Мұндай жағдайда оқытушы мен білім алушы тандемде жұмыс істейтін болады. Осылайша, тұлғалық-бағдарлы тәсілге негізделген білім беру нәтижесі студенттердің болашақ кәсіби қызметінде әрі қарай тиімді шешім қабылдауды қамтамасыз ететін жеке басының сапасы болып табылады.

Психологиялық-акмеологиялық тұрғыда студенттің жеке тұлғалық-кәсіби дамуы-бұл оның оңтайлы өзін-өзі дамуының сандық және сапалық өзгерістерінің үдерісі. Ол ақыл-ой және дене мүмкіндіктерін жетілдірумен, студент таңдаған кәсіппен анықталатын әр түрлі қызмет түрлерін жүзеге асыруға мүмкіндік беретін қабілеттерді қалыптастырумен байланысты. Зерттеушілердің тұжырымы бойынша жоғары оқу орнындағы маманның тұлғалық-кәсіби дамуы бір жағынан жоғары білім беру жүйесінде оның мақсатты қалыптасу үрдістерін, екінші жағынан - болашақ кәсіпқойдың тұлғалық-кәсіби қасиеттерін ашу және болашақ маманның қарым-қатынас тәсілдерін толық игеруінде.

Егеменді елімізде қазіргі кезде білім берудің жаңа жүйесі жасалып, әлемдік білім беру кеңістігіне енуге бағыт алуда. Аталған жағдай оқу-тәрбие үрдістеріндегі елеулі өзгерістерге байланысты болып отыр. Келер ұрпаққа қоғам талабына сай тәрбие мен білім беруде оқытушылардың инновациялық іс-әрекетінің ғылыми-педагогикалық негіздерін

меңгеруі маңызды мәселелердің бірі. Мақаланы қортындылай келе жеке тұлғаға бағытталған оқытудың қазіргі таңда сапалы тәрбие мен білім беру негізі дей отырып, жоғарғы оқу орындарында да осы әдісті пайдалану арқылы егеменді еліміздің мықты, білікті, шығармашыл мамандарын дайындау күн талабы.

LIRIK ASARLARNI O'QITISHDA FANLARARO ALOQANI YO'LGA QO'YISHNING ZAMONAVIY METODIKASI

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Annotatsiya. Ushbu maqola 6-sinf o'qish kitobining zamonaviy talablar darajasida takomillashtirish to'g'risida bo'lib, unda o'quvchilarni o'quv jarayonining faol ishtirokchilariga aylantiradigan, o'quv vaqtini oqilona ishlatishga hissa qo'shadigan va, eng muhimi, o'quvchilarning bilimni chuqurlashtiradigan, o'quv materiallarini yuqori darajada o'zlashtirishni ta'minlaydigan, ta'lim mazmunini yaxshilash uchun qulay shart-sharoit yaratadigan *lirik asarlarni o'qitishda fanlararo aloqani yo'lga qo'yishning zamonaviy metodikasi haqida fikrlar yuritilgan.*

Kalit so'zlar: fanlararo aloqa, integrativ dars, adabiyot, geografiya, tilshunoslik, psixologiya, tarix.

Lirik asarlarni o'qitishda fanlararo aloqani yo'lga qo'yishning zamonaviy metodikasini ishlab chiqish bugungi dolzarb masalalardandir. Badiiy asardagi adabiy voqelikni teran aks ettirish bilan yoshlarning ruhiy-ma'naviy kamolotga erishuvi yo'llarini yanada oydinlashtirish kun tartibidagi vazifalardandir. Adabiy asar yoshlarda milliy qahramonning ongi va tafakkuriga, undagi gumanistik g'oyalarning shakllanishiga yordam beradi. Hozirda mustahkam irodali va sog'lom fikrli shaxsni, ya'ni barkamol avlodni etishtirish usullarini ishlab chiqish va amaliyotga tatbiq qilish yo'llarini qidirish zarur.

Darhaqiqat, har qanday badiiy asarning o'zani hayotga yo'naltirilgan bo'ladi. Adabiyotning asosiy manbasi hayotdir. Nuqtai nazarimizni qaratsak, badiiy asarning mohiyatini uning kompozitsiyasi syujeti va fabulasining shakllanishida jamiyat va ijodkor orasidagi bog'liqlik ahamiyatlidir.

Adabiyot darslarida, aynan, shunga o'xshash munosabatlar talqinini ongli tarzda amalga oshirish zarur bo'ladi. Adabiyot o'qitishning integrativ holatini doimo nazarda tutish lozimki, har qanday ijodkorning amaliy faoliyati va badiiy asarni yozishda an'anaviy usullardan foydalanish maktab yoshidagi o'quvchilarni badiiy adabiyotdan bezdirishi, ularning kitobga munosabatini susaytirishi mumkin. Bunaqa an'anaviyliklardan xalos bo'lish uchun o'qituvchi badiiy adabiyotni bilishi, tushunishi, bevosita hayot bilan bog'liq tarzda tadqiq va tahlil etishi lozim. Jarayondagi mavjud asar voqealari bilan hayotdagi muammolarni atroflicha tahlil qilib, kun tartibidagi bu muammolarning badiiy asar bilan mushtarak jihatlarini atroflicha o'rganish kerak. Ularni hal etish uchun to'g'ri xulosalar chiqara olgan o'quvchida hayotga tiyran ko'z bilan qarash tuyg'ulari shakllanadi. Shuning uchun ham bu jarayondagi yangiliklardan boxabarlik, fanlararo munosabatlarni amaliyotga tatbiq etish juda muhim masalalardandir.

Adabiyotni, xususan, badiiy asarlarni o'qitish hech qachon tayziq ostida bo'lmasligi zarur. Shunday ekan, adabiy asarlarni o'rganish jarayonida yoshlarda mustaqil va to'g'ri fikrlashni shakllantirish hal etilishi lozim bo'lgan birinchi galdagi vazifa hisoblanadi.

6-sinf adabiyot darsligidagi lirik asarlar orasida tarix fani bilan aloqadorlikda o'rganilishi lozim bo'lgan asarlar ham bor. Unda o'z joyini urush maydonlarida deb bilgan Musa Jalil jangchilar o'rtasida ma'naviy-ma'rifiy targ'ibot ishlarini olib borgan haqida ma'lumotlar uchraydi.

Ikkinchi jahon urushi deb ataluvchi tarixiy urush Musa Jalilga askarlik kiyimini kiydirish bilan birga, uning she'rlariga jangovar ruh va dard bag'ishladi. Urush yillarida fashistlar konslagerida azob-uqubat tortgan vatanparvar shoir dushmanga taslim bo'lmadi. U asirlarning yashirincha tashkilotiga rahbarlik qildi. Keyinchalik "Moabit daftari" nomi bilan mashhur to'plamga kirgan g'oyaviy-badiiy she'rlarini yozdi. Musa Jalilning "Moabit daftari" to'plami o'zbek tiliga tarjima qilinib, alohida kitob shaklida nashr ettirilgan.

Urushga taalluqli gazetalarda harbiy muxbir sifatida turli xabar, maqola va badiiy asarlar bilan faol ishtirok etgani haqida ma'lumotlar bor. Bu holat bevosita tarix bilan ham bog'liq jarayon. Shoirning shu yillari nashr etilgan "Okopdan xatlar" nomli kitobiga jamlangan she'rlaridan 6-sinf adabiyot darsligida tahlillar bor. Frontda bo'layotgan urushning butun dahshati ro'yirost tasvirlanib, shoir talqinida go'zal ifoda etilgan.

Jahon urushi davri, yani 1942-yilning yozida Volxov daryosi bo'yida kechayotgan shiddatli jang paytida Musa Jalil og'ir yaralanadi va dushman qurshoviga tushib qolishiga bag'ishlangan she'rlari dardli poetik ifoda bilan tasvirlanadi. U fashistlar qo'lga tirik taslim bo'lgandan ko'ra o'limni afzal bilardi. Ammo:

Taqdir kuldi, o'lim tegmasdan

O'tib ketdi, qilmadi jur'at.

Netay, axir so'nggi minutda

Pistoletim qildi xiyonat...

Netay, axir do'st pistoletim

So'nggi so'zdan to 'sat bosh tortdi.

Kishan soldi dushman qo'limga

Va erksizlik qa'riga otdi.

(«Kechir, yurtim!» she'ridan)

O'sha kundan boshlab, shoirning tutqunlikdagi mashaqqatli hayoti boshlanadi. U fashistlarning turli qamoqxonalarda chidash mumkin bo'lmagan qiynoqlarga solinadi. Xo'rlik va haqoratlarni, o'ta mashaqqatli tazyiqlarni boshdan kechiradi. Ruhan matonatli, chidamli ijodkor turfa millat va elatlardan iborat mahbuslar orasida o'zining dushmanga nafrat, kelgusi ozod va yorug' kunlarga ishonchi bilan yo'g'rilgan da'vatlari, she'rlari ila taniladi.

Uning bu badiiy faoliyatidan xabar topgan fashistlar, nihoyat, shoirni Berlinga olib kelib, eng katta Moabit turmasining zax va qorong'i bir kishilik xonasiga tashlashadi. Bu holat o'quvchi ko'z o'ngida hozirgi kuniga shukronalik hissini paydo qiladi. Dushman tomon uchun unaqa sog'lom fikrli da'vatkor dushman kerak emasdi.

Urushdan keyin Moabit turmasidan qutulib chiqqan belgiyalik partizan Andre Timmermans ismli kishi Brussel (Belgiya)dagi konsulxonaga she'rlar bilan to'lgan bir yon daftarni olib keladi. U mazkur daftar qamoqxonadagi yaqin do'sti, tatar shoiri Musa Jalilga tegishli ekanini aytib, ijodkoming o'zi fashistlar tomonidan vahshiylarcha o'ldirilganini so'zlab bergani manbalarda keltirilgan. Daftardagi Musa Jalilning o'limi oldidan yozib qoldirgan quyidagi vasiyati ham 6-sinf adabiyotida keltirilgan edi:

"Tatarcha yozuvni taniydigan va bu daftarni o'quvchi do'stga. Bularni tatarlarning taniqli shoiri Musa Jalil yozib qoldiradi, deb yozadi. Uning tarixi quyidagicha, 1942-yilda urushga ketib ham ... asirlikda ko'p azoblar tortib qirq o'limdan qolib, oxirida Berlinga keltiriladi. Berlinda yashirin siyosiy uyushmada qatnashuvda ayblanib qo'lga tushdi va turmaga qamaldi. Balki uni o'lim jazosiga hukm etarlar. U o'lar. Ammo uning asirlikda va tutqunlikda yozgan 115 she'ri bor. U shular uchun qayg'uradi. Shuning uchun 115 she'rnin 60 tasini o'lsa hamki, ko'chirib qoldirishga tirishdi. Ammo bu kitob qo'lingga tushsa, she'rlarni yaxshilab diqqat bilan oqqa ko'chirib saqla, ham urushdan so'ng Qozonga xabar qilib, tatar xalqining marhum shoirining she'rlari deb nashr ettir. Mening vasiyatim shu!"

Musa Jalil, 1943-yil dekabr». Bu vasiyatnoma yozilganidan keyin oradan bir oy o'tib 1944-yilning yanvarida tatar xalqining asl farzandi fashistlar tomonidan qatl etildi.

Maktabning 6-sinf adabiyot darsligida Musa Jalilning adabiyotga qo'shgan hissasi hamda ijodini tarixiy-qiyosiy metod orqali o'rganilishi ochiqdangina. Darslikdagi savol-javoblar ham bolalarning fanlarni integratsiyalash orqali o'rganilishini ta'minlaydi. Masalan: 1. Musa Jalilning hayoti va ijodi qanday davrda kechdi? Juda mashaqqatli urush davri edi. Asir tushgani haqada va ozodlik hamda erk haqidagi she'rlari ko'z o'ngidan o'tadi. 2. Shoirning serqirra faoliyati o'z ichiga nimalarni qamrab oladi? Darslikdagi bu savol ham tarixiy faktlar bilan qiyoslanib fanlararo integratsiyani yuzaga keltiradi. 3. "Moabit daftari"ning yaratilish tarixini so'zlab bering. Bu topshiriq ham o'z-o'zidan Maabit turmasi bilan bog'liq. Ya'ni shu topshiriqdan adabiyot, geografiya, tilshunoslik, psixologiya va tarix fanlarining o'zaro komparativistik holatini kuzatish mumkin.

1. adabiyot – badiiy asar nomi;
2. geografiya – Germaniyadagi turma nomi;
3. tilshunoslik – toponimika, joy nomi o'rganiladigan yo'nalish;
4. psixologiya – mahbusning ruhiy holati ijodida aks etishi bilan bog'liq hodisa;
5. tarix – urush davri jarohatlarini o'zida aks ettirgan tarixiy jarayon guvohi.

Darhaqiqat, Musa Jalilning «Moabit daftari»da kuylangan erkin hayotga chanqoqlik, insoniyatning baxtli kelajagiga ishonch hissi uning har qanday o'limni dog'da qoldirganidan yorqin dalolatdir. Shu daftardan o'rin olgan "Qushcha" she'rida ham qamoqxonaning tikanli simiga kelib qo'ngan erkin qushchaga murojaati aks etgan:

Uch, qushcha, hur
Qo'shig'im bo'lib! -
Shudir sendan so'nggi tilagim.
Tanim qolsin bunda (Tan nima?)

Ona yurtga borsin yuragim, - deya kuylagan edi. Uning o'lim oldidan qilgan orzusi ro'yobga chiqqandek. Shoir she'rlarida ifoda etilgan o'tli tuyg'ular, go'zal insoniy hislar nafaqat yurti va o'z yurtdoshlari, balki jahonning ko'plab xalqlari yuragiga yetib bordi, millionlab qalblarda aks sado berdi. Jumladan, tarjimon – Mamarasul Boboyev o'zbek kitobxonini uchun "Moabit daftari" to'plamini va boshqa asarlarini o'zbek tiliga o'girib, adabiyot ixlosmandlarini quvontirdi.

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CONDITIONS FOR THE FORMATION OF FUTURE TEACHERS' READINESS TO ORGANIZE LEARNING ACTIVITIES AT SCHOOL

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School education in the Republic of Kazakhstan is undergoing various changes. New living conditions impose special requirements on future teachers: they must be not only educated and skillful, but also thoughtful, initiative, independent. Therefore, pedagogical science sets forth the task of developing students' thinking ability and creativity in applying knowledge in practice. The requirements to them are also strengthening, one of them is the requirement for the competence of the teacher in the development of the students' research abilities. In particular, the teacher lacks the competence to develop the students' research abilities, organize and develop their educational and research activities, create conditions for them.

The relevance of the research topic is the problem of training physics teachers and students to organize research activities in higher educational institutions, the need to develop the research abilities of future physics teachers as an important factor in their professional development. The importance of the problem of creating the necessary professional research competencies in teaching physics at school for future physics teachers (students of pedagogical universities) is that such competencies allow solving the problems of forming students' skills to do research in the course of teaching physics.

Therefore, in order to determine to what extent the curriculum for the training of physics teachers in Universities of Kazakhstan includes the relevant content and methods of teaching necessary for teaching physics in secondary schools, the study of the content of educational programs for the training of physics teachers in universities of the Republic of Kazakhstan during 2000-2022, the author has made an analysis of educational programs for the training of physics teachers in various universities. For this, a decision was made to review and analyze "Physics" educational programs according to the register of educational programs of the unified system of higher education management (ESUVO).

We have made an analysis of the state educational standard and standard programs that were in effect in the period 2000-2020. We see that the adoption of the new Law of the Republic of Kazakhstan *On Education*, adopted on July 27, 2007 No. 319-III, has become a key milestone in the field of education. The Law of the Republic of Kazakhstan *On Education* with amendments and

additions consists of 12 chapters, which include general and final provisions, the system and management of education, the content and financing of education, the organization and subjects of educational activities, responsibility for violations, international activities, the status of a teacher and the rules of state regulation. It introduced a number of important and innovative norms: the introduction of a three – level system of training personnel in higher educational institutions – Bachelor – Master – Doctor of Philosophy. Approval of the system of academic credits in accordance with the Bologna Process adopted at the international level. Thanks to this, the mobility of students whose diplomas can be recognized abroad was greatly facilitated. A national accreditation system for assessing the quality of educational services has been created. Provision of state grants for the most priority specialties for school graduates based on the results of the unified national testing. Since 2007, 45 amendments and additions have been made to the Law. The most numerous amendments to this law were made in 2015, in connection with which the state educational standard, standard curricula, and standard syllabi were modified.

In order to determine the content of the educational programs, the registry of the Ministry of Education conducted an analysis of the existing educational programs for training physics teachers in 21 universities of the Republic of Kazakhstan. Objectives of the EP, expected results of training, taught subjects and their content were considered.

If we analyze the current curriculum for training physics teachers in higher educational institutions using the list of EP of the Republic of Kazakhstan, among the 21 given higher educational institutions, there are very few subjects that give future teachers an idea about research work and adapt them to scientific work with students in the future. Even in some higher education institutions, there were universities where only the subject *Methods of Scientific Research* is taught within the cycle of General Education Subjects (GES).

For example, let's look at higher education institutions, where the content of subjects for the formation of research competences is the same or almost the same (Table 1).

Table 1

HEIs	Subject	Content
K. Zhubanov Aktobe Regional University	Basics of Scientific Research	The training course is aimed at forming a systematic understanding of the content and methods of scientific research, academic writing and academic integrity, as well as mastering knowledge, skills, technologies and methods that allow conducting research in various fields. The subject program includes methodological recommendations on the formulation of the topic, goals and objectives of the scientific research; study of the methodology of theoretical and experimental research; analysis of research and presentation of findings and proposals. Much attention is paid to the implementation and effectiveness of scientific research, as well as the research and final papers design rules.
Sarsen Amanzholov East Kazakhstan State University		The aim of the subject is teaching students a framework of basics of scientific research, the basic ways and methods of scientific knowledge required to do the research. The discipline is aimed at studying the principles, rules and subjects of the scientific research, making choice of research methods, implementing them, applying technologies in order to arrange the research process, analyzing, synthesizing, registering the research findings.
Kazakh National Women's Teacher Training University		The course is aimed at the development of scientific research components in professional interests of a future specialist. The subject forms students' skills in working with scientific literature, organizing and

		conducting research (according to the field chosen), holding scientific experiments, competent formalization of research findings in an academic manner and presenting them to public.
Arkalyk state pedagogical Institute named after Altynsarin	Research methodology and academic writing	The student formulates the goals, features of the content, introductory and final hypothesis of scientific research work in physics, education; describes the concepts of general research methods; conducts research on topics of personal interest; masters the main features of the academic letters: writing the content structure of the work, making and filling-in tables, drafting graphs, spatial mapping of physical problems, writing research articles, annotations, abstracts, reviews and essays; as well as the ability to discuss scientific works in public.
Alkey Margulan Pavlodar Pedagogical University	Fundamentals of research activity and academic writing proficiency	Organization of research activities. Types of research activities: theoretical, experimental-research activities. Tools and forms of implementation. Design and research activities. Analysis and presentation of research findings. The structure of academic texts. Basic concepts and types of academic writing. Punctuation and spelling of academic texts. Plagiarism. The author's attitude to the cited material. Quotations from the second sources. Essay. Report. Articles and theses. Etymology of terms.
M.Kh. Dulaty Taraz Regional University	Research, commercialization fundamentals and academic writing	Basic principles of composing academic texts, writing research articles and reports on them, drafting proposals for research projects and basic principles of their activities; applying for certificate of authorship; basic rules for organizing scientific research in high schools; creation of a startup projects; and research projects commercialization

As we can see from this table, to form students' research ability only one subject is taught within the framework of the GES. Sufficient attention is not paid to the formation of research competence of future teachers. Students after graduating from higher education institutions, when they go to school, have no idea how to work with gifted children. Some educational programs contain only such disciplines that solve olympiad assignments. It does not give a full idea of how to conduct research, how to make research projects. Among the 21 universities considered, six universities have given the results of training, such as the organization of educational and research work of students, academic writing, organization of methodically correct performance of physical experiments. This is a very low indicator in the formation of research competence of future physics teachers.

The relevance of this issue is supported by many studies on this topic. Those studies show that future teachers have not developed the skills of conducting research [1]. The work touches upon the work of physics teachers in order to ensuring the objective analysis of students' research abilities formation [2]. It should be noted that most of the participating teachers do not plan students involvement in research activities.

The subject of research are physics teachers who were involved in the research, formation and development of students' abilities to do research. The aim of the research is to develop the competence of future physics teachers so that they could do research. The study consisted of three stages.

In the first stage, a literature review was conducted on the research topic. As part of the research, the authors reviewed and studied legislative acts, monographs, research articles and

other scientific publications. The theoretical framework was based on pedagogical and methodical literature [3]. Nowadays, higher educational institutions are facing the problem of training a specialist who can reach the objectives, who can be guided in abnormal situations, who can do research together with students [4]. Zh.M. Bitibayeva notes that the analysis of the requirements for the results of training bachelors and master students, as well as future physics teachers to organize research activities is based on the extent to which the competence approach in education has been implemented. Psychological bases of development of students' research activities were considered in the works by A.V.Leontovich, A.S.Obukhov, A.N.Poddyakov, A.I.Savenkov et al. A certain number of works describe pedagogical conditions for the organization of educational and research activity at school (T.V.Augustmanova, D.I.Zakharova, E.Yu.Kravtsova, M.M.Novozhilova, O.N.Prokazova, P.Yu.Stepanenko, etc.). The competency approach shows that it is important to organize the training of future teachers at pedagogical universities in such a way that they acquire the necessary professional skills (competencies) during field practice at schools [5]. In addition, the improvements (curriculum and plans) that are always carried out in practice do not lead to an increase in the efficiency of the entire educational process and the effectiveness of the results obtained. In terms of content, there is a divergence in the learning process from the requirements for practical activities; monotonous approaches are observed in the course of training, which lead to insufficient development of the professional competencies of future physics teachers. In higher and secondary education, the Committee for Education Quality Assurance (CEQA) notes that it is critically important, firstly, to form the competence of future teachers, secondly, to develop students' abilities to do research [6].

In the second stage, analysis and evaluation of the practice of forming researching abilities of teachers and future teachers of physics was carried out. As a pedagogical experiment the authors composed a questionnaire. The results of the questionnaire are given in Table 2. As a result of the discussion of the questionnaire, it was found that many teachers independently compose tasks to determine the research abilities of students, compose works for discussing its goals and tasks, methods of implementation, and conclusions. The purpose of the experiment is to determine the sufficiency of the competence of university graduates, physics teachers on the formation of doing research abilities and the formation of research skills of students. At the diagnostic stage, the level of formation of skills in conducting and organizing research work, as well as the level of motivation of 30 teachers to conduct research work, was determined.

In the third stage, a training model for future teachers was created to form students' doing research skills. The research used simulation methods. The development of the model is based on the fact that the formation of research activity is seen as a controlled and focused process that begins within the university under the guidance of experienced teachers. At the university, future teachers should be given knowledge and skills that they can use in their teaching activity. The proposed model considers the step-by-step formation of research stages of future physics teachers. Each of the stages requires the formation of the necessary professional qualities and is related to the relevant didactical assignments.

The results of the assessment of the experience of forming doing research skills of teachers and future physics teachers showed: 16.6% - who do not know what work should be done by a physics teacher to develop students' doing research skills; 16.6% - who were provided with methodological materials that teach research work during the study in higher educational institutions; 16% - used project and creative methods in the course of teaching physics; 12% - those who found that students have analytical skills and inference skills; 10% - those who often conduct research with students; 2% - those who see obstacles on the school side in conducting research; 12% - those students who have an understanding of how research works are conducted; 60% - teachers who do not have evaluation criteria for research work; 60% - those who are not engaged in research work because of large teaching load; 66.6% - who are not engaged in research

due to the lack of time. The obtained results show that teachers have many problems, the main ones of which are the insufficient level of preparation and the low level of technical and methodological equipment in universities.

These questions were asked during the meeting with university alumni. The participants of the meeting expressed their proposals for the development of the secondary education system, discussed the need to conduct advanced training courses and noted that the physics teacher training program of the university does not provide adequate training of student-teachers for teaching physics. Sometimes, after graduating from the university, the graduates do not have the appropriate physical knowledge, physical skills and competence, which contributed to the decrease in the performance of students in the subject of physics in secondary schools. During the dialogue, students-teachers of various educational institutions said that they were not effectively prepared for the work to be performed after graduation. One of the issues that may be of interest is to determine what could be the reason for such gaps and why students are not confident in teaching physics in the classroom, whether they have been subjects in higher education. The teaching profession requires physics teachers to acquire the necessary competencies to do research with students while studying in the pedagogical education program. These results have been proved in other scientific studies: Zh.N.Bitibaeva 2020, A.S.Bychkova, 2013, they note the difficulties of physics teachers in conducting research with students. A.A. Vlasov, 2007, D.O.Danilov, 2006, shows methodological problems of teachers in choosing research content, methods and tools [5; 8-10].

The training model for future teachers includes: content component; assessment component; motivational component; an organizational component that allows for the development of comprehensive and high-quality professional competences. In the first stage, students considered the methods of scientific research, so that in the future they can conduct reproductive research types of research classes. Questions adapted to practical research activities were considered in the lesson. As a result, students can use the acquired knowledge, i.e. research works, content, goals, create an abstract, review, write a peer-review, predict, justify it, discuss research results, choose methods, draw conclusions, write a bibliography, compile a report. In the second stage, learning tasks become more complicated. With the help of the teacher, research activities are proposed, such as conducting research work on the subject of physics, writing coursework, projects. Here, the substantive component is characterized by its features, since it is based on the use of types of research activities through analogies and ways to create associative connections. At the third stage, students are offered to participate in research conducted by the University. This stage forms the competence of future physics teachers, because they can independently formulate research goals and objectives, pose a research problem, design and organize a plan.

To improve the competence of future teachers, to encourage them to conduct research work, it is possible to highlight the following pedagogical factors: -motivational component; - technological;-formation of research skills, taking into account the capabilities and abilities of students of higher educational institutions to do research work.

Conclusion

Thus, according to our research, the training of physics teachers to do research work with students remains one of the most pressing issues and requires an urgent solution. One of the requirements of modern schools is to engage students in research work, because in such a way students show interest, discover new things, develop independent work and decision-making abilities during research work. These requirements are set against higher educational institutions as well, because they need to develop the competences of teachers and prepare future teachers in a different way.

Research works by physics teachers confirms the insufficient level of training at the

University and the low level of technical and methodological equipment required to carry out high-quality work on the formation of research skills at school and encouraging students to conduct research. It is proposed to introduce models for the formation of professional research competencies of future physics teachers in pedagogical universities. When developing them, the main features of the formation of research skills in the organization of research activities at school, in our opinion, should be the following: the ability to navigate learning situations (initiative, independence), analysis, systematization, search for solutions); the ability to draw up a research plan in accordance with the proposed hypothesis and draw practical conclusions; the ability to organize creative classes and research assignments at home; the ability to do research; availability of motivation for organizing research work. An important condition for the effectiveness of the proposed model should be an increase in the level of knowledge of students in physics and the formation of research skills.

As the results of the study show, if graduates of a pedagogical university achieve a sufficient level of experimental training, the solution of the tasks set by the state educational standard will be completed. This complex competence is characterized not only by special experimental skills, but also by a developed methodological culture and an individual orientation of the student to activities related to physical experiment.

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ОСНОВЫ ПОДГОТОВКИ МОЛОДЕЖИ К РЕАЛИЗАЦИИ СИСТЕМЫ ФИЗИЧЕСКОГО ВОСПИТАНИЯ

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Введение. В условиях интегрирования в мировое пространство и стремления к общим традиционным ценностям демократического общества, все актуальней становится вопрос формирования физической культуры в Республике Казахстан посредством формирования здорового образа жизни на основе тесной связи физического воспитания с духовно-нравственным развитием. Этот вопрос в качестве одной из главных задач системы образования отражен в Программе «Казахстан-2050», законе Республики Казахстан «Об образовании», государственной программе "Развития образования в Республике Казахстан на 2020-2025 годы» [3].

В нашей республике растет потребность в специалистах по физическому воспитанию и новых направлений в спорте для сферы образования и различных отраслей. В связи с этим актуальным является вопрос соответствия образования, квалификации и способностей данных специалистов современным требованиям, совершенствования профессиональной подготовки будущих педагогов и содержания образовательных стандартов.

Учитывая физическое воспитание как социальную систему и общественное явление, для обеспечения физического воспитания подрастающего поколения в соответствии с требованиями образования и воспитания необходимо знать систему физического воспитания и основные задачи ее формирования и развития, ее деятельность и структуру. Физическое воспитание это не только урок физической культуры в школе. Это еще и система внеклассных и внешкольных мероприятий связанных со здоровьем. На современном этапе система физического воспитания в образовательных учреждениях подразумевает укрепление здоровья молодежи, совершенствование биолого-психологических качеств личности, формирование активной позиции и развитие гуманных отношений [4].

Физическое воспитание является частью сферы образования и воспитания подрастающего поколения и служит всестороннему развитию личности, сильному и мощному росту, формированию долгой творческой работоспособности человека. В вузе профессиональная подготовка будущих специалистов связана с государственными требованиями к подготовке поколения с крепким здоровьем, всесторонне развитого,

способного к физическому и умственному труду. Одна из главных задач, отраженных в «Концепции развития образования в Республике Казахстан до 2015 года» – внедрение международной системы образования.

Методы исследования. Анализ научной литературы и статей, ссылки на научные труды ученых, связанных с темой, традиционного послания Президента Республики Казахстан К.К.Токаева, направленное на реализацию системы физического воспитания.

Результаты исследования. Рассмотрен процесс подготовки будущих учителей к реализации системы физического воспитания, необходимость внедрения новых педагогических основ в содержание образования в связи со структурными изменениями в высшем образовании, национальной концепции и программе развития высшего образования.

Полная реализация указанных задач напрямую связана с системой физического воспитания. Реализация физического воспитания – является одной из педагогических работ, направленная на решение задач образования, развития, воспитания, улучшения здоровья личности, укрепления природной силы, воспитания саморазвития путем самостоятельного выполнения двигательных упражнений в соответствии с физическими возможностями и гигиеническими основами организма.

Крепкое здоровье, здоровый образ жизни будущего поколения напрямую связан с личностью школьного учителя, уровнем его теоретической и практической подготовки, полученной в вузе. Поэтому подготовку будущего учителя к организации работ по реализации системы физического воспитания учащихся надо рассматривать как неотъемлемую часть профессиональной подготовки. Специалисты физического воспитания и спорта должны быть духовными руководителями в решении учебно-воспитательных задач совместно с решением сложных социальных задач в соответствии с психологическими особенностями учащихся.

Сегодня невозможно формирование будущих педагогов как образованных и квалифицированных специалистов, если в ходе их подготовки не будут освоены физическая культура и здоровый образ жизни. Потому что здоровье каждого будущего специалиста не только личное богатство, оно также одно из необходимых условий для образования нашего народа и роста экономической мощи. В том числе главное условие здоровья – культурная среда, здоровый образ жизни. Поэтому встает вопрос изменения и обновления требований, предъявляемых к будущим педагогам. По этой причине нельзя оставлять без внимания общественное и социальное значение личности учителя физического воспитания.

На уроках физической культуры наряду с решением оздоровительных, образовательных и воспитательных задач необходимо осуществлять формирование духовной личности учащихся [1]. В качестве одного из основных требований к профессиональным качествам личности будущего педагога для формирования его как специалиста можно особо отметить общую научно-методическую подготовку. На повестку сегодняшнего дня ставятся задачи развития самоуправления студентов, необходимость развития и воспитания активности и индивидуальности будущего учителя. В вузах на будущих педагогов возлагаются задачи достижения своих профессиональных задач, освоение необходимых педагогических навыков, профессиональная подготовка учителей к воспитанию у учеников любви к Родине. В этих целях в вузах особое внимание уделяется повышению качества подготовки будущих специалистов. Так же значительно расширилось влияние воспитания.

На современном этапе изменилась концепция составления программ школ и вузов. Однако, не во всех случаях указываются условия сдачи учебных норм и основные навыки и способности, которыми должны обладать ученики школ и студенты. В современных условиях научного прогресса особое значение имеет повышение теоретического уровня

подготовки учителей-воспитателей в вузах, способных творчески проводить учебно-воспитательную работу.

В условиях увеличивающегося потока информации всестороннее развитие молодежи требует повседневного повышения научно-теоретических знаний самого учителя. В современной школе учителю наряду с проведением уроков по своему предмету необходимо заинтересовать учеников научными и техническими достижениями. В связи с этим особое значение имеет формирование у студентов вузов стремления к будущей деятельности в качестве исследователя. Эти задачи будут результативно решены в секциях, курсовых работах, посредством участия в студенческих научных конференциях и в ходе педагогической практики. Это даст возможность студентам заниматься научно-исследовательской работой, привить навыки самостоятельной работы. А это имеет особое значение для последующей педагогической деятельности.

На сегодняшний день система и структура высшего образования, содержание образования, методы и способы обучения, инновации в подготовке специалистов физического воспитания, требование изысканий и исследований свидетельствуют об актуальности рассматриваемого вопроса. Результат исследования показывает, что в республике подготовка учительских кадров при формировании высшего педагогического образования в советское время проводилась на ее территории. Вместе с этим была создана система основы образования. Огромное значение имеет проведенное исследование для творческого решения вопросов физического воспитания на различных уровнях, знания последних новостей, критического восприятия некоторых теоретических и практических новинок, правильного оценивания роли дополнительных научных дисциплин в решении задач физического воспитания [2].

Формирование личностных качеств детей является важной задачей системы воспитания в школе. Поэтому одним из основных вопросов воспитания творчески мыслящей личности является формирование двигательной активности. Ее отсутствие задерживает умственное развитие, снижает активность. А это в свою очередь исключает необходимость использования своих навыков и умений в практической деятельности, что приводит к нарушению ритма движения. Эффективность формирования учителем активности учащихся средствами физического воспитания обеспечивается при соблюдении следующих педагогических условий:

1. Профессиональная направленность процесса физического воспитания.
2. Дополнение теории и методики физического воспитания психолого-педагогическими вопросами воспитания двигательной активности учащихся.
3. Достижение уровня необходимых знаний и определенного мастерства в формировании творческой активности учащихся средствами физического воспитания.
4. Проявлять деловой подход в использовании средств, методов, активных форм обучения и воспитания с учетом индивидуально-психологических особенностей и уровня двигательной активности детей.

Заключение. Организация подготовки будущих учителей к реализации системы физического воспитания учащихся, воспитание необходимых качеств для будущей профессии, использование оптимальных методов и приемов, творческого подхода в педагогическом процессе, постоянное повышение профессиональной квалификации, привитие интереса учащихся к физическому воспитанию и спорту наряду с их закаливанием, укреплением здоровья, улучшением физического состояния оказывает положительное влияние на формировании здорового образа жизни и физической культуры у учащихся школ, на занятия физической культуры и спортивных секций.

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Використання методів креативного навчання на заняттях англійської мови як засіб формування ціннісної сфери студентів

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Актуальність вивчення цього питання полягає в методологічному обґрунтуванні необхідності впровадження креативних технологій у навчально-виховний процес. Застосування креативних технологій навчання сьогодні стає педагогічною умовою ефективного формування загальнолюдських цінностей у студентів у процесі вивчення англійської мови.

Результати наукових досліджень і педагогічний досвід сучасних педагогів та науковців дають змогу стверджувати, що використання креативних методів навчання має низку суттєвих переваг перед традиційними методами в контексті формування у студентів загальнолюдських цінностей (Е.Арванітопуло, Л.Байдурова, І.Зимня, І.Мудрицька, А.Муратов, Е.Полат, Т.Полилова, Т.Шапошникова та ін.).

Креативність будь-якого індивіда складається з взаємодії трьох компонентів: комунікативної компетентності, здатності творчо мислити та мотивацію. Здатність творчо мислити визначає гнучкість та винахідливість у пошуку рішення цієї конкретної проблеми, що стоїть перед студентом.

Комунікативна компетентність та творче мислення - стратегічна сировина особистості, необхідні елементи для усного ділового спілкування - її природний ресурс. Третій фактор - мотивація - залежить від того, як людина використовує цей ресурс. Комунікативна компетентність, творче мислення (здатність творчо мислити) та мотивація залежать один від одного. Вони взаємні між собою і знаходяться в діалектичній єдності. Комунікативна компетентність неможлива без творчого мислення.

Саме захоплення, інтерес, прагнення зсередини бажання щось зробити лежить в основі внутрішньої мотивації. За наявності внутрішньої мотивації люди займаються своєю справою заради нього самого та пов'язаного з ним задоволення. Мотивуючий чинник у разі – сама робота. З одного боку, наявність інтересу до процесу роботи, незалежно від його результатів, – правильна ознака покликання. З іншою – для творчої діяльності важливий і «мотив досягнення», тобто внутрішнє спонукання зробити свою роботу якнайкраще. Можна і треба виховувати мотив досягнення, тобто прагнення здатної людини до досконалості на обраному ним терені.

Творчість є найвищий прояв людської діяльності, спрямованої на перетворення дійсності, створення нових соціально значущих цінностей. Воно являє собою особливий стиль розумової діяльності, що передбачає аналіз ситуації, виділення проблем, пошук способів їх вирішення та рефлексивну оцінку результатів. Слід також підкреслити, що основним елементом креативного мислення є уява. Наша уява є важливою частиною

креативного мислення, оскільки це потужний інструмент, що допомагає нам уявно бачити і осмислювати альтернативи. Можна виділити основні завдання уяви:

- подання очікуваного результату до його здійснення;
- формування образів, що ніколи не існували або реально не існуючих об'єктів;
- розв'язання розумового завдання та забезпечення пізнавального процесу в умовах невизначеності та обмеженості ресурсів (нестача інформації, часу, коштів).

Розвинена творча уява передбачає:

- вміння усвідомлено долати психологічну інерцію;
- здатність до самостійного розвитку своєї уяви;
- вміння ним керувати при здійсненні творчої діяльності до генерування нових ідей.

Творча діяльність – це процес, що сам стимулюється, який характеризує прагнення реалізувати себе. Всупереч поширеній думці, креативність не є вродженою здатністю. Навпаки, креативному мисленню можна систематично навчати. Здатність знаходити креативні рішення дозволяє студентам успішно справлятися з вимогами та вирішувати багато комунікативних завдань. За допомогою креативної технології можна значно підвищити успішність кожного студента. Креативність – комплекс інтелектуальних і особистісних особливостей індивіда, що сприяють самостійному висуванню проблем, генеруванню великої кількості оригінальних ідей і нешаблонному вирішенню.

Для успішного виконання комунікативного завдання (продукування мови іноземною мовою) необхідно сформулювати ідею (тобто тематично пов'язану лексичну одиницю), виникненню якої повинні сприяти відповідні креативно-комунікативні умови, що створюються викладачем іноземних мов на занятті. Без відповідних умов неможливо генерувати оригінальні ідеї (тобто продукувати мовлення) на заняття з іноземних мов. Пропонуємо такі види даних креативних умов:

- умови, викликані рішенням комунікативної задачі в загальноосвітній сфері іноземної мови;
- умови, викликані рішенням комунікативної задачі в професійній сфері іноземної мови;
- умови, викликані рішенням комунікативної задачі у сфері ділової іноземної мови.

Можна висунути такі функції креативних технологій:

1. Екзистенційна функція. Вона спрямована на процес рефлексії, самоаналіз студентів філософсько-рефлексивного дискурсу (роздумів, риторичних бесід, розмов про себе, про свої переваги) у процесі виконання комунікативного завдання. Метою даної функції є активізація виконання студентами завдань наступного типу: Розповідь про себе, Розповідь про свою сім'ю, Розповідь про своє хобі та дозвілля і т.д. Ця функція є однією з основних, оскільки, як правило, виконання комунікативних вправ вимагають самостійності та рефлексії від студентів.

2. Професійна функція. Вона спрямована на дискурс у професійній сфері студентів, на застосування студентами спеціалізованої термінології, особливо якщо йдеться про немовний вуз, де дисципліна «Іноземна мова» не є профільною. Мета цієї функції: формування професійної компетенції студентів.

3. Компенсаторно-стратегічна функція. Вона спрямована на розвиток здібностей застосовувати різні стратегії – як для розуміння усних / письмових текстів, так і для підтримки успішної взаємодії при усному / письмовому спілкуванні, здатності уникнути непорозуміння, подолати комунікативний бар'єр за допомогою використання креативно-орієнтованих вправ у навчанні. Мета цієї функції: формування компенсаторної та стратегічної компетенції.

4. Мовна функція. Вона спрямована на контроль викладачем застосування студентами лексичних одиниць, граматичних конструкцій відповідно до заданого креативно-орієнтованого комунікативного завдання. Мета цієї функції: формування мовної компетенції.

5. Креативна функція. Вона спрямована на активізацію креативно-комунікативних резервів учнів у процесі виконання комунікативної вправи, тобто на рівень застосування дивергентного мислення при генеруванні оригінальної ідеї щодо вирішення комунікативного завдання на заняття з іноземних мов. Мета цієї функції: розвиток креативного мислення студентів як засіб формування комунікативної компетенції. В даному випадку, виходячи з вищезгаданого, можемо назвати це креативною компетенцією. Ця функція є методичним концептом технології доменів у процесі навчання іноземних мов.

6. Соціокультурна функція. Вона спрямована на знання студентами в галузі країнознавства та мистецтвознавства країни мови, що вивчається, що, у свою чергу, полегшує дискурс загальноосвітньою іноземною мовою. Мета цієї функції: формування соціокультурної компетенції.

7. Комунікативна функція. Вона спрямована на формування власне мовних навичок та розвиток мовних умінь у процесі вирішення комунікативної задачі. Мета цієї функції: формування мовної компетенції.

Розглянемо, що таке креативний метод та креативна технологія навчання:

Креативний метод (або метод креативного навчання) – це система принципів і прийомів креативного навчання іноземних мов, що застосовуються з метою розвитку креативного мислення як базисного концепту формування **комунікативної компетенції на заняттях з іноземних мов.**

Креативна технологія – це сукупність методичних прийомів, що свідомо використовуються, викладачем з орієнтацією на розвиток креативного мислення як засобу формування комунікативної компетенції на заняттях з іноземних мов.

Розглянемо такі методичні прийоми, що використовуються викладачем при застосуванні креативної технології навчання:

1. Прийом створення викладачем умов конкуренції та суперництва. Використання заохочувальних балів викладачем, інформування щодо екстраординарності генерування ідей у форматі (швидкість, гнучкість, оригінальність) студентами при вирішенні комунікативної задачі – все це сприяло більшій активності та підвищенню мотивації студентів у процесі навчання іноземним мов.

2. Прийом розвитку дивергентного мислення (уяви). Даний прийом базується на концепції розвитку креативного мислення як засіб формування комунікативної компетенції. Прийом містить мовні та мовні вправи креативного змісту. Захоплення кожною ідеєю передбачає позитивне підкріплення всіх ідей та відповідей; використання помилки як можливості нового, несподіваного погляду на щось звичне; створення клімату взаємної довіри, без оцінювання, прийняття інших, психологічної безпеки; забезпечення незалежності у виборі та прийнятті рішень з можливістю самостійного контролю за власними рухами.

3. Прийом розвитку «амбівалентності суджень» (третє ланка в ланцюжку мислення). Він використовується викладачем у процесі етапу пояснення лексичного і граматичного матеріалу. Даний прийом полягає у наданні викладачем студентам можливості «здогадки» недовомленої інформації з метою та у формуванні лексичних мовних навичок та лексичних мовленнєвих розвитку умінь у рамках процесу говоріння, при якому активізація продукування мови досягається за допомогою відсутності логічної наявності змісту завдання мовних вправ: вони повинні бути складені і представлені викладачем таким чином, щоб основним завданням їх виконання було генерування оригінальної ідеї на основі відсутності правильного і неправильного варіантів відповіді.

Розглянемо такі стадії креативно-орієнтованого способу продукування іншомовного висловлювання та його послідовність: креативна настройка сприйняття – вибір лексичних одиниць – граматичне структурування – ситуативна креативізація продукування промови.

1. Креативне настроювання сприйняття – це дивергентна (креативна) фіксація сприйняття змісту комунікативної задачі перед породженням іншомовного мовлення. Під дивергентною фіксацією ми розуміємо сприйняття змісту комунікативної задачі (проблеми) з погляду багатогранності, амбівалентності, суперечливості, креативності самої суті та змісту даної задачі (проблеми), а також ігнорування шаблонності, кліше, конформізму та логічної надмірності при вирішенні навчальної задачі.

2. Вибір лексичних одиниць. Після входу в стан креативного сприйняття проблемного завдання в результаті креативного налаштування слідує стадія вибору слова. При усвідомленні відмовитися від шаблонності і логічної надмірності, і навіть орієнтування амбівалентність і суперечливість під час вирішення проблемної завдання вибір слова стає найшвидшим і оптимальним.

3. Граматичне структурування. Наступною стадією породження іншомовного мовлення, з погляду, є граматичне структурування, під яким ми розуміємо конструювання граматичних структур під час продукування промови. Вибір граматичної конструкції також має бути максимально швидким і, певною мірою, – хаотичним. Акцентування уваги цьому аспекті має бути мінімізовано можливістю учня заздалегідь використовувати підготовлений граматичний матеріал, яка формується в учня попередньому етапі закріплення граматичного навички.

4. Ситуативна креативізація, на наш погляд, є побіжним продукуванням усного іншомовного висловлювання (мовлення) за допомогою стимулювання навчальною ситуацією у вигляді екстраординарного рішення комунікативного завдання. Тут екстраординарний спосіб розв'язання мовленнєвої задачі є засобом активізації побіжності та гнучкості породження іншомовної мови, виконуючи функцію активізації та стимулювання побіжності мовлення. Дана стадія є основною, оскільки саме тут і відбувається комунікативна дія, яка вчиняється учням, тобто породження іншомовного мовлення, яке, у свою чергу, відбувається за допомогою креативної установки.

Підсумовуючи вищезазначене, ми можемо зробити висновок, що комунікативна компетентність, творче мислення (здатність креативно мислити) та мотивація залежать один від одного. Вони взаємодіють між собою і знаходяться в діалектичній єдності. Комунікативна компетентність неможлива без творчого мислення. Недостатньо знати лексичні одиниці та граматичні конструкції мови, щоб бути комунікативними. Необхідно вміти використовувати свої знання, і ці навички досягаються лише у формуванні творчого мислення, здатності креативно мислити. Так само, як і комунікативна компетентність, креативне мислення вимагає мотивації.

Перспективи подальшого розвитку у цьому напрямку полягають, по-перше, у тому, що необхідна подальша розробка системи креативних завдань, що ефективно сприятимуть формуванню загальнолюдських цінностей у студентів на уроках іноземної мови; по-друге, необхідне подальше з'ясування педагогічного впливу креативних методів на формування ціннісної сфери студентів, що є відображенням однієї з головних тенденцій сучасного світу.

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A NEW SCHOOL WITH SPACES INCLUSIVE PEDAGOGICS

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ABSTRACT:

The current public policies in education matters of the Chilean State have declared within their focus the educational inclusion and a new public quality education that offers the best opportunities to all its inhabitants, especially to the most vulnerable socially, culturally and economically. In this way, it takes the international commitment mandated by the United Nations in the 2030 Agenda for Sustainable Development, in particular the Sustainable Development Goal 4, whose objective is to guarantee an inclusive and equitable quality education and to promote opportunities of permanent learning for all. The objective of this investigation considers studying the attitudes of pedagogy students to promote the inclusive school's development. It is necessary, therefore, to know what they think and feel one of their main actors that will lead these changes, future teachers. This study was developed under a quantitative, multivariate, descriptive and correlational model of the phenomenon based on the general perceptions of the sample according to the studied construct. The data collection was carried out through the adaptation to the Chilean reality of the "Questionnaire for future Secondary Education teachers about perceptions of attention to diversity" (Colmenero & Pegalajar, 2015). The results show a positive perception towards inclusion of students, but it is necessary materialized them in a better initial teacher training and in real inclusion practices.

Keywords: Inclusive education; Teacher educator training; Quantitative analysis

Introduction

Since the middle of the last century educational systems around the world have increased with varying intensities and through various mechanisms - their ability to integrate more students. One of the most important consequences of this process is that schools have progressively become more diverse and complex spaces to develop teaching processes. Thus, the convergence of children and adolescents of different social, ethnic, racial, country of origin or physical, sensory and intellectual capacities challenges one of the main tasks of school communities: to ensure that all students participate and learn from the process Learning. Disparities in academic results and psychosocial skills and the prevalence of disruptive milestones in the school trajectory of minority or subordinate populations only exacerbate the diagnosis (Glick, J., Yabiku, S., & Bates, L. July, 2008) (Román, M. & Perticará, M. 2012).

The change in educational centers is transformed into an inclusive improvement when it is based on inclusive values. Doing the right thing involves relating different school practices and actions to values. Linking your actions to your values may be the most practical step toward better school buying. In the case of Chile, the issue of school integration and, later, inclusive education has been present in the national discussion since the return to democracy. The main way in which this discourse has been installed in the country has been through the creation of a series of regulations, policies and technical-pedagogical guidelines, developed mainly by the State (Ministerio de Educación de Chile, Mineduc, 2005; Mineduc, 2007; Mineduc, 2015).

In this way, the recognition of the diversity of students in the school system has been promoted, seeking to generate guidelines for the implementation of measures and concrete actions that allow providing relevant support to respond to educational needs within schools and classrooms. Thus, efforts have been made to put into practice one of the internationally shared ways of understanding educational inclusion, considering it as: a process to address and respond to the diversity of needs of all children, youth and adults by increasing the the participation in learning, cultures and communities, and the reduction and elimination of exclusion dentr or from Unesco and education (2009, p. 8).

The previous definition moves away from the traditional understanding of inclusive education as one that addresses specific groups of students, moving to a more complex understanding, based on the conviction that the responsibility of the regular education system is to provide quality learning opportunities for everybody. However, and despite the importance of this definition, Chilean educational policies have been developed mainly from a traditional perspective of inclusion, circumscribing it to specific topics such as students with special educational needs or students of ethnic origin, without fully considering the need to incorporate social, cultural, political and academic differences in the teaching process , Infante & Matus, (2009).

In the pedagogy of inclusion education increasingly seen interest from the perspective of their own children and young people , consistent with the recognition of the rights of the child as part of the fundamentals ethical and filosofic years of quality education, White , (2006) . In this sense, in recent times considerable attention has been paid to the interpretation and implementation of the right of the child to be heard as one of the fundamental principles on which the convention of the rights of the child is based , recognizing them as active protagonists, with the right to participate in decisions that affect their lives (Lansdown , 2005). More specifically , it has been argued that narrative perspectives that seek to give a voice to excluded young people can illuminate issues that are not visible to the researchers' own academic world (Parrilla, 2009).

On the other hand, in the development of policies that seek to address the diversity of students in Chile, a response based on the identification of specific groups and on the implementation of compensation strategies for the alleged individual deficits has predominated . This restricted way of approaching the response to diversity entails a static conception of development, which categorizes students based on their learning difficulties and grants them little or no participation in the actions that affect them (Infante, 2007). Therefore, educational practices based on the intervention of specialist professionals in a remedial and individual way persist with children identified as carriers of a problem (López *et al.* , 2014).

In this way, the policies developed in recent years to address diversity constitute a scenario that is not very conducive to the development of an inclusive perspective of the school, where many challenges arise . These challenges can be summarized in the idea of the need for a profound cultural change in national inclusion policies , pedagogical practices in schools and the conceptions of educational actors. Part of this cultural change means overcoming what Slee (2011) calls the “rationality system” of integration , that is, that although there are adjustments in the language that proposes a more inclusive approach to education , the way of thinking and operate in practice remains that of integration .

In the framework of the research , we understand inclusive education as the continuous process of seeking a quality education for all, responding to diversity and the different learning needs, abilities, characteristics and expectations of students and communities, eliminating all the forms of discrimination (United

The concepts of learning and participation , therefore, are fundamental to understand the perspective of educational inclusion . In this context, "learning" refers to all students progressing

in their capacities and developing their maximum potential, through broad educational experiences, relevant and meaningful for their lives, which not only aim at academic performance (Ainscow & Miles, 2009) . In this sense, as has been proposed in the Universal Learning Design (CAST, 2008), in order to favor the learning of all students, it is necessary to ensure that the design of curricular materials and activities considers multiple means of representation of the contents by of the teacher, multiple forms of expression and communication of the content by students and multiple forms of motivation that respond to their diverse interests.

As one of the inclusive values, participation means being and collaborating with others, being actively involved in decision-making, recognizing and valuing a variety of identities, that all are accepted for who they are (Ainscow *et al.* , 2006). The participation involves learning together with others and collaborate on lessons shared by implication active with what they learned and taught , being recognized and accepted for who they are (black-hawkins *et to the .* , 2007). The participation involves all aspects of school life, it requires an active and collaborative learning for all and is based on relationships of mutual recognition and acceptance . The focus on participation contributes to inclusion the notion of active involvement, which implies: access (being there) , collaboration (learning together) and diversity (recognition and acceptance) .

To address both learning and participation, it is relevant to pay attention to the development process of boys and girls and the conditions in which it occurs. In this regard, the sociocultural perspective provides an understanding of development that is more consistent with a rights-based approach (Lansdown , 2005). Development is conceived from this perspective as a process of transformation of the child and his environment through the appropriation of tools that culture offers and participation in the problems and challenges of everyday life (Rogoff , 1997). Therefore, as argued by Smith and Taylor (2010: 33), "the capacities of children are strongly influenced by the expectations and opportunities for participation that their culture offers them, as well as by the amount of support they receive when acquiring new competences ". From the sociocultural perspective, the child is conceived as an active agent, actively constructing meanings from the stories and narratives in which the culture incorporates them (Bruner , 1990). The education , then, is understood as a process of dialogue and transaction between adult and child , where both negotiate and recreate the meaning of the action together, and where the child has a voice protagónica , becoming a member of a creative community culture (Bruner , 1986). Following a similar argument , Wells (2001) proposes that classrooms should become "communities of inquiry where the curriculum is seen to be created in an emergent way in the many modes of conversation with which the teacher and students understand in a way dialogic issues of inter e s individual and social through action , the construction of knowledge and reflection "(p. 113).

However, as has been raised in the debate on the relationship between development theories and social practices directed towards childhood, what underlies many of these practices are certain theories of child development that conceive of the child as lacking in skills of communication , regulation and resolution of problems (Bruner , 1986), as well as also conceptions of learning understood as transmission of objective knowledge of the teacher to the students that they should receive without interrogating (Pozo *et to the .* , 2006). These conceptions do not contribute to the development of an education that respects the child's right to be heard.

Knowing the perspective that children have of educational processes, would allow to have a practical vision of what aspects to change and improve in the implementation of strategies that promote inclusion . As point out Rudduck and Flutter (2007, p. 40) "ideas of their world can help us see things that normally do not pay attention , but [that] if they matter."

After what has been raised and with the aim of understanding the possibilities and limits of the restructuring processes that educational inclusion implies , an element that is fundamental is the understanding of the meanings that students attribute to their daily experiences at school,

assigning it to These play a leading role in the definition of the diagnosis of the situation , as well as the proposals for its improvement. In this regard, Fullan (2002) in the framework of the discussion on educational reforms warns that adults rarely think of students as participants in organizational life and the processes of change in school, but simply see them as beneficiaries of these processes. The conclusion of his analysis on the role of students in initiatives for change, improvement or innovation in education is that “if we do not assign them some significant role in the work, most of the educational change - and indeed of education - it will fail ”(p. 178).

Consequently, the objectives of this paper are to describe the meanings students construct about learning and participation , with the purpose of providing elements for an evaluation critical of policies that seek to explicitly promote inclusion .

The context of inclusion policy in Chile

The international agreements in force in Chile allow the quality of education to be assumed, at least in general terms, as the condition of the training processes that allow the incorporation of the members of the social framework to the socio-cultural codes and understandings, in order to favor their dignified and active participation in society, thus being able to contribute in a real way to the permanent and effective improvement of democratic coexistence (UNICEF, 1994; UNESCO, 1990), which has also been extensively worked on in specialized documents on the subject (UNESCO-OEI, 2005; Delors 1996; UNESCO / UNICEF, 2008, among others). Although recent studies (Muñoz, 2011) show that an ideal development on the subject has not been achieved at the Latin American level , in Chile public policy guidelines have been developed that intend to contribute to the improvement of equity in the training process (MINEDUC- Chile, 2012).

Based on regulations previously indicated in Chile, it has been established, in relation to the field of education, that actions of arbitrary discrimination correspond to:

Any distinction, exclusion or restriction that lacks reasonable justification, made by State agents or individuals, and that causes deprivation, disturbance or threat in the legitimate exercise of the fundamental rights established in the Political Constitution of the Republic or in international treaties on human rights ratified by Chile and that are in force, in particular when based on reasons such as race or ethnicity, nationality, socioeconomic situation, language, ideology or political opinion, religion or belief, union or participation in union organizations or the lack of them, sex, sexual orientation, gender identity, marital status, age, affiliation, personal appearance and illness or disability (MINEDUC-Chile 2012).

Given the above, it is assumed that the decisions of educational establishments should consider not violating the right to education of the student for any of the reasons indicated. The foregoing should favor the generation of a climate in educational establishments, which allows the constitution of favorable conditions for student learning, considering the factors established by current research on educational achievement (Backhoff , Bouzas , Contreras, Hernandez and García 2007; UNESCO, 2010; UNESCO-OEI, 2005; UNESCO, 2013; López, Julio and Morales, 2011, among others) and its link with the school climate, as well as the generation of educational experiences that favor learning in diversity and the valuation of inclusive societal spaces (UNESCO, 2013; Talou , Borzi ; Sánchez, Borzi and Talou 2010; Valenti , 2009, among others).

Specifically, within the regulations issued by the Ministry of Education of Chile, regarding the operation of educational establishments, the implementation of management processes has been determined, with the support of financing through the Special Grant (MINEDUC - Chile , 2008 and its subsequent refinements), guiding the permanent improvement of educational work, through the Improvement Plans. Within the framework of these Plans, the space is established,

within the sub-axis of coexistence, for the installation of guidelines that allow the establishment to advance in the achievement of educational experiences that favor inclusion.

In this regard, research shows us, on the one hand, that we still have significant tensions and barriers to overcome in order to achieve an inclusive culture in our establishments, but at the same time, they provide us with interesting clues to reflect on. For example, Urbina (2013) regarding the implicit theories of teachers in relation to educational inclusion establishes the existence of organizing axes that lead them to give an important weight to the role of individual differences in the results of the teaching and learning processes, over the teacher's own role. However, at the same time, teachers present a positive assessment of innovation and the permanent improvement of their own doing, as well as of collaborative work, being what the author calls "ethics of care", as a concern for emotional and general well-being on the other, an element of the school culture that would promote inclusive educational work. For their part Liñan and Melo (2013), also on implicit theories in relation now to integration, they indicate that the majority of teachers positively value work with the SEN approach, presenting an orientation, which the author calls, of pedagogical understanding, in which an interest in the effective learning of the student is expressed, from the perspective of the assessment of said student as a subject.

Regarding the representations of teachers on educational inclusion, Morales (2011) and Gallo (2010), point out the existence of positive evaluations.

The problem of Inclusive Education in the new constitution

The Convention on the Rights of Persons with Disabilities calls on the signatory States to adapt their educational systems to be inclusive and of quality. Many of you may wonder, is it necessary that we have to ratify something so obvious and dignified internationally? Well, it is. And to illustrate it, I will give you a couple of examples that will help you to have an idea of the current reality, almost 10 years after the convention was signed:

People with disabilities have 25% fewer years of schooling than the rest of the population. If the Chilean population achieves 11.6 years of schooling, people with disabilities barely reach 8.6 years. In other words, on average they barely exceed Basic General Education. If you are a woman with a severe disability from the most vulnerable quintiles of the population or the rural population, the outlook for schooling is further diminished, with schooling gaps of up to 40% compared to the rest of the population (INE; 2018).

Although in the last 15 years there have been numerous support and benefits implemented by the state towards educational establishments, little is known about their availability in opportunity and necessary quality. Above all, in adolescent populations or those who attend secondary education. In the latter case, the main problem is given by the high levels of school absenteeism that will necessarily influence their academic trajectory.

INCLUSIVE SCHOOL ENVIRONMENT

But what do we need to implement an educational and inclusive school environment? First, a powerful plan for universal access to the curriculum. Unfortunately, society tends to underestimate the possibilities of children and young people with disabilities to access knowledge related to the sciences, humanities and arts. Even more so in the technical professional levels that can have a good relationship with the world of work from the time they leave the establishments. Although there are initiatives led by universities on this line, their implementation and execution in the educational plans of the different levels is still incipient.

Second, the school climate as a factor of adherence to the educational system is configured as another critical element. School violence against students tends to be more recurrent in certain more vulnerable groups of young people and children and adolescents with disabilities are extremely exposed to it. It is widely known that those communities in which children live in diverse and inclusive environments are more tolerant and peaceful in childhood and adolescence. For this reason, it is essential that schools implement measures on the school climate strongly based, among some factors, on the fulfillment of the right to inclusive education that people with disabilities have.

Third is physical activity and recreation. Familiarizing ourselves with the Paralympic, special and unified sport through the various media has helped us to understand that people with disabilities not only can, but also seek spaces for physical activity and sport. But let's not get confused, what we see there is that High Performance that is destined for an elite that has the physical and attitudinal potential for competition at an international level. The most important drop should be focused on the development of instances of physical activity and healthy habits of people with disabilities. This, based in the first place that the presence of disability can be a factor of other diseases or unhealthy habits. Second, because physical activity strengthens self-care behaviors, coexistence, sense of belonging, among others. For the same reason, the establishments must be articulators of instances of sport and healthy habits that allow people with disabilities to develop and share the recreational sports experience with their peers.

The current Chilean educational system has a high component of segregation and people with disabilities have been greatly affected, especially at the levels of secondary and higher education where state support and benefits present significant access gaps in terms of opportunity and quality. This will impact your adulthood and obviously, your ability to be productive and live with autonomy and independence. Disability has been taken as part of the group of "bad students", "those who screw up the school at SIMCE", "those who will not be able to give the PSU", among other epithets. For all the above, within a stage of profound social changes we must not forget to include them in the new public policies and also within the Social Agenda in favor of a better education and based on the rights of all.

ORIGIN OF INCLUSIVE EDUCATION

The first milestone to advance educational inclusion that is declared today as a need felt in many developing countries, including Chile, had its origin in the World Declaration on Education for All developed in Jomtien (Thailand), where 155 met States in 1990 to raise the voice of those who for many years remained on the margins of society, be these children and young people and adults deprived of a basic education due to different conditions: immigrants, workers, populations in remote and rural areas, displaced by wars, refugees, ethnic, racial and linguistic minorities and peoples subjected to an occupation regime. This declaration established as a priority to universalize access to basic education, promote equity, give priority attention and build an environment conducive to learning and respect the essential right that all people have to education.

It is recognized in it that "education can contribute to achieving a safer, healthier, more prosperous and environmentally purer world and that at the same time it favors social, economic and cultural progress, tolerance and international cooperation" (Unesco 1994 , p. 6), but also that it will not be easy to achieve these objectives without a long-term commitment by all societies, especially the most developed ones, to actively contribute to the fight against poverty and social inequality. Thus, during the following years various conferences will take place to reaffirm this first

declaration of Education for All (EFA), reminding the signatory states and collaborating organizations of the commitments assumed.

With the declaration on Special Educational Needs: Access and Quality of Salamanca (Unesco 1994), a qualitative leap was made to the political and educational process of an EFA, considering the integration of vast sectors of the school population that for years were postponed and marginalized, how were people with SEN. This Salamanca declaration recognizes that all children, of both sexes, have the fundamental right to education in ordinary schools and that these must design programs that recognize the characteristics, interests, capacities and learning needs that are specific to each individual. It also incorporates as a force idea the participation and collaboration of families within educational centers and that of guaranteeing initial and permanent training programs for teachers in accordance with the new demands of an inclusive school.

Within the Framework of Action established to put this declaration into practice, it is demanded that,

Schools must welcome all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions. They should accommodate disabled children and well-endowed children, children living on the street and working children from remote or nomadic populations, children from ethnic or cultural linguistic minorities and children from other disadvantaged or marginalized groups or areas. (UNESCO, 1994, p. 6)

The dream of an education for all began to gain momentum by including many more people who, in one way or another, have been systematically excluded within their societies. The challenges of inclusion have been posed since then for those in charge of designing educational policies and mainly for the educational system and schools that will have to modify their practices in favor of attending to the new diversity and the educational demands resulting from overcrowding of education in the last three decades (Esteve, J. 2003) . The World Forum on Education for All: meeting our common commitments, held in Dakar (UNESCO, 2000) reaffirmed this idea of equal access and preferential attention to those students with the greatest needs and the most vulnerable. A 15-year term was established as an agreement to consolidate and achieve the goal of basic education for all and gender equality in education.

The 48th International Conference on Education entitled Inclusive Education: A way forward, held in Geneva in 2008 in the middle of the process to achieve EFA, Member States and intergovernmental organizations, NGOs and civil society institutions affirm that inclusive education It must also be of quality, equitable and effective, thus updating the concept of quality education for all (UNESCO, 2009). The idea that only with access and coverage would the goals of achieving human, social and economic development be achieved is overcome and progress is made towards what we currently understand by the concept of educational inclusion, which is much greater than the idea of assimilation, integration or tolerance that arose in the early nineties.

The main recommendations delivered to the member states, as a result of the 4 regional discussions held prior to the conference, covered several areas, giving an account of the scope of this inclusion policy led by UNESCO. Regarding the focus and scope of the concept, it is recognized that,

inclusive education is a permanent process, the objective of which is to offer quality education for all, respecting diversity and the different needs and abilities, characteristics and learning expectations of learners and communities, eliminating all forms of discrimination. (UNESCO, 2009, p. 19)

In addition, it mentions the fight against poverty and social inequality and the need to promote school and cultural environments that respect gender equality and the participation of the students themselves, their families and their communities. For public policies, it calls for gathering information on the various forms of exclusion that affect people, especially in the school context, where educational practices should be diversified in quality and equity. It is therefore

necessary to design effective curricular frameworks from infancy onwards and formulate pedagogical support policies aimed at educational reforms aimed at inclusion and to develop national monitoring and quality assurance mechanisms. It highlights the leadership role that governments should play in promoting inclusion, ensuring the participation and consultation of all stakeholders to generate broad social commitment that reinforces, for example, the links between schools and families and that They can contribute to the educational process of their children.

There are also recommendations for improving the status and working conditions of teachers, since they play a fundamental role in raising awareness and educating on and for inclusion. The paradigm shift will only be achieved with the commitment of the entire educational system, and this includes the continuous training of teachers on practices and learning towards inclusive education (Essomba, M. 2006). It should therefore promote research on it and instances of work with the other educational actors of the educational act, establishes the mandate of the conference.

Finally, in this journey of the Education For All (EFA) movement, the UN declaration of 2015 stands out, with the agreement of 193 countries to advance the 2030 Agenda for Sustainable Development.

Objective 4 of said agenda seeks to guarantee an inclusive, equitable and quality education and promote lifelong learning opportunities for all based on the development of goals such as: universal primary and secondary education, access to care and development services in early childhood and preschool education, equal access to quality technical-vocational and higher education, increase the skills necessary to access decent work, eliminate gender disparities in education and ensure equal access at all levels of the education and vocational training for vulnerable people, including people with disabilities, indigenous peoples and children in vulnerable situations, literacy and youth and adults and better civic education that upholds human rights and creates a culture of education for the peace and appreciation of cultural diversity (UN-ECLAC 2016).

The historical journey of these multiple conferences and international agreements highlights the importance of valuing education as a means for the sustainable development of the world, but it also makes us aware of the need to transform our pedagogical practices in an increasingly complex and complex world. changing. We must rethink what we understand by education (UNESCO 2015) and therefore what the school and its main actors represent.

Since the 48th International Conference on Education on inclusive education, we can appreciate with greater force the training need required by teachers to realize the dream of an inclusive education,

to train teachers by equipping them with the skills and materials necessary to teach different student populations and meet the different learning needs of different categories of learners, using methods such as school-level professional development, initial inclusion training and an instruction that takes into account the development and strengths of each learner. (Unesco 2009, p. 21)

Higher education centers that train teachers have been affected by educational inclusion as an idea that seeks to transform pedagogical practices and have received demands in relation to incorporating new concepts such as SEN, diversity, interculturality, integration and inclusion, as well as changes at the level. of curricular networks and training programs in basic education, kindergarten and specialty careers (Infante 2010).

The Initial Teacher Training is responsible for reviewing and harmonizing the training plans of pedagogy careers to provide coherence and integration between the learning trajectory, modules, syllabus, among others. In favor of improving quality as well as the development of capacities aimed at inclusion, both in its theoretical aspects, but also practical as part of the daily work of pedagogical practices. The teachers of the school system are responsible, for their part,

for the implementation of current public policies on inclusion (Law 20.845), and also for creating the conditions for a school without barriers by updating their projects internal (educational, coexistence, evaluation, inclusion among others) and to achieve those challenges require ongoing training that enables them in the optimal exercise of their professionalism.

The most representative authors of educational inclusion coincide in pointing out teacher training as a cornerstone in inclusive schools. Nothing will be done if we do not have well-trained teachers in the dynamics of educational inclusion. The research carried out by Gonzalez -Gil, (2016) concludes that the attitudes towards the inclusion of teachers are very positive and with high expectations in all their students, but they do not know or show resistance when modifying their daily educational practices in favor of inclusion, either due to lack of time, lack of resources and support from the educational administration and families, as well as organizational obstacles of the school itself. In this same sense, they recognize that they are not sufficiently prepared, at the training level, to take on the challenge of inclusion and attention to the diversity of students in general.

In the Chilean case, the specialists trained in inclusion issues are special or differential educators, but the current challenges for all teacher training institutions is to take charge of the entire complexity of the educational system to guarantee the right to education for everyone. .

Educational inclusion concept

The concept of inclusion was represented in the beginning to that of assimilation and then integration, because its origins are linked to traditional special education. The limited notion provided by this view of reality based on a medical vision of difference guided the educational policies of the States during the eighties and nineties, mainly in Europe and North America, according to (Slee , R. (2001)).

The concept of inclusion for Echeita and Sandoval (2002) refers to the right that all children and people have, not only those with special educational needs, to benefit from education so as not to be excluded from school or culture and society in general. . Stopping social exclusion therefore helps us to have greater dignity and equality, fundamental human rights. They reflect the same opinion (Stainback , S. and Stainback , W. (1999)) when they establish that there has been a change in current schools that previously focused their efforts on integrating and meeting the needs of students with disabilities, but now the center is It has expanded the attention of all members of the educational community, thus increasing the possibilities of greater social cohesion.

It should be remembered that at the end of the nineties the concept of integration of students with SEN has been overcome and there has been a firm step towards educational inclusion, " *the deficit paradigm is more focused on the subject's shortcomings, on their weaknesses ; while the paradigm of knowledge, more current, more focused on the subject and his needs, opens and enables the person to deploy all their potentialities in the social environment where they live in participation with others* " . (Escribano, A. and Martínez, A. (2013) , p. 21) , Ainscow , M., Booth , T. and Dyson , A. (2006) define educational inclusion as a process of continuous improvement that must be faced institutions to diagnose their exclusionary barriers and thus be able to eliminate them and promote student learning and participation. It is in this same sense that Unesco (2005) -will define educational inclusion as a process that attempts to respond to the diversity of student needs based on practices in schools, culture and communities, thereby reducing exclusion.

The very concept of educational inclusion today will therefore depend on what its actors, within the communities, mean them both in their speeches and in their practices, hence the need to know inside what they think, what they believe and what what all the actors do inside the classrooms and educational centers, reveal the locally situated models of inclusion (Mateus , L.,

Vallejo, D., Obando, D. and Fonseca, L. (2017) . and student participation processes in the Chilean case is a challenge and current research should focus on its actors. Inclusive education for public policies should be a priority since with them we not only transform and improve the school, but also society itself (Slee , R. and Allan, J. (2001).

The objectives of the research are:

- Identify the attitude towards educational inclusion of pedagogy students from a Chilean public university.
- Identify the quantitative weight of the variables: conditioning elements of the educational inclusion process, evaluation of teacher training in relation to educational inclusion and educational practice towards educational inclusion within the attitude towards educational inclusion of students in initial teacher training of a Chilean public university.
- Identify the attitudinal levels towards educational inclusion and existing differences by: careers and years of admission to higher education in a Chilean public university.

conclusion

We can affirm that having a positive reach (84.7%) in the perception towards educational inclusion, this showed significant differences in the different variables that compose it, where the most positive perception is on the elements that condition and define educational inclusion (96.6%), followed by the perception of teacher training in relation to educational inclusion (71.3%), leaving in last place the perception of training teaching practices towards educational inclusion, where students show a reach lowest (65.5%).

The consideration of a construct composed of variables of different nature, showed that each one of the variables has a certain weight with which its membership and consideration in the measurement carried out is confirmed, the variable with the greatest weight being the educational practice towards inclusion education that represents 77.6% of the global concept, followed by teacher training in relation to educational inclusion that represents 67.4% and the conditioning elements of the educational inclusion process, which only represent 41.8% of the concept . This would show an inclination of university students for the development of practices that strengthen inclusion, not from theory, but rather thinking about the role of constant interaction that they will play in their role as educators.

The characterization of the different careers reflected that the positive perceptions in relation to educational inclusion maintain an order, where the first places are occupied by careers that do not correspond to specialties, so that the specific sciences are located in a second place and the students of careers belonging to pedagogies in languages or with a mention in languages other than English, have the lowest score. Regarding the year of entry of the students, for the perceptions of the students about educational inclusion, three years of entry are considered, where the closer the year of entry, the students have more positive perceptions towards educational inclusion, which coincides with the considered variable 1 (elements that condition and define educational inclusion) and that totally disagree with variables 2 and 3 (Teacher training in relation to educational inclusion and Teacher training practice towards educational inclusion), which order inversely Your results.

We can also affirm that, since there are differences in the means achieved by the different courses taught and the different years of admission, these are mostly significant at the level of comparison in the different careers, where the variable Elements conditioning the process of educational inclusion, has a higher value for F, followed by the variables Teacher training in relation to educational inclusion and Educational training practice towards educational inclusion

respectively. Regarding the results obtained in the search for significant differences at the level of the students' years of entry, the results show that the F value is significant only for the conditioning elements of the educational inclusion process, the only value obtained being greater than 1, where the variables Teacher training in relation to educational inclusion and Educational teaching practice towards educational inclusion and the value given to the complete questionnaire are not considered significant.

Finally, and by way of reflection, these results are an approach to the analysis of the complex relationships that are established in the training of future teachers, their attitudes towards educational inclusion and their possible actions in a context of pedagogical practice, so they should be taken with caution as it is limited to a sample contextualized to a recently created faculty. However, it provides elements that can be discussed by all the actors who want a paradigm shift towards a society that is rebuilt by looking directly at diversity, interculturality and inclusion of all.

As stated by UNESCO (2015), it is necessary to rethink the aims of education and the construction of knowledge in a changing and complex world, and for this the figure of educators will continue to be a factor of change and transformation. The possibilities for sustainable and inclusive development should move us to focus on new approaches to learning for all, and that promote social equity and global solidarity.

The work of attention to inclusion is urgent and it is necessary for teacher training institutions to consider the variables described for the improvement of their professional paths, both at the curricular and extra-curricular levels. Institutions of Higher Education through Initial Teacher Training require constant practice in issues of inclusion and attention to diversity and for this it must build bridges with the Permanent Training of Teachers, teacher unions, education administrators, grassroots organizations and especially schools, in order to ensure continuity of innovations and improvement processes that are pursued for a new quality public education with a real sense of social justice.

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"KHOSROV AND SHIRIN" POEM BY NIZAMI GANJAVI THE ROLE IN SPIRITUAL EDUCATION OF THE YOUNG GENERATION

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Abstract. Education is an important factor in the formation of human personality. There is a dialectical and metaphysical development concept about the development of society, its regularities, the causes of events, and the driving mechanism. Of course, man-individual is formed by developing as an entity. Many prominent world scientists are right to approach the development of the individual from the point of view of heredity. Development is related to natural and social phenomena and is characterized by movement, progress, and creativity. It is also determined by the environment and upbringing.

The fulfillment of the tasks facing the society at present depends to a great extent on the efficiency of the process of forming an active and mobile developed personality. In connection with the development of personality, it is necessary to take into account the rich ideas not only of today's experience, but also of pedagogical thought.

There were different opinions about the factors influencing the process of formation of a person as a personality. For centuries and thousands of years, among these factors, superiority has been given to heredity and such an idea has been put forward that whatever is positive and negative in the parents is passed on to the children. In the times when the theory of heredity prevailed, intelligent people, in addition to accepting that theory, attached great importance to education. Nizami Ganjavi, who believed in the great power of science, education and upbringing and promoted it, sometimes took the absolute influence of heredity as the main factor of development.

In the article, the poem "Khosrov and Shirin" included in the genius Nizami's "Khamsa" was studied from this aspect and fundamental conclusions were revealed. It is noted that Nizami Ganjavi was not only a poet, but a teacher-pedagogue who had an exceptional service in the education of the young generation in terms of promoting the national and moral values of the people.

Key words: *personality, heredity, development, pedagogical idea, Nizami Ganjavi, "Khosrov and Shirin", genius artist, classical heritage, educational factor*

As it is known, during the Middle Ages in Azerbaijan, it was very difficult for the children of families from the poor class to be brought up and educated. During the Nizami period, educational institutions consisted mainly of a small number of mollakhanas and madrasahs in isolated cases. However, during the Middle Ages, Azerbaijan gave mankind such a prominent and brilliant personality as Nizami Ganjavi. In the second half of the 12th century, the Azerbaijani renaissance literature entered the highest stage of its development in the work of Nizami. Creatively mastering the rich science and culture that existed before him, this genius artist gave a new direction to lyrical and epic poetry. A great unity arose between the vortex of the mind and the peak of art. Based on the ancient culture of the East and the West, the flourishing science and art of the new

Muslim East, Nizami's heritage was distinguished by its deep humanism and democracy [1, p.134]. Nizami's real name was Ilyas, and his father's name was Yusif. The name Nizami is a pseudonym of the poet - it means the one who composes verses, arranges. The word "Ganja" in the surname means the place of birth. President İlham Aliyev gave high value to himself and his creativity of this genius at the State level and signed the Decree on declaring 2021 as the "Year of Nizami Ganjavi" [2].

When talking about the creativity of Nizami Ganjavi, it should be noted first of all that the history of world literature is marked by the five poems he wrote ("Treasure of Secrets" (1175), "Khosrov and Shirin" (1180), "Leyli and Majnun") (1188), "Seven Beauties" (1196) and "Iskandername" (1203) entered as the author of "Khamsa".)'s poem was later given this name by scribes and tazkirechi (literary scholars), and Nizami Ganjavi himself named his poems "Pang jangan" (Five treasures).

The second great work of Nizami Ganjavi included in "Khamsa" is the poem "Khosrov and Shirin". In this work, Nizami filtered the legendary history of his native people through modern renaissance ideas and created an extremely deep social and philosophical poem. If his first poem was included in the didactic poem genre, which has a wide place in Yachtn and Middle Eastern renaissance literature, "Khosrov and Shirin" emerged as the highest example of the romantic-philosophical novel series [1, p.155-156]. Nizami started writing this work in 1177 when Sultan Togrul ibn Arslan came to power. At the beginning of the story called "About the history and reason of this poem", Nizami clearly points to this aspect and writes that "I laid the foundation of this building when Sultan Togrul came to the throne". Unfortunately, this idea has been distorted in the translation. Nizami worked on "Khosrov and Shirin" completed in 1180-1181 for more than 4 years [1, p.156].

The genius poet's poem "Khosrov and Shirin" was engraved on the pages of Near and Middle Eastern literature with golden letters as the first large-scale epic work written on the subject of love. This poem was first written by Nizami Ganjavi in 1180-1181 and became an immortal love poem and became a treasure of world culture. made it even richer. This poem, which consists of 12112 lines, is written in the "hazace-musaddase-maqsure-makhzuf" style of Aruz. This poem of Nizami also begins with a prayer, a note and a hymn in the traditional manner. This work had a strong influence on Turkish epic poetry and has been used since the Middle Ages. It has been translated many times into Turkish. Atabay Shamseddin Muhammad Jahan Pahlavan Eldaghiz (1173-1186) dedicated this work of the genius artist. In addition to Jahan Pahlavan, the names of Togrul ibn-Arslan Seljuqi (1178-1194) and Qizil Arslan (1186-1191) are also mentioned in the work. is drawn [3].

Although the poem "Khosrov and Shirin" is written on the theme of love, the main idea of the work is the education, change, and improvement of a person under the influence of love. The poet's main goal here is to turn people away from bad deeds and turn them into fair and kind people. The poem describes the transformation of Khosrow's love for Shirin as a result of its influence. Khosrow's change plays a positive role in the education of the reader and instills human qualities in him. The greatness of man, the victory of love and labor play an important role in the moral education of teenagers and young people. In addition, as noted by Zahid Khalil and Fuzuli Asgarli, although "Khosrov and Shirin" is a love story, some points here can play a key role in the moral education of children. In this work, the poet skilfully used allegory to make plants speak like people, and artistically penned beautiful natural landscapes that had an interesting effect on children, events and stories that were compatible with these landscapes [4, p. 52]. received":

A fresh spring flower in every branch,
The blue of a rose in hand.
The chirping nightingale, the singing warbler,

The lovers were patient.
Spring filled with love,
He who lives without love cries from his heart.
Khosrov, Sweet every day free from care,
They walked with joy in their hearts. [8, p. 124]

As in other poems of Nizami Ganjavi, in this work: envy, lying, slander, betrayal, hypocrisy, backbiting, gossip, cowardice, lack of will, insecurity, extravagance, laziness, selfishness, self-loathing, etc. turned such negative moral qualities into a target of criticism and devoted a lot of space to the promotion of positive human qualities in his creativity. Also, honesty, will, generosity, goodness, benevolence, justice, etc. valued the importance of the role played by such qualities in the moral formation of a person at a high level [5]:

A hundred thousand congratulations to the great Muhammad!
It is the land of creation, be sure of that.
A lamp to the eyes of those who see the truth,
It is only an ornament to existence.
It is the pioneer of Wafa square,
He is considered the leader of the Prophets.
Shame does not leave the sinful community,
Intercede for them constantly. [8, p. etc. 31].

Nizami's poem "Khosrov and Shirin", like his other poems, serves to purify the inner world of people and to understand and understand themselves. As people read this work, they draw moral, ethical, and educational conclusions:

My sin is too much, I know
Embarrassed, I delete it.
What's wrong with what I said?
Draw a pen on it, oh master! [8, p. 29].

The brightest representatives of the patriotic ideas of Dahi Nizami are Shirin and Mahin Banu in the work "Khosrav and Shirin". Mahin Banu is an intelligent, courageous, brave and skillful woman who ruled over a large area from Arran to Armenia (now "Armenia"), who loved her country with infinite love. Despite being a woman, Mahin Banu manages to protect her homeland from foreign invaders. When he saw Khosrow for the first time, he invited him to his native Barda, and even described his homeland [6, p. 67] praises.

He said: "Come, let's go with us to Barda,
Let's stay there in the winter, walk and enjoy.
The place of this Barda of ours is a plain,
There is a lot of water, a lot of grass, it is a flower bed. [8, p. 100-101].

It should be noted that the personality, the human factor, which is considered the main problem for the science of pedagogy, is systematically manifested in Nizami's work. Because the great thinker was deeply familiar with many sciences (history, philosophy, jurisprudence - Muslim jurisprudence, astrology, astronomy, medicine, etc.), he used these sciences in his work and expressed valuable ideas about personality. These ingenious sayings have been widely used in the education of the young generation since his time and are still being used today. N. Ganjavi gave a

high value to the human personality, his mind, and his emotional characteristics, calling them to observe humanism, justice and moral rules [7, p. 48-49]. "Motives of deep humanism and social justice running through all of Nizami's works like a red line" show themselves prominently in all his works [2, p. 23].

Every trace on earth is Adam's contribution,
The yeast of the pure gem is pure.
Those who said this word very well:
Good or bad will be known after death. [8, p. 159].

The poet, who seeks the meaning of life in good deeds and good work, refers to the rulers in one verse of his work and calls them to follow the divine instructions in order to be intelligent, careful, just, and to rise in the eyes of the people, and expresses his thoughts as follows:

To oppress in the world is cowardice,
It's good to have an opinion. p. [8, p. 317].

According to the poet who creatively benefits from the progressive ideas and motives of Sufism, his words are also the words of the prophet. According to the poet, a person's external actions should be exemplary, and his words and morals should be beautiful. "Open the door of help, O creator! Show Nizami the straight path every moment!" [8, p. 23], the genius Nizami seems to value simplicity and modesty among positive moral qualities. It goes without saying that the more simple a person is, the more he is able to bow down in front of the people, the higher he will be in the eyes of the people. Finally, Nizami Ganjavi completes his conversations about his time with instructive and instructive stories in the poem "Treasure of Secrets".

Summarizing the above, we can say that Nizami Ganjavi's poem "Treasure of Secrets" is very rich in ingenious ideas about educational issues, and we could only provide information about a small part of it in this small article. It goes without saying that there is always an urgent need to conduct research in this direction.

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PERSPECTIVES OF TEACHER TRAINING ACCORDING TO THE REQUIREMENTS OF THE INFORMATION AGE

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Abstract. The concept of public interest and the formation of a sense of responsibility is one of the main goals of the personality-oriented education reform. The development of any society depends on the degree of protection of public interest there. In this sense, a modern teacher should also be a carrier of public interest with his whole being.

At the modern stage, it is not the subject of the lesson, but the method and environment of its delivery that is important. Today's teacher should not be satisfied only with imparting knowledge, writing a ready-made template and keeping it in the student's memory. Knowledge must be inculcated in order to learn to think more. One of the conditions included in the training activity of a modern teacher is to master a new lesson in the classroom. This is considered an indicator of the teacher's ability to "teach learning". Currently, there are no homework in the educational systems of several advanced countries.

A teacher "dies" on the day he does not read. We must take into account that the modern student's access to information is almost greater than that of the teacher. In order not to lag behind his students, the teacher should make working on himself the main goal. From this point of view, the promotion and promotion of the necessity of reading books at the state level is timely and has high importance within the framework of objective interests.

Today, the volume of scientific knowledge is increasing rapidly, the content of education is constantly improving, new knowledge is continuously included in university programs. However, the time allocated to study the teaching material at the university is limited. Such a situation requires the use of modern technologies and innovative teaching methods in the teaching process. If earlier the teacher was the main source of information, now the situation has changed. Now the teacher acts as an intermediary between the information sources and the student. He should teach the student effective work methods and information processes with various information sources.

Keywords: *teacher, lesson based on interactive learning, professional secret, training-education-education, innovation, strategy*

Teaching is a complex profession. This complexity is due to his creativity. Teaching is a rare profession. Although teaching is a popular profession, the best teachers are remembered. They are rare teachers. The teacher himself evaluates the result of his work. Pedagogical abilities characterize the mental, emotional and voluntary aspects of the teacher in the teacher-student relationship. Pedagogical skills specific to the teaching profession can be conventionally grouped into three groups:

- ✓ Personal abilities.
- ✓ Didactic abilities
- ✓ Organizational - communicative abilities.

1. *Personal pedagogical abilities* usually mean abilities related to the characteristic signs and qualities of the personality. Patience and self-control are the core of teacher-student relationships. During communication and relationships or during conflicts, the teacher should

behave with patience and restraint, listen carefully and patiently to children, show restraint during conflicts, and be able to control himself. Another personal ability of the teacher is the ability to create the necessary, positive mental state in the teacher-student relationship. Teachers with this ability are distinguished by their sociability and enthusiasm. A teacher should always be optimistic in his relationship with students.

2. *Didactic skills include the teacher's ability* to convey the program material to the students, to present the material or problem to the students in a clear and understandable way, to arouse interest in the subject, and to create an active independent opinion in the students. Specifically, the teacher's explanation, interpretation ability, expressive-speech ability, scientific-theoretical, methodical abilities can be attributed to this.

3. *Organizational, communicative and constructive abilities.* Such pedagogical abilities are related to the teacher's organizational function, communication and attitude, general pedagogical and psychological preparation.

One of the most important qualities for a teacher is humanity. Although a teacher without humanism achieves something in being demanding, he cannot find a way to the hearts of his students and win their love and sympathy. We must not forget that the teacher is a social engineer who builds national consciousness. He is the guardian of morality, protecting the moral security of our state and nation. The teaching of state symbols and attributes is the duty of every teacher, regardless of the type of subject taught. In the event that it is about forming a personality, in this case the education of patriotism comes first.

At the modern stage, it is not the subject of the lesson, but the method and environment of its delivery that is important. Today's teacher should not be satisfied only with imparting knowledge, writing a ready-made template and keeping it in the student's memory. Knowledge must be inculcated in order to learn to think more. One of the conditions included in the training activity of a modern teacher is to master a new lesson in the classroom. This is considered an indicator of the teacher's ability to "teach learning". Currently, there are no homework in the educational systems of several advanced countries.

We must take into account that the modern student's access to information is almost greater than that of the teacher. In order not to fall behind his students, he should consider working on the teacher as his main duty. From this point of view, the promotion and promotion of the necessity of reading books at the state level is timely and has high importance within the framework of objective interests. Before teachers can focus on personalized learning, they need to treat learners themselves as learners. Many teachers think that they are good teachers because they use different methods. Of course, teachers can use different methods. However, if the methods used do not bring innovation to the learning process, it is not necessary to use this method. Teachers should gradually abandon the traditional methods that do not bring innovation to the learning process and look for new methods as much as possible.

Teachers should not lose sight of the fact that students will tend to teach students in the future using the methods they have learned. Teachers can create certain patterns through consultation, interaction, discussion. As a result, students ask questions, criticize, etc. they try to learn with these methods and try to use these methods in their activities in the future.

Helping students understand is one of the most important issues teachers face. Teachers need to help learners understand the essence of knowledge, not just by imparting knowledge about the subject. Learners should be told that they should strive to understand the essence of knowledge rather than rote memorization. If learners are not helped to understand, they have difficulty and lack interest in applying their knowledge independently. Teachers should prepare examples of these issues.

Seeking experimentation as part of the development of the learning process and supporting this process. in general, the quality of teaching and the development of the teaching process are

possible thanks to the experiences that teachers seek. Conducting experiments does not mean that teachers should perform any extreme type of activity in the teaching process. They simply need to discuss their work with others, network different information about learners and try to find different approaches. It is best to consult the learners themselves first about new ideas.

What difficulties can arise during the teaching process and what should the teacher do to overcome these difficulties? Teachers should look for ways to overcome difficulties in the teaching process. It would also be useful to seek discussions with other experienced teachers about this.

Inclusive approach to education should be included in new approaches. Inclusive educational opportunities should be created for all, regardless of students' race, religion, culture, ethnic composition, gender, mental disability, socio-economic issues. Students should get acquainted with inclusive education approaches directly in the classroom in a visual form. Teachers need to understand that supporting learners is not just a technical issue, but an ethical issue. It is the moral duty of teachers to take care of learners in the learning process. In the technical approach, knowledge about a certain subject is given, and learning and understanding are not given much attention.

Forming a sense of self-evaluation and self-judgment in students. Using a variety of flexible approaches in the teaching process to support the learning process of students. Quality teaching is changeable, and changes in teaching should be made not just for the sake of change, but to create opportunities for learners.

Recommendations for teachers in the teaching process:

1. *Do not stand in front of the students and speak for a long time.* It is especially important that you comply with this condition. Don't spend too much time introducing certain topics to students, and don't ask students to spend too much time talking about certain topics. It is best to allow them to experiment and think independently. If they make mistakes in thinking and drawing independent conclusions, give them direction or suggest another topic to think about.

2. *Don't treat learners lightly.* Never accept students who are lazy to think and draw their own conclusions, and make them understand that in order to be good teachers in the future, they must acquire the habit of thinking and drawing conclusions now.

3. *Never accept unedited copy of someone else's work.* Ask such students to do it again. If you neglect this, the students will be just as careless in their future activities as you are.

4. *Encourage students to seek discussion in groups or other ways.* As a result of such discussions, students can learn a lot from each other. It is best if students are actively involved in discussions, which are considered a form of "natural learning". In such discussions, you should try to focus the discussion topic on the topics provided in the curriculum.

In modern times, the future fate of every nation and state is determined not only by its rich natural resources, but also by its scientific, cultural and intellectual capabilities, and human capital, which stands above all of these. This irreplaceable capital, whose functional capabilities are realized through the application of science and education in the most diverse areas of social life, at the current stage acts as the spirit of the future development, living standards, and achievements of individuals and societies, in a broad sense, of nations. The independent state of Azerbaijan, as an equal subject of the globalized world, does not connect its development to the dividends brought by natural resources and builds its existing resources solely in the direction of making the human factor a priority.

In the modern information society, a student must acquire the skills to search for, select, analyze, create new information, form a position on this basis, make a decision, and implement the decision. The main function of the modern teacher is to teach students to learn. For this, the teacher must constantly develop himself.

The goal of modern pedagogical education is to prepare new format teachers in accordance with the requirements of the information society. Today, our universities are implementing the

"2009-2013 State Program on Reforms in the Higher Education System of the Republic of Azerbaijan" in the direction of integration into the European and world education system, and the "2008-2012 State Program on Informatization of the Education System in the Republic of Azerbaijan" in the direction of informatization of education (Mahmudov, 2009, 104-117).

Like other universities, higher pedagogic educational institutions are also trying to integrate into the European educational space, the teaching process is becoming informatized. Two years before the adoption of these state programs, the "Concept and Strategy of Continuous Pedagogical Education, Teacher Training in the Republic of Azerbaijan", a corresponding action plan for the implementation of this strategy for the years 2008-2015 was prepared and approved by the Cabinet of Ministers in 2007. In accordance with the strategy and action plan, the following measures are planned for the informatization of pedagogical education:

- ✓ Application of ICT, new training methods and technologies in teacher training;
- ✓ Application of new methods, technologies, ICT tools for the current and final assessment of the knowledge of students studying pedagogical specialties;
- ✓ Application of distance education form in pedagogical educational institutions;
- ✓ Computerization of pedagogical educational institutions, implementation of electronic education (Shukurov, 2006, 8-10).

As it can be seen, in the action plan of "Concept and Strategy of Continuous Pedagogical Education Teacher Training", important projects in the direction of informatization of pedagogical education are planned.

The main goal of the Decree of the President of the Republic of Azerbaijan on the preparation of the "National Strategy for the Development of Azerbaijan Education" in 2011-2021 is to open wide opportunities for the improvement of the modern and innovative education system and to ensure that it becomes an important factor of economic development. The national strategy requires the transition of development to the stage of innovation, the formation of a competitive national economy and the acceleration of development dynamics, the solution of many issues related to human capital, including the meeting of world standards of education (AME, 2007, 697-699).

Starting from the 21st century, the strengthening of the influence of the globalization process on the Republic of Azerbaijan is manifested in many fields, as well as in the field of education, science, scientific research. This also imposes certain duties and requirements on the mentioned areas. It is from this point of view that attitudes towards education, teaching and specialist training in higher schools are also changing. In particular, in recent years, important measures have been taken in the direction of the development, improvement, humanization and modernization of the national education system in Azerbaijan (Huseynzadeh, 1997, 28-32).

The transition to the new education system requires high professionalism, innovative skills and digitalization from the teaching staff. First of all, the teacher should master the active/interactive teaching methods well, he should look for methods and methods that will ensure the development of thinking in different directions.

"Creating lessons in a new way using active/interactive learning increases the effectiveness of the teacher and the student, who is another participant in the learning process. As a result, students develop skills such as the ability to think independently, respect others' opinions, develop logical thinking, flexibility, analyze events, make comparisons, draw conclusions, connect the past topic with the new topic, and conduct research" (Huseynzadeh, 1997, 16-21).

The teacher should be the architect of the spiritual world of his students. Teacher-student relations should be established at the level of cooperation. For this, first of all, teachers must have a number of abilities as a necessary requirement. Many studies have been conducted in modern pedagogy regarding this issue and certain conclusions have been reached.

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XXI ҒАСЫР ПЕДАГОГТЕРІНЕ ҚАЖЕТ ТРАНСВЕРСАЛЬДЫ ДАҒДЫЛАР

VALUABLE TRANSVERSAL SKILLS FOR EDUCATORS OF THE XXI CENTURY

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АР 14870088 «Болашақ мұғалімдердің трансверсалды дағдыларын дамытудың инновациялық моделін әзірлеу және енгізу» (Финляндия, Эстония тәжірибесі негізінде). Мақала ҚР Ғылым және жоғары білім министрлігі Ғылым комитетінің гранттық жобасы негізінде жарияланды.

Аннотация: Мақалада Қазақстандық білім беру жүйесін жүзеге асырушы педагогтердің жаңа әлемдік деңгейдегі білім беру трендеріне сәйкес трансверсалды дағдылары, маңызы, мазмұны қарастырылған, компетенция мен дағдылардың өзара байланысы нақтыланған. Негізгі идея: тренд – қозғаушы күш.

Түйін сөздер: білім берудегі тренд, компетенция, дағдылар, hard skills, soft skills, кәсіби құзіреттілік, білімділік, іскерлік.

Қай уақытта, қай заманда өмір сүрмейік бірінші кезекте бізге сапалы маман қажет. Және сапалы маман деген сөз тіркесі айтыла салатын ұғым емес, қоғам талап ететін, маман жауапкершілікпен қарайтын, мәні мен мазмұны ештеңемен өлшенбейтін ұғым-түсінік. Өйткені, біздің жаңа Қазақстанның болашағы білімді, ұрпаққа бағыт-бағдар беретін, оларды өмірлі дайындайтын педагогтың қолында. Бұл туралы айтылып та, жазылып та жүр.

Қоғамдағы өзгерістің бәрі білімнен басталады, ол білімді тасымалдаушы, бағыттаушы - педагог. Бүгінде әлем білім берудегі жаңа трендтерді талқылауда, соған сәйкес кәсіби дағдыларды айқындауда, қоғамдық кәсіби сананы қалыптастырудың шынайы жолын іздеуде.

Бүгінгі кәсіби дағды, компетенциялар әлемдік заманауи білім беру трендтерімен тікелей байланысты. Өйткені әлемдік деңгейдегі білім беру трендері - қозғаушы күш. Олай болса, бүгінгі әлемдік білім беру трендеріне назар аударайық.

Мектепке дейінгі, мектептегі және жоғары білім берудегі инновациялар, EdTech мүмкіндіктері, корпоративті оқыту трендері мен қазіргі оқыту әдістемелеріндегі өзгерістер білім беру технологиялары EdCrunch Reload: «Слияние разума и технологии» тақырыбында Алматыда (28 қараша, 2022ж.) өткен масштабты конференцияның ұйымдастырылуына негіз болды. Конференцияға 25 мемлекеттен 350 халықаралық спикерлер қатысты. Нәтижесінде EdCrunch Reload эксперттері әлемдік білім берудің 5 трендін бөліп алды. Олар:

Зерттей отырып оқыту тренді. Оқу процесін модернизациялау қажеттілігінен туындаған, оқушылардың материалды игерулері емес, не үшін қажеттілігін, не үшін әрекет ететіндігін, болашақта қайда және қалай қолдана алатындығына бағытталған тренд. Бұл ізденіс-зерттеу-таным мәдениетін қалыптастыруды болжайтын тренд.

Тұлғаның дамуына, оның потенциалы мен мүмкіндіктеріне бағытталған *оқытудағы дербестік тренді.*

Ойластырылған педагогикалық дизайн тренді. Модернизация мен жаңа технологиялардың енгізілуі, білім алушыларға сапалы білімді тасымалдау - қажеттілік. Сондықтан білім беру жүйесінде қолданылып жүрген дәстүрлі технологиялар өзектілігін жоюда. Осы аталған қажеттіліктер оқытуға педагогикалық дизайнды әкелді. Педагогикалық дизайн – заманауи ақпараттық технологиялардың енгізілуіне сәйкес сабақтың құрылымын өзгерте отырып, жаңа білім беру ортасын жобалауға мүмкіндік беретін оқыту әдістемелерінің пайда болуы.

Нәтижелі оқыту немесе білім беру тренді. Цифрлық дағды міндетті дағдыға айналғандықтан педагогтерде соған сәйкес компетенциялар болуы тиіс. Бірақ естен шығармау керек, технология тек қана оқыту процесін жеделдетуші инструмент қана, өйткені ол ешуақытта мұғалімнің орнын баса алмайды, оның қызметтерін орындай алмайды. Нәтижелі оқытудағы педагогтың мақсаты – оқушының өзіне, тұтастай қоғамға пайда әкелетін бақытты адам болып өсуіне көмек көрсету.

Оқытудағы жобалау. Жобамен айналысу арқылы оқушының білімі кеңейіп, тереңдейді, зерттеу, оқу дағдысы қалыптасады, шынайы өмірде әр түрлі ситациялардан (проекция) шығуға көмектеседі [1].

Трендер әр түрлі мазмұнда ұсынылғанымен мақсаты біреу – болашақ. Келесі трендтер жіктемесі:

Тренд 1. Бейімделе оқыту – техниканы «интерактивті оқыту құралдары» ретінде қарайтын білім беру моделі.

Тренд 2. Шынайылықтың виртуалды толықтырылуы (VR@AR). Мақсаты: адам өміріндегі физикалық кеңістікті көруге, естуге мүмкіндік беретін цифрлық құралдармен (виртуалды көзілдірік, наушниктер, смартфондар, планшеттер) және бағдарламалармен толықтыру.

Тренд 3. Оқытуды цифрландыру шеңберіндегі мінез-құлық және мотивация.

Тренд 4. Геймификация. Ойын элементтері мен механикасын оқытуда қолдану, әсіресе ойын әдістемесі қашықтықтан оқытуда кеңінен қолданылады.

Тренд 5. STEAM - білім беру. Пәнаралық, ғылым аралық байланыстарды орнатуға негізделген, мысалы жаратылыстану ғылымының технологиямен, инженерлік өнермен, шығармашылықпен, математикамен байланысы.

Тренд 6. МООС, мобильді және аралас оқыту [2]. Олай болса, цифрлық және технологиялық мүмкіндіктер кеңістігінде технологияларды қолдану аздық етеді, ең маңыздысы технологиялар арқылы өмірімізді жақсартуға, кәсіби мүмкіндіктерімізді арттыруға болады.

«Болашақта бізді не күтіп тұр?» деген сауалға да мамандар тренд арқылы жауап беруге тырысқан. Осы сауалға жауап ретінде айқындалған трендер: жасанды интеллектінің білім беру ортасына енуі. Келесі тренд - біз бәріміз цифрлық азаматтармыз. Осы бағытта «цифрлық сауаттылық» (digital literacy), «цифрланған тіршілік», digital citizenship («цифрланған азаматтылық») сияқты ұғым-түсініктер ғылыми-тұрмыстық кеңістікке енген.

Компьютерлер ұл балаларға ғана арналған емес, оны жас ерекшеліктеріне, қызығушылықтарына, жынысына қарамастан барлығы, деимек кез келген индивид, мамандар қолданады.

Ақпараттық желілерге (интернет, гаджет, әлеуметтік желілер, телевизор) адамзатқа, білім алушыға қажетті, маңызды, мазмұнды ақпарат жүктеу.

Өз қателері негізінде оқу, үйрену.

Космос тақырыбы мен білім берудегі STEM.

Әлемдік-адамзаттық трендерге сәйкес елімізде қабылданған «Педагогтің кәсіби стандартында» (2017ж.) педагогтың кәсіби қызметіне, еңбек жағдайы мен біліктілік деңгейіне, құзіреттіліктеріне, мазмұнға, сапаға қойылатын талаптар қарастырылған, педагогтың еңбек қызметі нақтыланған: оқыту, тәрбиелеу, зерттеушілік, әлеуметтік-коммуникативтілік. Заңда педагогикалық кәсіп ерекшеліктеріне өз бетімен білім алу, демек білімнің толассыздығы, дауларды шешу қабілеті, икемділік, бейімделу қабілеті, сыни ойлау дағдылары, ынтымақтастық дағдылары және т.б. жатқызылған [3]. Олай болса, Педагогтің кәсіби стандарты әлемдің білім берудегі трендерге сәйкес педагогқа жауапкершілік жүктейтін құнды бағыт-бағдар.

«Педагог мәртебесі туралы» Қазақстан Республикасының (2019ж.) заңының 4 бабында педагог мәртебесі туралы: «Қазақстан Республикасында педагогтің ерекше мәртебесі танылады, бұл оның кәсіптік қызметін жүзеге асыруы үшін жағдайды қамтамасыз етеді» және 9 бапта «білім алушылар мен тәрбиеленушілердің өмірлік дағдыларын, құзіреттерін, өздігінен жұмыс істеуін, шығармашылық қабілеттерін дамытуға және саламатты өмір салты мәдениетін қалыптастыруға міндетті» - делінген педагогке мәртебе әкелетін міндеттер болжанған [4].

Осы еліміздегі заңдарда бекітілген міндеттерді жүзеге асыру үшін білікті маман-педагогтың қажеттілігі айқын. Ол үшін кәсіби дағдылар, компетенциялар қажет.

Педагогика ғылымында «компетенция – білімді, іскерлікті, дағдыны қолдануда көрінетін білім беру процесі мазмұнын игеру нәтижесі» ретінде қарастырылады.

Еуропалық білім беру кеңістігінде «компетенция, компетенттілік (құзіреттілік)» ұғымдары көбінекей адамның кәсіби іс-әрекетті атқара алуы ретінде пайымдалады. Компетенция шекарасы өте ауқымды, ол «білім мен дағдыдан да үлкен».

Кузьмина Н.В. пікірінше, құзыреттілік педагогтың басқа бір адамды дамытуына негіз болатын білімділігі мен абыройлығы. Кривцов Л.Ю.: «Кәсіби құзіреттілік - маманның білім, іскерлік және дағдыларды меңгеруін көрсететін сапаларының жиынтығы» десе, көпшілік педагогикалық әдебиеттерде: «Кәсіби кәметтілік, кәсіби іс-әрекетті шығармашылық деңгейде қазіргі сәтте социумда қабылданған нормалар мен стандартқа сәйкес жүзеге асыру» тұрғысында тұжырым жасалған, педагогтың мәдениеті; қызметтің экономикалық, әлеуметтік, құқықтық, адамгершілік, психологиялық аспектілерін меңгеруі; қызметті жаңа жағдайға бейімдеудегі, басқару шешімін қабылдаудағы дайындығы; практикалық кәсіби тапсырмаларды орындауға дайындық әлеуеті; нақты жағдайларға байланысты қандай да бір

әдістерді пайдалану біліктілігі; тиімді шешім қабылдау қабілеті сияқты белгілері ажыратылған [5,89 б].

Құзыреттілік – маманның білімі, біліктілігі және дағдылары негізінде нақты кәсіп аясында жоғары сапалы және мөлшерлік еңбек нәтижелеріне жету үшін нақты жұмыс түрлерін білікті атқара алу қабілеті. Біліктілік – адамның қандай да бір кәсіби-еңбек қызметін орындауға деген дайындық деңгейі немесе біліктілік – кәсіпті меңгеру деңгейі.

Кәсіби құзыреттілік - педагогикалық қызметті жүзеге асырудағы теориялық және практикалық дайындықтың бірлігі.

Белгілі ғалымдар С.Е.Шишов пен В.А.Кальней өскелең ұрпақтың бойына білім мекемелері мынадай құзырлылықты қалыптастыруы тиіс деп есептейді:

1. Саяси және әлеуметтік құзыреттілік. Олар адамның өзіне жауапкершілік ала алуында.

2. Көп мәдениетті қоғамда өмір сүре алуға байланысты құзыреттілік. Ұлтаралық келісім, басқа мәдениет, дін өкілдерін құрметтеу.

3. Жазбаша және ауызша қарым-қатынас жасай алу құзыреттілігі. Бұл әрбір адам үшін аса маңызды мәселе, бұған сонымен қатар бірнеше тілді білу де жатқызылады.

4. Ақпараттық қоғамда өмір сүре алуға байланысты құзыреттілік. Бұл жаңа технологияларды білу, ақпараттар ағынынан қажеттісін таба білу, оған сыни баға беру білу деген мағынаны береді.

5. Тұлғаның жеке және қоғамдық өмірінің негізі болып табылатын - өмір бойы білім алуға қабілеттілік [6,109 б].

О.Л.Жук «Условия формирования трансверсальных компетенций педагога» атты еңбегінде педагогтың трансверсальды компетенцияларына жатқызады:

1) Азаматтық мәдениеттілік (әр түрлі дәстүрлер, тілдер, діндер мен сенім жағдайында тіршілік етуге, жұмыс жасауға, ынтымақтастыққа дайындық);

2) Мәдениетаралық өзара әрекеттестік (диалогқа, өзара түсіністікке дайындық, конфликтінің алдын алу, шешу жолын меңгеру және т.б.);

3) Ұрпақаралық сабақтастық (қоғамдағы көзқарастардың «ескіруі» немесе «қартаюы» жағдайында әр түрлі егде жастағы адамдармен қарым-қатынасты орнату іскерлігі, егде жастың әр түрлі кезеңінде көрінуі мүмкін өз мүмкіндігі мен проблемаларын алдын ала көре білу, бағалай алу);

4) Әлеуметтік жауапкершілік (өзінің құқығы мен міндеттерін сезінуі, өзгелердің тұлғалық кеңістігін құрметтеу; тұлғалық, әлеуметтік, экономикалық, кәсіби іс-әрекетте экологиялық жауапкершілікті таныту; күрделі әлеуметтік мәселелерді шешуде адамгершілікті, гумандылықты, батылдықты, әлеуметтік ынтымақтастықты, болашақ ұрпақ алдында жауапкершілікті сезіну) туралы білімге, түсінікке және қатынасқа негізделеді [7].

Аталған трансверсалды компетенцияны меңгеру педагогтерде адамның құқығы мен абыройын құрметтеуге және мәдениетаралық диалогта көптеген маңызды проблемаларды көре алуға негізделген мектептегі білім беру процесін, демократиялық процестер мен әр түрлі ситуацияларда оқушылардың қатысуымен болған процесті моделдеуге әкеледі. Трансверсальды компетенциялар педагогқа оқушыларда демократиялық қоғамда өмір сүруге қажетті дағдыларды дамытады. Олай болса, трансверсальды компетенция білім алушылардың дүниетанымын қалыптастырмақ.

Ғылыми айналымда педагогикалық іс-әрекетті атқаруға мүмкіндік беретін кәсіби дағдылар көптеп саналады. Кәсіби дағдылар мен кәсіби компетенциялар педагогикалық процесті жүзеге асыруда маңызды орында. Өйткені бүгінгі педагогтың кәсіби кредосы: «Өзің жасай алмайтын нәрсеге ешкімді де үйрете алмайсың».

Заманауи теория мен тәжірибелерде маманның қаншалықты білікті екендігі оның бойында қалыптасқан, бүгінде «қатты» (hard skills) және «жұмсақ» немесе «икемді» (soft

skills) деп бөлінетін кәсіби дағдыларға байланысты. «Қатты» (hard skills) дағдыларға жалпы кәсіби және кәсіби компетенциялар жатқызылса, «жұмсақ» (soft skills) дағдыларға кәсіби іс-әрекеттің тиімділігіне апаратын белгілі бір тұлғалық сапалар немесе универсалды компетенциялар жатқызылады.

Ғылыми зерттеулерге жасалған шолу бізге «қатты» (hard skills) дағдылар мен «жұмсақ» немесе «икемді» (soft skills) дағдылардың ЖОО оқыту процесінде қалыптасатындығы мен олардың арасындағы тығыз байланыс айқындалғанымен, «жұмсақ дағдылардың» маңызына баса назар аударылады. Жұмысқа қабылдауда пәндер бойынша академиялық үлгерім емес, «жұмсақ дағдаларға» назар аударылатындығы айтылады.

Soft skills заманауи педагогтың кәсіби компетенциясының шеңберіне кіреді. АКТ компетенциялар түйінді компетенция құрамында, өйткені педагог заманауи технологиялық тенденцияларға сәйкес электронды білім беру ресурстарымен, гаджеттермен, қосымшалармен жұмыс жасай алуы тиіс болғанымен, педагог икемді компетенцияларды (Soft skills) да меңгеруі тиіс: эмоционалды интеллект, шешім қабылдай алу; бірқалыптылық, үлес қосу, жетістік, интерпретация, сенімділік, командадағы жұмыс, тиімді қарым-қатынас, конфликтіні басқару, стрессті басқару, тайм-менеджмент, сын тұрғысынан ойлау, нәтижелік, зейін бөлу, бейімделгіштік, лидерлік сапаларды көрсету және шұғыл шешім қабылдау, сыныпта жайлы психологиялық атмосфера құру, креативтілік.

АҚШ, Ресей, Англия, Австрия, Словения, Румыния мемлекеттеріндегі ғалым-зерттеушілер жұмыс берушілердің талабынан шыға келіп өзекті «жұмсақ» кәсіби дағдыларға тоқталған. Нәтижесінде оған адалдықты, коммуникативтілікті, ізгілікті, жауапкершілікті, әлеуметтік дағдыларды, позитивтілікті, кәсіби біліктілікті, бейімделгіштікті, командадағы жұмыс және еңбектегі этиканы жатқызған [М.Роублз]. Және ғалымдардың пайымдауынша ЖОО бітіруші түлектердің бәсекеге қабілеттілігін осы аталған дағдылар арттырмақ.

Бүгінде ғылыми айналымда 21 ғасыр педагогының бойына қажетті дағдылар көптеп саналады. Олардың ішіндегі өзектілерге тоқталамыз.

Бейімделу. Бүгінде қоршаған ортадағының барлығы өзгеріске ұшырауда, ғылым да, білім де, технологиялар да, әрекет ету жолдары да, оқыту амал-тәсілдері де. Уақыттың өзгерісіне, ондағы жаңа идеяға, білімге *бейімделу* – уақыт талабы.

Сенімділік. Өзіңізге, оқушыларға, әріптестеріңізге деген сенімділік. Сенімділік «жұғады», сондықтан педагогтың өзінің компетенттілігіне, кәсібилігіне сенімділігі оқушылардың да өзіне деген сенімділігін арттырмақ.

Коммуникативтілік. Педагог жұмысының 90% кез-келген сатыдағы білім алушылармен, олардың ата-аналарымен, әріптестерімен күнделікті қарым-қатынаста өтетіндігі белгілі болғандықтан, кәсіби іс-әрекетте оның коммуникативтілік мәдениетінің маңызы зор. Коммуникативтілік педагогтың пікірін, идеясын тұра, нақты, түсінікті жеткізе білуі.

Командада жұмыс жасай білу. Педагог оқушылармен бірге бір команданы құрауы тиіс, оқушылармен командада болу олардың оқу үлгерімдерін арттырмақ, сыныпта жағымды, жайлы психологиялық атмосфераны қалыптастырмақ.

Non-stop оқу. Педагог - толассыз білім іздеуші, толықтырушы.

Қиял. Педагог үшін маңызды инструмен – қиял. Шынайы қиял арқылы оқытудың формаларын, амал-тәсілдерін, технологияларын ойластырып, тиімді қолдануға болады. Қиял шығармашылыққа апарады, шығармашыл педагогтың оқушылары да шығармашыл болады.

Лидерлік. Сыныптағы педагог оқушыларға білім беруші, тәрбиелеуші ғана емес, бағыттаушы да, үлгі де. Осындай педагог ісімен, білімімен, адамгершілігімен абыройлы болмақ.

Ұйымдастырушылық дағдылар.

Жаңашылдық. Жаңа технологияларды, идеяларды қолдану, сабақты әлемдік инновациялармен байланыстыру.

Мамандықты аялау, құрметпен қарау. Оқушылар мамандығына деген құрметі шексіз білікті маманды көрулері қажет.

Онлайн репутациямен жұмыс жасау іскерлігі XXI ғасырдың өзекті дағдысы. Демек, заманауи педагог медиатеchnологияларды игеру арқылы медиасауатты болуы тиіс.

Технологияларды қолдану. Педагогикалық әрекетте оқушыға қажетті технологиялық жаңалықтарды бөліп алу және қолдану, демек инновация легінен маңыздылар мен аса қажеттілерін бөліп ала білу іскерлігі.

Қызықтыра білу іскерлігі. Педагогтың міндеті заманауи материалдардың ішінен оқушылардың қызығушылықтарын арттыратын деректерді іздеу, табу, қолдана білу.

Жұмыстан «алшақтау» іскерлігі. Педагогтың өзіне және оқушыларға демалыс беруі.

Басқаларға мүмкіндік беру іскерлігі. Оқушыларды шабыттандыру, тағы да шабыттандыру қажет. Оқушыларды ойлауға, өз бетімен проблеманы шеше алуға, жаңа идеяларды көре білуге, болжауға, жобалауға, модельдеуге, жоспарлауға, ізденуге үйрету бүгінгі педагогтың міндеті.

Туындайтын сауал жоғарыда берілген өзекті дағдыларды болашақ педагогтың бойында қалыптастыру. Елімізде педагогикалық бағытта маман даярлайтын ЖОО «қалай және не үшін өмір сүру керек» деген сауалға жауап бере алатын, баланың болашағын болжай алатын, оның бойындағы қасиеттерді көре алатын лидер-педагогты даярлауға ұмтылуда.

Бүгінде педагог бәсекелестік нарығында, сондықтан ЖОО түлегі біліктілігі жоғары маман болуы үшін жаңа әлеуметтік-кәсіби білім мен практикалық іскерліктің кең арсеналын меңгеруі тиіс. Маман болуға даярлану сәтінде болашақ маманның бойында көптеген кәсіби іс-әрекетті атқаруға мүмкіндік беретін компетенциялар, дағдылар қалыптасуы қажет.

Ғылымды және ондағы жаңалықтарды қолдана білуі, білім алушыларға жеткізе білуі.

Мемлекетімізде материалдық ресурсы талапқа сәйкес мектептер көптеп салынууда, сол базаны, ресурстарды кеңінен қолдану; бүгінгі педагогқа стандартты, дәстүрлі жолмен жүруге келмейді, оған үнемі ізденіс, талпыныс, қозғалыс, демек шығармашылық немесе креативтілік қажет. Ол – сұраныс. Ізденбейтін мұғалімді білім алушылар қабылдамайды.

Оқушыларды қолдау, сүйемелдеу, мотивтендіру тәсілдерін меңгеру аса қажет, бұл психологиялық білімнің қажеттілігіне мегзейді.

Педагогтың өмірлік ұстанымы, кәсіби ұстаныммен сәйкес болуы қажет; педагогтың кәсіби саулығына назар аудару маңызды, дені сау педагог қана дені сау бала тәрбиелей алады. Ол үшін кәсіби ортадағы еңбек жағдайы, кәсіби міндеттері, психологиялық климаттың да маңызы зор. Педагогтың кәсіби құзіреттілігінің бірі – командада жұмыс жасай білу іскерлігі. Педагог та білімін жетілдіріп отыруға міндетті болғандықтан білімі мен біліктілігін жетілдіріп отыруы, педагогтың әрбір ісін дұрыс жоспарлай білуі, қарым-қатынас дағдысы, белсенділік, үздіксіз кәсіби шыңдалу, нәтижеге бағытталу, мәселені шеше алу, өзгерістерді басқару, шығармашалық .

Әлемдік білім мен ғылым біріккен кезде трансверсальды құзіреттіліктің маңызы зор, өйткені аталған құзіреттілік адамның тіршілік сферасының барлығында да қолданылады; әлеуметтік және тұлғааралық қатынасқа жатады және бірнеше пәндердің жиынтығы негізінде қалыптасады. Ойымызды тұжырымдасақ, кәсіби дағды мен компетенция қалыптастыруда әрбір болашақ педагогтың, тәжірибелі педагогтың дербес кәсіби маршруты болуы маңызды.

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Philological Sciences

COMMUNICATION LANGUAGE ISSUE IN TURKISH STATE AND COMMUNITY

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Summary

After the collapse of the Soviet Union, the Turkic republics began to show themselves in the international arena as separate independent states. The newly independent republics began to open up to the world and establish relations in all fields in economy, science, art, sports.

The common language of communication spoken by Turkish peoples and communities was the most important issues that attracted the main attention in these meetings. In high-level meetings, the fact that the participants communicated in different dialects of the language formed in the same historical period in some cases caused certain difficulties and disagreements. Historically, Turks actually spoke various dialects of common origin. Ideas about language and alphabet have always been the number one topic of discussion at the meetings held at a high level. In these meetings, the issues of whether a common alphabet union could be established among the Turkish peoples, and whether a common written language and communication language could be formed were constantly being discussed in these meetings and solutions were sought.

Today, Turkish people need a common language of communication in order to establish scientific, economic and political relations at the highest level in the globalizing world. Turkey Turkish has now paved the way for the states and communities in which Turks live. Today, the Republic of Turkey establishes high-level relations with Turkish-speaking countries in the fields of civil, economic and education. So, Turkey Turkish has now paved the way for Turkish geography. Turkey Turkish should or can mediate for a common spoken language between Turkish people. But we should also say that Turkish has minor problems within itself. If Turkey Turkish wants to take the responsibility of being the common language of communication among Turkic peoples, then it can reveal minor problems in Turkish.

Key words: *Turkic, world language, Turkic republics, common Turkic, Turkic communities.*

Turks, who chose the slogan of Oguz Khan's advice to their own children "Kun tug bolsun, sky kurigan" (Let the sun be your flag, the sky is the sky umbrella) for themselves, set up their homeland, establish their own state and live in the vast and boundless geographies of the world. The most powerful tool that connects the Turks living in these various geographies is their language. There is no "Turkish homeland family" expression for Turks in large geographies, but there is a "Turkish language family" expression. So, it is his language that puts Turk in the form of family. İhsan Doğramac, who is one of the doyens of the Turkish World, has such a word: "The language spoken at home is the foremost and even the only element that defines the identity of nations... The language spoken by my mother, father, grandfathers and grandmothers at home was Turkish" (Hajiyev, 2013: 187).

The real family is then considered as family so that everyone living in that house speaks in one language, their mother tongue, and its members can understand each other. Likewise, if everyone speaks in one language in a society that considers itself a family, that group of people is not a family. We say that Turkish is one of the oldest and most rooted languages; because Turkish

existed when most of today's languages did not exist, and even the languages that are considered to be the ancestors of some of today's languages did not exist. Turkish is a developed, rich language of culture, science and art spoken in the oldest and largest geographical part of the world (Hajiyev, 2013:187).

In order for a language to be a language of science, it must have many characters. In order for a language to be a language of science, it must first be the language of instruction. Language should be prone to abstract thinking and have words that evoke rich connotations in penetrating existence. It should be convenient for the human mind to think and should not have difficulty in expressing the thought. "It should be suitable for development and enrichment and it should be able to produce responses to innovations in the field of science and technology" (Gundoghan, 1997: 7-8).

In addition, for a language to be a language of science, it is of great importance to transfer the historical processes it has passed through and the cultural characteristics gained in these processes. Because one of the conditions of being a language of science is to be a language of culture first.

Of course, giving importance to science and producing science in the country where it is spoken is of great importance for a language to be the language of science. If a country cannot produce science, it may buy from the producers and use it as the producers call it.

As he knows, the first written sources of Turkish are the writings on the Orhun, Kultegin and Yenisey monuments from the eighth century. The language of these stone monuments appears as a highly processed written language rather than a newly formed written language (Ergin, 2011: 13).

Considering that a language must go through a long period of development in order to have a written language, we can say that the beginning of the Turkish written language dates back much earlier than the captured texts.

The period from the eighth century to the thirteenth century, to which the first written texts of Turkish belong, is the first phase of Turkish and is called Old Turkish. In this period, many works that reveal the power and rootedness of Turkish, such as the Orkhon monuments, which have a high expressive power and a processed written language, were given. XI. We can give two of his works, such as "Kutadgu Bilig" and "Divan-u Lügati't-Türk" in the 19th century, as examples of the works produced in this period. Among them, "Divan-u Lügati't-Türk" is the first dictionary, anthology, encyclopedia and grammar book of Turkish. We can say that this work, which was written with the aim of teaching Turkish to Arabs, is the first work in the field of teaching Turkish to foreigners. Kutadgu Bilig, which is the first political book, is one of the honorable works of the period with its successful expression and written in Turkish at a time when Arabic was considered the language of science. Both of the mentioned works showed the power of Turkish in scientific studies in the eleventh century, and their effects have gone beyond the ages and have reached the present day.

If we look at the subject in question from the point of view of Turkey Turkish, although it is thought that the first signs of it extend to the dialect of the Oghuz tribes in the Kocaturk State, the documents and data show that the establishment of a written language based on Oghuz in Anatolia took place in the second half of the thirteenth century. This written language is called Old Anatolian Turkish or Old Turkey Turkish between the thirteenth and fifteenth centuries, Ottoman Turkish between the sixteenth and nineteenth centuries, and Turkey Turkish from the 1910s to the present (Korkmaz, 2001: 99).

During all these periods, the development of Turkish as a language of science and culture continued. Many writers, thinkers and scientists, from Yunus Emre to Aşık Paşa, Gülşehri, Yahya Kemal and Fazıl Hüsnü Dağlarca, have written their works in Turkish and have demonstrated the depth and high expressive power of Turkish in these works.

One of the things we will do in order not to increase the differences in the vocabulary of each dialect is to develop the next word creativity on a line. For this purpose, Turkish people need to agree among themselves both in producing new words specific to nationality and in taking words from foreign languages. After long struggles, the First Turkology Congress was held in Baku in 1926. After the discussions at this congress, a Latin based alphabet was adopted and it was called the Unified Turkish Alphabet (Yanalif). In the Turkology congress, many other more important issues were also clarified. According to the decision adopted in the congress, all Turkish dialects should be researched and searched, and whichever one has the appropriate root and suffix, all Turkish should accept it. If the desired lüket unit is not found, it should accept the foreign but international term.

Turkey Turkish should be able to mediate widely between Turkish people. Turkey has established very high-level relations in the fields of civil, economic and education throughout the Turkish geography. So, Turkey Turkish has now paved the way for this geographical area. Today, this or another degree of communication has been established between Turkey-Turkmenistan, Turkey-Kazakhstan, Turkey-Tataristan, Turkey-Azerbaijan Turkish.

For this, as we mentioned above, Turkey Turkish should act in common with other Turkish dialects. Where did Turkey Turkish come from from European languages, no matter how necessary, unnecessary words should not be used. This hurts him too. However, if he wants to be the common Turkish language in the Turkish world, he must fill the gaps in his own body on the way to common communication.

Today, in Turkish, the word "fürset" is used instead of luck, attack instead of attack, interesting instead of curious, depression instead of distress, stress instead of concussion, face to face, direct instead of confrontation, appointment instead of opinion and.d. (Hacıyev, 2013: 193) is used. Instead of these words, it would be more logical to use common Turkish words that are understood and used by everyone in Turkish communities.

If Turkey Turkish wants to be a common Turkish-communication language in Turkish states and communities today, Turkey Turkish is the most suitable language in this way, then they should definitely consider such problems and try to solve them or use Turkish words instead of these words. After independence (1991), Azerbaijan Turkish borrows and uses multiple words from Turkey Turkish. I would like to specify a few of them, especially their use has been very positive for Azerbaijani Turkish: gaze instead of nöqteyi-nezer, research instead of investigation, computer instead of computer, enoughsay instead of kvorom, which we once used in Russian, surname instead of family, əhəmiyyət, importance, we use the word leader instead of leader (Hacıyev, 2013:194).

Solving some of its problems in the process of Turkey Turkish becoming a common language for the Turkish world and creating a language that Turkish peoples can use in common is a very important issue for today. On the way to language unity, the Turkish literary language (ie Turkey Turkish) is the most widely accepted language today. Establishment of joint universities in separate and separate Turkish states Hoca Ahmet Yesevi International Turkish-Kazakh University (Kazakhstan), Kyrgyzstan-Turkey Manas University (Kyrgyzstan), Yunus Emre Institutes, opening Turkish schools, broadcasting television programs, organizing congresses or symposiums more often. is accelerating. It is becoming more and more common that the Turkish language will become the common language for the Turkish world.

Solving some of the problems of the Turkish literary language (Turkey Turkish) in the process of becoming a common language for the Turkish world and creating a language that Turkish communities can use in common is a very important issue for today (Aliyeva, 2017: 11).

Today, avoiding all kinds of carelessness and misuse towards Turkish, getting rid of foreign language admiration and passion for foreign words, not mixing foreign language teaching with foreign language education, opposing the view that Turkish is not the language of science, seeing

the inadequacies in Turkish teaching and taking necessary precautions, It is of great importance to initiate language customs (protecting the language), to accelerate the production of national words and terms, to train qualified and sufficient teachers, for the existence of Turkish and for it to be a common communication language.

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Afaq Şıxlının şeir dünyasına fragmental baxış

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Dünyada müxtəlif mədəniyyətlərin, xalqların bir-birinə qovuşmasında hər zaman ədəbi-mədəni əlaqələrin müxtəlif formaları və qolları mühüm rol oynamış və bu gün də oynamaqdadır. 1991-ci ildə Azərbaycan öz müstəqilliyini bərpa etdikdən sonra, kiçik bir zaman kəsiyində, Azərbaycan-rus ədəbi əlaqələrində bir qədər durğunluq müşahidə edilsə də, XXI əsrin əvvəllərindən başlayaraq bu əlaqələr, ümumilikdə, həyatın müxtəlif sahələrində millətlərarası münasibətlər özünü daha səmərəli şəkildə əks etdirməyə başladı.

Bu gün Azərbaycan-rus ədəbi əlaqələrinin ən mühüm qollarından biri Rusiyada yaşayan azərbaycanlı şair və yazıçıların yaradıcılığı, ədəbi-bədii-ictimai fəaliyyətidir. Rusiyada yaşayıb-yaradan azərbaycanlı şair və yazıçıların çoxşahəli fəaliyyəti bir tərəfdən müasir Azərbaycan ədəbiyyatının mühüm bir qolu olmaqla, digər tərəfdən də rus ədəbiyyatına müsbət təsir göstərən bir amil kimi Azərbaycan-rus ədəbi əlaqələrinin inkişafında canlı mədəni körpü rolunu oynayır. Bu yaradıcı insanlardan bir neçəsini şəxsən tanıdığım və onların həm elmi, həm ədəbi-poetik yaradıcılığı, həm də ictimai fəaliyyəti ilə yaxşı tanış olduğumdan bu fikirləri əminliklə söyləyə bilirəm. Biz bu yazımızda Rusiyada yaşayan və çox məhsuldar yaradıcılıq fəaliyyəti ilə yanaşı geniş ictimai fəaliyyət göstərən qələm sahiblərindən biri – şairə Afaq Şıxlının şeir dünyasına qısa nəzər salacağıq.

Şeir yazanlar çoxdur dünyada. Amma şair olmur hər şeir yazan. Şeir yazan o vaxt şair olur ki, o, oxucularını öz şeirləri ilə yaşadır və özü də oxucularının qəlbində yazdığı şeirləri ilə yaşayır. Bu mənada, əsl şairdir Afaq Şıxlı. Çeynənmiş sözləri, fikirləri, mövzuları oxuculara sırımıqla məşğul olmur, ayaqlanmış cığırarla getmir Afaq Şıxlı. Öz yolu, öz cığırı var poeziya aləmində Afaq Şıxlının. Nədir Afaq Şıxlının uğur açarı? Niyə bu qədər sevilir oxucuları tərəfindən şair? Səbəb sadədir. Bir çoxları kimi adının şair çağırılması üçün yazmır Afaq Şıxlı. Ürəyinə, təbiətinə, varlığına, iç dünyasına yaxın, doğma olan bir işlə məşğul olur, ürəyinin duyduqlarını, qəlbinin hiss etdiklərini yazır, daxili mənəvi ehtiyacdən güc alır şairin şeirləri. Budur onun şeirlərindəki şirinliyin, həzinliyin, təbiiliyin, doğmalığın, səmimiyyətin və demək ki, oxucu məhəbbətinin canı, mənbəyi. Üstəlik, “Afaq Şıxlıda həm Haqdan gələn bir ilham, həm də mütaliədən yaranan bir yetkinlik var. Ona görə də gərək şeir vəznlərindən, gərəksə də biçimlərindən istifadə etməkdə çətinlik çəkmir. Həm də ədəbiyyatımıza yeni gələn ədəbi qüvvələrin bəzilərində olduğu kimi, yenilik adına əlləməlik etmir, sadəlikdə mürəkkəblik arayışına girir... Hamının anlaya biləcəyi, amma kimsənin bu cür yaza bilmədiyini yaza bilmək, budur əsas məsələ! Və Afaq da bu istedadı ilə oxucusunu heyretlər içində buraxmağı bacarır” (9, s.6-7).

Əsasən vətəndən uzaqda, Rusiyada yazıb-yaradır Afaq Şıxlı. Və təbii olaraq vətən həsrəti havasında köklənib şairin şeirləri. Amma elə-belə, “məsafə həsrəti” deyil bu həsrət, vətən sevgisindən süd əmmiş, vətənə məhəbbətdən yoğrulmuşdur şairin vətən həsrətli şeirləri, “vətən bayatıları”. ... “Vətən – mənim şeirlərimin qaynağıdır. Bəlkə də onun həsrətidir məni şair edən... Sevdəyim və bacara bildiyim qədər hər kəsə sevdirməyə, tanıtmığa çalışdığım həsrət qarışıq sevdəmdir o mənim”, – deyir Afaq Şıxlı.

Günəşli bir diyardan soyuq, şaxtalı bir aləmə düşmüş şairin şeirləri də özü kimi üşüyür bu aləmdə. Və üşüdükcə də xəyalən qızınır ana vətəninin isti qucağında:

Günəş yox... Soyuqdur... Havada şaxta...
Əllərim üşüyür, donur ürəyim.
Doğma bir vətən var məndən uzaqda,
O isti qoynuna dönə biləydim...

Darıxır vətənin torpağı, hər daşı, dağı üçün Afaq Şıxlı. Amma həsrəti qədər də güclüdür şairin dözüümü:

Fikrim qalib torpağında, daşında,
Yel olaydım dağlarının başında.
Sel gücü var gözlərimin yaşında,
Tükənməzdir ürəyimin dözüümü.

Və ya

Altında babam var, üstündə balam,
Bəxtimə yazıla, şəhidin olam.
Biryolluq boynuna sarılam qalam...
Torpaq, nə şirinsən! Vətən, nə şirin!

İliq payızın var, isti baharın...
Xoşdur üşütsə də boranın, qarın.
Mən sənə yoxunam, sən mənim varım!
Torpaq, nə şirinsən! Vətən, nə şirin!

Uzaqda olsa da onun şair ruhunu rahat buraxmır vətənin havası, küləyi, qarı:

Deyir, bu ilki qış soyuqdur yaman,
Xəzərə qar yağıb, üşüyüb dəniz.
Mənsə uzaqdayam əziz Bakımdan,
Yazı da mənsizdi, qışı da mənsiz...

Vətənə, torpağa olan sevginin gücünü vətən, torpaq dara düşəndə ölçmək daha asan olur. Böyük Vətən müharibəsi illərində şairlər əsgərə, qələmləri silaha döndü. Müharibə mövzusu şairlərin yaradıcılığında xüsusi yer tutdu, əsgəri qələbəyə, lazım gələrsə, vətən yolunda ölməyə səsləyən, çoxsaylı şairlərimiz qələbənin qazanılmasında öz işlərini görmüş oldular.

30 ildən çoxdur ki, "Qarabağ" adlı bir dərdə düşmüşdü. Uzun müddət dərmanını tapa bilmədiyimiz bu dərd təbii mövzuya döndü Afaq Şıxlının poeziyasında. Şair ədalətin zəfərinə və o günün çox yaxında olduğuna inanır, o arzu ilə yaşayır:

Qurtarsın qan davası,
Köz bağlasın yarası.
Laçında bir toy vuraq,
Çalaq "Laçın" havası.

Bu yerin suyu qaymaq,
İçdikcə olmur doymaq.
Bu bahar Qarabağı

Gəzəydim oymaq-oymaq!

Və nəhayət o gün gəldi. Torpaqlarımız azad olundu, 44 günlük müharibə ilə düşmən üzərində tam qələbə çaldıq və əvvəlcə vətən ruhlu, torpaq nəfəsləri ilə əsgərlərimizi qələbəyə səsləyən Afaq Şıxlı indi də bu qələbəni böyük qürurla bayram etdi:

Vətən, ağrın-acın düşməyə getsin!
Yox, bu acılar da doğmadır bizə!
Bütün ayrılıqlar payızla bitsin,
Zəfərin su səpsin ürəyimizə!

Sağalsın yarası küsgün yerlərin,
Dərdimiz dağılsın, duman-çən olsun!
Gülmürdü könlümüz nə vaxtdan bəri,
Qoy bizi ağıladan – Qələbən olsun!

Afaq Şıxlı poeziyasının əsas xüsusiyyətlərindən bir də onun “Palaza bürünüb, elnən sürünməməsi”ndədir. Afaq Şıxlı hər məsələyə müxtəlif müstəvilərdən baxır, bir obyektə hər mənada fəlsəfi dərk etdikdən sonra onu şeirə çevirir.

Qarışıb hər şeyin mənası, dadı,
Ruhuma xoş gəlmir bu natəmizlik...
Haqqın ədalətin sınıb qanadı,
Nə biz dünyalıyıq, nə dünya bizlik.

Poeziyada bir qayda olaraq dünya həmişə fanidir, ona bel bağlamaq olmaz. Afaq Şıxlı isə başqa cür düşünür:

Yazılan qismətlə olmasaq qane
Yaşam uzun olar, səadət ani.
Bəzən aldansaq da, desək də fani,
Ədalətsiz yerə öc alan deyil.

Dünyanı şeirin, sözün varlığına görə sevir Afaq Şıxlı:

Gecəsi möcüzə, gündüzü cənnət –
Kaş belə görəydi çoxu dünyanı!
Nağıldır, nəğmədir, sözdü təbiət...
Qəlbinin gözüylə oxu dünyanı!

Və ya:

Dünya qəribədir, dünya maraqlı...
Günləri, ayları, qərinəsi var.
Dünya bir kitabdır - min bir vərəqlə,
Dünyanın söz adlı xəsinəsi var.

Nəğməkar şairdir Afaq Şıxlı. Nəğmə damır hər şeirindən, hər misrasından Afaq Şıxlının. Heç də təsadüfi deyil ki, onun 10-dan çox şeirinə (Sevərsənmi, Bilmədim, Bir gün, Keçmişin dumanları, Əlvida, Ömrümün beşinci fəslə, Qapımı döy səadətə, Azərbaycan bayrağı, Dənizlər qovuşan yerdə

və digər şeirlər) musiqilər bəstələnmiş (Rauf Hacıyev, Xanım İsmayılqızı, Aygün Kazımova, Zəka Vilayətoğlu və başqaları), Azərbaycanın tanınmış müğənniləri (Aygün Kazımova, Rəqsanə, Natəvan Həbib, Zəka Vilayətoğlu, Turanə Babayeva, Fəxri Kazım Nicat, Könül Xəlilzadə, Anar Şuşalı, Zamiq Hüseyinov və başqaları) onun mahnılarını sevə-sevə ifa edirlər. Maraqlıdır ki, Afaq Şıxlinin “Ömrümün beşinci fəsl” adlı şeirinə 3 müxtəlif bəstəkar (Rauf Hacıyev, Xanım İsmayılqızı, Zəka Vilayətoğlu) tərəfindən musiqi bəstələnmişdir.

Afaq Şıxlinin şeirlərindəki, musiqi, sadəlik, şirinlik və səmimilik təbii olaraq müxtəlif millətlərə məxsus tərcüməçi şairlərin də diqqətini cəlb etdi, onun çoxsaylı şeirləri bir çox dillərə və təbii ki, rus dilinə tərcümə edildi. Afaq Şıxlinin şeirlərini rus dilinə çevirənlər arasında Rusiyada yaşayıb-yaradan ilham Bədəlbəyli, Leyla Şəkili və digər tanınmış azərbaycanlı şairlərlə yanaşı müasir rus ədəbiyyatının sayılıb-seçilən nümayəndələrindən Serqey Karatov və Mixail Sinelnikov kimi şair-mütərcimlər də var. Mixail Sinelnikov yazılarından birində Afaq Şıxlini “müasir Azərbaycan poeziyasının Anna Axmatovası” adlandırır (8, s.20). Tanınmış Azərbaycan şairi, professor Məmməd İsmayıl da Afaq Şıxlinin Anna Axmatova və Marina Svetayeva ilə ruh qohumluğundan danışır (8, s.14-16; 9)

Afaq Şıxlı özü də peşəkar şairlik fəaliyyəti ilə yanaşı, çox məhsuldar tərcüməçilik fəaliyyəti ilə məşğul olur. O, Rus klassik ədəbiyyatının Fyodor Tütçev, Osip Mandelştam, Sergey Yesenin, Anna Axmatova, Marina Svetayeva, Lev Qumilyov, Mirra Loxvitskaya, Bella Axmadullina, Rimma Kazakova kimi simalarını, müasir rus və digər xalqlara məxsus ədəbiyyat nümayəndələrindən Aleksandr Ananiçev, Mixail Sinelnikov, Andrey Vasilyevski, Sergey Karatov, Yevgeni Çiqrin, Yelena Kuzmina (Arxangelsk); İmdat Avşar və Yakup Öməröğlu (Türkiyə), Mariko Sumikura (Yaponiya), Attila F.Balaş (Macarıstan), Rami Meir (İsrail), May Van Fan (Vyetnam), Koman Çova (Rumıniya), Dmitro Çistyak (Ukrayna), Xosiyat Rüstəm (Özbəkistan), Natalya Xarlampyeva (Saha Yakutiya), Saylıkmaa Kombu (Tuva), Janat Əskərbəy və Makpal Mısan (Kazaxstan), Rıfat Saleh və Fənil Qıyləjev (Tatarstan), Gülnaz Kutuyeva (Başqırdıstan) və başqalarının şeirlərini Azərbaycan dilinə tərcümə etmişdir. Afaq Şıxlinin müxtəlif dillərdən tərcümələri müxtəlif ölkələrdə ayrıca kitab şəklində dərc edilmişdir. Afaq Şıxlinin tərcüməçilik yaradıcılığında uğurlarının əsas səbəbi fikrimizcə, onun tərcümə etdiyi anda orijinal müəllifinin həmin şeiri yazdığı andakı ruhunu tuta bilməsi, müəllifin həmin anda keçirdiyi hissləri bütün varlığı ilə yaşaya bilməsindədir. Əks halda bu qədər gözəl, ürəyəyatan tərcümələrin meydana çıxmasını izah etmək çətinidir. Özünün alman dilindən tərcümələri haqqında danışırkən A.K.Tolstoy yazır: «*Mən, mümkün olduğu qədər, orijinala sadiq olmağa çalışıram, amma o yerdə ki, harda sadiqlik və ya dəqiqlik bədii təəssüratə zərər vermir və bir dəqiqə belə tərəddüd etmədən, əgər bu, rus dilində alman dilində olduğundan fərqli təəssürat bağışlayırsa, sətirikdən uzaqlaşırım. Mən düşünürəm ki, sözləri və hətta bəzən mənanı da tərcümə etmək lazım deyil – təəssüratı vermək lazımdır*» (11, s.321).

Fikrimizcə, Afaq Şıxlı öz tərcüməçilik fəaliyyətində məhz böyük rus şairinin bu fikirlərini əsas götürmüş, tərcüməçilik fəaliyyətini əsasən bu prinsiplər üzərində kökləmişdir. Afaq Şıxlinin geniş tərcüməçilik fəaliyyəti ayrıca ciddi bir araşdırma mövzusu olduğundan biz burada onun tərcüməçilik fəaliyyəti haqqında yuxarıdakı qısa fikrimizi söyləməklə kifayətlənirik.

Və sevgi! Bitməz, tükənməz sevgi mövzusu! Acı hicranı, şirin vüsali ilə! Amma hər poeziyada olmayan bir xüsusiyyət də var Afaq Şıxlının sevgi poeziyasında. Hər cür intiqamdan, hər cür nifrətdən uzaqdır, nə qədər ayrılıqlara, nə qədər ədalətsizliklərə düçar olsa da, hər şeyi unutmağa hazırdır, vüsala çağırır şairin məhəbbəti:

Gəl, yenidən başlayaq yaşamağa, yenidən!
Bizimlə bir doğulsun ayımız, günəşimiz.
Gəl, yenidən başlayaq, sənlə yeni sətirdən
Ağ kağız üzərinə bəxtimizi yazaq biz!

Və ya:

Deyir, kama yetir bu gün diləklər...
Bizim də arzumuz göyə ərz ola!
Sonunda qovuşa sevən ürəklər, -
Tanrıdan bu gecə məni arzula!

Şair üçün sevgi, məhəbbət mövzusunda yazmaq nə qədər vacibdirsə, əslində kifayət qədər də çətinidir. Çeynənmiş fikirləri təkrar etmək, bununla da öz oxucularını məyus etmək təhlükəsi həmişə “gündəmdədir” şair üçün. Amma öz orijinal bənzətmələri ilə hər zaman məlum fikirlər arasına da bir yenilik ruhu gətirməyi bacaran Afaq Şıxlı bu təhlükələrdən kifayət qədər uzaqdadır:

Məni bir də seversənmi
ikimizin xatirinə?
İstəmirəm
çoxlarıtək
dönək sevgi qatilinə...

Doğrudan da “sevgi qatili”dir, sevginin qiymətini bilməyənlər. İlahi, nə gözəl bənzətmə!

Və ya:

Yağış ətilisən, Günəş nəfəsli,
Qəlbimdə ötəri naxış deyilsən...
Sən mənim ömrümün Beşinci fəslü,
Nə bahar deyilsən, nə qış deyilsən.

Layla çalır oxucuya, həziz-həzin kövrəlir qəlbi insanın oxuduqca bu misraları. Dilində “Məni bir də seversənmi?!” kimi ülvü bir sual olan saf duyğulu şair əbədi sadıqdır öz məhəbbətinə:

Həsrət əcəl deyil ala canımı...
Heyif ki, sənsiz də yaşayacağam!
Eşqinə həsr edib hər bir anımı,
Adını qəlbimdə daşayacağam!

Beləliklə, hazırda Rusiyada yaşayıb-yaradan, müasir Azərbaycan poeziyasının ən istedadlı xanım nümayəndələrindən biri, ürəkdən gələn səmimi şeirləri ilə böyük oxucu sevgisi qazanan Afaq Şıxlının şeir dünyasına qısaca nəzər saldıq və bir daha əmin olduq ki, “Afaq Şıxlının şeirlərində sadəlik, səmimilik bütün yaradıcılığında paklıq, təmizlik simvolu kimi görünür, başqa sözlə, onun şeirləri zahirən sadə, mahiyyətə insanı düşündürən, təsirləndirən, həyata sevgi, inam yaratmaq gücünə, qüdrətinə malik olan ədəbi nümunələrdir” (10).

Müəyyən xəstəlikləri müalicə etmək üçün tibb elmində “musiqi terapiyası” kimi bir metoddan da istifadə edilir. Fikrimizcə, artıq “şeir terapiyası”, “poeziya terapiyası” kimi metodlar haqqında da düşünməyin vaxtı çatmışdır. Afaq Şıxlı ixtisasca həkimdir, xəstələrin iç dünyasını, bir peşəkar olaraq, yaxşı duya bilir. “Şeir terapiyası” üçün əsl dərmandır, şəfa mənbəyidir Afaq Şıxlının bayatı kimi həzin, qoşma kimi şirin sevgi şeirləri.

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ON ONOMASTIC AND ETYMOLOGICAL ANALYSIS

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Keywords: onomology, onomastic unit, etymology, linguistic analysis

The study of the onomastic lexicon, which is an important part of the vocabulary of the Azerbaijani language, is extremely valuable in terms of studying the laws of development of the Azerbaijani language, the formation and development tendencies of the literary language, the material history, ethnogenesis, and traditions of the people. A. Gurbanov, who had irreplaceable services in the foundation, formation and organization of the science of onomology of Azerbaijan, wrote about it: "The importance of onomastic research in order to expand the horizons of linguistics and ensure its comprehensive development is very great at present. In-depth research, careful analysis and scientific summarization of the onomastic lexicon, which has a special place in the vocabulary of the language, helps to reveal many complex and necessary issues of the language and history of our people. Therefore, to approach onomastic materials from a scientific point of view, to provide an accurate and fundamental analysis of it is one of the urgent and necessary issues. (1, p. 3)

Analyzing onomastic units (land, home, person, mountain, valley, river, sea, ocean, animal, planet, etc.) on the linguistic level helps to get more information about their structure, classification, language affiliation, and origin. The onomology section of linguistics and its research object is the scientific-theoretical basis of onomastic analysis. In the onomology section, various aspects of special words in the lexical composition of our language are studied; the origin, regionality, language affiliation of special words are determined; the structure, ways of formation, semantics of special words are investigated. Also, in the onomology department, special words are classified, their style and poetic character are explained. Every special name-onomastic unit in the language has a socio-historical essence and in this respect is a product of social-historical development. Indeed, these living witnesses of the onomastic layer-history contain the blood memory of history, the past full of struggles, the warriors who were in the front on the day of battle, the Turkish tribes who played horses, played swords in the great Turan land, and wrote their names on the pages of history, from time to time the roots of Azerbaijan It keeps alive our ancient ancestral homes, which were torn apart by their strength and cried blood when the enemy found them.

As with other units of the language, the classification of the onomastic lexicon should be based on certain principles. When classifying onomastic units, meaning and content are mainly taken into account. So, the onomastic units with the same character and the same specific meaning are grouped in a special row and under a certain title. Taking into account the mentioned aspects, special words (onomastic units) in our language can be divided into the following independent groups: 1. Anthroponyms; 2. Ethnonyms; 3. Toponyms; 4. Hydronyms; 5. Zoonyms; 6. Cosmonyms; 7. Ktematonyms.

A. A. Bakikhanov's work "Names and titles" can guide researchers as the most valuable source in the study of the anthroponymic system of Azerbaijan. Nickname, title, ratio, etc. in the formation of personal names of the author. His notes on the role of language elements like A.A. Demirchizade's research on the anthroponymic system of the "Kitabi-Dada Gorgud" epic is also very valuable as a main source for researchers. "Azerbaijani onomastics" by M. Adilov, A. Pashayev, "How names were created" by Sh.M. Sadiyev, "Azerbaijani personal names", "Basics of Azerbaijani

anthroponymy" by M. Chobanov, "Azerbaijani anthroponyms of Turkish origin" by A. Tanriverdiyev, R. "Onomastics of the Azerbaijani language" by Israfilova, G. Mashadiyev, G. Jafarov, etc. research works such as lexic-semantic groups of anthroponyms, naming traditions, structure, informal name categories (nicknames, pseudonyms) attract attention with valuable scientific and theoretical ideas.

Ethnonyms form a group of onomastic units that form a special layer of the Azerbaijani language lexicon. "Unlike other groups of words in our language, ethnonyms have more ancient phonetic, grammatical, lexical, and semantic properties. Ethnonyms are related to the social and political life of the people and were formed at different stages of history. Therefore, during their investigation, more historical written sources are used. The science of history speaks first about tribes, clans, peoples and nations, and at the same time, it is history itself that gives life to the names of tribes, tribes, peoples and nations. In this sense, the past written monuments and works on the history of Azerbaijan are a reliable source for studying ethnonyms in the direction of linguistics.

Ethnonym refers to the names of ancient tribes, lineages, clans, and tribes. Indeed, it is possible to solve many linguistic and ethnographic issues by tracing tribal names. The first Turkic-philologist of the Turkic world M. Kashgarli's work "Divaniü lüğat-it türk" is an invaluable source in this regard. This work is a valuable monument for studying the Turkic languages and their history, as well as an incomparable treasure for researching the Turkic tribes and their origins. Which from time to time linguists, historians, geographers, dialectologists, folklorists have benefited from it. M. Kashgarli lists the Turkic tribes as follows:

1. Pechenegs: Turkic tribes closest to Byzantine-Roman country.
2. Kipchak, Oguz, Yamak, Bashkir, Basmil, Gayi, Yabaku, Tatar, Kyrgyz tribes.
3. Chiyil, Tuhsi, Yagma, Igrak, Charuk, Cumul, Uygur, Tangut, Khitay clans.
4. Tabgach.

M. Kashgarli writes in his dictionary about the number of Turkish tribes and the areas where they are spread: "The Turks are actually twenty tall. All of them, peace and blessings be upon him, reach Yalavac Nuh oglu Jafes, Jafes oglu Turk... There are many carvings on each of these necks, the number of which only God knows. I counted the trunks and mother lengths of them, I didn't mention the carvings. I only wrote the Oguz arms and the marks on their animals, which are necessary for everyone to know. In addition to these, I also told the place where each tribe lives." (M. Kashgarli "Divani-lüğat-it turkish". Volume I, Ankara, 1992, p. 28)

Abulgazi Bahadir Khan's work "Shajarei-tarakima" also provides information about the Turkmens and the tribes that united with the Turkmens and bore the Turkmen name, starting from Adam to the year one thousand and seventy-one.

Researcher Z. Khasiyev, talking about the importance of studying ethnonyms, wrote: "We get the initial information about the ethnonyms, which are the roots of the Azerbaijani people and play an important role in its evolution and ethnogenesis, from the works of Greek, Roman, Arab and other foreign authors. There is no doubt that foreign authors used Turkish-speaking ethnonyms in their pronunciations. They presented it accordingly, and as a result, some of them became unrecognizable. Most importantly, the existence of Turkic-speaking ethnic groups in the ancient Albanian-Aran lands was denied because these ethnic groups were presented as nomadic herders outside the territory of Azerbaijan.

About the ancient and medieval ethnonyms of Azerbaijan (Caspian, Mugh, Albanian, Maskut, Uti, Kengar, Bayat, Afshar, Eymur, Duyar, Gajar, Gov, Kazakh, Kipchak, etc.) in various sources, in written and oral literature, separately Information can be found in the works of travelers who visited Azerbaijan in the past, in dictionaries, and written Turkish monuments.

Toponyms are one of the most important types of onomastic units used in the lexical layer of the Azerbaijani language. Toponym is a word of Greek origin and means "place name".

The comprehensive study of Azerbaijani toponymy has great scientific importance. First of all, the greatness of this importance lies in the determination of the role played by the Azerbaijani people, as well as the ethnic groups and tribal associations that existed here in the history of the Azerbaijani people, and in the study of the spiritual and historical wealth fossilized in place-names. A. Bakikhanov wrote: "If the country's tribes, villages, buildings and ancient fence are extensively studied, it will be possible to determine the origin of the population."

Indeed, it is impossible to solve the origin of the Azerbaijani people and language without taking into account the comprehensive ethnogenetic, historical-cultural relations with various Turkic-speaking tribal associations that have existed throughout history. Toponymic research has an exceptional role in studying these relationships.

Toponymic research sometimes makes it possible to clarify which tribe and ethnic group the inhabitants of a small village belonged to in the past. Prof. A. Akhundov figuratively calls toponyms "Motherland words" and wrote about it: "...The concept of homeland is manifested in concrete words in the language of each nation. In science, such words are called toponyms, that is, place names. Because people express their thoughts and feelings, longing and love, pride and joy about the Motherland with these words."

In the comprehensive study of the toponymy of Azerbaijan, R. Yuzbashov, K. Aliyev and Sh. Sadiyev's "Geographic names of Azerbaijan" (Baku-1972), A. Aliyev's "Toponymy of the western regions of Azerbaijan" (Baku-1975), Sh. Jamshidov's "Central residences of the heroes of KDK" About" (Baku-1967), N. Nabiyev's "Origin of Geographical Names" (Baku-1969), B.A. Budagov, G.A. Gaybullayev's "Explanatory Dictionary of Turkmen Toponyms" (Baku-2004) and dozens of other research works. had an important role. Recently, the interest in this field has increased, and the etymological analysis of toponyms from the perspective of linguistics has attracted the attention of our linguists from time to time. One of the last research works dedicated to the study of toponyms in Azerbaijani linguistics was written by the doctor of philological sciences, prof. V. Aliyev's textbook "Azerbaijan toponymy" (Baku-1999). The author wrote about toponymy and the related study of linguistics: "Toponyms, like proper names, are undoubtedly included in the vocabulary of the language. People took into account the characteristics of geographical objects and created toponyms by adding certain elements (geographical terms, topoformants, suffixes...) to existing words in the language. Geographical names were created on the basis of the laws of a specific language and have always considered it native. ... toponyms can serve as a reliable source for studying the ancient history of the language (especially the pre-writing period), historical lexicon, even historical grammar, restoring the initial lexical and semantic form of individual words.

In this article, we are far from the idea of giving extensive information about the object, goals and tasks, groups of the department of onomatology. We are satisfied with giving examples of linguistic analysis of only some groups of onomastic units. There will of course be some scientific commentary where appropriate.

1. "Garabagli is one of the largest villages registered in Tovuz district. It is believed to have been created in the Middle Ages."

The linguistic analysis of the onomastic units distinguished in the example should be carried out as follows:

Karabaghlar - a toponym in meaning and content;

Language is national by affiliation;

Due to its structure, it is complex: it is made up of the words black and garden, from the suffix -li, -lar (here it denotes the concept of belonging and plurality);

They are territorial: they are place names in the Sharur region of the Republic of Nakhchivan, as well as in the Goychay and Goygol regions of the Republic of Azerbaijan, in Western Azerbaijan, in Southern Azerbaijan;

For information. There have been different opinions about the semantics and etymology of the toponym Karabakh. The lexical unit "black" in the name of the Karabakh village does not mean the concept of color in the modern Azerbaijani literary language. In the ancient Turkish lexicon, the word "black" means greatness, grandeur, vastness, grief, sadness, darkness, etc. also used in the meanings. For example, "Don't let the black mountains lying opposite fall." (KDQ) As it can be seen, the expression "black" in the given example does not reflect the concept of color, but the ancient lexical meaning capacity, i.e. the meanings of "giant", "tall".

In the Azerbaijani language, as well as in the ancient Turkish lexical layer, the "black" unit, which has a wide semantic capacity, has been used in the onomastic lexicon, in the composition of complex words and word combinations, and expressed the meanings we mentioned:

1. In the sense of big, big, huge, wide, high: Kara dag, Karabalig cave, Kara village, Kara kuzey, Karayazi;
2. In the sense of color: black shirt, black hair, black hair;
3. Metaphorically: black thought, black day, black collar, black heart, black face, etc.;
4. In the sense of low-quality, unfit for drinking water: black water;
5. In the sense of denoting people with rough hands, hardworking people who work day and night: black worker;
6. Metaphorically related to natural phenomena: black winter, black cloud, black wind, black rain, etc.
7. in the sense of land, earth: these meanings are more active in Turkish Turkish. E.g.: The glorious Turkish army attacked from land, air, and water.

In our opinion, the lexical unit "black" in the toponym Karabakh has the semantic capacity of "huge", "big". "Bagh" is sometimes used in the meanings of "connection", "rope", "arm", "part". In the toponymic layer, the archaic meaning of the word is more conservative and preserves its traces. From this point of view, Karabakh can be used in the meaning of "strong, big branch, part" of Turkic tribes. The suffix morphemes -lı and -lar in the name of the village create a shade of belonging as a topoforment.

By the way, the lexical unit "gara" means "big, huge, tall" in the onomastic units of Garabalig cave and Garabaldir mountain registered in the territory of Tovuz region. The lexical units involved in the formation of both toponyms are archaic words at the level of modern Azerbaijani literary language. "Garabaliq" - a large, huge shelter (fish was used in the sense of city, shelter); Garabaldyr - a big crossing (garabaldyr gives the concept of "passage, road").

Let's also include an oronym formed by the black lexical unit in the linguistic analysis:

Dear Karayazi,
White paper, black writing,
To drive around for fun,
The month of May, Karayazi
(Stale)

Braille is monophonic in meaning and content;

Language is national by affiliation;

It is complex in structure: it is composed of black and written words.

The semantics of both words that make up the constituent parts of the oronym are considered archaic for our modern literary language. Karayazi - dense, thick, big forest, flat, field is used in the meaning (kara: big, wide; script: forest, desert, plain, etc.). Garayazi is a flat name in Agstafa district, on the left bank of Kura river. It is surrounded by Jeyranshol from the east. It has a mild hot semi-desert and dry desert climate with dry winters.

2. "Oh, what a zealous person you are! Have you ever tasted bread and salt with Tanriverdi?" (M.F. Akhundov)

Tanriverdi is an anthroponym in meaning and content;

It is national due to language affiliation (Tanrı is an ancient Turkish word, meaning "creator, creator of people" (Arabic Allah));

It is complex in structure: it is composed of the words God (noun) and verdi (verb). It is in sentence form. God is a noun in the nominative case; gave - the verb of the form of news is the verb used in the past tense, it is in the third person singular; transformed and used as an anthroponym. The Tanriverdi onomastic unit is not active in the anthroponymic system of the modern Azerbaijani language.

3. "Gazan Bey is a Shepherd, so don't be like this..." . (KDQ)

Cauldron is an anthroponym in meaning and content;

It is an ancient Turkish word due to its linguistic affiliation;

It is a fix by design; Gas+moment

Areal in nature.

It does not function in the anthroponymic system of the modern Azerbaijani language.

4. Khayyat Mirza was a lover-poet who wrote and created at the beginning of the 20th century.

Khayyat Mirza is an anthroponym in meaning and content; the first party is a nickname.

It is hybrid by language affiliation. Khayyat (Arabic) – tailor, clothier; Mirza (Persian) – 1. literate, studied; 2. the secretary who conducts the writing work; 3. It means a title added to the end of the names of Iranian princes.

Due to its structure, it is a complex name, type I definition is formed on the basis of word combination model.

5. Altiagac is one of the charming corners of our country.

Altyagac is a toponym in meaning and content.

It is national by language affiliation.

It is complex in structure, type I definition is formed on the basis of word association model.

Etymological analysis. Etymology is a word of Greek origin and its original meaning is to search for the "true meaning of a word". "Etymos - real, true; Etymology, which gives the concepts of logos - meaning, is a field of linguistics that studies the origin of words and morphemes, their genetic connection with the words of related languages, the initial form of words, and their history. The main task of etymology is to study the origin of words, their meaning in the early ages in the diachronic aspect.

Speaking about the task of etymology, HE Hasanov wrote: "Usually, etymology searches for the true meaning of words when their true meaning has already been forgotten. In other words, etymology studies dead, inanimate words whose etymology is unknown, rather than living words that are active and whose meaning is known. The lexicon deals with the living etymology of words. (6, 93)

In the etymological analysis, attention should be paid to the phonetic, word-forming and meaning aspects of the word.

Examples of etymological analysis:

1. Etymology of the word "Test". In Latin, "testum" was called a refractory pot made of clay. Gold and silver were considered precious metals in ancient times as well as today. In order to check their quality and purity, they were melted in fireproof vessels called "testum". The separated products were measured. Later, this word took the form of "test" and began to be used in reference to all kinds of assessment and verification work.

2. Etymology of the word "Sugar". B.C. In the 4th century M. Iskandar sent troops to India. M. Iskandar and his army were amazed by this country full of miracles. One of the wonders they saw for the first time was a sweet mass of white color. Hindus called it "sakkara". Later, this

word underwent various phonetic changes and continued to be used in the same sense. The word "sugar" that we use in our language is derived from the Persian language. In Arabic, sugar has the same meaning (sugar, syrup).

3. "A snake gets bored with a snake, and it ends up at the mouth of its nest." In M. Kashgarli's "Divan" we read: "The snake escapes from the yarrow, if it hits the hook, the yarrow grows".

This is not the proverbial herb. Yarpız is an ancient Turkish word meaning "Pharaoh's mouse, mongoose".

And the mongoose is the most feared animal of the snake.

4. "His blood flowed and became oily, Your neck was red with water." (M. Kashgarli. "Divanü luğat -it-türk") Translation: The blood flowed and cried, red water, i.e. blood, poured from their necks.

The word we want to highlight in the example is the word red. In our modern literary language, gold is a precious metal. L. Budagov stated that the word kızıl means "red" in Turkish languages, Shah Ismayil's army wore red hats, and therefore they were called "Gızılbaşlar".

V.V. Radlov also stated that the word kyzyl is used in the meaning of red, and the words gold-red-girl are derived from the same root. The initial root of these words was the allomorphs of girl\gyr. In ancient Turkish, the word girl was used in different meanings: 1. girl, teenage girl, young person; 2. captive, captive woman, maidservant, blacksmith; 3. expensive, precious; 4. stingy, stingy; 5. to burn, burn, burn, redden... (Drevneturkskiy slovar. "Nauka", Leningrad, 1969, p 450)

M. Kashgarli considered the word qizarmak to be a verb formed from a noun, stated that the original form is "kizil er", and wrote about the verb to kizarmak: "The original (i.e. the original of the verb to kizarmak) is "kizil er", kirzil means red. In other words, the verb "red husband" later became a root verb. M. Kashgarli also stated that the verb blackened was also formed by this means: "ton blackened - don blackened" and the verb "black became black". ("Divanü dictionary-it-Turkish" "Ozan", Baku, volume II, 2006. p. 179)

In "Oguzname", the concept of red is expressed by the word "red":

There is Adam, it is a pattern of red apples,
There is Adam, and the animal is right from the moment.
He has a man, he gets lost in his conversation,
There is a man, his conversation ends.

In the "Kitabi-Dada Gorgud" saga, it is used more in the meaning of red: "He built a white room in one place, a golden room in another place, and a black room in another place". "I have golden cheeks like blood dripping on snow!... (Azerbaijani literature pearls. p. 29; p. 116) "Let there be golden spots instead of black spots on your faces." (O.S. Gokyay. "My grandfather Korkut's book" Ist. 1973)

The previous semantic load of the word "red", which historically means "red", remains in some expressions in our modern language: Gizilveng, Gizil Meydan, qizilgul, qizilahmadi, etc. By the way, golden almond, as you know, is a type of apple. Its color is also crimson. Also, qizil-ahmadi (actually ahmari) also means red: qizil-ahmari (of Arabic origin, red) - qizil-ahmadi - red-red - red-red.

In addition to these, the first side of the Red Horde, Red Army formations also means red.

5. On the etymology of the toponym Altiagac

The second component of the toponym Altiagac means the archaic unit of length for the modern language.

Once upon a time, there was a caravanserai at the current location of Altyağac. Caravans from far away, merchants, all kinds of road people would rest there. This road connected Shamakhi, which was the center of ancient Shirvan, with the city of Guba, as well as with many countries of the East. Since the place of the caravanserai is barren and has streams, a village was built there. It was given this name because there is a six-tree road (42 km. with the current size) between the village and the city of Shamakhi.

6. Etymology of the name Gazanlıkand

On the territory of Azerbaijan, there are many place names with the Kazan component. Traces of the name Kazan can also be found in some Turkic-speaking regions. The name of Kazan is not only a toponymic unit. Many anthroponyms, hydronyms, as well as oronyms are related to Kazan. Kazan means the name of one of the Turkic tribes. In the "KDQ" saga, the head of one of the Oghuz tribes is Kazan. In general, in the linguistic literature, onomastic units with the Kazan component are associated with the name of the ancient Oguz tribe. F. Rashideddin's "Oghuzname" mentions the name of Ghazan Bey and states that he is from the Oghuz tribe: "...Another Oghuz Bey settled on the other side of Jeyhun with a thousand horsemen. For wintering and summering, he went to the Balkan mountains and also to the borders of Khwarazm. Kutlug Bey and Ghazan Bey are his children, their descendants still continue." (p. 61) In linguistic literature, the words "gas" and "gazi" mean "high, high". In "Oguz proverbs", this word is given in the phonetic composition "gadi" and means "commander, hero". By the way, the expression "gadi" means "law judge" in Turkish and is also reflected in the toponymic system. One of the big districts of Istanbul is called Kadıköy.

In the Tovuz dialect lexicon, the word "gadi-gadi" is used, which is a repetition of the expression "gadi". This phrase refers to children who "do not speak according to their age", who speak "one-on-one", "adult-adult", who are younger and think like adults. In the dialectological dictionary, the word "gazi-gazi" is explained as "single-single or big-big". The second part of the word "cauldron" -an acts as a suffix with sign content in terms of definition. So, the personal name Kazan means high, high (person). The lexical unit "Gaz" in Azerbaijani toponymy is Gazakh, Gazyan, Gazanlı, Gazboluk, Gazgulu, Gazikhanli, etc. participates in the creation of onomastic units.

M. Seyidov also confirms the opinion that the "gas" component is related to the meanings of "high", "height": "gas" in the word "Gazan": high, high, great; -an is a verb adjective suffix. Kazan, formed from both components, means "rising, rising, exalting". (7, p. 124)

The "gas" component of the famous Gazilig mountain oronym mentioned in the epic "Kitabi-Dade Gorgud" also means "elevation, elevation".

7. "Our water is cloudy in summer, our fruit is dry, what do you know about this fruit, because you have no taste." (I.Nasimi) Let's try to explain the etymology of the differentiated word (guz).

It is known that guz\kuz (autumn) is the name of the third season of the year. Seasonal names (spring, summer, autumn, winter) characteristic of most Turkic languages were created in connection with the trajectory of the Sun in the early ages. Let's look at the angle of the Sun in the chapters:

Summer. The angle of incidence of the sun is 50 o - summer/summer (Sunlight is increasing).

Summer. The angle of incidence of the sun is 73.5 o - yayar\yayar (greater spread of sunlight).

Autumn. The angle of incidence of the sun is 50 o - sunset\sunset\autumn\autumn.

Winter. The angle of incidence of the sun is 26.5 o - kisar\kisar\kiş\kiş (shortening of sunlight).

In our modern literary language, the initial forms of chapter names, which have a grammatical meaning as nouns with time content (yayar\yayar\yazar\yay, yaz; kuzer\guzer\guz; kisar \kisar\kiş\kiş) are the reason to say it shows that, in fact, these words were verbs reflecting the movement of the Sun.

In the fall/autumn (autumn) season, the degree of sunlight begins to decrease (50), that is, the day falls less, as if it glows. It sounds very natural and convincing that this event is expressed by the verbs күзәрмек\күзәрмек\ күзәрмак, which mean "give a weak light, shine, shine" in the ancient Turkish thought. Let's explain our thoughts like this: "After the fire, the stove burns out, the flame goes out, only hot coals and embers remain. Of course, embers do not emit much light, flame, or heat. Inevitably, when the stove is turned off and the eyes remain, a person gets cold, the environment (house, room) gets cold. Another example: let's say there are faults in the power lines. At this time, the light is getting weaker and the lamps are burning. As a result, a weak light, an incandescent lamp cannot illuminate the surroundings. Even in the autumn months, such expressions are said among the people: The sun is dead, it is still burning, there is no heat. Thus, adding the suffix -er to the noun күз\көз, which means "red, but weak light, heat, coal", the verb күзәрмак\көзәрмак (also characteristic of the modern literary language: boz+ar= brown; ağ+ar= turn white, etc.), as a result of further development, the noun күз\гүз with time content was formed as a result of dropping the suffix -er in those verbs. "Küz\көз+er=küzer\көзер\гүзер+güz (in Turkish languages k-g; ü-ö sound substitutions and shortening of the suffix -er are among the possible cases)". (5, p. 252)

Although the expression "guz" has become archaic at the level of the modern literary language, it remains in some words at the regional level, colloquial language and dialect level: guzem - wool sheared in autumn; guzdak - autumn grain; Guzdak - toponym, etc.

Let's also note that the word "north" and the word "guz", which has entered the passive vocabulary of our language, are combined in the same semantic line, that is, the content of both of them has the meaning of "less daylight, a place where the sun does not set, a shady place". It is written in "Divan" of M. Kashgarli: "... күз таг = a mountain where the sun does not fall (the sun falls there only in the afternoon, the mountain stays to the left of the sun, there is a lot of cold and snow)". (M. Kashgari. Divanü lügat-it-turk. Volume I, Baku, 2006, p. 340)

The conducted research suggests that the time content of night, yesterday, yesterday, day, tomorrow, tomorrow, etc. the semantic capacity of the words is related to the logical result that the ancient Turks obtained by following the sun's incidence angles and movement trajectory.

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The life and activity of the great leader is an example for generations

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Writing an article about our national leader Heydar Aliyev is a great honor for me as a citizen of Azerbaijan. If we take a look at the life history of the genius, we will see that at a very tense time of the political situation in Azerbaijan, he put his heart forward as the father of the nation and saved the country from the dangers that were happening, has done. With his return to power in 1993, a great page was opened in the history of Azerbaijan.

This historical turning point became the basis for the recognition of Azerbaijan as an independent, democratic state in the world arena today. The life and activity of a personality who prioritized the interests of the entire state over his personal interests played a decisive role in the recognition of modern Azerbaijan as a powerful state in the world arena.

It is a historical fact that at the end of the last century, the return of Heydar Aliyev, the eldest son of Azerbaijan, was the beginning of the renaissance period for us. In the middle of 1993, an undeclared war was being waged against our country. Our lands are being lost, hundreds of thousands of people became refugees, and a political conflict ensued. At such a tense time of the situation, only one person, Mr. Heydar Aliyev, could save Azerbaijan from all troubles. The people believed in it, so they entrusted their destiny to the genius. The fact that the eldest son of the country heard the voice of his native people and obeyed him resulted in the salvation of the country. When Heydar Aliyev came political and economic reforms began in Azerbaijan, and a legal and democratic state was established. The great leader won the great love of everyone during his more than 34 years of rule. One of the unparalleled services of our national leader to the people of Azerbaijan is his implementation of the oil strategy. As a result, on September 20, 1994, the "Contract of the Century" was concluded. The Baku-Tbilisi-Ceyhan oil and Baku-Tbilisi-Orzurum gas pipeline projects were realized in order to export our country's crude oil to foreign markets. Started the merger of the Azerbaijan economy with the world economy. The great leader knew the important influence of education in all areas of human life and its important place in the development of society and the state, and from the first day he came to power, he prioritized reforms in this area and used the potential opportunities. Education, culture, health, etc. Our President, who pays special attention to the development of social fields, wanted to see Azerbaijan among the leading countries of the world. For this, he prepared and started to implement the country's all-round development strategy. But fate decided it allowed us to complete these great works. But we are all witnesses and witnesses that our honorable President, who is a worthy follower of our national leader Heydar Aliyev, fulfills his wish and Azerbaijan is on the path of sustainable development.

The words "I am proud to be an Azerbaijani" of a person with great statesmanship experience is a manifestation of his infinite love for his people, and is also a sign of the rapid and innovative development of the modern state of Azerbaijan, which he built.

The great leader's broad worldview, political wisdom and will, analytical analysis skills, taking the right decisions in the field, the traditions of the past, and having deep knowledge protected Azerbaijan, which has just regained its independence, from the observed political and economic threats. Words written for a lifetime of service cannot be completed with Sla.

The words "I dedicate the rest of my life to my people" once again bring to mind his selfless service to his country and people and his legacy as an example to generations. This expression of a wise personality means true love for the country. These words have a wide meaning that many people cannot understand. It would not be wrong to say that these words, which reflect the meaning of his life, are the love of eternal life given to him by God. The words of former American President Bill Clinton about the peak of the leadership of Heydar Aliyev, who is the architect of Azerbaijan's domestic and foreign policy, are quite characteristic. "Heydar Aliyev is a political leader who can manage not only Azerbaijan, but the whole world."

The historical activity and legacy of this man in God's chosen humanitarian center is a great school for young people like us. I am very proud to be among the graduates of this school. Because of his high age, spiritual values, and artistic qualities, he is a patriot of Azerbaijan. is also recognized by the world community. Indeed, he is a personality that will always be remembered by the people and will always live in their memories. The name of Heydar Alirza oglu Aliyev, the architect of the modern state of Azerbaijan, will always be remembered by us young people with great love, and his life and work will be an example for each of us.

АМАНГЕЛДІ ШАХИН – ШАҒЫН ЖАНРДЫ ДАМУШЫ ҚАЛАМГЕР

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Әдеби өлкенің көрнекті өкілі ақын, жазушы, журналист Аманкелді Шахин өлең-сөзге жастай қалам тербеп, кейіннен тәжірибесі толыса келе толыққанды қаламгерге айналды. Туған жер, елге деген құрмет, жастық шаққа тән ашық жарқын көңіл, пәлсапалық дүниетаным, қоршаған орта тынысын танытар рухани туындылары арқылы әдебиет әлеміне өзіндік жол сала білді. Әр жылдары Аманкелді Шахиннің «Мәңгі көктем» (1999) [1], «Сол бір сүргін» (2002) [2], «Езуінді жи» (2003) [3], «Жайсаңдары-ай, Жайықтың» (2005) [4], «Жарқ еткен дәурен» (2009) [5], «Тілім қышиды» (2012) [6] аталатын өлең-жырлар мен балладалардан, шағын әңгімелер мен деректі хикаялардан, новеллалардан құралған жинақтары, тарихи-деректі публицистикалық кітаптары жарық көрді.

А. Шахиннің ақындықтан өзге прозадағы аяқ алысы да автордың бұл жанрға да алыс емес екенін айғақтайды. Тақырыбын жазушы қиналмай-ақ табады. Кейіпкерлері де күнделікті өмірдің өтінде жүрген қарапайым еңбек адамдары. Автор ауыл-елдің адамдарының қазақы бейнесін, ұлтқа тән ақжарқын көңіл-күйін аңғалдық пен шынайылық, әдет-ғұрыптарын сырттай бақылап, өз кейіпкерінің характерін әбден зерттеп барып, қағаз бетіне түсіреді. Жазушының өзіндік жазу мәнері, жеткізу шеберлігі шағын әңгімелерінен анық байқалады. «Әңгіме, - дейді Сомерсет Моэм, - ұзын-қысқалығына қарай он минуттан бір сағатқа дейін оқылтын, әбден аршылып алынған бір-ақ нәрсе, бір ғана оқиға немесе бірігіп кеткен бірнеше оқиғалар тізбегі туралы жазылған шағын шығарма. Әңгімені еш нәрсе қосуға да, алуға да болмайтындай етіп жеткізу керек» - деп сөз саптайды [7, 250-б.] – дейді З.Қабдолов. Әңгімені жазуда екі түрлі ерекшелік: қысқа әрі шебер жазу сақталу керек болса, А.Шахин туындылары бұл жанрлық сипатқа ие деуге әбден болады.

Шахин әңгімелерінде көбінесе қоғамның өмір сүру дағдысы, ондағы тіршілік иелерінің бастан кешкен хикаяттары сол дәуірдің таным-түсінігінің шеңберінде баяндалады. Әр қилы жағдаятты бастан кешіп жататын қарапайым еңбек адамдарының тағдыр-талайының әлеуметтік хал-ахуалын жазушы сол кезеңнің тұрмыстық даму көрсеткішімен алып қарастырады. «Әңгіменің ең елеулі ерекшелігі – жинақылығы, ал «нағыз күшті, нағыз құдіретті проза – жинақы проза; одан басы артық, айтпауға болатын жайдың бәрі алынып тасталған да, тек айтпауға болмайтын шындық қана қалған. Жинақылық – мұқият мықтының ісі» [8, 35-б.] – деп жеткізеді орыстың ұлы жазушысы К.Паустовский. А.Шахин әңгімелерінде шынайылық, жинақылық, табиғилық бар. Автор көркем бейненің ішкі танымдық, рухани өлшемін оның іс-әрекетімен қабыстыра, психологиялық иірім көздерімен қабыстыра сомдайды. Күнделікті өмірде көріп жүрген қарапайым кейіпкерлерді көркемдік ойдың өзегі етіп ала отырып, солардың бойынан басқа көзге байқала бермейтін ерекшеліктер тауып алуға құштарлық – А.Шахин шығармашылығының басты қырларының бірі.

Автордың «Қара айғырдың ажалы» әңгімесі «Кекілі буырқанып, сүмбіл, қалың қара жалы күдірейіп, сұлудың қолаң шашындай күлтелене төгіліп, киттей дөңкиген қара кер көк шалғынға сауырынан батып тұр. Қасында жерге жанасқан ақ бұлттай кербезденіп, кер маралдай керілген көк бие. Па, шіркін! «Жалды қара» мен көк бестіні жасыл жайлаудың сәні демей көр?! Екеуінің жарасымына қоса бір-біріне ынтызарлығын айтсайшы! Бастарын бір-бірінің мойындарына аса шұлғыса аймаласқанда құдды көлде жүзген қос аққудың сыланғанындай. Ту сырттарынан қадалған көздерді «Жалды қараның» жасындай жарқ еткен отты жанары алмастай кесіп түседі» [5, 112-б.] – деген әсерлі суреттеуден бастау алады.

Ел сүйсінер жарасымды жұпқа айналған жалды қара мен көк бестінің көз тартарлық қылықтарын шынайы бейнелеген автордың сөз саптау шеберлігі айқын аңғарылады. «Қасында «Жалды қара» барда көк бестіде алаң жоқ. Қанаттыға қақтырмайтын, тұмсықтыға шоқыттырмайтын қорғанышы, тас қамалы іргесінде. Тіл үйірген көктен басын алар емес. Сыртынан қарақшыдай қадалып, жәудіреген жанарға бұрылып көз қиығын да салмайды. Көк шалғынды бырт-бырт үзіп, уызы бөрткен балауса бидай талшығын баудай отап бара жатыр. Егістікке еңдей сіңген сайын айызы қана түскендей. Жан рақатына батқалы жарты сағаттың жүзі болды. Дала мәзіріне мейірленіп, егінжай төріне озып барады. Көк бесті алаңсыз алға адымдаған сайын «Жалды қара» елегізе түсетіндей» [5, 113 б.]. Сұлудай сыланған сымбатты жұбының әр қимылын қалт жібермей қадағалайтын жалды қараның ынтызарлығы әсем сипатталады.

Екі жұптың осынша жарасымын, шексіз махаббатын құбыжықтай көретін егіс қарауылы Қарабай шалдың ұнамсыз қылықтарын да жазушы шебер суреттейді. Екеуінің соншама жарасымдылығына, әсемдіктеріне қызғанышпен қарайтын Қарабай шал оқыс қимыл танытып, оқырманын жан түршіктірер көңілсіз күйге бөлейді.

Жазушының бұл әңгімесінде белгілі бір сюжетті басынан аяғына дейін бір уыста ұстап, ширықтырып, ширатып, айтқысы келгенін оқырманға астарлап жеткізе білуі сөз иесінің жанр табиғатын мейлінше шебер меңгергенін көрсетеді.

«Беймезгіл мылтық даусы «гүрс» еткенде жерден басын жұлқи көтеріп, аспанға ырғыған айғыр жер жара ышқына шыңғырып, шалқалай құлады. Қапелімде не болғанын түсінбей, үрке қашқан көк бие кері орағытып келіп, қимылсыз құрқырап жатқан «Жалды қараның» тұсына келіп, бір сұмдықты іші сезгендей жанұшыра осқырынды. Шыбын жанын шүберекке түйіп, әрлі-берлі шапқылады. Айғырдың тұсына айналып, үйіріліп қайтып келеді де, азынап, аулаққа шауып кетеді. «Жалды қарада» сыбыс жоқ» [5, 114 б.]. Серейіп жатқан қара айғырға қарап есеңгіреп қалған қарауылды көріп қапталдан шабуыл жасап, арынын тежеместен төстеп келіп тапап кете жаздаған, оң иығынан тістелеген көк биенің әрекетінен ыза кектің, күйініштің лебі ескендей болады. Қарауылды омақастыра құлатып, тепкілеп, ауруханадан бір шығарған көк бие ажырамастай сыңарын жоқтап құса болады.

Қара айғырдың басын қапқа салып көк биенің алдына тосып жанұшыра шұрқыратқан Қарабайдың тірлігі азғындықтың, жауыздықтың белгісі ретінде көрінеді. Жан дүниесі құлазыған, құр сұлдері қалған көк биені одан әрі қинай түсу Қарабайдың жанын тыныштандырады.

Айғыр мерт болған жерде бірнеше күн ас-су ішпей, мүшкіл халге түскен көк биенің сипатын автор мейлінше әсерлі суреттейді. «Ұнжырғасы түсіп кетіпті. Бұрынғы көк бие емес. Сұлудай сыланбайды. Кер маралдай керілмейді. Бейсауат адамды көргенде бұрынғысынша жасындай ширығып әріге ұзамайды. Құдды қой торы. Бие тұрған тұсқа барса, целлофан қапқа салынып, ауа кірмейтіндей тұйықталып тасталған «Жалды қараның» басы жатыр. Бастың қасына көк бие құлын тастапты. Өлі түскен шарана «Жалды қараның» нақ өзінен айнымай қалған. Жарықтық жануардың бір тектісі еді ғой! Басты кім әкеліп тастаған?! Оқыс ойдан басы зірк ете түсті. Қарабай! Соның ғана қолынан келетін қараулық. Кәміл сол!..» [5, 116 б.]. Көк биенің иесі жылқының жайын жақсы білетін ауыл ақсақалдарының ақылына

құлақ түріп, биені қысыр қалдырмайын, сыңарынан айырылған жануардың жүрегін жараламай, көңілін бөлейін деп деп жүріп, орны толмас қателікке ұрынғанын сонда барып біледі. Қорлық пен зорлықтан, ішкі құсадан әбден әлсіреген көк бие нәр сызбастан арып-ашып, жатқан жерінен тұрмастан тынысын тоқтатады.

Автор бұл әңгімесі арқылы адам түгілі, мал атаулының арасында болатын шексіз махаббаттың, сезімнің ұлы күшін ұғындырғысы келеді. Ақылынан алжасып кеткен Қарабайдың хал-жағдайы арқылы жауыз әрекеттің, қитұрқы тірліктің соңы жақсылыққа апармасын жеткізуге тырысады.

Автордың «Шағанның толқыны», «Спорт шебері», «Айтылмаған сөз», «Құдай атқан күн», «Абысындар» сынды әңгімелерінде астарлы әзіл мен философияға толы шағын оқиғалар баяндалады. Ауыл-аймақ арасына лезде тарайтын жаңалықтарды бір-біріне асыра жеткізетін абысындардың қылықтары, сөз саптаулары, сырт келбеттері әдемі көрініс табады. «Абысындар» әңгімесі қазақилықтың жылы лебі есетін абысындар арасындағы жеңіл диалогқа құрылған. «Кескен томардай жуан келіншек есіктен аһылай-үһілей кіріп, кіреберістегі орындыққа селк етіп отыра кетті. Астындағы орындықтың жаны шыға шиқ етті. – Белім үзіліп кетер ма екен деп едім. Уһ, әрең жеттім ғой. Ойбай! Бөксесі бұлдырықтай, белі қылдырықтай құлын мүшесіне мін түспеген абысыны қуақылана жымың етті. – Айтпасты сөз қыласың. Сенің белің үзілетін болса, бізге не жорық» [5, 111 б.] – деп қуақы қалжың мен астарлы әзілді үйлестіре сипаттаған автор абысындар арасындағы қазақы қарым-қатынастың, сыйластықтың бір үзігін көрсете біледі.

Жазушының ой мен сезім қатар өрілген шағын әңгімелері оқырманын бірде тұңғыық тереңге тартса, бірде асқар биікке шақырады. Олардан бірде романтикалық асқақтықты, бірде публицистік нақтылықты, бірде реалистік шынайылықты, енді бірде сағыныш-мұңға бөлейтін лирикалық әуенді айқын аңғаруға болады.

Жазушының «Спорт шебері» әңгімесінде аға мен іні арасында кездесетін жеңіл әрі әзіл араласқан шынайы оқиға көрініс табады. «Спорт шебері» атағы бар інісімен кешкі серуенге шыққан ағасы бауырының батылдығына, сенімділікпен айтқан сөздеріне масаттанып келе жатып, кездейсоқ оқиғаға тап болады. «Түнделетіп қаланың шеткері көшесіне шыққан олар айтқандайын бұзақылар тобына ұшырасты. Мұндайда кім өз еркімен тоналып, бойындағы бар асылынан айырылсын, ілік сәл нәрседен басталды да, ұмар-жұмар айқас тұтанып кетті. Ескендір барынша қайрат қылып, өзіне бас салған екеуіне тойтарыс беріп тастады. Әуелгіде ұшырасқан жеті-сегіз қаралы жігіттің басқалары көрінбейді. Екеуі ғана ойқастап жүр. Байқағаны таулары қайтып қалыпты, қаша жөнелген бұның артынан ілесе түсіп, іркіліп қалды. Негізгі топ інішегіне ауып кетті-ау деп қобалжыған Ескендір айналаны барлап көріп еді. Зым-зия, ешкім жоқ. Әудем уақыттан соң айналып келіп, бұзақылар жолыққан тұсты да қарап кетті. Тып-тыныш» [5, 106 б.]. Інісін «жау қолында» қалдырғанына қапаланып, көңілі түсіп үйіне оралған жігіт құлан-таза алдында отырған бауырының күш көрсетпей-ақ, шаң қаптырып қашып кеткеніне таң қалады. «Спорт шебері» атағы бар інісінің бұл әрекетіне таңданған ағасына жеңіл атлетикадан спорт шебері екенін айтып інісі тағы бір мәрте көңілін көтеріп қояды.

А.Шахиннің «Қызғалдақтың дәмі» новелласы балалық шақтың алаңсыз күндеріндегі тәтті бала махаббаттың шынайы көрінісі сыр шертеді. Нұрлы жүзі, сыңғыр күлкісі, ұяң, жұмсақ мінезі, ерке қылықтарымен бозбаланың бойына сезім ұялатқан Жансаяның кемшіліксіз таза бейнесін автор әдемі келістіре сипаттайды. Бала махаббаттың алаулаған сезім ұшқындары уақыт өте қызғанышқа ұласады. Жансаяны маңайындағы бөгде көздерден қызғанған Жандостың ендігі әрекеті ішкі жан сырын жеткізу болатын. «Қадірлі Жансая, саған айтайын деген жан сырымды ауызша жеткізе алмағасын, ақ қағазға түсіргенімді айыпқа бұйырмасың. Арамыздағы жүреппен ұғыссақ та, ашық тіл қатысуға дәрменімізді жеткізбей келе жатқан ақиқатқа ақ қағаз арқылы көз жеткізуге тәуекел етіп отырмын. Өзіңді жанымдай

жақсы көретінімді іште булықтырып, кеудемде тұншықтыра беруге шамам жететін емес. Жауап күтем! Жандос» [6, 188-б.]. Іштегі риясыз сезімін сыйдырған ақ парақты досы арқылы қызға жеткізген жігіт оң пейілді жауап алып төбесі көкке жетердей қуанады. Алғашқы махаббаттың уыз демі мен қызғалдақтың дәмін теңестірген автор балалықтың бал күндерін еске салады.

А.Шахин шығармашылығының маңызды бір бөлігін деректі хикаялары құрайды. Автор «Ешкі айдаған «завферманың» хикаясы», «Айға сапар», «Мүсірге айтқаны», «Мүсірдің айтқаны», «Адам айтса нанғысыз», «Қой келіп қалды» сынды хикаяларында әкесінің бастан кешкен шым шытырық әрі қызықты, шынайы оқиғаларын, қағытпа қалжыңдарын әсерлі баяндайды. «Ешкі айдаған «завферманың» хикаясында» Ұлы Отан соғысынан елге аман оралған әкесінің Жаңақала ауданындағы Шалқар ауылдық кеңесіндегі тауарлы қой фермасының меңгерушісі болып қызмет еткен кезін, тап болған түрлі оқиғаларын сипаттайды. Әкесінің әзілқойлығы мен тапқырлығы, күлкі тудыратын қылықтары шағын хикаяның көркемдік қуатын айшықтай түседі.

«Қадырдың қағытпалары» хикаясында астарлы әзілге шебер, сөз тапқыш, ұшқыр ойлы ақын Қадыр Мырза Әлимен жүздесу барысында жұртшылықты күлкіге кенелткен тауып айтқан сөздерін қаз-қалпында жеткізе біледі. Сондай-ақ, «Жеті бас», «Төребайға тағзым», «Беріштің тозаңы», «Жанардың көз жасы», «Жаза», «Еділ мен Жайық», «Тапсырма», «Күзгі мұң», «Қауіп», «Патриотизм», «Обал мен сауап», «Аңшының әңгімесі», «Тектінің тегеуріні» секілді деректі шағын хикаялары да күлкілі әрі шынайы, тартысты оқиғаларға толы. Жоғарыда аталған деректі хикаялардың барлығына ортақ бір ерекшелік – бәрінің де деректі негізде жазылуы. Әңгіме кейіпкерлерінің өмірде нақты болған адамдар екенін сезініп отырудың өзі оқырманға қосымша әсер береді.

Жазушы шығармалары халқымыздың құнарлы тіліне тұнып тұр. Оқиғалары өміріміздің әр қилы кезеңдерінен тебіреніске толы сыр шертеді. Халқымыздың қасиетті қара сөзін кие тұтатын автор әрбір сөйлемнің сөздерін елеп-екшеп, бірі мен бірін өзара өзектестіріп, жымдастырып жазады. Басы артық бос сөз, қиялдап кету кездеспейтіндіктен оқырманды жалықтырмайтын жазушы шығармаларының көркемдік деңгейі де жоғары.

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ART OF AN APHORISM OR APHORISM OF ART (THE SCIENTIFIC REPORT)

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The literature and art are the most spiritually saturated product of creative activity of the man – the person, the creator, the citizen. For today the occurring formulation «the literature and art» is still theoretically insufficiently realized. That the literature – a verbal basis of art culture professor J.B. Borev confirms quite definitely. Us at present interests aphoristics – an esthetic and art phenomenon of verbal art. The known philologist, the corresponding member of the Russian Academy of Sciences N.T. Fedorenko and L.I. Sokolskaja underline that owing to the universality aphorisms correspond to spirit of an epoch, they are equally close both to a science, and to art, in them principles of scientific and art creativity organically cooperate. There are many definitions, transcriptions of the scientific term "aphorism". «The newest dictionary of foreign words and expressions» let out by publishing house "ACT" in Moscow in 2001 designates that «an aphorism (other-Greek) saying, is short, neatly, concisely and gracefully expressing public, finished thought». In our opinion, for a long time has ripened necessity of researches and release of the original encyclopedia of aphorisms about aphorisms because the disorder of opinions on this unique genre of the literature is really wide. All serious scientists underline an urgency of aphorisms at all times and their historical dynamics.

For last decade the book market of Russia and Belarus only was let out hundreds names of the aphoristic literature, having offered their client reading and for readers from the post-Soviet territory. I will note only some of them: Encyclopedia of aphorisms. (Antiquity. Ancient India. Ancient China. The bible. The Middle Ages. Renaissance. An epoch of scientific revolution. An education epoch. XIX century. XX century); Aphorisms of Nobel prize winners under the literature; the Encyclopedia of mind or the dictionary of the selected thoughts of authors of all people and all centuries and many other things. In Kazakhstan the big resonance have caused «²àçà°òàđ – Kazakhs. A precious word»; M. Alimbaev «the Book of aphorisms», T. Ibraev «Parlamentarizms, paradoxes and paroxysms. The past and a thought, aphorisms, theses and antitheses»; the Collection «the jurisprudence World in statements, aphorisms and catchwords»; I. Shevelev «Aphorisms, thoughts, emotions. The life book».

I will stop short on two last. Despite eclecticism of collection compositions «the jurisprudence World in statements, aphorisms and catchwords» most likely carries an informative role about judgements of scientists, philosophers, lawyers concerning politically legal views. The hope of publishers that it is possible to consider the purpose reached if this book could exemplify and push us to win legal nihilism our consciousness, in our opinion, is a little starry-eyed, illusory. The method of the collecting of aphorisms by a principle "okroshka" has appeared not well-founded owing to ignoring of an esthetic principle «fine should be stately». From "content" of collection dazzling in eyes and disturbing the soul. But, as they say, - the first step is the hardest.

«Aphorisms, thoughts, emotions. The life book» I.N. Shevelev published in Moscow in 1997. Author Ilya Shevelev – the winner of Averbahovsky award AMH the USSR, the former professor of Almaty state medical institute has carried out the first edition of the book earlier in 1988 in Kazakhstan. In the given monography it is presented more than 2200 aphorisms and thoughts, the special place is occupied with aphorisms-lingvizms. The brilliant preface of the visible expert on aphorisms, a member-correspondent of the Russian Academy of Sciences of N.T. Fedorenko on an order lifts a

book rating. Here some author's extraction: «Aphorism – a thought sculpture; Reading aphorisms – to look at life eyes of the thinker; Familiarizing with aphorisms does the person more cleverly, more kindly and more happily.» «An aphorism – an inductor of a work of art»; «Art of aphorism in ability to speak the general by your tongue and yours – in the popular form». And from a position of today an aphorism – our intellectual instrument, the tool of thought, feeling of business in civil practice.

In the General declaration of human rights in article № 2 it is said that each person has the right to participate freely in cultural life of a society, to enjoy art, to participate in scientific progress and to use its blessings. It is fairly said that any art represents a well of original values, through the traditions and forms of expression the people declare itself to the educated world.

It is known that art exists in concrete kinds: the literature, theater, a drawing, painting, a sculpture, a choreography, music, architecture, applied and decorative art, circus, an art photo, cinema, television. Art – many-sided concept, it allows to master esthetically the world and is mighty force in people education. It is represented to us interesting and useful aphorisms of various authors about art. At us in an everyday life on hearing winged thoughts that art – glory of the people, the literature – expression of thought of a society, poetry – music of words, music – national requirement, theater – national school, painting – silent poetry.

The mini anthology of aphorisms about art from the most ancient times is offered up to now to your attention:

- All art consists in the study of truth.
Cicerone
- Every art is an imitation of nature.
Seneca
- Prostate, truth and naturalness - these are the three great principles in all works of art.
C. Gluck
- If you want to enjoy art, then you have to be artistically educated person.
Karl Marx
- Moral laws are the laws of art.
R. Schumann
- Art - is the nation's clothing.
O. Balzac
- Art history - a history of revivals.
C. Butler
- Art requires knowledge.
B. Brecht
- The Art truthfully when it merged with the truth of life.
Abay
- Art - a mystery!
E. Grieg
- Know how to love art in itself, and not myself in art.
K. Stanislavsky
- The Art creates good people, creates the human soul.
K. Paustovsky
- The main feature in any art, a sense of proportion.
Leo Tolstoy

-Art cannot ignore the aspirations of his time.

R. Rolland

-The principle of art: finding more than lost.

E. Canetti

P.S.

-Aphorism - visual media culture of language and an excellent example of the word ecology.

-Aphorism does not tolerate empty words and unjust argument.

-Aphorism in a fictional picture of the world - a rarity.

L.Adilbekova

Political Studies

Military Balance and Nuclear Weapons in the Middle East (Iran and Israel)

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Abstract

The vast majority of countries in the Middle East are quite well armed. This region is constantly characterized by controversy and conflicts both within the state and in the surrounding countries of the region. These conflicts often last fairly long time. Therefore, the countries of the region naturally spend great amount of financial resources on their armaments. They mainly purchase various types of weapons from Western countries and the USA. Out of these countries, Iran and Israel are of an interest particularly. The first of these has a nuclear program, which is why it's been a while it is facing the problems both in the region and outside. Due to its nuclear program this country had been imposed with the sanctions for decades already. Despite these sanctions, the country continues to work on its nuclear program, which started back in the 1970s. As for Israel, it is the only country in the region that has nuclear weapons and owns one of the best weapons and defenses among the countries in the region. There are frequent confrontations between Iran with a nuclear program and Israel with a nuclear weapon, which has not been concluded into the war until now.

Introduction

Most countries in the Middle East region are fairly well armed. This is natural, because confrontations and conflicts are a common occurrence for this region. Among the countries of the Middle East region, Iran and Israel are noteworthy in this regard. These two countries are interesting in that they have been regarded as hostile countries for more than four decades. Threatening language is often spoken among them. They follow a sharply different political course in the region. Their views on current political events are quite radical. Israel opposes Iran's aspiration for leadership in the region and considers all its actions against it, Iran has a similar attitude towards Israel, and this cycle continues endlessly. Despite the hostile interdependence between them, the situation has not reached an armed conflict, although this conflict has a significant impact on regional security and stability. As for the nuclear program and nuclear weapons, Iran has had a nuclear program for a little over half a century, and Israel is the owner of nuclear weapons. The problems between these two countries are in the center of attention not only of the region, but also of the world. The contradictions between them stem from their regional geostrategy. They are trying to increase their influence and dominate the region not only by their own strength but also by receiving support from outside.

Research methodology

In conducting the mentioned research, we used: **The theory of the balance of power**, which is derived from the anarchic structure of the international system, and based on this, the main task of each state is the struggle for self-preservation and self-establishment.

The theory of four tasks of the armed forces, which was developed by one of the representatives of the school of neorealism, R. It is related to the name of art. It is directly related to the modern international security environment. Here, the theorist develops the idea that states increasingly rely on military power to achieve national interests, and accordingly outline four tasks, which are: defense, deterrence, coercion, and boasting.

The theory of stability of hegemony. It indicates that the international system is likely to remain stable when one nation-state is the world's dominant power, or hegemon. And the decline of the existing hegemonic state reduces the stability of the international system.

Iran's regular army and the Revolutionary Guard Corps and its activities in the region

Iran's modern armed forces consist of the army (ground forces, navy and air force), as well as the Islamic Revolutionary Guard Corps (IRGC), which was established in 1979 after the Islamic Revolution. The army is divided into 4 divisions, each of which has an armored division, an infantry division, an artillery division, a special forces unit, an airborne division, an aviation group, as well as other separate units such as logistics brigades. Several hundred tanks are at the disposal of the Iranian army. In addition, it has other military equipment, infantry fighting vehicles, self-propelled artillery, self-propelled guns and multiple missile systems. Also air defense weapons, anti-tank weapons and helicopters. A considerable number of people serve in the Iranian Navy. Iran's naval bases are located in the following cities: Bandarabas, Bushehr, Chabahar, Bandar Khomeini on the Persian Gulf, Bandar Anzali and Mehshehr on the Caspian Sea. The task of the Navy is to carry out military operations against enemy ships and aircraft to gain dominance in the waters of the Persian Gulf and the Gulf of Oman, as well as to protect Iran's territorial waters and seashores and to ensure the protection of coastal sea lanes. Iran's air force is one of the strongest in the region. The number of its Air Force personnel is quite large. Most of the technical equipment is of American and French origin. The rest of the equipment is mainly of Russian and Chinese production.¹ As mentioned above, the Islamic Revolutionary Guard Corps (IRGC) occupies an important place in the armed forces of Iran. He reports directly to the Supreme Leader of Iran. The corps, in particular, is entrusted with the functions of assisting the army in the defense of the state's independence, territorial integrity and the "Islamic republic system", as well as fighting subversive elements inside the country, conducting rescue operations in case of natural disasters, etc.

The composition of the Islamic Revolution Guards Corps is quite extensive. It is armed with armored vehicles, artillery systems, combat aircraft, etc.

Guards of the Revolution are more important for the country, and therefore the country's leadership gives priority to them when financing and updating military equipment. The IRGC has its own ground, air and naval forces. The corps has a special division "Kodsi", which is intended for military intelligence and special operations outside the country. The IRGC also commands the Basij paramilitary organization, which includes army reservists and the Guard Corps itself. It is estimated that the Basij, if mobilized, could supply the Iranian armed forces with at least 11 million soldiers. His duty is spiritual propaganda and military activity itself. The combat unit of the Basij consists of several hundreds of battalions. Basij members are men aged 12 to 60 years. It also includes woman's battalions.

¹ Iranian Ground Forces equipment, Global Security Organization, 2001

The armed forces are controlled by the General Staff. There is also an apparatus of Islamic observers, without whose directives not a single decision of the commanders is valid.²

Some experts are convinced that Iran's army is the strongest in the entire region. It should be noted that due to the aggressive policy and nuclear ambitions of the Iranian government, a large-scale rearmament of the armed forces is not possible. It should be noted that the Iranian National Army gained a lot of experience during the Iran-Iraq (1980-88) eight-year war. Despite some problems, Tehran is trying to give the national armed forces a modern face, it is still developing in almost all military-technical fields, but as we mentioned above, the desire to have its own nuclear program has a negative impact on the modernization of the armed forces. One of the reasons for the high combat capabilities of the Iranian army is the motivation of the personnel and the high quality of the reserve. Religious propaganda also has a positive effect on the country's armed forces.

Arms production and military industry in Iran

Iran's modern defense industrial base was developed during the Pahlavi dynasty through an import substitution strategy. During the two-decade rule of Reza Shah (1925-1941), great importance was attached to the creation of a classically powerful army. An army that can serve the king on the border, in national security and against political opponents. To fulfill the king's ambitions, hiring all the skilled workers in the steel mills and metal workshops was the first step to arming the army. Between 1922 and 1929, gradually importing various tools and equipment from Europe, the gun factory was able to produce thousands of rifle barrels and thousands of bullets per day. At the same time, the necessary gunpowder production. With the help of the Germans, Iranian munitions and armaments factories were built between 1935 and 1940. Very soon, contracts were signed with German manufacturers for the production of 75mm, 205mm, 105mm ammunition. It soon became clear that it was necessary for the country to have an arms manufacturer with its own qualified personnel in order to increase the production of defensive weapons. In the sixties of the last century, during the reign of Mohammad Reza Shah (1941-1979), the production of weapons in Iran expanded even more. Iran's aviation industry also developed, launching helicopters, etc. With the profit, this project has grown even more.

When the Shah's era ended in 1979, post-revolutionary Iran inherited a vast land, air and naval war machine. Because of this, the country was sanctioned, which gave it an excuse to get in the way of technological development itself. The Islamic Republic of Iran started to produce rockets, various weapons and grenades. After the Islamic revolution, the military production stopped at a fairly fast pace in this country. After the revolution, Iran no longer had foreign specialists and technicians and had to work without them.

For military power, the country had to rely on its own production and overcome the existing difficulties, that is why the military industry of Iran began to act actively, which was distinguished by foresight. The acquisition of Eastern technology combined with existing Western knowledge greatly increased the military's capabilities among countries in the region. By 1990, there were already more than 240 factories and about 12,000 privately owned small arms manufacturing concerns in the country, employing about 45,000 people. The government of President Rafsanjani, after the elections in 1989, took serious steps to modernize the military. The Gulf War (1990-91) made it clear that there was a need to modernize the armed forces and the defense industry base.

² Islamic Revolutionary Guard Corps- Iranian Armed Forces, Britannica Online *Encyclopedia* -

<https://www.britannica.com/topic/Islamic-Revolutionary-Guard-Corps->

Iran Electric Industry (IEI), the country's largest defense company, increased production capacity by 80 percent by the end of the 1990s. It was focused on commercial electronics products. The Iranian Aircraft Manufacturing Company was another leading defense industry in the country. He focused on expanding defense works and sought commercial opportunities for this.

Iran is one of the few countries that has tried to achieve complete self-sufficiency in the creation of weapons. He did it slowly indeed.

Iran's armed forces are numerically the largest in the region. It consists of the regular army and the Islamic Revolutionary Guard Corps. The Guards Corps of the Islamic Revolution (actually, the Guard) is an elite unit and, as already mentioned above, obeys the highest spiritual leader of the country. As mentioned above, most of the armament of the Iranian army was American or European. With the revolution, an attempt to start joint production of missiles with Israel, which had good relations with Shah-era Iran, failed. The announcement of the main enemies of America and Israel by the Islamic government of Tehran and the Iraq-Iran war (1980-1988) forced Iran to accelerate the production of domestic military weapons. Some of it was copies of Soviet and Chinese weapons. The Islamic Revolutionary Guard Corps was tasked with reorganizing Iran's military industry. Now this country mainly meets the needs of its own army and produces its own tanks, armored vehicles, submarines, ballistic missiles. On August 21, 2018, at a ceremony dedicated to the "Defense Industry Day", Iran presented its own fighter jet "Kowsar", which is very similar to the American F-5 of the 1970s. In 2017, there were 1,650 tanks in Iran's arsenal (including 420 Russian-made T-72; the main battle tank "Zulfikar" has Russian-made engines); more than 100 vessels, including 4 corvettes, submarines; 330 airplanes and helicopters, etc. Since 2003, the Iranian Army, more precisely, the Revolutionary Guard Corps has had a two-stage Shahab-3 missile of local production based on the prototype of a North Korean missile, with an operational radius of 1,280 km. Improved missile variants were developed in the following years and Iran has been testing them in recent years. Iran has also developed long-range anti-ship missiles, which will pose a real threat to the aircraft carriers of foreign countries entering the Persian Gulf and the northern part of the Indian Ocean. On July 27, 2017, the Iranian rocket "Simorgh" launched an artificial satellite into orbit around the Earth. Iran cannot buy the latest modern military equipment in the West, because the US administration has prohibited military aid to it for more than four decades. In 2006-2015, another series of international sanctions were imposed on Iran, due to which Russia stopped supplying it with S-300 anti-aircraft/anti-missile systems. When it was decided to lift sanctions on it in 2015, Russia immediately renewed its military contracts and by 2018 it had supplied the aforementioned systems.³

Regarding Iran's military spending, President Ebrahim Raisi said that Iran will spend twice as much on the Revolutionary Guard in 2022 as it was allocated in 2021. The President's bill allocates 955 trillion Rials (22 billion USD) to the Ministry of Defense; 46 trillion riyals to the Joint Forces Command (which essentially handles military strategies and responsibilities); and 7.7 trillion riyals to Khatam Al-Anbiya Air Defense Base. The increased budget is intended to replenish casualties and depleted supplies from proxy wars so that the IRGC can maintain its edge against any external attacks or internal problems caused by the failed nuclear negotiations, as well as lost resources.⁴

In April 2019, US President Donald J. Trump has designated the IRGC as a foreign terrorist organization, saying it "participates in, sponsors and promotes terrorism as a tool of statecraft."⁵

Iran's foreign policy is partially implemented by the IRGC. The ruling ulema call Iran the center of the Muslim world and try to spread Shiite revolutions.

³ Strauss R., *Iranian Military Structure*, Internationa Security and Law, 2011

⁴ Iran's budget in 2022 – Kayhanlife spotlight on a global Iranian community, 2022

⁵ Lee M, "U.S. Labels Elite Iran Force a Foreign Terrorist Organization," Associated Press News, 8 April 2019

As of 2018, Iran controlled or had significant influence over four Middle Eastern capitals. The policy of strengthening Iran's status is to expand its power base in the Middle East, export the revolution and fight against its enemies. Iran is also using the IRGC to expand its influence beyond the Middle East by embedding its personnel in foreign embassies, charitable and religious organizations around the world.

Since the Islamic Revolution, Iran has developed close relations with several anti-American regimes in Latin America, including leftist governments in Cuba, Nicaragua, and Venezuela. The IRGC pursues three main foreign policies. The first objective is to use international initiatives to strengthen Iran's regional dominance in the Middle East and western Afghanistan. The second goal is to export the revolution. From the early days of the Islamic Republic, the IRGC tried to spread Khomeini's ideas, especially in states with a majority Shiite population. The third objective is to support states that attack Iran's enemies.

Iran also has global goals for which it uses the IRGC to achieve them. Mullahs show nostalgia for the period when they talk about Greater Iran. The ancient Persian Empire spread over the Middle East, Central Asia, the Caucasus and Afghanistan. Since 1979, Iranian leaders have wanted to rebuild Greater Iran, stretching from Israel to Afghanistan and based on the pre-Islamic Persian Empire, to improve Iran's strategic position.

Today, many Iranian leaders are counting down the last days of Israel's existence. In 2018, an IRGC exhibition displayed a missile with an inscription in Hebrew and Farsi that read: "Israel must disappear from the pages of time." Iran is a vocal supporter of Palestinian nationalism and militarism. It finances the Lebanese Shiite radical organization Hezbollah and trains various Sunni Palestinian groups (Hamas). Iran has turned Hezbollah into a fighting force with strong military capabilities.

Shia Liberation Army. The Islamic Republic of Iran has long supported Shiite militias outside the country. Their staff are located in Latin America, North Africa, Central Asia and South Asia. Since the Iran-Iraq War in the 1980s, Iran has trained, financed, and equipped Shiite recruits through various means. It also calls for Shiite volunteers to fight alongside Iranian soldiers. Nearly 4,600 foreign nationals were killed in Iranian military uniforms, most of whom were Shiite Afghans and Iraqis who had taken refuge in Iran, while others came from Bahrain, India, Kuwait and Pakistan. As of 2017, approximately 80,000 foreigners were mobilized in various groups working with Iranians in Syria.

The Shiite Liberation Army (SLA) is made up of non-Iranians serving under Tehran's control, led by a Quds Force commander. The SLA consists of three divisions armed with armored personnel carriers, anti-tank guided missiles and artillery, as well as air defense systems and various weapons. Some SLA recruits are sent to one of the Quds Force's military training camps in Iran to undergo basic training courses that typically last between 20 and 45 days. Those who pass these courses then go on to study advanced training courses such as logistics and weapons skills. These are more specialized courses.⁶

During several major wars of the twentieth century, armies used foreign nationals to bolster their ranks. Foreign nationals either served in international divisions, fought with independent but affiliated units, or were directly recruited into the host nation's armed forces. The French Foreign Legion is probably the most famous and good example. There are three main reasons why many Afghans, Iraqis, and Pakistanis join the SLA: poverty, religious unity (Shiism), and various forms of discontent. Many recruits are chronically unemployed, depressed and destitute, and have little prospect of economic success. Because they have to provide for themselves and their families,

⁶ Amir Toumaj, "IRGC Commander Discusses Afghan Militia, 'Shia Liberation Army,' and Syria," FDD's Long War Journal, 24 August 2016.

they see some kind of perspective and opportunity in being involved. Most of the new recruits, as mentioned above, are also Shiites, and therefore Khomeinism is attractive to them. Many Shiites see Iran as their protector. In Iraq, they guard the Shiite holy cities of Najaf and Karbala, two cities. There is also great resentment among the Middle Eastern and South Asian population about the secondary social, religious and economic status that Shiites hold in Sunni-dominated countries. Historically, the Shiites needed to hide their religion when they lived under Sunni suzerainty. Many Shiites continue to live under this suffering in Afghanistan, Pakistan, Saudi Arabia, Egypt and other Islamic countries.

Afghanistan Division. Today, a significant proportion of the Shia population in Afghanistan serves as a rallying point for SLA recruits. In the 1980s and 1990s, Iran sent money, food, and weapons to Afghan mujahideen groups fighting the Soviets and Afghan communists during and after the Soviet-Afghan War (1979-1989). Although Iran never liked the Taliban, one of the anti-communist Islamic groups it considered vulgar, it still supported it and its predecessor Islamist organizations in Afghanistan as they fought Iran's enemies. The IRGC developed, trained and supplied the Fatehmuni. Today, Fatemiyoun comprises several brigades and between 12,000 and 14,000 fighters, some of whom are currently active in Syria. Recruits join Fatemiyoun for many reasons, the most important of which is economic. Those Afghans who are the poorest among the world's poor turn to Iran for help. They are paid from \$100 to \$500 a month to participate in battles. Although international law states that recruits must be 15 years of age or older, many fighters are even younger. Many Afghans are fighting for Shia Islam to escape discrimination against Sunnis in Afghanistan.⁷

Pakistan Division. Zeinabiyoun Division is a Pakistani Shia division of the SLA. Its recruits are mainly from the poorer regions of Pakistan. Many of these fighters come from Parachinar, the main town of the Kurram tribal region, which has a large Shiite population and is the scene of intense conflict between Sunnis and Shiites - including suicide attacks and bombings. In Pakistan, it is sometimes dangerous for Shiites to participate in Ashura processions, one of the Shiite religious rituals, without fear of harassment or attack. Major General Jafari called for measures to ensure the welfare of Pakistani pilgrims, who were going from Iran to Iraq for pilgrimage. Iranians use both Afghan and Pakistani Shiites for their own purposes.

Iraq Division. Iraq's Heydariun Division was created in 2015 to replace Iranian-led or Iranian-sponsored units fighting in the Syrian civil war. Although its soldiers are engaged in combat, the division's primary mission is logistical support. Through military and commercial aircraft in Iraq and Syria, inside Iran, it maintains logistics depots near major airports, transporting personnel and cargo, including weapons and equipment. It also carries military cargo across Iran's western border into Iraq, maintaining the IRGC's land corridor between Syria and Iran. The Shiite sect of Islam unites many Iranians and Iraqis. Millions of Iranian and Iraqi Shiites cross each country's border to visit Shiite holy shrines (pilgrimage). Throngs of Shiite pilgrims flock to the Iraqi city of Karbala every year to pray at the tomb of Imam Husayn, grandson of the Prophet Muhammad. Unlike the Pakistani and Afghan recruits of the SLA, the Heydariuns fight mostly in their own localities. For many Heidarion legionnaires, their wars are personal.

Iran's pursuit of nuclear weapons and problems with countries in the region

1950s: Shah Mohammad Reza Pahlavi started Iran's first nuclear program, and its first implementation took place in 1967 when the US delivered a 5 megawatt nuclear reactor to Iran. Later, France and Germany provided technological assistance to this country in the construction

⁷ Fatemiyoun" Division , Middle East Institute, 1763 N St. NW, Washington D.C. 20036, May 22, 2019

of reactors. In 1968, Iran signed the Nuclear Non-Proliferation Treaty, which was ratified in 1970. In the 70s of the last century, the country's nuclear plans already included the construction of twenty nuclear power reactors. However, since 1979, the Islamic Republic of Iran fell into international isolation, Therefore, the then spiritual leader of the country, Ayatollah Khomeini, canceled the contracts and suspended the nuclear program. But it turned out to be temporary, and its renewal began very soon.

From the 1990s, a gradual revival of this program began, in which Russia also got involved and helped them build two nuclear reactors in Bushehr. From this period, Russia became an active supporter of Iran's nuclear program, which was manifested in the fact that it provided Iran with various types of technologies, contributed to the enrichment of uranium, etc., However, there was a backlash from the US and the US and Russia agreed that Russia would limit its cooperation with Iran in exchange for US economic aid to Russia, but this turned out to be only an agreement that was not implemented by Russia and it continued to actively cooperate with Iran.⁸

During the 1990s, Iran's nuclear program did not attract special attention and concern from the West, but the situation has changed. Already in August 2002, when one of the Iranian opposition groups published information about the ongoing work in Natanz near Tehran, where there were already 160 centrifuges necessary for uranium enrichment and about 1000 were under preparation. Intensive works were carried out in Arka and near Isfahan. This led to a change in the attitude of the US and Western countries towards Iran's nuclear program. Therefore, in 2003, negotiations with the EU3 (Great Britain, France, Germany) began. In October of the same year, an agreement was reached between the Secretary General of Iran's National Security Council and the foreign ministers of Germany, Great Britain and France regarding the nuclear program. Iran has agreed to comply with the Additional Protocol to the Treaty on the Non-Proliferation of Weapons of Mass Destruction and to stop uranium enrichment at Natanz to avoid international sanctions and a crisis. In return for all this, the European Union offered Iran support for its integration into the international community, although this first attempt to resolve the Iranian nuclear crisis was unsuccessful, since the promises of the Europeans without the USA were not convincing enough for it.⁹

Here we would like to mention what were Iran's conditions for starting negotiations with the European Union on the nuclear program:

- 1) All sanctions against Iran should be lifted. Of particular note is the sanction that directly prohibits investments in the oil and gas sector.
- 2) Iran should become a member of the World Trade Organization.
- 3) In order to find additional sources of electricity, Iran should receive technical assistance from abroad.
- 4) Iran should be given full national security guarantees in the absence of a nuclear deterrent. Here, it is necessary to involve Iran in the effective regional security system of the Persian Gulf.¹⁰

In 2004 there was the Paris Agreement where the EU3 recognized Iran's right under the NPT (Nuclear Non-Proliferation Treaty) to develop nuclear energy. At the same time, Tehran voluntarily halts uranium enrichment and processing until negotiations take place.

In 2005, the EU3 submitted a proposal for a long-term agreement. The following concessions were demanded from Tehran: Iran must enter into a binding agreement that it will not pursue fuel cycle activities, or withdraw from the NPT and ratify additional treaties. In exchange for all this, they proposed that the EU would support Iran to join the WTO (World Trade Organization) and negotiate regional security agreements.

⁸ Robinson K., What is the Iran Nuclear Deal, Council on Foreign Relations, 2022

⁹ Sahimi Mohammad. Iran's Nuclear Program. I: Its History Iran's Nuclear Program. 2003

¹⁰ Lotfian S. Nuclear policy and International Relations. In Katouzian & Shahidi (eds) 2007. P 172

In the same year (2005), hard-line politician Mohammad Ahmad Nejad (2005-2011) was elected president of Iran. Relations between Iran and the West have entered a new, stronger confrontational phase. During Nejad's presidency, Iran's foreign policy took an extremely rigid form. His influence on the country and foreign policy was soon reflected dramatically. At the same time, Iran accelerated work on its nuclear program. Confrontation with the West over the nuclear program led to the tightening of sanctions.

In 2006, US President George Bush Jr. said that the world will not allow the Iranian regime to be equipped with nuclear weapons. This was not the first statement, but after that the West's attitude towards Iran's nuclear program took an extremely tough form. The IAEA (International Atomic Energy Agency) passed a resolution on Iran's non-compliance with the safeguards agreement. The resolution states that the nature of Iran's nuclear activities and the lack of confidence in their peaceful nature fall under the jurisdiction of the UN Security Council. On February 4, 2006, a meeting was held again, where the IAEA officially referred the Iran case to the UN Security Council, and two days later, Iran informed the IAEA that it would voluntarily stop using the Additional Protocol and other non-legally binding verification procedures. Iran later announced that it had enriched uranium for the first time. Uranium enriched to about 3.5 percent was produced at the Natanz pilot enrichment plant. China, France, Germany, Russia, Great Britain and the United States (P5+1, meaning the five permanent members of the UN Security Council and Germany) are offering Iran a deal that would give it an incentive to halt uranium enrichment indefinitely. This continued for several years. New agreements, new sanctions, etc. In 2013, Iran had a new president in the form of Hassan Rouhani, who was a moderate politician. His main task was to bring the country out of political and economic isolation. In 2012, sanctions imposed by the US and the European Union on Iran's central bank and energy exports in connection with its nuclear program strengthened Tehran's political and economic isolation. It became necessary to make changes in the foreign policy before the new government of the Islamic Republic. Hassan Rouhani appointed Mohammad Javad Zarif as foreign minister, who led the negotiations on the nuclear program with the "5+1 countries" (USA, Great Britain, Russia, China, France + Germany). The main goal of President Rouhan became to manage to establish constructive relations with the countries of the world, to bring the country out of political and economic isolation, which in itself was connected to the normalization of relations with the West and the settlement of the nuclear crisis. Indeed, his efforts have paid off, with the latest and largest wave of tensions over Iran's nuclear program since late 2011 largely abated. The reason for this was also the agreement reached on November 24, 2014 in Geneva between Iran and the countries of the "5+1 group", which contributed to the settlement of the nuclear program crisis. This agreement meant strengthening the peaceful nature of Iran's nuclear program and lifting sanctions against Tehran. This agreement also defined a short-term plan to resolve the crisis in Iran's nuclear program. It meant the fulfillment of specific conditions by the parties.¹¹ These conditions are of this type:

1. Iran would only enrich uranium up to 5% and stop 20% enrichment;
 2. would stop the development of the Fordo, Natanz nuclear reactors and the Arak heavy water production facilities;
 3. International observers of atomic energy would have the right to enter nuclear facilities (Natanz and Ford) on a daily basis and also to open surveillance cameras;
 4. Inspectors of the International Atomic Energy Agency would have the opportunity to monitor and also the process of installing uranium deposits and centrifuges;
- "The countries of the 5+1 group" claimed that in return for fulfilling these conditions

¹¹ Basheleishvili M. The formation of the foreign policy of the Islamic Republic of Iran and development. Middle East and Georgia No. 7, 2014 288-289 p.

1. New measures to reduce Iran's oil exports would not be accepted.
2. The sanctions imposed by the USA and the European Union would be suspended on the export of petroleum and chemical products, as well as on the trade in gold and other precious metals;
3. Sanctions on Iran's engineering industry and related services would also be suspended;
4. The USA, the European Union and the UN Security Council would not impose new sanctions against Iran;
5. It would be easier for Iran to import food products and medicines;
6. The studies of Iranian students in the higher education institution of the third country would be financed from the accounts outside the borders of Iran;¹²

All this would be executed only and only if the parties agreed on the fulfillment of all points.

Since 2016, sanctions on Iran have been gradually lifted, but the situation has changed and become tense again, and already in January 2018, US President Donald Trump unilaterally terminated the agreement reached in 2015 regarding Iran's nuclear program. This was followed by the imposition of other new sanctions on yarn. On May 8 of the same year, he also announced that America was withdrawing from the nuclear agreement. After that, statements were made in the administration of the White House, according to which Iran's oil revenues should be completely canceled and the existing sanctions should be renewed, as well as plans to implement even tougher sanctions. Despite all this, Trump's sanctions did not gain international support, neither the UN nor European or Asian countries supported them, as was the case before the nuclear agreement. However, the imposition of sanctions on the part of the US meant that its allies, on which it can use various levers, were forced to support the US, because there was really no other way out.

In July 2018, Japanese oil companies began preparing to completely stop importing oil from Iran, and Saudi Arabia and the United Arab Emirates became alternative suppliers. Despite the US sanctions, Iran's two main customers, China and India, have refused to join the US in sanctions against Iran. According to them, there is no possibility of sufficient supply of fuel all over the world. China, Iran's biggest oil consumer, has publicly praised the nuclear deal and said it will continue to import Iranian oil despite Washington's threat to bar Chinese companies from the US market if Beijing does not comply with sanctions. India, which has traditionally had close relations with Tehran, says it does not recognize "unilateral" sanctions not imposed by the United Nations. Unlike Japan, the US has less influence over these countries, so its leverage does not affect them. As a result, on November 2, 2018, the US allowed eight of its allies to temporarily buy oil from Iran. Among them are China, South Korea, Japan and India. Although Japan was allowed to temporarily buy oil from Iran, it soon stopped buying oil from Tehran under pressure from the US. Turkey also refused to buy oil from Iran. The President of the country, Recep Tayyip Erdoğan, made a clear statement about this.

In 2019, Iran began exceeding the agreed limits on its stockpile of low-enriched uranium and began enriching uranium to higher concentrations, in response to actions by countries participating in the nuclear deal that Tehran said amounted to violations of the deal. He also began developing new centrifuges to speed up uranium enrichment; Resumption of production of heavy water in the city of Araki; and uranium enrichment at Ford, which made the isotopes produced there unusable for medical purposes.

In 2020, Iran moved several steps further away from meeting the terms of the five-year-old nuclear deal. In January of that year, after the US targeted the assassination of Iranian General Qassem Soleimani, Iran announced that it would no longer limit uranium enrichment. In October of that year, it began construction of a centrifuge manufacturing facility in Natanz to replace an

¹² Joint Plan of Action, Arms Control Association, January 2022

earlier one that had been destroyed a few months earlier in an attack blamed on Israel. And in November, in response to the assassination of renowned nuclear physicist Fakhri Zadeh, also attributed to Israel, Iran's parliament passed a law that led to a significant increase in uranium enrichment at Ford.

The following year, in 2021, Iran announced new restrictions on the IAEA's ability to inspect its facilities and soon ended its monitoring agreement with the agency.

The fate of the Iran nuclear deal remains uncertain. In April 2021, the JCPOA (Joint Comprehensive Plan of Action; The 159-page agreement with five annexes was reached by Iran and the P5+1 (China, France, Germany, Russia, Great Britain and the United States) on July 14, 2015.) signatories began negotiations to roll back the Washington-Tehran accord, but talks stalled after Iran elected conservative cleric Ebrahim Raisi as president. After that, at the end of the same year, the new Iran negotiating team took a tougher stance on the nuclear program.

Many observers had expected progress on renewing the nuclear deal by early 2022, but talks stalled again after Russia's invasion of Ukraine complicated discussions. Differences between Tehran and Washington continue on various issues. Among them is the declaration of IRGC as a terrorist organization. US officials have continued to delay the talks, saying that if Iran continues to make progress on the nuclear front, it will be unable to return to the original (2015) deal.

Israel, The regions significant military power

Israel is a country that has chosen the path of self-sufficiency in armaments, and this path is called the right one. Since its foundation (May 14, 1948), especially after the First Israeli-Arab War (1948-1949), Israel has focused on the creation and development of innovative military technologies. He did not spare the funds, determination and energy necessary for the appropriate military industrial-scientific foundation and base. And he got the proper result that was expected. Israel has fought a number of wars with the Arab countries of the Middle East region, and all of these wars have been a display of military-technical superiority. The country's industries provide the army with almost all types of innovative quality weapons - from pistols to tanks and from drones to ballistic missiles. From the beginning of the 1950s, West German reparations and French technical assistance were of great importance in getting the Israeli army back on its feet. As for American military aid in the 1960s - 2010s, it was equal to 3.1 billion US dollars annually. Accordingly, Israel imports certain types of weapons (for example, submarines, the latest aviation equipment), among which it only imports military aviation and missile/anti-missile technology from America.

Since 1984, Israel is the only state that receives military funding from the United States of America and has the right to use part of this funding for the production of weapons in its own country. All other countries that receive American aid are obliged to spend this aid entirely on appropriate products produced in America. Israeli companies are partners of Lockheed Martin, one of the giants of the American aviation industry, in the development of the latest technology, the fifth generation F-35 combat aircraft. After the US army, the Israeli army is the second to receive such drones, and in 2018 it already tested them from the skies of Syria to bomb Iranian military bases. At the same time, Israel sells 60% of the military equipment-equipment produced in its own country abroad, and thus it is among the top ten countries in the world by exporting military products. Between 2008 and 2015, it won \$12.8 billion in arms export contracts, mostly to India. He is also a supplier of weapons to Azerbaijan.

As for the army, all male Jewish citizens over the age of 18 undergo mandatory three-year military service in the Israeli army. Arab citizens are not conscripted into the army, although the Druze and Arab Bedouins of the Negev desert can volunteer to join certain (non-high-tech) units of the army. Children of ultra-orthodox Jewish families, who were exempted from military

service until recently, are an exception. In addition to men, Jewish women also undergo mandatory two-year service in the Israeli army. It is true that most of them do clerical work in the army, but this is also necessary. Israel's standing army is not as big as that of Turkey, Iran, Egypt, Syria, Iraq, but the reserve army of this country is three times more than the standing army. All male reservists (up to 49 years old in combat units, up to 54 years old in back units) undergo training for 3-6 weeks every year and participate in military operations.¹³

Israel's military superiority and its wars with the Arab countries of the region

On May 14, 1948, Israel declared independence, leading to a war with neighboring Arab countries because they did not recognize Israel's sovereignty. Israel emerged victorious in these wars and was able to defend its independence. On May 15, 1948, the armies of five Arab countries (Egypt, Transjordan, Lebanon, Syria, and Iraq), which sought to prevent the creation of a Jewish state, entered the territory of Palestine. The first war between Israel and the Arab countries began, which was called the "War of Independence" in Israel, and the "Palestinian Wars" in the Arab countries. Although several Arab countries took part in the war, their armed forces, with the exception of the Jordanian army, were disorganized and poorly armed military formations. The UN Security Council, trying to stop hostilities, passed two resolutions on November 4 and 13, 1948, demanding a cessation of hostilities from the opposing sides. In the first half of 1949, the Arab countries and Israel sat down at the negotiating table, which took place on the island of Rhodes. In 1949 Israel has signed ceasefire agreements with Egypt, Lebanon, Jordan and Syria. The demarcation line, the green line, was crossed between Israel on the one hand and Lebanon, Syria, Jordan (including the occupied west of the Jordan River), Egypt (including the occupied Gaza Strip) on the other.

Palestinian Fedayeen Revolt (1950s-1960s) Attacks and counter-military operations against Palestine by the Israel Defense Forces in the 1950s and 1960s. These actions were in response to ongoing attacks by Palestinian fedayeen, during which Palestinians from Syria, Egypt and Jordan managed to infiltrate Israel to carry out attacks against Israeli civilians and soldiers. Israel's policy of retaliatory operations was of particular importance because of the country's stated goal of achieving greater success from enemy attacks. They believed that this was necessary in order to become more effective at deterring future attacks.¹⁴

Suez Canal Crisis and Israel (October 1956) In October 1956, Israel, along with England and France, attacked Egypt, resulting in Israeli forces taking control of the Sinai Peninsula and approaching the Suez Canal. After a few months, the interventionists left the territory of Egypt due to the request of the United Nations and threats from the USSR. A cease-fire agreement was soon reached, after which UN troops maintained peace between these countries until 1967.¹⁵

Before the 1967 Six-Day War, the Green Line existed as a cease-fire line, and since then it has been given political status, as the UN considers Israeli-controlled territories outside the line to be occupied. The war lasted more than 1 year. Despite the decisions of the UN, an Arab state was not created on the territory of Palestine = Israel occupied almost 77% of the Palestinian territory, as well as a large part of Jerusalem, the rest was taken by Jordan and Egypt. As a result of the war, the territory of Israel increased by 46.4%. On June 5, 1967, a conflict broke out in the

¹³ Gachechiladze R. Middle East (geopolitics) Volume II. Bakur Sulakauri Publishing House, Tbilisi 2019 p. 69-70

¹⁴ Historical Timeline: 1900- Present - Britannica online *Encyclopedia*
<https://israelipalestinian.procon.org/historical-timeline-1900-present/>

¹⁵ Suez-Crisis, Britannica online *Encyclopedia*
<https://www.britannica.com/event/Suez-Crisis>

Middle East between the Arab countries and Israel, which went down in history as the Six Day War, and ended with the complete victory of Israel over Egypt, Syria, and Jordan. It was a new stage in the history of both Israel and Arab countries. It defined the subsequent development of the Middle East and the modern map of the region, with some exceptions. Israel has become one of the strongest military powers in the region. He launched airstrikes on Egyptian targets on June 4, 1967 and launched a large-scale offensive that led to the rapid defeat of the Arab coalition. Their swift defeat revealed that Egypt, Syria, and Jordan were ill-prepared for war. This war significantly changed the geopolitical balance in the Middle East. Israel won a complete victory, expanded its territory 3.5 times, took possession of the Sinai Peninsula of Egypt, the Gaza Strip, the Jordanian controlled areas of the river. On the coast, the main part of the Syrian Golan Heights. Establishing control over Jerusalem was of symbolic importance. On September 1, 1967, a conference of Arab countries was held in the city of Khartoum (Sudan), where the principle of "three nos" was announced, no - to the recognition of Israel, no - to negotiations with Israel, no - to the conclusion of a peace treaty with Israel. In addition, an additional resolution was adopted: No compromise or even the slightest concession on Palestinian rights.

A grueling war between the Israeli army and the forces of the Republic of Egypt, the Soviet Union, Jordan, Syria and the Palestine Liberation Organization from 1967 to 1970. It was initiated by the Egyptians as a way to liberate the Sinai from the Israelis, who had controlled the area since the middle of the 1967 Six Day War. The hostilities ended with a cease-fire agreement signed between the countries in 1970, where the borders remained where they were at the start of the war.

1973 Yom Kippur War - On October 6, the fourth war between the Arab countries and Israel began. Egypt and Syria attacked Israel at the same time that the Jews were celebrating the main religious holiday - Yom Kippur (Judgment Day). The maximum coordination of military actions should have taken place on 2 fronts - on the fronts of Egypt and Syria. At first, the Egyptians, with the help of aviation, gained an advantage. On October 16, the military advantage shifted to the side of Israel, and it not only escaped the destruction that drove back the Syrians and Egyptians. This war showed Israel that the enemy was now stronger than before. USA was indirectly involved in this war. He supplied equipment and weapons directly to Israel and put pressure on President Anwar Sadat. For both Jews and Arabs, this war had serious psychological consequences: Israel was no longer as confident in its invincibility as before. The Arab countries dealt a blow to the prestige of the Israeli leadership and had the opportunity to be proud of at least the first phase of the war, when their actions were successful. Israel did not expect Egypt to start a war. Because of this, the Jews did not attach much importance to the peace initiatives of Egypt and the United Nations, nor to the preparations for the 1972-73 war. The war of 1973 found a great response in the world. The imposition of an embargo by Arab countries on the sale of oil to countries that supported Israel led to an increase in oil prices. This created an economic crisis in the West. Most of the NATO countries refused to allow the United States of America to deliver oil to Israel by air. Israel's political isolation in the world has increased. African countries severed ties with Israel, weakening immigration to the country, which increased significantly after the Six-Day War. By means of Resolution #338 adopted by the UN Security Council on October 22, 1973, a ceasefire was achieved between the warring parties.¹⁶

Palestinian insurgency in southern Lebanon (1971–1982) - In 1978, Israel launched Operation Litani, the first large-scale Israeli invasion of Lebanon, carried out by the Israel Defense Forces to drive PLO-Palestine Liberation Organization (PLO) forces out of the area. Continued ground and rocket attacks and Israeli reprisals eventually escalated into the 1982 war.

¹⁶ UN Resolution 338, Britannica Online *Encyclopedia*-
<https://www.britannica.com/event/United-Nations-Resolution-338>

1982 Lebanon War (1982) - Began on June 6, 1982, when the Israel Defense Forces invaded southern Lebanon to drive the PLO out of the area. This war led to the expulsion of the PLO from Lebanon and the establishment of an Israeli security zone in southern Lebanon.

South Lebanon Conflict (1985–2000) - A nearly 15-year war between the Israel Defense Forces and its Lebanese Christian Maronite militia against Lebanese Muslim guerrillas led by the Iranian-backed Hezbollah within what Israel has designated as a "security zone" in southern Lebanon.¹⁷

The first large-scale Palestinian uprising against Israel on the West coast and Gaza Strip took place in 1987–1993.

The second Palestinian uprising began in 2000 and lasted until 2005.

In the summer of 2006, Hezbollah's military operation against Israel began. This operation gradually intensified, with the conflict starting on July 12, 2006 and continuing until a United Nations-brokered ceasefire came into force (August 14). This military operation officially ended on September 8, 2006.

(December 2008 - January 2009) - There was a three-week armed conflict between Israel and the Palestinian Islamist radical organization Hamas. Israel responded to the military operation carried out by Hamas from the Gaza Strip with a proper military confrontation, Israel launched the attack with a surprise airstrike on December 27, 2008. Its stated aim was to stop Hamas rocket fire and the importation of weapons by its supporters into Gaza. Israel announced the end of the conflict on January 18, and it ended on January 21, 2009.

In 2012, Israel carried out a military attack on the Gaza Strip.

In 2014, it again carried out an attack in this direction. This was a response to the disruption of peace talks sponsored by the United States, on the part of Hamas. as well as his opposition to the efforts of various Palestinian political associations to form a coalition government.¹⁸

In 2021, clashes between Israel and Palestine have resumed. In May 2021, riots broke out between Jews and Arabs in Israeli cities. At the same time, Hamas started firing military rockets at Israel from the Gaza Strip. The iron domes of this country destroyed the most dangerous rockets fired from the Gaza Strip. After that, Israel also attacked military facilities in Gaza.

The reason for Israel's military success in the wars we briefly discussed above is the successful military-industrial complex of this country, which was given experience by these wars. We also note that before Israel's military industry was strengthened, it was supplied with weapons by various countries. For example: until 1952, the flow of weapons from Czechoslovakia to Israel did not stop. It was also supplied by the USSR, USA, etc.

The problems of nuclear country Israel and Iran

When talking about nuclear weapons in the region, these two countries are usually remembered - Iran and Israel. Officially, the Israeli government has never said that it has nuclear weapons, but in 2007, Ehud Olmert, the Prime Minister of Israel, indirectly confirmed the possession of nuclear weapons in one of his speeches. The fact that Israel has nuclear weapons since the 1960s is no longer a surprise and a secret, and this is confirmed by various sources, for example, in the British weekly "The Sunday Times" published in 1986, an Israeli dissident, formerly a technician working at the Dimona Nuclear Research Center, Mordechai Vanunu's information that Israel has an atomic bomb. In 2018, the head of Israel's Atomic Energy Commission, Zeev Snir, said in an interview with the Reuters news agency that they have repeatedly ignored the threat posed by Iran and its allies with a possible attack on Israel's nuclear facilities. The specific threat

¹⁷ Arab Israel Wars, Britannica Online *Encyclopedia*- <https://www.britannica.com/event/Arab-Israeli-wars#ref340996>

¹⁸ Murphy B. and Taylor A., The Israel Palestinian Conflict:A chronology, The Washington Post, 2021

requires that Israel take appropriate measures and strengthen the protection of its nuclear facilities. It meant protecting the Dimona and Nakhla Sorek nuclear reactors from a theoretically possible missile attack by Iran or Hezbollah. The International Atomic Energy Agency has repeatedly appealed to Israel to join the Treaty on the Non-Proliferation of Nuclear Weapons. This call remains unanswered to this day.¹⁹

Based on the June 15, 2002 edition of the American newspaper "The Washington Post", many Israeli newspapers reported on the front page that Israel's three new diesel submarines of the "Dolphin" type, which were donated by Germany, had been equipped with cruise missiles that are indigenously produced and capable of carrying nuclear warheads.²⁰ This information was confirmed by a successful test in the Indian Ocean, and these missiles can fly at a distance of 1450 km. Also, according to the reports of these newspapers, we learn that these submarines will allow Israel to deliver a powerful blow to Iran from the vicinity of its territorial waters.²¹ Israeli aviation can also be equipped with atomic bombs. The fact that Israel has the ability to put an artificial satellite of the earth into orbit with a rocket of its own production is also known, which proves that the country has a ballistic missile capable of reaching anywhere on the earth.

In 1995, Israeli intelligence came to the conclusion that Iran had the intention of creating nuclear weapons, so they immediately began to create a corresponding political mood in the world, because it is natural that the world is not interested in the emergence of another nuclear state. Moreover, it is against the interests of America and Israel, when the Tehran regime openly declares them as its enemies and threatens Israel with destruction. In 1974, during the Shah's regime, the construction of a nuclear power plant (NPP) was started by a German company near the Persian Gulf port city of Bushehr in the south of Iran. In the mid-1980s, during the Iran-Iraq war, the Iraqi air force bombed the NPP under construction several times. This led to the forced departure of German contractors. Later, in 1995, the construction of the NPP was renewed with a contract worth 800 million dollars signed with Russia. In 2011, the NPP was commissioned. Iran maintains that the light water reactor at the Bushehr nuclear power plant is intended only for peaceful energy production and that the spent fuel cannot be used to produce nuclear weapons. Inspectors of the International Atomic Energy Agency systematically checked the progress of Bushehr NPP construction and did not find anything suspicious even after its completion. In addition, for a "peaceful atom" Iran does not need to enrich uranium or produce heavy water, which it has been doing for a long time. Now, information based on various indirect data has emerged about the geographical distribution of Iran's nuclear program over the vast territory of the country, which is of military strategic importance. The geographical distribution of Iran's nuclear program is as follows: one uranium enrichment plant is located in near Isfahan, in another ford. As for the production of hard water, it takes place in Araki (since 1996); Another similar enterprise was also built in St. in Natanz. There is information that a military factory also operates in Lavizan, a suburb of Tehran, and the Farchini military complex is located 30 kilometers from the capital. Nuclear technology centers, research reactors are located in Tehran, Ramsar and Bonab. As for uranium mining, it takes place in mines located near Saghand, Yazd and Gachin. In the future, the country will no longer depend on nuclear fuel imported from Russia. In such a case, it will no longer be necessary to export AES fuel waste to Russia. Therefore, all American presidential administrations and all Israeli governments see a nuclear threat from Iran.²² If Iran has nuclear weapons, other countries will also have ambitions, for example, its strategic rival Saudi Arabia, and not only it.

¹⁹ Gachechiladze R. Middle East (geopolitics) Volume II. Bakur Sulakauri Publishing House, Tbilisi 2019 p. 76-78

²⁰ „Three new Israeli Dolphin diesel submarines donated by Germany”, The Washington post, 2002

²¹ Israel Has Sub-Based Atomic Arms Capability, The Washington Post, 2002

²² Gachechiladze R. Middle East (geopolitics) Volume II. Bakur Sulakauri Publishing House, Tbilisi 2019

Conclusion

The fighting ability of the regular Iranian army after the Islamic Revolution, as well as the Revolutionary Guards Corps, which was created after the Islamic Revolution, are worth noting. The Islamic Revolution Guards Corps, or Guards Corps as it is often called, has recently been branded a terrorist organization by the initiative of the USA and Israel. The Guards Corps is one of the most important military units in Iran.

As a result of the sanctions, Iran was forced to produce weapons and develop a military industry on its own, because due to the sanctions, it did not have the opportunity to buy weapons from outside the country.

Iran's nuclear program and related problems, which have gone beyond the region, are worth mentioning. Because of this well-known nuclear program, sanctions have been gradually imposed on Iran since the 90s of the last century. The USA is particularly active in this regard, and Israel is active in the region. According to them, Iran aspires to obtain nuclear weapons, which will pose a threat to Israel first of all. The sanctions imposed on Iran are derived from this.

Israel is one of the important countries in the region in terms of military equipment. Since its independence, Israel has had to fight with the Arab countries, which has put this country in the face of self-sufficiency in armaments. Otherwise, Israel would not be able to wage wars with Arab countries.

Israel's desire to have the best weaponry and its military to be well trained has allowed it to repeatedly prove its military superiority over the Arab countries fighting against it.

Israel is the only country in the Middle East region that has nuclear weapons, which is another advantage for it to be able to defend itself in the "Arabian Ocean" and, moreover, to switch from "defense to attack".

The confrontation between Israel and Iran started with the Islamic revolution of Iran. Since then, a number of problems have appeared in the relations between these countries. It was Israel that initiated the designation of the Iranian Revolutionary Guard Corps as a terrorist organization. This was a serious blow to Iran. Israel accuses Iran of arming and financing Hamas. The confrontation between these two countries took place on the territory of Syria. Israel is one of the initiators who demanded the revision of the 2015 nuclear agreement and its cancellation, which was actually implemented by the US in 2018. It is the initiative of the same Israel that the 2015 agreement cannot be restored again. Israel supports the imposition of the toughest sanctions on Iran over its nuclear program.

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Physical and Mathematical Sciences

Calculation of Effective Mass and Mobility of Charge Carriers in p-type Si_{0.7}Ge_{0.3}

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The effective mass and mobility of charge carriers of p-type Si_{0.7}Ge_{0.3} are calculated. Concentration of charge carriers was $n = 2$ and $3.2 \cdot 10^{26} \text{ m}^2/\text{V} \cdot \text{sec}$. The effective mass at for the similar temperatures is a little more for the alloy with low concentration. Temperature dependence of mobility indicate the phonon scattering of charge carriers.

Key words: thermoelectric Si_xGe_{1-x}, effective mass, mobility of charge carriers.

Alloys with composition Si_xGe_{1-x} are a widely used thermoelectric material [1-5]. In the p-type Si_{0.7}Ge_{0.3} alloy, the temperature dependence of the electronic quality factor (B_E) and universal electrical conductivity (σ') was studied, as well as the dependences of Seebeck coefficient (S) on specific and universal conductivities. Based on the measured values (the thermal conductivity coefficient is also measured), ZT were up to 0.6 [6].

In this work, the effective mass and mobility of charge carriers of p-type Si_{0.7}Ge_{0.3} (concentration $n = 2$ and $3.2 \cdot 10^{26} \text{ m}^2/\text{V} \cdot \text{sec}$) are calculated.

The effective mass (m_s^*) can be calculated in different ways. It is convenient to use the following formula [7]:

$$m_s^* \cong \frac{h^2}{2k_B T} \left[\frac{3n_H}{16\sqrt{\pi}} (e^{S_r-2} - 0.17) \right]^{2/3}, \quad (1)$$

where h , k_B are Planck's and Boltzmann's constants, T – absolute temperature, q_e - elementary charge, $S_r = q_e/k_B |S| = 1.1604 |S|$ - reduced Seebeck coefficient. Formula (1) is fair when $|S| > 0.75 \cdot 10^{-4} \text{ V/K}$. (In our case $S = (1.08 \div 3.07) \cdot 10^{-4} \text{ V/K}$.)

Hall mobility (μ_H) is related to weighted mobility (μ_w) by $\mu_H = (m_s^*/m_e)^{-3/2} \mu_w$ (m_e – immobility mass). Weighted mobility is given by the following formula [8]:

$$\mu_w = \frac{3.31 \cdot 10^{-7}}{\rho} \left(\frac{T}{300} \right)^{-3/2} \left[\frac{e^{S_r-2}}{1+e^{-5(S_r-1)}} + \frac{\frac{3}{\pi^2} S_r}{1+e^{5(S_r-1)}} \right] S_r, \quad (2)$$

where ρ is the specific resistivity. Let us denote the expression enclosed in square brackets of Eq.(2) by B'_S . By entering the value of S_r in it: $B'_S = \frac{e^{11604S-2}}{1+e^{-5(11604S-1)}} + \frac{3527.2S}{1+e^{5(11604S-1)}}$.

When replacing specific resistance with conductivity ($\sigma=1/\rho$), for μ_H we finally get:

$$\mu_H = 3.31 \cdot 10^{-7} \sigma \left(\frac{T}{300}\right)^{-3/2} B'_S \left(\frac{m^*}{m_e}\right)^{-3/2}. \quad (3)$$

To calculate m^*_S and μ_H , the value of the Seebeck coefficient is needed. The temperature dependence of S was constructed according to the data of [6] (Fig. 1).

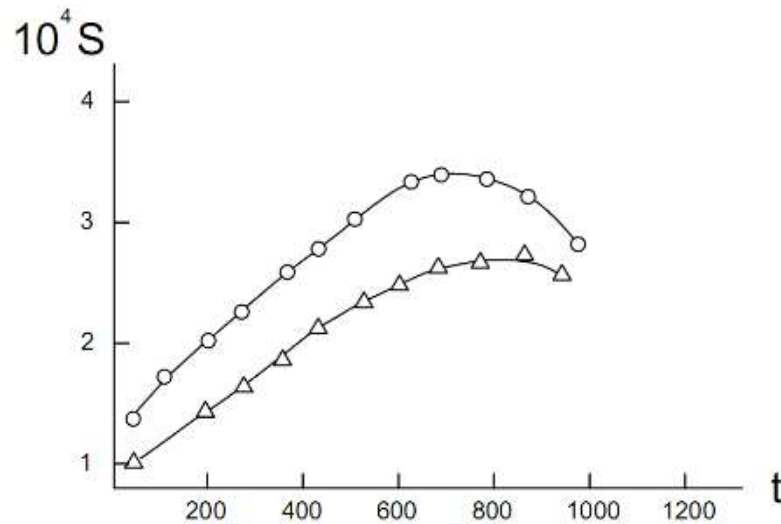


Fig. 1. Temperature dependences of the Seebeck coefficient.
o - $n = 2 \cdot 10^{26}$, Δ - $3.2 \cdot 10^{26} \text{ m}^{-3}$ [t]=°C, [S]=V · K⁻¹

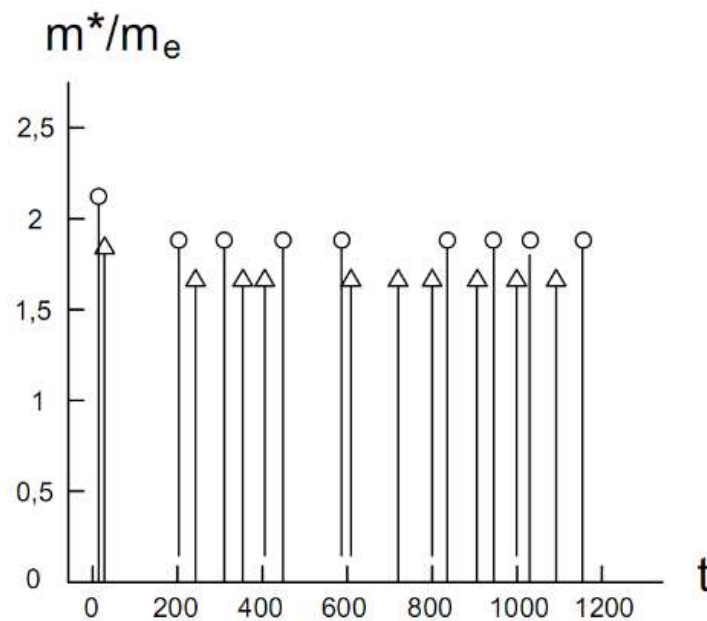


Fig. 2. Stroke graphs of m^*_S / m_e for different temperatures.
o - $n = 2 \cdot 10^{26}$, Δ - $3.2 \cdot 10^{26} \text{ m}^{-3}$

Figure 2 shows the stroke graphs of m_s^*/m_e calculated for values of concentration of charge carriers $n = 2 \cdot 10^{26}$ and $3.2 \cdot 10^{26} \text{ m}^2/\text{V} \cdot \text{sec}$. As we can see, the effective mass at for the similar temperatures is a little more for the alloy with low concentration of charge carriers.

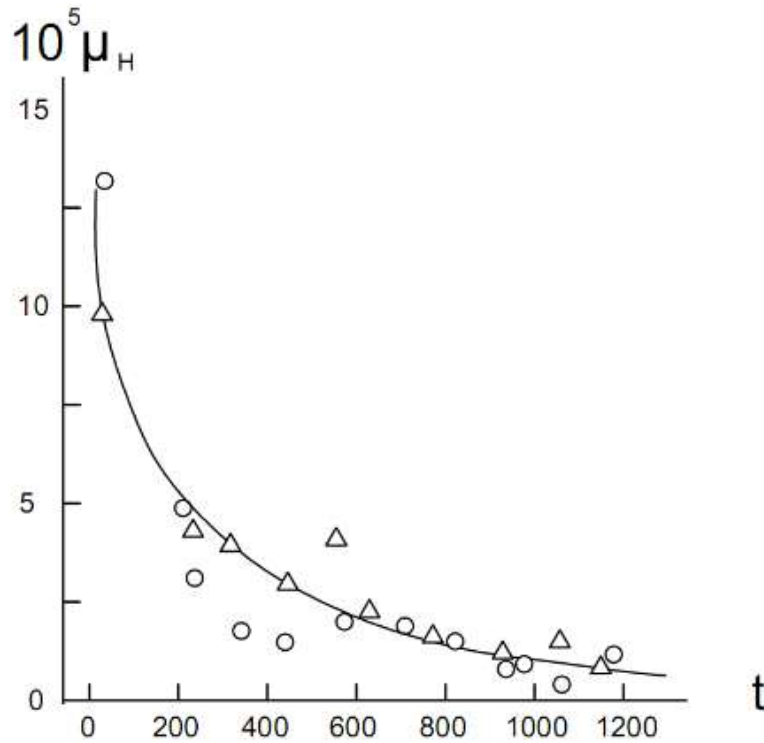


Fig. 3. Dependences $\mu_H - t, ^\circ\text{C}$ ($T, ^\circ\text{K}$).
 $\circ - n = 2 \cdot 10^{26}, \Delta - 3.2 \cdot 10^{26} \text{ m}^{-3}$
 $[\mu_H] = \text{m}^2/\text{V} \cdot \text{sec}$

Figure 3 shows temperature dependences of μ_H . As we can see, the mobility in $\text{Si}_x\text{Ge}_{1-x}$ is ~ 1 order higher than in Si or Ge ($0.06-0.15$ and $[0.18-0.39]10^{-5} \text{ m}^2/\text{V} \cdot \text{sec}$ [9]). The obtained data are close to the mobility in the Si/SiGe system at 4°K [10]. Presented dependences (Fig. 3) are described by the expression $\mu_H \cong \frac{1}{2} T^{-3/2}$ (T -temperature in $^\circ\text{K}$), which indicates the phonon scattering of charge carriers.

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Technical Sciences

ЗАСТОСУВАННЯ ШТУЧНОГО ІНТЕЛЕКТУ В РОЗУМНИХ БУДИНКАХ

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Вступ. Розумний дім — це система пов'язаних пристроїв, які здатні робити життя людей більш комфортним та безпечним. Сама концепція розумного дому існує вже більше 20 років, і протягом усього часу існування зазнавала серйозних змін. І якщо в кінці 20 сторіччя лише почали з'являтися пристрої для розумного дому, які можливо запрограмувати, то зараз побутові прилади мають власний штучний інтелект.

У багатьох великих компаній є власні проекти для створення розумного дому, які використовують штучний інтелект. Деякі з них можуть запропонувати такі розумні прилади як пральні машини, холодильники та сушильні машини. Інші ж компанії, такі як Bosch, мають лінійки хоч і досить специфічних, але не менш корисних приладів, наприклад, розумних духових шаф.

Завдання дослідження. У даній статті буде показано, яким чином штучний інтелект може зробити дім більш безпечним, економічним та комфортним. Також, будуть розглянуті розробки компаній, які безпосередньо стосуються концепції розумного дому.

ШІ для безпеки дому. Однією з найважливіших причин використання штучного інтелекту у розумному домі є підвищення рівня безпеки будинку. Одними з найбільш популярних пристроїв, які здатні забезпечити високий рівень безпеки у домі, є розумні камери.

Розумні камери можуть використовуватися для різних цілей: як для нагляду за домом, так і для спостереження за тим, що відбувається ззовні. Основними функціями таких камер є розпізнавання осіб, надсилання повідомлень про певні події та запис відео. Також цікавою особливістю розумних камер є використання деякими екземплярами голосових помічників Amazon Alexa та Google Assistant.

Також окремо можна виділити камери для спостереження за дітьми. Особливістю таких камер є більш розширений у порівнянні зі звичайними домашніми камерами, функціонал. Вони здатні надсилати повідомлення щодо безпеки дитини, розпізнавати плач, аналізувати сон і навіть виявляти закритість обличчя.

Існує велика кількість компаній, які займаються розробкою розумних камер, і однією з найпопулярніших є компанія Xiaomi. Бренди, які належать компанії, розробляють як домашні камери спостереження, так і камери із дверним дзвінком. Головною особливістю камер першого типу є можливість розпізнавання як людей, так і домашніх тварин. Також деякі домашні камери здатні повертатися на 360 градусів, що дає змогу фіксувати все, що відбувається у певному приміщенні. Головною особливістю камер із дверним дзвінком є можливість спілкуватися з людиною, яка знаходиться за дверима. Окрім цього, такі камери дають змогу цілодобово спостерігати за тим, що відбувається біля дому.

ШІ для автоматизація домашніх справ. Головною функцією штучного інтелекту є імітація людських здібностей. Ця особливість може бути використана в розумному домі для економії часу користувачів. У той час, поки люди будуть займатися важливими речами, пристрої, що підключені до мережі розумного дому, зможуть регулювати температуру у приміщенні та холодильник, прати речі тощо.

2018 року у Лас-Вегасі була представлена одна з найпопулярніших систем, яка може реалізувати описані вище можливості — DeepThinQ. Ця технологія необхідна для впровадження штучного інтелекту в продукти компанії, у тому числі в побутові прилади. DeepThinQ оснащена такими функціями як розпізнавання голосових команд, простору та місцезнаходження людини — усі вони були розроблені завдяки даним, які були зібрані за роки вивчення звичок користувачів пристроїв від LG. Завдяки такому функціоналу штучний інтелект може аналізувати поведінку користувачів і підлаштовуватися під їх потреби. Наприклад, кондиціонер зможе вивчати образ життя користувачів, завдяки чому буде охолоджувати приміщення до оптимальної для кожного користувача температури.

ШІ для розумних кухонь. Розумні кухні можуть допомогти людям уникнути нещасних випадків, наприклад, у випадку, коли їжа готується занадто довго. Крім забезпечення безпеки, розумні духові шафи можуть проінформувати користувача щодо приготування їжі, а також регулювати температуру. Також з важливих функцій можна виділити попередній нагрів духової шафи до того, як користувач прийде додому.

Компанія Bosch, яка займається створенням побутових приладів, має лінійку розумних духових шаф Accent. Духові шафи восьмої серії цієї лінійки мають вбудований штучний інтелект, який дозволяє з мінімальною кількістю дій приготувати смачну їжу. Достатньо лише покласти блюдо у духовку та вибрати потрібну програму за допомогою сенсорної панелі, або ж можна скористатися додатком для мобільних пристроїв Home Connect.

Однією з найважливіших функцій духовок лінійки Accent компанії Bosch є збір даних. Програмне забезпечення може збирати дані з датчиків — температуру, вологість тощо - та надсилати їх на сервер компанії-розробника. Для надсилання даних необхідно підключити духовку до серверу Home Connect за допомогою Wi-Fi та дати згоду на анонімний збір даних. Після цього дані з серверу духовки будуть надсилатися до сервісу Home Connect AI. Такий функціонал дозволяє духовці навчатися як на своїх даних, так і на даних інших духовок. З цього випливає, що чим більше користувачі будуть готувати, тим кращі страви будуть виходити із часом.

ШІ для економії електроенергії. Можливості штучного інтелекту не обмежуються лише поліпшенням повсякденного життя та забезпеченням безпеки користувачів. Досить незвичайною, на перший погляд, функцією штучного інтелекту є здатність економити електроенергію, що, по-перше, дозволяє користувачам зекономити гроші, і, по-друге, знижує рівень забруднення навколишнього середовища.

Однією з найпопулярніших систем, що має функцію економії електроенергії за допомогою штучному інтелекту, є SmartThings, яка розроблена компанією Samsung. Сама ж функція має назву AI Energy Mode. Як заявляє компанія Samsung, прилади, що працюють із технологією AI Energy Mode, здатні економити від 20% до 70% енергії.

Дані про економію різних побутових приладів:

- Пральна машина здатна економити до 70% електроенергії. Економія можлива завдяки технології AI EcoBubble, яка дозволяє ефективно прати одяг навіть у холодній воді
- Сушильна машина здатна економити до 20% електроенергії. Економія здійснюється за допомогою технологій AI Dry
- Холодильник здатен економити до 30% електроенергії. 15% можливо зекономити за рахунок алгоритму штучного інтелекту, який оптимізує швидкість компресору. Інші 15% вдається зекономити за рахунок регулювання заданої температури

Керування розумними приладами, які підтримують технологію SmartThings, можливо завдяки однойменному додатку для мобільних пристроїв.

Висновок. Штучний інтелект здатен покращити життя людей багатьма методами: забезпеченням безпеки, спрощенням приготування їжі і навіть економією електроенергії.

Найважливішою властивістю штучного інтелекту є навчання під час роботи. Тому, для більш швидкого розвитку цієї технології необхідно популяризувати концепцію розумного дому. Після збільшення кількості користувачів розумних приладів у компаній буде більше даних, завдяки яким буде навчатися штучний інтелект. Як було зазначено раніше, чим більше буде приготовано страв у розумній шафі від Bosch, тим краще вони будуть у майбутньому.

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ТЕХНОЛОГИИ В ИНТЕРНЕТ-ПОЭЗИИ

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Аннотация. Исследование посвящено интернет-поэзии, структура и композиция которой базируются на творческом использовании интернет-технологий. На основе «Дискуссий об электронной литературе» (1997-1998 гг.) в исследовании дается анализ мнений исследователей, поэтов и критиков о перспективах применения различных технологий в интернет-поэзии. Оптимистичные прогнозы, сделанные в конце 1990-х гг., сравниваются с примерами реальной реализации технологической интермедиальности в современной интернет-поэзии. В исследовании анализируются такие поэтические феномены, как сборник стихов, написанных на Google Map, а также экспериментальные гипертекстовые произведения, в том числе созданные на основе «бумажных» стихотворений. В то же время авторы серьезно относятся к представлениям исследователей о современной коммуникативной ситуации в интернет-поэзии. Делается вывод о том, что, несмотря на многочисленные ожидания, связанные с возможным творческим использованием технологий в интернет-поэзии, последняя в настоящее время идет по другому пути. Этот путь в основном связан с новым типом коммуникации в системе «поэт-аудитория», тогда как использование творческих интернет-сред, онлайн-игр, гипертекстов и выразительных средств других медиа становится достаточно редким явлением: современная аудитория ожидает искренности, эмоции и интерактивность от интернет-поэта, а не игры или оригинального технологического решения.

Ключевые слова: Коммуникация, интермедиальность, Интернет-поэзия, Интернет-технологии.

Введение. В конце 1990-х — начале 2000-х исследователи, поэты и критики с энтузиазмом писали о перспективах синтеза поэзии и технологий, которые предоставляет Интернет. Они также создали большое количество интересных экспериментальных текстов с использованием анимационных эффектов, гипертекстовых ссылок и различных комбинаций читательской и авторской навигации. Однако в настоящее время онлайн-поэты используют лишь небольшое количество интернет-технологий в эстетических целях. Между тем одной из важнейших тенденций современной поэзии является использование интермедиальности: поэты изобретают новые способы выхода за пределы словесного компонента и используют в своих произведениях разнообразные знаковые системы. Например, стихи могут быть написаны на открытках, промокатальной бумаге, путеводителе по художественной галерее, гадальном календаре и т. д. Также известны невероятно творческие эксперименты с изобразительными формами поэзии. При этом большая часть этих интермедиальных произведений создается на бумаге в традиционной книжной форме, а не в Интернете, хотя Интернет предоставляет практически неограниченные возможности для экспериментов с различными знаковыми системами. Тем не менее Интернет становится площадкой для творчества авторов, чьи стихи вполне могут быть переведены в книжный формат. Эта парадоксальная ситуация и находится в центре нашего исследования.

Задачи. Одной из важнейших особенностей современной культуры является передача значений с помощью других знаковых систем (Kim, 2019; Nilsson, 2020; Strehovec, 2017; Terskikh, 2017; Viires & Laak, 2021; Voss, 2019). Технический прогресс привел к новому

взгляду на процесс интермедиальности, представляющий собой взаимодействие различных медиа и семиотических систем. «Сегодня интермедиальность — это не столько техника или концепция (как это было раньше), сколько неизбежное следствие технологического медиаповорота, и сама ее суть принципиально отличается от «Интермедиальности 1.0», когда синтез искусств, поиск синкретизма и комплексное воздействие на реципиента были художественной задачей автора-творца» (Загидуллина 2017, с. 60). В связи с этим актуальна проблема влияния интернет-среды и интернет-технологий на поэтический дискурс (Aranha & Borborema, 2016; Bootz, 2021; Демченков и др., 2018; Sanz, 2017; Senis, 2019; Валеро, 2019; Синь, 2017). Понятие интернет-поэзии включает в себя множество различных аспектов: это как «традиционные» произведения, перешедшие в цифровое пространство и различные генераторы стихов, так и малые поэтические формы, распространенные в Интернете. Мы разделяем идеи Р. Симановского о классификации интернет-литературы на основе основной авторской стратегии. Он предлагает следующие группы произведений: 1) изначально созданные для бумажного формата, 2) основанные на цифровых/мультимедийных технологиях «как основной формообразующий эстетический принцип с целью достижения новых форм и способов художественного выражения», 3) с использованием «конкретных коммуникативных технологии и интернет-стратегии (интерактивность) как основной жанрово-эстетический принцип» (Шмидт, 2005). Материалом нашего исследования являются в основном произведения, относящиеся ко второй группе: термин электронная поэзия/интернет-поэзия используется в узком значении. Это оригинальные авторские произведения, которые создаются или обрабатываются в сети и не могут быть переведены на бумажный носитель, так как их структурно-композиционные особенности основаны на интернет-технологиях. При этом в настоящее время наиболее изученными и популярными у читателей являются поэтические тексты из третьей группы. Это интернет-стихи, созданные поэтами, которые используют Интернет как своеобразную площадку для публикации и общения со зрителем. Такого рода интернет-поэзия образует особый тип коммуникации в системах «автор-текст-адресат», «автор-текст-критик», что во многих случаях позволяет противопоставить интернет-поэзию «обычной», «бумажной» поэзии. Таким образом, поэтические сообщества, ориентированные на традицию, «письменно-книжный способ существования литературы и такие институты литературной легитимации, которые... связаны именно с «диахроническим» измерением литературы через понятие вкуса как специфического «отличительной способности» (Воробьева, 2020, с. 47), составляют своеобразную оппозицию новой интернет-поэзии, в которой «статус поэта устанавливается самим фактом общественного одобрения, а все «субъекты одобрения равноправны, независимо от статуса, в том числе и «профессиональный «поэт» или критик, или рядовой пользователь ВК» (Воробьева, 2020, с. 57). Кроме того, это творческое направление литературы формирует некоторые типичные черты электронной поэтики, например, повышенную концентрацию прецедентных имен (Елистратова, Минец, 2013), «оптативность»/«императивность», когда автор побуждает потенциального читателя принять ряд действий для воссоздания настроения/обстановки/чувств, побудивших интернет-поэта написать стихотворение» (Бартош, 2018, с. 117). С другой стороны, Интернет предоставляет широчайшие технологические возможности для реализации творческой идеи. Интернет-поэты создают свои произведения, имея свободный доступ к различным медиа: видео, аудиоклипам, веб-сайтам, изображениям, которые используются в качестве выразительных средств (Абросимова, 2020; Куламихина, 2021; Кучина, 2017; Росарио, 2011). В то же время интернет-поэзия находится в центре внимания исследования в связи с тем, что является новой формой общения поэта с читателями (Аранья и Борборема, 2016; Бартош, 2018; Козак, 2018; Воробьева, 2020; Елистратова, Минец, 2013).

Вопросы исследования. В исследовании поставлены следующие исследовательские задачи:

1) выявить основные гипотезы и ожидания относительно технологического аспекта интернет-поэзии на основе анализа материалов «Дискуссии об электронной литературе»;

2) описать некоторые технологические принципы, лежащие в основе структуры и композиции интернет-поэзии.

Цель исследования – выявить тенденции развития поэзии на базе цифровых/мультимедийных технологий в Казнете на основе анализа рецензий критиков, исследований и поэзии.

Методы исследования. В исследовании использовались методы описательного, структурно-композиционного, промежуточного и тематического анализа.

Выводы. В конце 1990-х – начале 2000-х годов критики, ученые, журналисты и поэты широко обсуждали возможности и тенденции развития электронной литературы, причем среди наиболее вероятных тенденций назывались те, которые связаны с различными технологическими решениями (Жердев, 2000). Например, были отмечены следующие тенденции: установление связей между стихотворениями и их частями с помощью гиперссылок; сочетание словесных текстов с графическими, цветовыми, звуковыми эффектами; разработка игровых поэтических форм с возможностью совместного авторства. Теоретические размышления и предположения сопровождалось созданием большого комплекса работ с применением технологий. Среди существующих поэтических опытов того времени (к сожалению, большинство из них уже недоступно или удалено) — «Комок сонетов» Юрия Нестеренко под названием «Аэропорт» (Нестеренко, 2000), организованный как гипертекст. На первый взгляд стихотворение похоже на классический сонет: в нем 14 строк, состоящих из двух четверостиший и двух терцетов с рифмовкой «абба абба ссd eed». Каждая из строк обоих четверостиший представляет собой гиперссылку, которая связана с новым сонетом, начинающимся с этой строки. Таким образом, из основного посредством гиперссылок выходят еще восемь сонетов. Первая строка (Зал ожидания, очередь, контроль) связана со стихотворением, написанным в нарочито возвышенном стиле, подражающем шекспировскому. Получившийся сонет становится своеобразным введением ко всему «Связке сонетов»: пассажиры — человеческие жизни противопоставляются судьбе, символом которой является самолет. Остальные строки связаны с сонетами, повествующими о жизни конкретных пассажиров: На шпильках деловая дама в белом, Девушка в шортах с мужиком дебелим, Костлявый парень, стриженный под ноль. Старик, в его глазах - тупая боль, Мамаша с сыном, чуть оторопелым, Девчушка с выражением осивелым, Мужчина, элегантный, как король. Интересны технологические решения А. Сараева и Р. Карапетяна по переводу ряда известных стихотворений («Дом, который построил Джек» в переводе С. Маршака, «Принцесса и каннибал» Г. Сапгира) на язык знаков гиперпоэмы (HPML). Первоначально эти стихи имеют специфическую композицию. «Дом, который построил Джек» написан по принципу цепного рассказа, состоящего из сюжетных частей, каждая из которых имеет последовательно увеличивающееся повторение. Стихотворение «Принцесса и каннибал» построено на контрасте и структурном реверсе (перевертыш). А. Сараев и Р. Карапетян с помощью технологического решения сделали эти приемы наглядными: выстраивание сюжетных частей и обратное происходит буквально на глазах у читателя.

В ходе дискуссий об электронной литературе высказывались мнения о том, что использование технологий в поэзии требует особого чувства гармонии и литературного вкуса, который должен быть еще более острым, чем при создании обычных произведений (Андреев, 2000). Судя по всему, авторы нового направления разделяли эту точку зрения: несмотря на поэтическую простоту, экспериментальные стихи конца 1990-х — начала

2000-х продемонстрировали стремление авторов создать цельный связный текст, неотъемлемой частью которого была бы технология.

Однако первоначальный импульс, данный художественными экспериментами на рубеже тысячелетий, не получил ожидаемого воплощения, хотя были большие ожидания и очевидные перспективы развития интернет-поэзии. С другой стороны, работ, в которых используются интернет-технологии, немного. Например, Самойлов (2015) создал сборник поэтических произведений под названием «Маршрут 91», состоящий из 49 стихотворений. Каждое стихотворение посвящено одной из остановок маршрутки маршрутки № 91 в Челябинске. Все стихи были загружены на карту Google. Каждая из автобусных остановок обведена на карте красным цветом и сопровождается стихотворным текстом. Названия стихотворений соответствуют названиям остановок (Плодоваягодная, ДК ТЭЦ и др.). Заявки отмечены на карте зелеными квадратиками. Это видеопоэтические ролики с аудио- и видеосопровождением текстов. Через использование средств массовой информации, которыми являются карты Google, буквально выражается традиционная литературная метафора «Жизнь — это путь». Мазо (2019), московский поэт и музыкант, создает синтетический жанр, который он называет цифровой оперой: мультимедийный проект, объединяющий сборник стихов, фильм, движущиеся иллюстрации, музыкальный альбом и компьютерную игру. Стихи — это своего рода либретто, на котором базируются остальные составляющие проекта. Они усиливают и воспроизводят образ городской зимы и одиночества с разных сторон.

В настоящее время есть примеры гипертекстовой поэзии как развивающегося направления в творчестве ряда авторов. Авторы сочетают словесный поэтический текст с различными видами медиа: видео/аудиоклипами, изображениями, страницами сайтов и т. д. Гиперссылки позволяют поэтам постоянно обращаться к неограниченному количеству произведений, принадлежащих к разным эпохам, стилям и жанрам (Абросимова, Куламихина, 2021).

Однако большинство интернет-стихотворений, созданных современными поэтами, не имеют структурной связи с технологиями. Интернет используется как способ общения с аудиторией (читателями) и площадка для загрузки стихов. Удивительно, но тексты таких авторов легко переводятся в бумажную форму.

Заключение. Мы пришли к выводу, что предположения о бурном развитии технологического направления в интернет-поэзии, предсказанные на рубеже веков, не совсем оправдались: интернет-поэзия развивалась по другому пути. Эксперименты с использованием гиперссылок в эстетических целях, навигации и анимации продолжает лишь небольшая группа современных авторов, что, вероятно, связано с тем, что большая часть аудитории не готова к восприятию таких произведений. Интернет-авторы, для которых Интернет становится способом общения со зрителем и площадкой для выкладывания стихов, развивают совершенно иное направление современной поэзии по сравнению с поэзией, основанной на технологиях. Однако цифровое поэтическое творчество занимает свою нишу, но до массового искусства ему далеко.

Дискуссия об электронной литературе продемонстрировала огромный творческий потенциал синтеза интернет-технологий и поэтического текста. Авторы, использующие интернет-технологии в поэзии, изначально стремились к лаконичной и продуманной форме стихотворения или сборника стихов. Об этом говорят их жанр и композиция: определенная организация сборника сонетов, стихотворений на основе структурного реверса и т. д. Интернет-технологии подчеркнули и визуализировали структуру и композицию стихотворения. В современных цифровых произведениях возможности гиперссылок, элементов навигации и игры зачастую направлены на формирование ассоциативных связей и подтекста, а не на жанровые и стилистические особенности стихотворения. Однако

технологическая интермедальность продолжает оставаться авторским концептуальным представлением о цифровом произведении, его основным художественным приемом. В то же время интернет-поэты, использующие Интернет как площадку для общения (выкладывая стихи в социальные сети, комментируя их, озвучивая, выкладывая видеоролики с исполнением поэта и т. д.), ориентированы на иной тип интермедальности. Интернет-технологии становятся средством доставки поэтического текста адресату, а не объектом эстетического развития.

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Песнопения к Богу (Цикл стихов Г. Каландиа)

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Грузинская литература издавна славилась к выражению восторженного преклонения Всвышнему в стихотворческой форме. Ещё в чисто церковной, агиографической поэзии, восхваляли Бога, выражая тем самым и покаяние грехов в мирной жизни с надеждой обретения духовного слияния с Богом. Так продолжалась эта тенденция и в мирской литературе вплоть до начала 21-ого века.

Современный мир и сам человек не тот, кем был на протяжении тысячелетия, но чувство обращения к всевышнему не покидала его и, как-то усиливалась особенно при личной или всенародной беде.

90-ые года XX столетия стали особенно тяжёлыми для Грузии, когда части его земли были оторваны (Абхазия, Самачабло), беззащитные старики, женщины, молодёжь, дети, видя собственными глазами гибель родных, разрушене дома, разрушения крова над головой, были вынуждены оставить любимый город Сухуми, другие города и сёла и через труднейший перевал Сакен-Чубери стать беглецами из собственной земли. Среди них был и видный грузинский писатель Гено Каландиа (1939-2017).

Находясь на грани жизни и смерти, видя трагедию собственного народа, поэт продолжает творческую жизнь в Тбилисси. И здесь, вдали от близких, от любимого Сухуми, неожиданно выражается в двухстрофных стихах, которых он назвал «Песнопениям к Богу». 23 ноября 2013 года в прессе публикуется стихотворения из цикла «Песнопения к Богу». В предисловие отмечено: «Каждый поэт, как субъект творчества, где-то, в глубине души принимает себя как носитель Божетсвенного, но это нужно выразить устно, художественным словом... Таким образом это и самовыражение целостности с Богом». Так родилась маленькая книжечка в 2014 году, а потом и двухтомник в голубом переплёте, совсем незадолго до смерти поэта. И сразу-же привлекло внимание большого круга читателей исследователей творчества Гено Каландиа (из монографии «Мир парадигмов Г. Каландиа», 2014 г.).

Чем отличается творения Г. Каландиа? Каков суть стихотворения, вскормлённого кровью, истерзанной души человека, которая несмотря на страшную участь постигшую его народу, стихи полны-любовью к людям и Богу, чувствуется сострадания и самопокоения. Так продолжает жизнь жанр песнопения на протяжении веков и в 21-ом столетии.

Так пишет Лаша Гвасалиа в предисловии сборника («Карманные псалмы») «В его сознании отражаются светлые образы тех людей, которые редко встречаются в нашем духовном пантеоне. С «Песнопениями» автор смог, подражая стилю духовных песней, распротется перед спасителем все свое жизненное «имущество», для приобретения божьей милости и любви» (Г. Каландиа, т.2, 2016:6).

В твоём храме, Господь, мне тепло,
Я молитвами душу здесь грею,
Мне псалмы как бальзам. Но болею
И слезам, и морозам назло.

(Перевёл с грузинского Артэм Григоренц /Киракозов)

«Бог во мне» и «я в Боге!» - вот идейная суть этих песнопений – отмечает Темур Шавладзе («Исповедальные песнопения»)… Эта книга сама не ищет похвал, нет, сама хвала находит его для всех времён (Г. Каландиа, т.1:24).

«Песнопения к богу» представляют собой образец масштабного мышления. Это возникло благодаря любви и веры всевышнего.

В своих стихотворениях поэт старается выразить свое восхищение, восхищение человека 21-ого столетия, бесконечностью космического мира, простым но выразительным словом, передать заного открыты мир, тот мир, который невидим и бескраинный. Но это он передаёт благодаря тех художественных образов, которые оригинально представлены.

Самое большое, самое дорогое, для поэта вера, христианские ценности, родина. Стихи представляют собой и поэзию и философию. Его смущает то, чего не может понять: что лучше, тот или иной мир. И ищет поэт всевышнего, находя в самом сердце и это становится очевидным. Портрет человека, для которого вера, как этическая категория, становится религиозной заповедью.

Каждая строка «Песнопений» свидетельствует, что между человеком и Богом существует общность, гармония и везде Бог со своей волей даёт возможность понять его всеобъемлемость чтобы принять его и своим началом и своим концом.

Суть «Песнопений» в любви, глубокой, общечеловеческой, что рождается в самом себе с родимых истоков. И как он вскармливает человека, даёт землю и энергию, заботу, теплоту души, того же отдаётся вооружая новой силой, любви, поэтического чувства... Как сам вспоминал поэт, в детстве он чувствовал себя в обособленности с миров, чувствовал шуршание листьев особенной музыкой. Так, что это чувство само было внедрено в поэте с рождения, но трагические события должны были только способствовать его выражению в «Песнопенных».

Многогранен и многообразен поэтический «гобелен» стихотворении Гено Каландиа: солнце, фиалки, ландыши, оливковые и вишневые ветки, крик петуха, черные дрозды, и Новый Завет Хадиши... все в библейских парадигмах воспринятое поэтом, с грустью о кончине жизни, о его персказуемости, Вера в том, что уйдёт человек из мира сего, но борется человек, течёт его жизнь бесконечностью добра и любви.

Жизнь человека растворится в этом сакральном и кончается эгоистическое стремление и поиск счастья.

«Чувствую в воздухе звон струн золотой арфы, но не смог до конца понять его» _ писал видный грузинский поэт Гиорги Леонидзе, и Г. Каландиа всё-таки ищет, стремиться разгадать суть человеческой жизни. Перекрёсток времени даёт повод призадуматься над этой брэнной жизнью, жизнью изгнанного из своей собственной земли человека, где он отрываясь от Абхазии чувствует, который каждый день ждёт смерть осуждённого, но мечтает

вновь прижаться к родной земле, хоть перед смертью. По-этому и эти «Песнопения» своеобразные приношения на алтаре всевишнего взамен счастья своего народа.

Поэт все-таки верит вечности жизни, верит в Бога и по-этому готов отдать даже свою жизнь за счастье человечества.

Его взор устремлён в небо и всегда помнит «слёзы матери». В «Песнопениях» нет ничего нового, только хорошо забытая память, вновь воскрешается 21-ом веке для человека нового времени.

В его «Песнопениях» чувствуется запах всего перкрасного, единственное, что осталось в памяти.

В каждом строке стихотворения слёзы и страдания из-за отнятой земли родной. Но поэт все-таки ищет опору в небе, ищет дорогу к сердцу читателя и находит ту грань, который может преодолеть.

У «Песнопении» Г. Каландиа есть свой лирический герой. Это сам автор, который жаждет новую жизнь, новый мир. Единственной опорой для поэта остаётся путь к Богу.

У стихов отсутствует заглавия, потому-что они составляют одно целое посвящение к Богу.

В этих десятислоговых двухстрофовых стихах выражение мысли поэта к одно целое:

«Всевишний, думаю, думаю, думаю
Как посвятить свою брнную голову,
Как Акакий плакал в родном селе,
В ту субботу-воскресенье-днём и ночью,
Смотрел на дорогу, похожую на Голгофу,
Слёзы сжигали его лицо и глаза,
Серебро капало с церкви Спасителя
И луна тлела апельсиновым цветом»

Здесь и дальше каждый стих создано в точном соответствии содержания и формы. Здесь отсутствует лишняя метафористика, «преувеличение», помпезность» (Т. Шавладзе).

Внутренняя культура гармонии с эстетической красотой вводит нас к библейским сценам, где меняются разные вечные образы мирской жизни, нарисованные поэтом Гено Каландиа.

При помощи аллегорических образов (голубь Спасителя, Нового завета и т.д.) поэт подчеркивает читателю об национально-вероисповедального назначения.

Г. Каландиа доводит до нас своеобразную музыку неба и земли, но учитывает и то, что сегодняшней человек другой феномен, для которого и существуют обеты Всевышнего. Его парадигмы перешедшие из Библии прекрасные священные камни: гранат, роза, серебро, хрусталь... и связывает их с художественным словом, что придаёт яркость и традиционность.

В каждом «Песнопении» слышется смятение по-поводу потерянных земного и небесного рая.

Поэтическая душа стремится с помощью священного слова дойти до небес, так как только там верится ему настоящие счастья. Так феномен «Песнопении» Г. Каландиа обращена к Богу и родине. А новые формы, которым наполнен каждый стих, метафоры дают представление о возвышенности. Предсказание поэта таково: Человек должен при помощи творчества продолжить божественное дело, создавая прекрасное. Таким представляется поэту связь между библейским мифом и эстетикой.

Использованная литература:

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Medical Sciences

ANATOMICAL VARIATIONS IN ORIGIN OF DEEP FEMORAL ARTERY, MEDIAL CIRCUMFLEX ARTERY AND LATERAL CIRCUMFLEX ARTERY/ ILIOFEMORAL SEGMENT ARTERIES

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Background: Exact comprehension and expansive knowledge about the femoral blood vessel fragments is significant during the invasive and angiographic diagnostic procedures. The point of this study is to team up with a couple of studies done about the anatomical variations and original sites of branches of femoral artery. Precise anatomical variations of femoral artery are fundamental to minimize complications that can happen during invasive procedures.

Materials and methods: A sum of 15 articles was included in the review, analysing lower limbs. These articles have addressed a considerable geographical width originating from regions like Asia, America and Europe, covering the most of nations among them. The most ideal strategy for information gathering in a considerable lot of the examinations are cadaveric gathering information, while some in light of computer tomography (CT), computer tomography angiography (CTA) and intraoperative findings.

Conclusion: Many anatomical variations in the site of origin of profunda femoris artery (PFA), medial circumflex femoral artery (MCFA) and lateral circumflex femoral artery (LCFA) were similar in some studies and different in some. Awareness of these origins will allow the specialists to minimize iatrogenic injuries. These varieties are clinically huge and ought not be disregarded.

Key words: femoral artery, branches, origin, vascular surgery

Profunda femoris artery (PFA) shows variations in point of origin, cause and its branches. Experting on these clinical variations permits specialists to prevent flap necrosis, particularly tension fasciae latae when used in plastic and reconstructive surgery, in surgical repair of femoral hernias, clinical procedures in the femoral region and in hip joint replacement or preventing severe secondary haemorrhage while performing femoral artery puncture. Absence of information on varieties makes it challenging to deal with inconveniences that can happen during the procedures [1].

PFA begin from CFA as a common trunk with LCFA 10,6% cases and 9.09% from CFA as common trunk with MCFA and exceptionally phenomenal beginning with both of circumflex

arteries as trifurcation in 4,54% cases [1]. A cadaveric study illustrated that 90% on the right side and 95% on the left side PFA originate from the common femoral artery (CFA) while 10% (5% on each side) emerge from the CFA as a common trunk with MCFA and 5% dominantly on right side missing [2]. In the meantime exhibit 18% of males (20% on right and 16% on left) and 15% of females (15% on right and 15% on left) have the origin of PFA from CFA as common trunk with MCFA [3].

Not only the point of origin, but also the side of origin contrast in many cases. The majority originate from posterolateral, lateral, posterior sides, while the minority originates from different sides like posteromedial, medial, anteromedial. 53,3%, 18,17%, 10,61%, 3,03%, and 1,51% emerge from posterolateral, lateral, posterior, medial and anteromedial sides respectively [1]. 50% on the right and 70% on the left originate from the posterolateral side. 40% on the right and 10% on the left from posterior side while 5% on the right and 15% on the left from lateral aspect and only 5% cases from posteromedial side. It's absent in 5%, predominantly on the right side [2]. The most regular beginning of PFA are 42% on males and 42,5% on females in posterolateral aspect. 20% on males and 20% on females in lateral aspect. 24% on male and 27,5% on female, in posterior aspect while 14% on male and 10% on female in posteromedial aspect [3]. A cadaveric study shows that 50% of cases of PFA originate from the posterolateral aspect, second most frequent side was posterior in 46,9% of cases while 3,1% originated from the medial aspect [4]. Another study illustrate that 42% of cases are from posterolateral aspect, 28,5% from posterior, 10,5% from medial aspect [5]. Although the majority of studies show most regular origination as posterolateral aspect, A.S. Sabnis [12] studies demonstrate 86% of cases arise from the lateral aspect and 14% of cases arise from the posterolateral aspect. According to a case study by T. Siriporn [13], 44,6% and 30,8% arise from posterior and posterolateral aspects respectively. While 21,4% from lateral, 12,2% from posteromedial, 3,6% from medial aspect. According to study M.B. Samarawickrama [14] most of PFA arise from posterior 46%, 30% from posterolateral aspect, 23% from lateral aspect.

Table 1 – Prevalence of different origin of profunda femoris artery from femoral artery.

Author of the study	Posterolateral	Lateral	Posterior	Posteromedial	Medial	Anteromedial	Absent
T. Manjappa et al.	50% (R) 70% (L)	5% (R) 15% (L)	40% (R) 10% (L)	5% (L)			5% (R)
Ashraf Y. Nasr et al.	42% (M) 42,5% (F)	20% (M) 20% (F)	24% (M) 27,5% (F)	14% (M) 10% (F)			
Rajani et al.	53,03%	18,17%	10,61%		3,03%	1,51%	
Prakash et al.	50%		46,9%		3,1%		
Dixit et al.	42%		28,5%		10,5%		
Sabnis A.S	14%	86%					
Siriporn et al.	30,8%	21,4%	44,6%	12.2%	3,6%		
Samarawickrama M.B et al.	30%	23%	46%				

MCFA has a wide variety of origin from different arteries in the femoral segment. A cadaveric study concluded that the majority derived from PFA, 60% on the left and 40% on the right. Another, half of the lower extremities on the right side and 35% on the left side derived from common femoral artery. The least percentage is followed by CFA as a common trunk with PFA 10% on right and 5% on left [2]. Nasr et al. [3] portrayed that most common origin from PFA 60% each on male and female followed by origin from CFA 14% on male and 17,5% on female, CFA as a

common trunk with PFA 18% on male and 15% on female, superficial femoral artery (SFA) 8% on male and 10% on female. 67,2% get from PFA, 32% cases derive from the CFA [4]. One more study done by Dixit [5] revealed 15,3% of cases arise from CFA. 6,6% cases having right dominant origin from SFA. Just 4% of cases have derived from CFA as a common trunk with PFA. A cadaveric study found 59,5% arise from PFA, 33,3% from the common femoral artery. Just 2,4% of cases have an beginning from CFA as a common trunk with PFA [6]. 65% of cases in an investigation have an origin from PFA, while 31% and 3% arise from CFA and SFA respectively [7]. Another study exhibit 5 varieties in the origin of MCFA. As indicated by the information, the majority emerge from PFA 78,3%. The second highest frequency begins from the CFA 11,7%, 5% arises from the SFA. Origination from CFA as a common trunk with PFA and origination from CFA as a common trunk with LCFA have 1,6% each [8]. A cadaveric study exhibited 7 varieties in origin of MCFA. 50,2% got from PFA followed by CFA as a common trunk with PFA 14,6%, common femoral artery 13,1%, CFA with PFA and LCFA 9%, SFA 2,5%, CFA as a common trunk with LCFA 1,9% and 0,6% cases its absent [9]. Another study illustrates the origin of MCFA from PFA in its 64,6% cases. In 32,2% of the lower extremities, it originate from CFA followed by SFA in 1% of cases and 0,5% are absent. Rare form of variation 0,4% origin from external iliac artery [10].

Table 2 - Prevalence of origin of MCFA

Author of the study	CFA	PFA	CFA as a common trunk with PFA	SFA	CFA as a common trunk with LCFA	CFA with PFA and LCFA	Absent	External iliac artery
T. Manjappa et al.	50%(R) 35%(L)	40%(R) 60%(L)	10%(R) 5%(L)					
Ashraf Y. Nasr et al.	14%(M) 17,50%(F)	60%(M) 60%(F)	18%(M) 15%(F)	8%(M) 10%(F)				
Prakash et al.	32%	67.2%						
Dixit et al.	15,3%		4%	6,6%(R dominance)				
Lalovic et al.	33,3%	59,5%	2,4%					
Zlotowicz et al.	31%	65%		3%				
Vuksanovic-Bozagic et al.	11,7%	78,3%	1,6%	5%	1,6%			
Waseem Al-Talalwah	13,1%	50,2%	14,6%	2,5%	1,9%	9%	0,6%	
Krzysztof A. Tomaszewski et al	32,2%	64,6%		1%			0,5%	0,4%

The most widely recognized side of beginning of MCFA is the medial side. Besides concluded another 2 variation sides as posteromedial and posterior 25% on right, 15% on left and 15% on right, 10% on left respectively [2]. Medial side aspect was illustrated in the majority of studies, namely 60% on right and 75% on left [2], 58,9% [3], 59,5% [6], Samarawickrama et al. 62% [14], Siddharth et al. 63% [15].

Discussion about the variation in origin of the lateral circumflex femoral artery. Manjappa & Prasanna[2] portrays 80% on the right side and 70% on the left side of the lower extremities, LCFA arises from PFA, followed by 20% on the right side and 25% on the left side arise from CFA. In 5% of cases with the left prevalence emerge from CFA as a common trunk with PFA. With

respect to their study majority of LCFA arose from lateral side 100% on left side and 75% on right side. The posterolateral side has a 20% frequency with right side prevailing. 5% of cases arise from the anterolateral side with right side predominance. The cadaveric study [3], 45 adult human cadavers in respect to LCFA. It arose mostly from PFA 74% in males and 65% in females. The second highest frequent position of origin from CFA as a common trunk with PFA, 14% on male and 15% on female. Emerging from CFA has a predominance of 8% on males and 12,5% on females. The least frequent origin from superficial femoral artery is 4% in males and 7,5% in females. Study illustrates in respect to LCFA 83,3% of lower extremities arose from PFA, 6,7% cases arose from CFA, CFA as a common trunk with PFA and CFA as a common trunk with MCFA 1,6% each while 3,3% case LCFA was missing [8]. One more study describes 5 variations in their study with an uncommon rare variety. 65,55% from PFA followed by 14,3% from CFA as a common trunk with MCFA, 10,7% from CFA as a common trunk with PFA, rare form of trifurcation with PFA-MCFA in 7%, 2,4% from CFA [11].

In conclusion, we can summarize that the deep femoral artery originates from the common femoral artery in the posterior aspect. According to the majority of case studies, the middle and external circumflex arteries arise from the deep femoral artery with a predominance of the medial and lateral surfaces. But other minority cases should not be ignored because the likelihood of availability among different populations worldwide is very high. The ignoring of these cases will lead to devastating consequences like flap necrosis, iatrogenic injuries during surgeries that can be life threatening. Therefore, this systematic review summarizes the anatomical variations of the iliac-femoral artery segment among many different populations around the world in order to gain knowledge and reinforce the importance of these variations.

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ПРОБЛЕМЫ ДИАГНОСТИКИ И ЛЕЧЕНИЯ ВИСЦЕРАЛЬНОГО АКТИНОМИКОЗА

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Аннотация

Актиномикоз - это хроническое гнойное заболевание, которое вызывается лучистыми грибами, поражает людей трудоспособного возраста, длится годами и наносит значительный медицинский, социальный и экономический ущерб народному хозяйству. Заболевание, особенно его висцеральных форм, обусловлена формированием хронического специфического воспаления в мягких и костных тканях практически любых локализаций, присоединением в 70-80% случаев бактериальной флоры, нарушением функций пораженных органов, развитие в практике врачей различных специальностей и среди хронических гнойных заболеваний составляет 5-10%. Однако, организация центров не была осуществлена и специализированная помощь больным висцеральными «актиномикозами» по-прежнему запаздывает. Больше, как правило, поступает под наблюдение, с поздними сроками заболевания из-за трудностей его диагностики на ранних стадиях, недостаточного знакомства практических врачей с разнообразными клиническими формами заболевания, отсутствием во многих лечебных учреждениях микологических лабораторий и т.д. Это в свою очередь утяжеляет картину актиномикотических поражений, снижает защитные реакции организма, создает трудности в лечении, удлиняет периоды выздоровления. В ряде случаев трудности диагностики и лечения приводят к невозможности радикальной хирургической операции и инвалидности.

Все вышеизложенное указывает на необходимость усовершенствования диагностики актиномикоза на местах, разработки более эффективных схем консервативного лечения в пред- и послеоперационном периодах, методов хирургического лечения, разработки методов антибиотик- и иммунотерапии. Назрела необходимость изучать эпидемиологию и наметить пути профилактики этого заболевания.

Введение. Актиномикоз – относительно редкое заболевание, возбудителями которого являются актиномицеты. Актиномицеты являются бактериями, а не грибами, входя в порядок Actinomycetales, объединяющий микроорганизмы, способные к образованию ветвящихся и мицелиальных клеток. Характерной их особенностью, отличающей от грибов, является отсутствие перегородок внутри нитей, и весь мицелий состоит из одной клетки. Актиномикоз протекает в виде хронического гранулематозного воспаления с поражением различных органов и систем. Бактерии грамположительны, спор не имеют. В пораженных тканях возбудитель создает специфическое морфологическое образование – актиномикотические друзы, которые имеют вид сплетения тонких микроколоний

актиномицетов. При попадании актиномицетов в ткань, вокруг них образуется актиномикотическая гранулема, которая представляет собой воспалительную реакцию с усиленной миграцией нейтрофилов с формированием гноя, вокруг которого происходит скопление эпителиоидных и гигантских многоядерных клеток, а также ксантомных клеток с большой светлой пенистой цитоплазмой. При прогрессировании процесса происходит образование новых гранул, при слиянии которых формируются обширные очаги, придающие ткани сотовое строение, за счет желто-серых полей гранулемы с мелкими гнойными полостями. Гистологическая картина напоминает инвазивный рост злокачественных опухолей, за счет свойственного для актиномицетов роста в макроорганизме путем распространения по протяжению. Актиномицеты распространяются по клетчатке и межмышечным пространствам, образуя свищи как наружные, так и внутренние. Поэтому отличительной особенностью актиномикоза является инвазивный рост и свищеобразование. По локализации патологического процесса выделяют актиномикоз шейно-лицевой, легочный, кожный, абдоминальный и актиномикотическую септицемию. Именно редкость и опасность данной формы патологии, сложность и важность своевременной диагностики являются основной причиной актуальности рассмотрения каждого конкретного случая висцерального актиномикоза.

В данной статье представлен клинический случай редкой формы актиномикоза – висцеральный актиномикоз. Редкая встречаемость висцерального актиномикоза, отсутствие специфических симптомов заболевания, тяжелое течение и развитие осложнений, приводящих к инвалидизации пациентов работоспособного возраста и снижению качества жизни, делают актуальными вопросы своевременной диагностики и лечения данного заболевания.

Материалы и методы исследований. Проведен анализ истории болезни пациентки Т., 19 лет, которая находилась на лечении в отделении гнойной хирургии ШНОС г. Туркестан

Результаты исследования. Пациентка Т., 19 лет, поступила в экстренном порядке ШНОС в г. Туркестан 14.11.2018 г. С жалобами на наличие болезненного инфильтрата в правой подвздошной области, повышение температуры тела, общую слабость. За две недели до госпитализации беспокоила периодическая тянущая боль и дискомфорт в правой подвздошной области. Через 3-4 суток в данной области появилось умеренно болезненное уплотнение. Самостоятельно не лечилась, за медицинской помощью не обращалась. Инфильтрат увеличивался в размере, усиливалась боль в нём, к концу второй недели заболевания стала повышаться температура тела до 38,0- 38,5 °С, нарастала общая слабость, ввиду чего 13.11.2018 г. Вызвала бригаду скорой медицинской помощи, доставлена в Муниципальный перинатальный центр г. Туркестан Пациентка была госпитализирована в гинекологическое отделение, для обследования и лечения с учётом анамнеза заболевания и недавних родов (роды были в августе 2015 г., первые, естественные, в срок, без каких-либо интранатальных и постнатальных осложнений). При обследовании в ОАК Hb-79 г/л, L-27,7 x 10⁹ /л с резким сдвигом лейкоформулы влево (п/я-24%, с/я-60%), показатели биохимического анализа крови в пределах нормы. Выполнено УЗИ органов малого таза, брюшной полости – в брюшной полости обнаружено образование, занимающее справа гипогастрий, мезогастрий. Задняя стенка мочевого пузыря и его дно утолщены до 8-9 мм. Стенка гипэхогенная, слоистая, структура нарушена. Внутренний контур мочевого пузыря чёткий. Наполнение мочевого пузыря слабое. Из верхней части мочевого пузыря исходит образование примерно 110x40 мм с неровным контуром, неоднородной солидной структуры, обильно васкуляризованное, имеющее сосудистую связь с мочевым пузырём, касающееся матки, чётко дифференцирующееся от неё, окружено салъником. На уровне средней и верхней части образования резко утолщена мышца передней брюшной стенки, снижена эхогенность, локально нарушена граница с

вышеописанным образованием, имеется сосудистая связь с ним. Выше, в подкожной жировой клетчатке, образование примерно 130x45 мм с неровными местами нечётким контуром, выражено неоднородной солидной структуры, с расширенными сосудами. Образования образуют единый конгломерат. 14.11.18 г. пациентка была и переведена в отделение гнойной хирургии с предварительным диагнозом – Новообразование забрюшинного пространства. Абсцедирование 14.11.2018 г. По показаниям была выполнена экстренная операция, в ходе которой вскрылся абсцесс в правой подвздошной области (выделилось около 40,0 мл гной), при ревизии была обнаружена опухоль передней брюшной стенки, занимающий правый мезогастрий и распространяющаяся в сторону мочевого пузыря к лону. Ткань опухоли представляла собой детрит черно-багрового цвета, фрагментировалась, часть детрита взята на гистологическое исследование. Случай был расценен как злокачественная опухоль передней брюшной стенки, T4NxMx с прорастанием мочевого пузыря и абсцедированием. На 4-е сутки после операции, получен результат гистологического исследования, который не подтвердил онкологический процесс. В исследуемом материале обнаружены друзы актиномикоза. На 6-е сутки выполнено контрольное УЗИ передней брюшной стенки и мочевого пузыря – в околопупочной области справа несколько ниже пупка определяется гипоэхогенный участок около 11x22 мм с неровными, но довольно чётким контуром с неоднородной структурой – инфильтрат передней брюшной стенки. В подвздошной области справа определяется участок с неровным нечётким контуром 100x118 мм с выражено неоднородной структурой без жидкостного компонента с переходом на паховую область – инфильтрат. 02.12.2018 г. выполнена операция – релапаротомия, иссечение части мышечно – апоневротических тканей брюшной стенки (апоневроза наружной косой мышцы живота, внутренней косой мышцы, поперечной мышцы, прямой мышцы), резекция мочевого пузыря, тубэктомия справа, паравазальной лимфодиссекции справа, дренирование брюшной полости.

Резекция выполнена по причине поражения тканей грибковым процессом. В материале резецированного участка мышц передней брюшной стенки получена фиброзно-мышечная ткань с полосами воспалительной инфильтрации. Данная морфологическая картина характерна не только для актиномикоза, но и для любого неспецифического воспаления. Но, учитывая данные предшествующих гистологических исследований, можно утверждать о том, что данная картина в исследуемых материалах все-таки более характерна для актиномикоза. В гистологическом препарате резецированного участка мочевого пузыря и правой маточной трубы было обнаружено обилие ксантомных клеток, свойственных актиномикозу. К оперативному лечению было добавлено консервативное – флуконазол, хемомицин, метрогил. После окончания курса антибактериальной терапии начато иммуномодулирующее лечение актинолизатом (4 курса по схеме 1 курс – №25, 2 курс – №15, 3 курс – №10, 4 курс – №5, интервал между курсами 1 месяц). На фоне проводимого лечения клинически и по данным лабораторных исследований отмечалась положительная динамика. Пациентка выписана в удовлетворительном состоянии на 44-е сутки после первой операции.

Выводы. На примере данного клинического случая, было показано сходство висцерального актиномикоза с онкологическим процессом. Инвазивное поражение тканей, неспецифическая клиническая картина определяет трудность диагностики и сложность постановки верного диагноза. Диагноз актиномикоза устанавливается только на основании результатов гистологического исследования материала полученного из очага воспаления.

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ПЛАЗМОЛИФТИНГ КАК ИННОВАЦИОННЫЙ МЕТОД ЛЕЧЕНИЯ В МЕДИЦИНСКОЙ СФЕРЕ

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Аннотация: В данной статье рассматривается тема методики плазмолифтинга, которая совершила настоящий прорыв в современной медицине. Плазмолифтинг (PRP терапия) как особая методика естественного омоложения универсальна, она получила свое широкое применение не только в косметологии, но и в гинекологии, урологии, ортопедии, стоматологии и во многих других направлениях медицины.

Ключевые слова: *плазмолифтинг, оптимизация, регенерация, аутоплазма, тромбоцит*

Оптимизация и ускорение регенерации тканей – одна из актуальных задач современной медицины. Особенно в наши дни, когда сильнейшие антибиотики перестают справляться с мутирующими бактериями, а заживление ран, лечение артрозов, артритов, травм позвоночника, остановка кровотечений становится более трудоемким и долгосрочным процессом. Поэтому на передний план в борьбе со многими проблемами со здоровьем выходит процедура *плазмолифтинга*. Она в отличие от антибиотиков не влияет на систему пищеварения человека, не имеет индивидуальной непереносимости, а также способствует укреплению иммунной системы с помощью возможностей самого организма, насыщению клеток кислородом, активизации роста стволовых клеток, быстрому заживлению ран, восстановлению поврежденных тканей, не имея при этом побочных эффектов.

Плазмолифтинг или метод PRP - это точечное введение плазмы крови пациента, обогащенной его же тромбоцитами, в проблемные места кожи.

Аутогемотерапия - подкожное или внутримышечное введение пациенту собственной крови, взятой из вены. *Аутогемотерапия* достаточно устаревший прием, он представляет метод лечения ряда заболеваний путем введения пациенту подкожно или внутримышечно его собственной крови, взятой из вены. Отличие аутогемотерапии от *плазмолифтинга* в том, что в первом случае пациенту вводилась его «чистая» венозная кровь, во втором случае аутоплазмы.

Аутоплазмы – вещества, близкого по своему составу к естественной плазме крови, но при этом содержат компоненты, стимулирующие регенерацию тканей. Поэтому смело можем говорить о том, что всё новое – это хорошо забытое старое, как и в случае с *плазмолифтингом*. Плазма крови обладает уникальными свойствами, благодаря ей активируются стволовые клетки организма, улучшается обмен веществ.

Говоря о *плазмолифтинге* первое, что приходит на ум это применение этого метода в косметологии как процедуру по омоложению, а также по лечению пигментных пятен,

угревой сыпи, растяжек и рубцов, выпадения волос. Современная медицина не стоит на месте и выходит на новый уровень, используя плазмолифтинг не только в косметологии, но и находит ему широкое применение в стоматологии, гинекологии, урологии, травматологии, спортивной медицине, ортопедии, трихологии.

Изначально *плазмолифтинг* носил название «*аутогемотерапии*», получившее еще в 1913 году французским дерматологом Поль Раво. Процедура представляла собой незамедлительное введение аутологичной цельной крови пациенту под кожу. Результат не заставил себя ждать.

1905 год немецкий хирург Август Бир применил сыворотку аутогенной венозной крови для лечения воспаления легких. Кроме того, он установил, что инъекции собственной крови пациента ускоряют процесс заживления переломов костей. Аутогемотерапия и аутосеротерапия (подкожное или внутримышечное введение пациенту сыворотки его собственной крови) входят в число наиболее применяемых вспомогательных терапевтических методов. До начала эпохи антибиотиков других способов борьбы с инфекциями не существовало. И с периода 1935-1980 годы удалось успешно излечить дерматоз, крапивницу, экземы, пузырьчатки и гангренозные язвы сывороткой аутогенной крови пациентов. 1980 год американский челюстно-лицевой хирург Роберт Маркс впервые в клинической практике применил плазму крови в форме геля. Результаты исследований позволили сделать важнейшее открытие: тромбоциты содержат белковые факторы, стимулирующие процессы клеточной регенерации.

И вот уже в 2003 году российские врачи и исследователи Р.Р.Ахмеров и Р.Ф.Зарудий применили тромбоцитарную аутологичную плазму для лечения воспалительных заболеваний и атрофических процессов в постоперационном периоде. Таким образом, была создана предпосылка для разработки новаторской технологии, получившей название «*Плазмолифтинг*» (*Plasmolifting*) или же PRP терапия. Метод плазмолифтинга не новейшее открытие современной медицины, точнее получил он широкое применение последние 15 лет, а до внедрения этой технологии Ренатом Ахмеровым и Романом Зарудием PRP терапия носила название «*Аутогемотерапии*».

Рассмотрим технологию проведения процедуры *плазмолифтинг*. В первую очередь проводится забор крови из вены пациента в специальные пробирки с гепарином при помощи вакутейнерской системы в объеме 20 мл. Пробирки для забора крови также усовершенствовались. Теперь они стерильны, выполнены из инертного материала и плотно запечатаны. Внутри пробирки – вакуум, что полностью исключает попадание в кровь патогенных микроорганизмов. Тончайшие сеточки-мембраны помогают предотвратить смешивание разделившихся слоев плазмы. Таким образом, удается получить чистейший биоматериал с живыми клетками. После забора крови, пробирка переносится в специальном контейнере для биологических материалов в лабораторный блок, где осуществляется ее центрифугирование в ламинарном шкафу сразу же, после доставки крови в лабораторию. На аппарате устанавливаются программы, подбирающие режим работы центрифуги так, чтобы при вращении не разрывались клеточные мембраны.

Режимы центрифугирования для настольных центрифуг: 2200 об/мин в течении 15 мин, либо 3000 об/мин в течении 10 мин.

Кровь в пробирке разделяется на две составляющие: эритроцитарный сгусток красного цвета (расположенный в нижней части под углом к стенке пробирки) и богатую тромбоцитами плазму (БотП) (расположенную в средней и верхней части пробирки). Отделившуюся плазму, обогащенную тромбоцитами, вводят инъекционно в проблемные участки. Проще говоря, собственную плазму крови пациента вводят в его же организм с целью стимуляции иммунной системы, регенерации и обмена системы жизнедеятельности для выполнения всех процессов в полную силу. Если в организме имеются, какие либо

нарушения, помимо зоны, которую необходимо восстановить, то метод плазмолифтинг регенерирует не только поврежденный участок, но и приводит в порядок состояния организма в целом. Это общие правила проведения процедуры *плазмолифтинга* независимо от направления в медицине, будь то гинекология или стоматология.

PRP терапия применяется во многих направлениях медицины. Так, например, в стоматологии *Плазмолифтинг* - это настоящий прорыв в стоматологии, позволяющий безболезненно проводить сложные челюстно-лицевые операции. Целью этой технологии является восстановление структуры десен и снижение разрушающих воздействий на костную ткань, а также восстановление изначальных свойств зубов, включая их цвет и естественную фактуру ткани. Еще одной особенностью метода выступает нейтрализация болезненных состояний и ряда хронических заболеваний пародонта. В частности, плазмолифтинг считается эффективным способом борьбы с неприятным запахом изо рта, который нередко наблюдается даже при отсутствии выраженных воспалительных процессов. Его появление связано с развитием бактерий на фоне низкого иммунитета, когда организм не может в должной мере подавлять их активность. В таком случае применение технологии позволяет стимулировать естественные процессы и добиться стойкого результата уже после однократного выполнения процедуры. Результаты, полученные в ходе применения *плазмолифтинга* в стоматологии: заживление ран после удаления зубов происходит быстрее и менее болезненно, импланты приживаются гораздо лучше, ткань восстанавливается после любых видов повреждений, десна обретают здоровую окраску, их структура совершенствуется, кровоточивость десен устраняется, неприятный запах исчезает, т.к. гнилостные процессы останавливаются, боли купируются, предотвращается пародонтит или успешно лечится уже имеющееся заболевание.

При всей своей эффективности *плазмолифтинг* – одна из самых безопасных процедур современной медицины. Она исключает возможность аллергических реакций и побочных явлений, так как «лекарство» изготавливается из крови самого пациента и не содержит чужеродных примесей. Плазмолифтинг в гинекологии в подавляющем большинстве случаев имеет положительный результат. Процедура оказывает мощное влияние на активизацию клеточного обмена веществ, прекращает развитие бактерий и улучшает микрофлору влагалища.

В гинекологии основными причинами для применения аутоплазмы являются: воспаления органов малого таза, спаечные процессы, дистрофические заболевания (лейкоплакия шейки матки) эрозия шейки матки.

Плазмолифтинг в травматологии позволяет ускорить реабилитацию после травм, постановки протезов и операционных вмешательств. Наиболее часто к плазмотерапии прибегают спортсмены: данный метод помогает им ускорить процесс заживления и в скором времени вернуться к тренировкам. Таким образом, максимально быстро и эффективно излечиваются растяжения связок, вывихи и прочие травмы. Метод, восстанавливающий опорно-двигательные функции – *плазмотерапия*, либо *плазмолифтинг* суставов. Действие процедуры при таких патологиях, как воспаление суставов, артроз, остеохондроз, дефекты костной ткани, спазмы мышечных волокон, исключительно положительное. Огромный плюс Plasma LIFT в том, что он позволяет вылечить болезнь, не прибегая к оперативному лечению, при этом нет необходимости пребывания в стационарной клинике. Пациент ведет привычный для него образ жизни, периодически посещая клинику для очередной процедуры, а также для контроля эффективности лечения. PRP ускоряет регенерацию тканей, улучшает их питание за счет активации обменных процессов и ускоренного развития капиллярной сети в месте инъекции.

Плазмотерапия в травматологии демонстрирует следующий эффект: устраняет спазмирование мышц, купирует суставные боли, расширяет ограниченную амплитуду движения в суставе, восстанавливает объём жидкости в суставе, укрепляет местный иммунитет в суставе, активизирует восстановление хрящей и костей, укрепляет ткани, улучшая тканевой обмен, сокращает восстановительный период после постановки имплантатов, оперативных вмешательств, травм, нарушений целостности кости, мышц и сухожилий.

В гинекологии в среднем требуется от 5 до 10 процедур с перерывом 5–7 дней в зависимости от состояния здоровья пациентки и ожидаемого результата. Эффект начинает проявляться уже после первой инъекции. В стоматологии достаточно и одного посещения, так как от запаха изо рта можно избавиться уже после первого визита. Если же речь идет о лечении и профилактики пародонтоза, то данная процедура выполняется раз в три месяца. Результат держится от 2 до 5 лет при соблюдении гигиены полости рта и заботы о деснах. При необходимости процедуру можно повторить. А вот, например, в травматологии количество посещений и процедур будет устанавливаться самим врачом, так как процесс выздоровления зависит от состояния пациента и размеров повреждений. Стоимость такой процедуры составляет от 5000 до 30000 тенге. В среднем пациент оставляет от 15-20 тысяч тенге. Но красота и здоровье требует жертв, особенно в том случае если они будут оправданы.

Результаты проведения PRP терапии: Большой процент выздоровления больных; улучшение всего состояния организма в целом, независимо от зоны, нуждающейся в лечении; улучшение иммунной системы; профилактика многих заболеваний; регенерация поврежденных участков.

Плюсы PRP терапии: Безопасность; безболезненность; быстрый результат.

Итак, *плазмолифтинг* настоящий прорыв в медицине. Это возобновляемый источник здоровья, содержащийся в нашей собственной крови. *Плазмолифтинг* существует лишь первые 10 – 15 лет, но уже успел хорошо зарекомендовать себя не только в косметологии, но и во многих направлениях медицины. Учитывая все плюсы этой процедуры и отсутствие ее минусов, при соблюдении всех правил стерильности, этот метод без преувеличения можно назвать современным эликсиром молодости и здоровья.

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EPIDEMIOLOGY AND ORGANIZATIONAL FEATURES BREAST CANCER SCREENING

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Annotation: This paper discusses the clinical and organizational aspects of early diagnosis of breast cancer, based on its secondary prevention using a population method of active detection of this pathology in clinically asymptomatic individuals - screening. A detailed algorithm is presented and the principles of organization and clinical diagnostic capabilities of this method are reflected. It has been shown that the use of mammography based on the use of low-dose X-ray radiation allows a differentiated approach to the diagnosis, development of management tactics and targeted treatment of these patients.

Key words: breast cancer, screening, mammography.

The concept of "Screening" in medicine (English screening - screening) is a method of actively identifying individuals with any pathology or risk factors for its development, based on the use of special diagnostic studies, including testing, in the process of mass examination of the population or its individual contingents. The key concept of screening is the detection of oncopathology at a stage when further treatment changes its prognosis and further clinical course. It is carried out for the purpose of early diagnosis of a disease or predisposition to it, which is

necessary to provide timely treatment and preventive care. Screening results are also used to study the prevalence of the disease (or group of diseases) being studied, risk factors for its development, and their relative importance. The main conditions for screening are the availability of trained personnel and a standard approach to identifying the trait under study and evaluating the results. The applied methods should be sufficiently simple, reliable and reproducible. At the same time, it is necessary that they have sufficient sensitivity and high specificity [1,2,3].

Breast cancer is in the 1st ranking place in the structure of the frequency of malignant tumors of both sexes of the population with a specific weight of 15.4% (2020 - 14.5%). This situation has been stable since 2004. In addition, breast cancer occupies the 1st ranking place and constantly remains at this position in the structure of female oncopathology.

The incidence rate of breast cancer per 100 thousand population in 2021 in the country as a whole increased to 26.3 (22.8 in 2020). In the structure of the incidence of regions, breast cancer occupies the 1st ranking place in most regions and cities of the country, except for four: Akmola, Atyrau, Kyzylorda and North Kazakhstan regions, where lung cancer has taken the 1st ranking place.

Above the average republican level, the incidence of breast cancer was established in 9 regions of the country: Pavlodar - 47.4 - the highest level, Karaganda - 40.1, East Kazakhstan - 39.9, North Kazakhstan - 38.2, Kostanay - 35.8, Akmola - 29.8, West Kazakhstan - 28.4 regions and Almaty - 34.5, Nur-Sultan - 28.4. The indicator is lower in 8 regions: Turkestan - 11.7, Kyzylorda - 14.4, Zhambyl - 15.1, Atyrau - 15.7, Mangystau - 17.3, Almaty - 17.7, Aktobe - 24.3 regions and Shymkent - 21.9 per 100 thousand population [4].

In the structure of the causes of death of both sexes from this disease, for the twelfth year in a row, it occupies the 3rd position, amounting to 8.7% in 2021 (7.8% in 2020). In general, the mortality rate from breast cancer in the republic increased from 5.9 to 6.2 per 100,000 population.

The regions where the mortality rate from breast cancer is above the average level in the republic include: North Kazakhstan - 11.4 (maximum level), Pavlodar - 10.0, East Kazakhstan - 8.5, Akmola - 8.2, Kostanay - 7.5, West Kazakhstan - 6.9 regions and years. Almaty - 9.5 and Nur-Sultan - 6.6 per 100 thousand population. The lowest rates were noted in Atyrau - 3.0, Aktobe - 3.5, Turkestan - 3.6, Mangystau - 3.6, Kyzylorda - 4.1, Zhambyl - 4.8 and Almaty - 5.8 regions [4].

Mass screening to identify breast cancer patients should mainly involve healthy women without any signs of the disease or symptoms. Screening not only helps to detect hidden forms of cancer that can be treated, but also has psychological value for women. As a result of screening, women are convinced that they do not have breast cancer, and this is the most important potential success of such programs. While the ultimate goal of screening is to reduce breast cancer mortality, its immediate goal is to detect cancer before clinical manifestation. However, breast cancer is a heterogeneous disease, which can significantly affect the effectiveness of screening. Screening models for breast cancer are usually based on the fact that the majority of detected tumors are invasive cancers in the early stage of progression. In addition, it must be taken into account that the detection of cancer (or its precursors) before clinical manifestation increases the risk of false positive diagnosis [5,6].

Mammography has a sensitivity of 95% and a specificity of 97%. These indicators decrease when examining women with denser mammary glands (young age, use of hormone therapy), with low quality mammography, and also with insufficient qualifications of the radiologist. Detection of high-grade invasive cancer by screening, when the tumor is not yet detected by clinical examination (palpation), means the possibility of reducing mortality from breast cancer [7].

The stage of examination for early detection of breast cancer in the Republic of Kazakhstan includes [8]:

1) mammography of both mammary glands in two projections - direct and oblique in the mammography room of the city, district polyclinic (mobile medical complex). All digital

mammograms in the presence of a system for archiving and transferring medical images are copied to CDs and other electronic media and transferred to the server of the mammography room of the cancer center (OC) using specialized licensed software integrated between medical organizations; in case of impossibility of digital transmission - they are printed on X-ray film at a scale of 1:1 - 100% (1 patient - 1 set - 2 or 4 mammograms) with subsequent transfer to the mammography room of the OC;

2) interpretation of mammograms according to the BI-RADS classification (M0t, M0d, M1, M2, M3, M4, M5) by two or more independent radiologists of the same medical organization (MC) - double reading or different medical organizations: a radiologist of the mammography room city, district polyclinic (mobile medical complex) - the first reading, and the radiologist of the mammography room of the OC - the second reading;

3) in-depth diagnostics - targeted mammography, ultrasound examination (hereinafter - ultrasound) of the mammary glands, trepanobiopsy, including under ultrasound or stereotaxic control for histological examination, which is carried out in case of detection of pathological changes on mammograms (M0d) in the mammography room of the OC.

◆ An average medical worker or a responsible person of the organization of outpatient care sends the patient for mammography to the district, city polyclinic.

◆ The X-ray laboratory assistant of the mammography room of the city, district polyclinic (mobile medical complex) performs mammography, fills out a referral for double reading of mammograms and transmits the referral through information interaction.

◆ Radiologist of the mammography office of the city, district polyclinic (mobile medical complex): fulfills the requirements for the safety and quality of mammographic examinations; evaluates the quality of the images provided and the correctness of the installation; performs repeated mammography in the M0t category (technical errors of mammography); determines the radiological density of the mammary glands on the ACR scale (A, B, C, D) indicating this parameter in the study protocol; conducts the first reading of mammograms with interpretation of the BI-RADS classification results. In the M0d category (undetermined or suspicious radiological changes requiring additional examination), the study protocol indicates the predominant pathology: education, asymmetry, violation of architectonics, microcalcifications; sends mammograms, electronic copies of mammograms through the archiving system and transfer of medical images to the workplace of the mammography office of the OC together with directions for double reading of mammograms; directs low-dose computed tomographic images (hereinafter referred to as NDKT images) through the system of archiving and transferring medical images to the workplace of the computer tomography office of the OC together with copies of images recorded on CD-ROMs or other electronic media and directions for double reading of NDKT images.

◆ The radiologist of the mammography room of the OC: evaluates the quality of the provided images and the correctness of the styling. Viewing digital x-ray images transferred to the server or on digital media (CD, DVD) is carried out on a monitor for interpreting digital x-ray images with a resolution of at least 5 megapixels, which has a certified grayscale transmission in accordance with the DICOM standard; conducts a double (second) reading of mammograms with the interpretation of the results according to the BI-RADS classification, using, if necessary, archival images. Organizes the third reading according to indications. With double reading, an independent interpretation of the images is carried out (blinding method - the second radiologist does not know the results of the first reading); in the M0m category (technical errors in mammography), recommends repeat mammography; in the M0d category (uncertain or suspicious radiographic changes requiring additional examination), the study protocol indicates the predominant pathology: education; asymmetry, violation of architectonics, microcalcifications; recommends that the outpatient care organization, according to indications, invite the patient for in-depth diagnostics (targeted mammography, ultrasound of the mammary glands, trephine biopsy,

including under ultrasound or stereotaxic control, followed by histological examination of the material); collects and archives all mammograms (films and electronic media) made as part of the examination. The shelf life of mammograms is at least 3 years after leaving the age subject to a screening study; the results of the double (second) reading are transferred to the outpatient care organizations through information exchange.

◆ Indications for in-depth diagnostics are the conclusions of double reading mammograms M0d (uncertain or suspicious X-ray changes requiring additional examination).

◆ In-depth diagnostics is carried out in two stages. At the first stage, ultrasound is performed, according to indications, targeted mammography, possibly with an increase (with asymmetry, violation of architectonics and the presence of microcalcifications). When visualizing a suspicious pathology (M4 and M5), the second stage is performed - trepanbiopsy, including under ultrasound control and stereotaxic control for histological examination.

◆ Histological examination is carried out in the laboratory of pathomorphology or pathological bureau. Morphological interpretation of the biopsy is carried out in accordance with the recommendations of the World Health Organization.

◆ Physician or responsible person of the outpatient care organization:

1) upon receipt of a mammography result according to the BI-RADS classification:

- in case of M0t (technical errors in mammography) - sends the patient for a second X-ray examination to the mammography room of the city, district polyclinic (mobile medical complex);

- with M0d (undefined or suspicious X-ray changes requiring additional examination) - sends the patient for in-depth diagnostics to the mammography room of the OC;

- with M1 (no changes detected) - recommends that the patient undergo a follow-up mammography examination after 2 years. With radiological density of the mammary glands, C and D are sent for ultrasound of the mammary glands to exclude a false-negative result of mammography;

- with M2 (benign changes), refer the patient for a consultation with an oncologist (mammologist) of the clinical diagnostic department, followed by a screening mammography examination after 2 years;

- with M3 (probable benign changes) - sends the patient for short-term dynamic radiation observation to the local doctor with the recommendation of control mammography or ultrasound in 6 months;

- with M4 (signs that cause suspicion of malignancy), M5 (practically reliable signs of malignancy) and if it is technically impossible to perform a trepanbiopsy or a biopsy is refused, a referral to an oncologist (mammologist) of the clinical diagnostic department for dynamic observation and decision on the verification of the identified pathology;

2) upon receipt of the result of a histological examination:

- benign education - refers the patient to an oncologist (mammologist) of the clinical diagnostic department for dynamic monitoring, followed by a screening mammography examination after 2 years;

- formation with an indeterminate malignant potential or carcinoma in situ - refers the patient to the OC for consultation and treatment, followed by dynamic observation by an oncologist (mammologist) of the clinical diagnostic department at the place of her attachment;

- malignant neoplasm - refers the patient to the OC for treatment and follow-up;

3) communicates the results of the screening examination to the patient in any available way (by telephone, in writing, through electronic means of communication);

4) enters the results of double reading, in-depth diagnostics, histological examination, recommendations of the radiologist of the OC mammography room into the information system.

Establishing the size of the primary tumor is especially important in screening. Tumor size is an important criterion for evaluating the quality of screening and determining the ability of X-

ray mammography to detect non-palpable tumors. Therefore, it is extremely important that pathologists measure tumor diameter as accurately as possible. The smaller the size of the primary tumor, the greater the likelihood of error in determining its size.

Thus, the goals of mammographic screening can only be achieved with proper organization, high quality of conduct, active participation in population screening, the use of highly sensitive technology, accurate subsequent diagnosis of detected tumors, and modern treatment. High-quality mammographic screening leads to early diagnosis of breast tumors, which, in turn, improves the effectiveness of treatment and improves the prognosis of the disease. Those women who, for one reason or another, do not participate in this screening should be informed that there are no other screening methods that could also effectively reduce mortality from breast cancer.

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Sociological Sciences

PROMOTION OF WOMEN TO MANAGEMENT POSITIONS: COMPARATIVE ANALYSIS

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The work of women and men is valued differently due to gender bias. This affected not only the public sector, but also the private sector. There are very few statistics in Kazakhstan: a very small number of private companies are covered, which does not give a sufficient picture of the collection of information regarding women's leadership positions.

Men and women may or may not have an innate psychological predisposition for traditional roles: men must be aggressive, competitive, self-reliant, take risks; women should be supportive, caring, intuitive, sensitive, sociable, but, of course, both men and women are capable of the whole range of behavior. Indeed, male and female roles have already begun to expand and merge. In the coming decades, as the socialization of boys and girls and the experiences and expectations of boys and girls steadily become more androgynous, differences in behavior in the workplace will continue to blur. At present, however, we are still plagued by differences in perceptions and behaviors that make the integration of men and women in the workplace unnecessarily difficult and costly.

Key words: leadership positions, women, gender, glass ceiling, glass labyrinth, women in leadership positions

Currently, the work of women and men is valued and paid differently depending on the accepted customs, laws and corporate rules (public and unspoken) in different countries. Most often, women's work is devalued and paid less, especially in the case of the countries considered in this study. Women have to face stereotyped judgments and prejudices on their way to promotion to leadership positions. The article explores many of the factors that have been considered as potential causes of women's underrepresentation in leadership positions, as well as the role of the social worker in supporting women in their advancement. The study also examined the emergence of gender stratification in gender-balanced organizations in Kazakhstan, the United States, and China, and the impact of reducing recruitment bias and development opportunities in gender-stratified organizations (Hannah Samuelson, 2018).

As part of the study, the works of foreign authors such as Hanna Samuelson, Benjamin Levin, James Grand, Lucas-Perez, Mingos-Vera, Baishauli-Soler, Martin-Ugedo, Sanchez-Marin and others were considered. The study examined the practice of appointing women to leadership positions in the largest companies in the US and China as a foreign example of supporting women in promotion to leadership positions. According to research, women remain in a minority compared to their male counterparts, with women occupying only about 5% of CEO positions in the Fortune 500 and S&P 500 rankings (Benjamin Levin, 2018). The underrepresentation of female leaders has been associated with a variety of "undesirable" outcomes for organizations and employees, including decreased satisfaction with the representation of women instead of men,

decreased perceived attractiveness of the organization to successful candidates, and decreased diversity of ideas and organizational strategies. According to the data examined, it is not easy to identify the reason for the underrepresentation of women leaders for various reasons. For example, according to the US Bureau of Labor Statistics, women now make up 57% of the US workforce. Furthermore, evidence suggests that the rarity of women in leadership positions cannot be explained by inadequate leadership skills (James Grand, 2018).

Comparative data analysis was taken as the research methodology. The article explores the mechanisms for promoting women to leadership positions in the practice of private business entities in Kazakhstan and foreign countries. Companies of various industries and activities (financial companies, consulting companies, jam companies, companies in the field of trade, etc.) that are small, medium and large businesses were studied.

The selection criteria were the level of development of countries (Kazakhstan is a developing state; the USA, China are developed countries), geographical location (USA is a country geographically located on another continent, China is a state neighboring Kazakhstan) and cultural characteristics of countries (USA is a country of freedom and equality, China is a country with a patriarchal system and ideology, like Kazakhstan). The study is based on the period from 2000 to 2021, with an emphasis on the last 5 years.

Within the framework of the study, a comparative analysis of the representation of women in senior positions in companies of the above-mentioned countries was carried out on the basis of official statistics, articles and monographs.

The purpose of the study is a comparative analysis of the mechanisms for promoting women in companies in Kazakhstan, the United States and China and identifying the reasons for the underrepresentation of women in leadership positions.

The results of the study showed that gender differences in the promotion of women to leadership positions influenced the increase in the turnover of women due to lack of promotion, causing the phenomenon of "sticky sex" and the concept of "career labyrinth". Studies have shown that the presence of female directors increases attendance at board meetings and improves internal company management. Compared to their male counterparts, they are more strict leaders (Adams & Ferreira, 2009), less opinionated (Daily & Dalton, 2003), and more responsible (Fondas & Sassalos, 2000). Women leaders have increased board independence (Lucas-Pérez, Minges-Vera, Baixauli-Soler, Martin-Oguedo and Sanchez-Marin 2015) and have played a significant role in reducing the level of profit management (Gull, Nehili, Nagati and Chtiui, 2018 .) and investment decision risks (Faccio et al., 2016). Some countries, such as Sweden, Norway, and Spain, have promulgated policies encouraging or requiring that a certain proportion of corporate boards of directors be composed of women (Qi & He, 2015). The growing participation of women at high levels in business has made them a new force in decision making in enterprises. Due to the fact that the promotion of women to senior positions in corporations in Kazakhstan is not popular and is generally not considered within the framework of social work, it is proposed to introduce foreign practice into Kazakhstan realities by adopting the necessary legal acts in the legislation of Kazakhstan, supporting and providing preferences for companies in which the number women in leadership positions will be equal to the number of men.

The effects of gender stratification in leadership are usually interpreted through the glass ceiling metaphor, which draws attention to the barriers that prevent women from moving vertically up the organizational hierarchy (e.g., Baumgartenre and Schneider, 2010; Hubler, Wein, and Remmon, 2009; Ragins, Townsend, and Mattis, 1998). However, the key point here is the fact that the tendency to assume the existence of such "top-down" barriers is quite popular (i.e. there are glass ceilings that prevent women from taking leadership positions).

More modern explanations of gender stratification in leadership have begun to shift towards newer approaches. For example, Eagley and Carly (2007) highlight differences in career

trajectories for men and women, noting that women's paths often take more complex and circuitous paths than their male counterparts. While men strive to climb the career ladder, women more often have to overcome the career "maze". These and similar concepts have begun to draw more attention to the unique barriers that women face throughout the process of taking office and promotion, which contribute to gender stratification in leadership positions. For example, the perception that women are more likely to experience conflict between work and family, or that being a woman is incompatible with being a leader, can influence the perception of an organization in ways that create difficult barriers for women workers to goal achievement and prejudice against women.

Women and men generally report an equal desire for development and leadership opportunities in practice, and studies show that women are often given less difficult or less "critical" opportunities than men (De Pater, Van Vianen, & Bechtoldt, 2010 ; Silva and others). For example, King et al. found that although men and women reported receiving the same number of development opportunities in their workplace, the prestige and visibility of opportunities received by women were significantly lower than those of men. Some attribute these patterns to the persistence of stereotypes about women being less competent at problem solving and therefore less able to excel at difficult problems (e.g., ambivalent sexism; Glicke & Fiske). While previous computational models have explored the impact of perceived gender differences in performance on gender stratification (eg Martell, Lane and Emrich 1996; Robison-Cox, Martell and Emrich), they have not been directly related to developmental opportunities in the context of leadership. Thus, potential gender differences are taken into account in the face of the emergence of low representation of women in leadership positions.

The results of the study showed that stereotyped judgments, established traditions and culture, as well as biased attitudes towards women are the main reasons for the underrepresentation of women in leadership positions in companies in Kazakhstan, the United States and China. Within the framework of the study, a comparative analysis of the representation of women in senior positions in companies of the above-mentioned countries was carried out on the basis of official statistics, articles and monographs. The purpose of the study is a comparative analysis of the mechanisms for promoting women in companies in Kazakhstan, the United States and China and identifying the reasons for the underrepresentation of women in leadership positions. Comparative data analysis was taken as the research methodology. Companies of various industries and activities (financial companies, consulting companies, jam companies, companies in the field of trade, etc.) that are small, medium and large businesses were studied.

In accordance with the data of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, the proportion of women holding leadership positions in large private sector companies in Kazakhstan is 41.1%, the proportion of men, respectively, is 58.9%. Among them, the proportion of women holding leadership positions in urban areas is 41.5%, the proportion of men is 58.5%. As for rural areas, the difference is larger: the proportion of women is 40%, and the proportion of men is 60% (gender.stat.gov.kz). However, these data are not complete and accurate due to the fact that these data are usually compiled on the basis of companies where female managers are listed as "corporate managers", and directors, general directors and other designations in the corporate sector of large companies or medium and small companies are generally not taken into account.

It is extremely important that employers draw the right conclusions from ongoing research. Research will be useless, or worse, harmful if stereotyped that women are costly to employers.

Gender differences related to business fall into two categories: those related to motherhood and those related to different traditions and expectations from different genders. Motherhood is more biological than cultural. We cannot change it, but we can greatly reduce its impact on the workplace and, in many cases, eliminate its negative impact on employee

development. We can achieve this by addressing the second set of differences, the differences between male and female socialization. Today, these differences exaggerate the real cost of motherhood and can turn a relatively small work disruption into a major business and career disruption for individual women. If we are to bridge the cost gap between men and women, we must address the issues that arise when female socialization meets male corporate culture and male career rules—behavior and style, expectations, stereotypes and prejudice, sexual tension and harassment, female mentoring, lateral mobility, relocation, compensation and early identification of top performers.

The only unchanging, enduring difference between a man and a woman is motherhood. Motherhood is not just childbirth, it is a continuum that begins with awareness of the ticking of the biological clock, continues with the anticipation of motherhood, includes pregnancy, childbirth, physical recovery, psychological adjustment, and continues with child care, bonding and raising a child. Of course, not all women decide to become mothers, and among those who do, the process varies from case to case depending on the health of the mother and child, the values of the parents, and the availability, cost and quality of material and spiritual values.

In past centuries, the biological fact of motherhood has shaped the traditional roles of the sexes. Women performed household functions related to bearing and raising children. Men performed work that required great physical strength. However, over time, family size has shrunk, society has taken on greater responsibility for childcare and education, packaged food and home technology have reduced the workload at home, and technology has eliminated much of the need for muscle strength in the workplace. Today, in the developed world, the only role still unambiguously linked to gender is childbearing. However, men and women are still being socialized to fulfill their traditional roles.

Men and women may or may not have an innate psychological predisposition for these traditional roles: men must be aggressive, competitive, self-reliant, take risks; women should be supportive, caring, intuitive, sensitive, sociable, but, of course, both men and women are capable of the whole range of behavior. Indeed, male and female roles have already begun to expand and merge. In the coming decades, as the socialization of boys and girls and the experiences and expectations of boys and girls steadily become more androgynous, differences in behavior in the workplace will continue to blur. At present, however, we are still plagued by differences in perceptions and behaviors that make the integration of men and women in the workplace unnecessarily difficult and costly.

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PROSPECTS OF THE COMMERCIAL HYDROCARBON DEPOSITS DISCOVERY WITHIN BLOCK 9 ON THE LEBANON OFFSHORE BY THE RESULTS OF DIRECT- PROSPECTING METHODS USING

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Annotation. The results of application the mobile direct-prospecting technology of frequency-resonance processing and interpretation of satellite images at the prospecting Block 9 and Block 4 on Lebanon offshore and Leviathan gas field on Israel offshore are presented. Experimental research of a reconnaissance nature was carried out with the aim of demonstrating the efficiency, effectiveness and informativeness of direct-prospecting methods. The results of experimental reconnaissance studies, conducted promptly in 2020 within the Block 9 on Lebanon offshore, allow us to conclude that drilled exploratory wells for oil and gas will be dry. During additional processing of the satellite image of Block 9 on February 3, 2023 using an improved method of instrumental measurements at different depths in the range of 0–10,000 m, signals at the frequencies of oil, gas condensate and gas are not recorded for three minutes for each component! The results of the reconnaissance studies carried out showed that the probability of obtaining commercial fluid inflows in the drilled well within Block 4 on the Lebanese offshore is close to zero. This forecast was confirmed by the results of well drilling! During the frequency-resonance processing of a satellite image over a known Leviathan gas field, responses at the frequencies of oil, condensate and gas were recorded. This circumstance testifies in favor of the reliability of the conclusions made earlier about the results of drilling a prospecting well within Block-4 on the Lebanese offshore. Reconnaissance studies carried out on the offshores of Lebanon and Israel indicate that mobile direct-prospecting methods can be used to assess the prospects of oil and gas potential (ore potential) of large prospecting blocks and local areas (including those put up for auction), the selection of optimal locations (sites) of exploratory and production wells, assessment of the prospects of oil and gas deposits discovering in the deep horizons of cross-section, searches and localization of deep channels for the migration of chemical elements, fluids and mineral matter into the upper horizons of cross-section. The use of mobile and low-cost technology will significantly speed up the geological exploration process for hydrocarbons, natural hydrogen, ore minerals, as well as reduce financial costs for its implementation.

Keywords: Lebanon, Israel, offshore, oil, gas, salt, siliceous rocks, migration of gases, abiogenic genesis, volcano, direct prospecting, deep structure, hydrogen, chemical elements, sounding of cross-section, remote sensing data processing.

Introduction

The preparation of this article is caused by information which says that well drilling in Lebanon's offshore Block 9 to begin in Q3 [1]. The feasibility of preparing this paper is due to the following.

Over the past 2019-2022 years the authors have been testing mobile, low-cost and direct-prospecting methods of frequency resonance processing and decoding of satellite images and photo-images in various regions of the globe, including the areas of exploratory wells (drilled, being drilled, designed) location. The direct-prospecting frequency-resonance technology was also tested at the site of drilling a prospecting well on the Lebanon offshore. Satellite images of the Block 4 location area and the local well drilling site were processed using frequency-resonance technology before the well began to be drilled. According to the results of processing, the probability of obtaining industrial (commercial) hydrocarbon inflows in the well was estimated close to zero! The results of the well drilling confirmed the forecast made [2-3]!

First part of the article presents the results of an integrated assessment of the prospects for commercial inflows of oil, condensate and gas obtaining from the prospecting wells within Block-9 on Lebanon offshore. The results of investigation within Block 4 on the Lebanon offshore are given in the second part of the article.

Research methods

Experimental investigations of a reconnaissance and detailed nature are carried out using low-cost and direct-prospecting technology, including modified methods of frequency-resonance processing and decoding of satellite images and photo images, vertical electric resonance sounding (scanning) of the cross-section and a method of integral assessment of the prospects of oil and gas potential (ore content) of large prospecting blocks and local areas [4]. Standing electric waves, discovered by Nikola Tesla in 1899, are at the heart of certain methods of mobile technology. The processing of satellite images and photo images is carried out using resonant frequencies of various rocks (sedimentary, metamorphic, magmatic - <http://rockref.vsegei.ru/petro/>), oil, condensate, gas, ore minerals and chemical elements as samples. The features and capabilities of the methods used, as well as the measurement technique, are described in more detail in published articles and reports at conferences [4-6].

When conducting numerous studies using the described direct-prospecting methods in 2019-2022, the optimal procedure (processing graph, sequence of actions) was worked out (and constantly improved), which is used when carrying out work within the blocks and areas of survey. The used processing graph for a separate satellite image (or its local fragment) includes the following sequence of actions (steps).

1. Fixation from the surface of the presence (absence) of responses (signals) from the following set of minerals: oil, condensate, gas, amber, oil shale, argillic breccia, gas hydrates, ice, coal, anthracite, hydrogen, living water (deep), dead water, diamonds, brown coal, iron ore, potassium-magnesium salt, sodium chloride salt (hereinafter simply salt).

2. Registration of responses from the groups of sedimentary, metamorphic and igneous rocks that make up the cross-section.

3. Establishing the presence of deep channels (volcanoes), filled with various groups of rocks in the survey area; determination of the depths of the roots of volcanoes location.

5. Determination of groups of rocks (or individual samples of groups), from which signals are recorded at the frequencies of oil, condensate, gas and water (deep).

6. Establishing the presence (absence) of responses from oil, condensate and gas at the surface (depth) of 57 km - the boundary of hydrocarbon synthesis in deep channels (volcanoes), filled with certain groups of rocks.

7. Establishing the presence (absence) of responses from water (deep) on surfaces (depths) 59 km, 68 km, 69 km - the predicted boundaries of water synthesis in volcanoes of a certain type.

8. By scanning a cross-section with different steps from the surface up to 15 km, depth intervals are determined, within which responses are recorded at the resonant frequencies of oil, condensate, and gas. Refinement of the depths of location of the most promising for hydrocarbons intervals of cross-section during additional scanning with a finer step.

9. In case of detection of responses from the 6th group of igneous rocks (basalts) on the surveyed area, an assessment is made of the depth of the upper boundary (edge) of basalts, as well as the depths of the beginning of recording responses at resonant frequencies of hydrogen and living (healing) water from basalts.

10. When establishing the presence of signals from the 11th group of igneous rocks (kimberlites) in the survey area, the depth of the upper edge of the kimberlites is determined, as well as the depth interval within which responses are recorded at diamond frequencies.

Given the reconnaissance nature of the studies performed, the described set of separate procedures for satellite images processing in full was not implemented in all surveyed areas.

We also note that the developed technology uses the frequency-resonant principle of the useful signals' registration. Satellite images or photographs of research objects, as well as photographs of rock samples, minerals and chemical elements, are, in principle, antinodes of standing electric waves, discovered by Nikola Tesla in 1899 in the deep horizons of the Earth.

When carrying out instrumental measurements using the developed computerized complexes, the spectra of satellite or photographic images of objects studied are sequentially compared with the spectra of rock samples, the desired minerals and chemical elements. In the process of comparison, the measuring unit registers resonances (electromagnetic responses), which make it possible to draw a conclusion about the presence (absence) of specific rocks, the desired minerals and chemical elements in the cross-section of the object of study. Such features of the developed methods of satellite images processing and decoding are the basis for the use of the terms "frequency-resonance technology" ("frequency-resonance methods").

The processing of satellite images and photographs is carried out in laboratory conditions, without organizing and conducting field geological and geophysical studies. This provides an opportunity to quickly conduct research in any region of the globe, and, consequently, developing technology is super-mobile.

Lebanon offshore Block-9

Information of the planned drilling of a prospecting well within Block 9 on Lebanon offshore is given in document [1]. The position of the Block 9 on offshore is shown in Figs. 1 and 2.

Within this block, the authors have been conducted the experimental studies with the goal of an integrated assessment of the prospects for obtaining commercial fluid inflows (oil, gas) in the local area (or possible areas) of well drilling. Experimental studies were carried out using the technology of integrated assessment of the oil and gas prospects of large search blocks and local areas, which includes methods of frequency resonance processing of satellite images and photo images, as well as vertical sounding (scanning) of the cross-section in order to determine the depth and thickness of productive horizons and cross-section rocks.

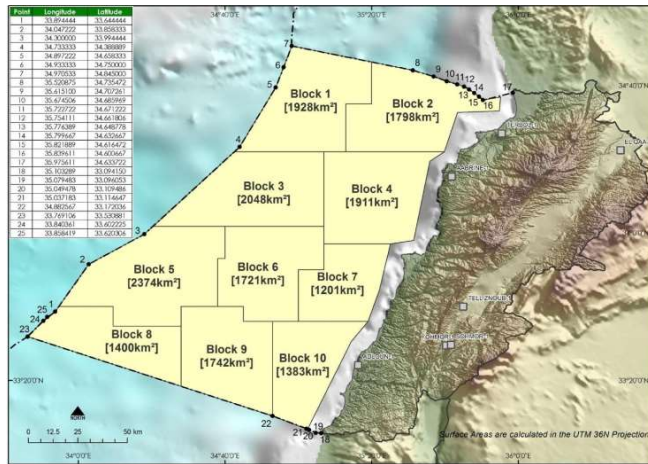


Fig. 1. Map of license blocks on the Lebanon offshore in the Mediterranean Sea.

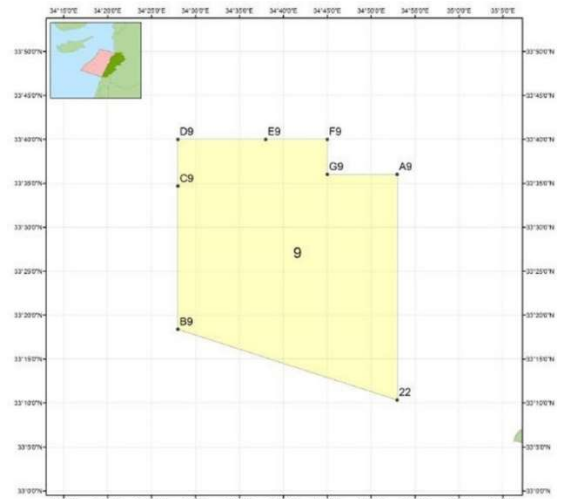


Fig. 2. The position of the license Block 9 on the Lebanon offshore.

The position of Block 9 on the satellite image of the Lebanese offshore is shown in Fig. 3. For the subsequent frequency resonance processing, a satellite image of Block 9 was prepared (Fig. 4). An integrated assessment of the oil and gas prospects of the entire Block 9 was performed at the first stage of research. At the second stage of the work, the frequency-resonance processing of individual fragments of Block 9 image, shown in Fig. 5 were conducted.

If the authors of the research will be given the coordinates of the points, in one of which the well will be drilled, then satellite images of local areas of these points' location can be processed additionally in order to select the most optimal one for drilling.

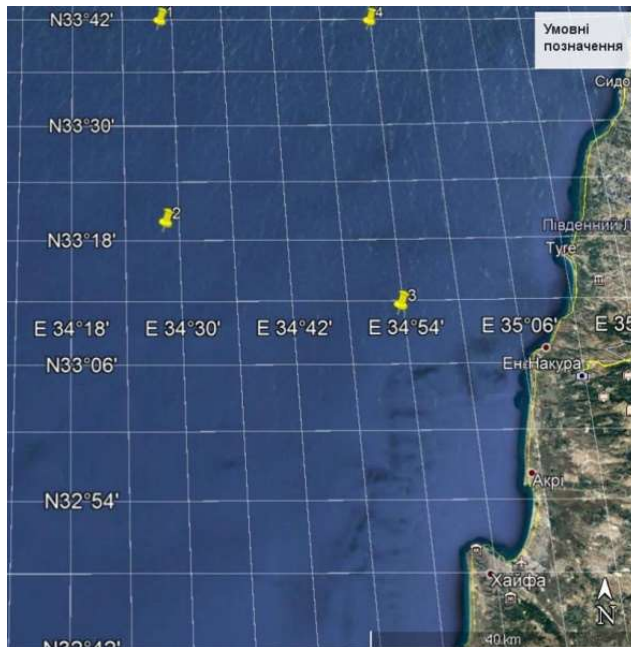


Fig. 3. The position of Block 9 in the satellite image of the Lebanese offshore.



Fig. 4. Satellite image of Block 9 on Lebanon offshore.

The results of frequency-resonance processing of a satellite image in Fig. 4. During processing a satellite image of the entire image, the responses (signals) of oil, condensate, gas, hydrogen and salt were not recorded.

Signals of the 9th group of sedimentary rocks (marls) were received. By fixing responses of marls at various depths (50, 150, 75, 70, 71 km), the lower boundary of marls is determined at a depth of 71 km.

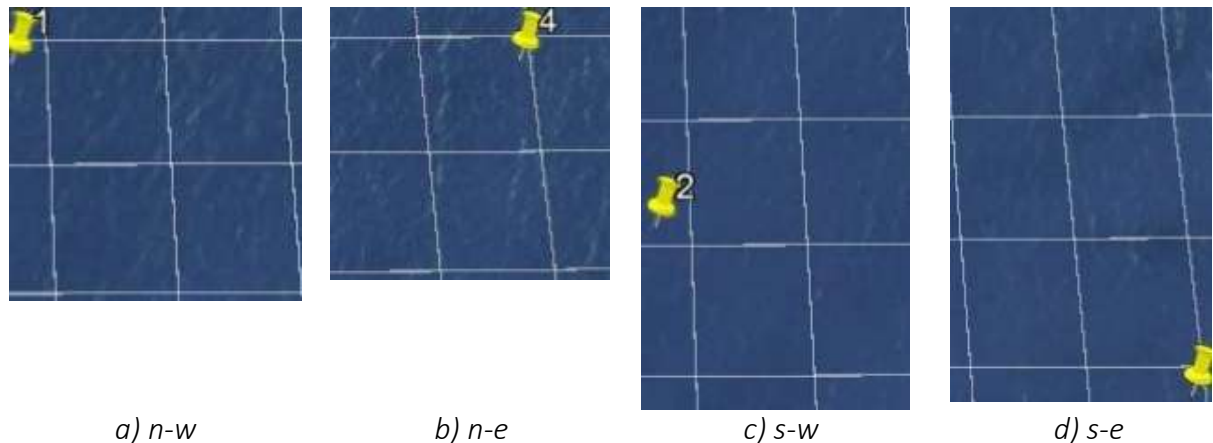


Fig. 5. Satellite images of individual parts (fragments) of Block 9 on the Lebanese offshore.

On a surface of 71 km, signals from 7 and 8 groups of igneous rocks were obtained from the lower part of the cross-section; no response from sedimentary rocks was received.

By fixing responses from the 7th group of igneous (ultramafic) rocks at various depths (171, 271, 200, 194, 195, 196 km), the lower boundary of these rocks is determined at a depth of 195 km. For control on a surface of 196 km, responses from ultramafic rocks were obtained from the upper part of the cross-section, and signals from the lower part were absent.

The presented above results of satellite image in Fig. 4 processing allow us to conclude that the **probability of obtaining commercial fluid inflows (oil, condensate and gas) in a well drilled within Block 9 is equal to zero!**

The results of the frequency-resonance processing of a satellite image fragments in Fig. 5. Given the results of processing a satellite image of the entire Block 9, within the four fragments of this block in Fig. 5, only responses of oil, condensate, and gas were recorded. The processing results are as follows.

Northwest fragment of the block (Fig. 5a): signals at frequencies of oil, condensate and gas are not fixed!

Northeastern block fragment (Fig. 5b): signals at frequencies of oil, condensate and gas are not fixed!

Southwest fragment of the block (Fig. 5c): signals at frequencies of oil, condensate and gas are not fixed!

Southeastern block fragment (Fig. 5d): signals at frequencies of oil, condensate and gas are not fixed!

These results confirm the above conclusions on the results of processing a satellite image of the entire Block 9!

Additional experiments. At the final stage of the experiments, the presence of responses at the resonant frequencies of lonsdaleite (technical micro-diamond) from the interval of ultramafic rocks was checked. As a result, the signals of lonsdaleite were recorded on the surface of 196 km only from the upper part of the cross-section, and on the surface of 71 km only from the bottom.

Additional comments. Frequency-resonance processing of satellite images was performed on **June 16, 2020**. For the authors of the experimental studies performed, the **results are shocking!**

Results of additional instrumental measurements. In order to verify the results obtained, on **February 3, 2023**, additional processing of the satellite image of Block 9 (Fig. 4) was carried out using an improved method of instrumental measurements. The processing results are as follows.

At different depths in the range of 0–10,000 m, (0-10 km) signals at the frequencies of oil, gas condensate and gas are not recorded for three minutes for each component!

In this interval of the cross-section (0–10,000 m), signals are recorded from the 9th (marl) group of sedimentary rocks, as well as low-intensity responses from the 8th (dolomite) group of sedimentary rocks. It is possible that a small "tongue" of dolomites was pushed into the contours of Block 9 from a nearby block.

The results of additional instrumental measurements confirm the previously made conclusions: the **probability of obtaining commercial fluid inflows (oil, condensate and gas) in a well drilled within Block 9 is equal to zero!**

Lebanon offshore Block-4

This part of paper presents the results of an integrated assessment of the prospects for obtaining commercial inflows of oil, condensate and gas in a drilled well within Block 4 on the Lebanon offshore. For comparison, the paper part also contains materials of frequency-resonance processing of a satellite image of a local area within the well-known Leviathan gas field on the Israel offshore.

The position of the license Block 4 on the Lebanon offshore is shown in Fig. 6 and a satellite image of the local area of the drilled well location within Block 4 – in Fig. 7. In the process of research, a satellite image of the entire block was processed, as well as a fragment of the image (Fig. 7) of the local area of the drilled well location.

During the image frequency-resonance processing, signals at oil frequencies were received with a long delay. No responses were recorded at condensate and gas frequencies.

Signals from salt and sedimentary rocks were absent.

Signals from the 7th group of igneous rocks were recorded. The root of the channel (volcano), filled with these rocks, is determined at a depth of 723 km.

A weak oil signal was recorded on the surface of 57 km; no response from condensate and gas was obtained on this surface.

Water signals were traced from 10 km to 69 km.

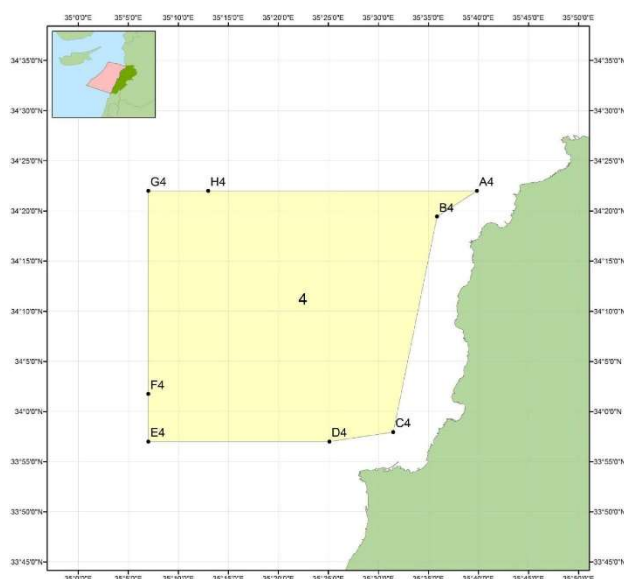


Fig. 6. The position of the license Block 4 on the Lebanon offshore.



Fig. 7. A satellite image of the local area of the drilled well location within Block 4 on the Lebanon offshore.

A weak signal from hydrogen was recorded on a surface of 69 km; no response from hydrogen was obtained at a depth of 60 km.

Signals from the "dead" water are recorded from the surface, as well as at depths of 60 and 69 km.

The results of the reconnaissance studies carried out allow us to conclude that **the probability of obtaining commercial fluid inflows in the drilled well within Block 4 on the Lebanese offshore is close to zero.**

This forecast was confirmed by the results of well drilling [2-3]!

Some comments. 1. In the absence of responses (intense) at the frequencies of oil, condensate and gas within the blocks (area) of the survey, further research does not make sense.

2. In this case, a certain number of experiments was carried out in order to determine the possible reasons for the absence of signals at the frequencies of oil and gas on the surveyed area. Such interest is due to the fact that in the Atlantic Ocean within the volcano, filled with igneous rocks of the 7th group, intense responses were recorded at the frequencies of oil, condensate and gas. The situation within Block 4 on the Lebanese offshore at this stage of research can be "commented" as follows.

A) A volcano (or volcanoes) filled with the 7th group of igneous rocks (ultramafic rocks) formed within the Block 4 structural uplifts that were discovered and mapped by seismic studies. Using the structural principle for laying the first exploratory well, the most promising structure was identified.

B) Using direct-prospecting methods, it was found that the synthesis of oil, condensate and gas occurs on the surface (depth) of 57 km from the incoming (migrating) from below hydrogen and carbon.

C) Water synthesis occurs on the surface of 69 km. Hydrogen coming from below is also involved in this process.

D) The facts of the fixation of weak signals from hydrogen on a surface of 69 km and their absence at a depth of 60 km can be interpreted as follows: the hydrogen flow from below is relatively weak and almost all of it at the border of 69 km goes to the formation of water. The insufficient volume of hydrogen is also evidenced by the responses received from the "dead" water obtained at the surface, as well as at depths of 60 and 69 km.

Leviathan gas field

The obtained results ("negative" in general) of satellite images processing within the Block-4 on the Lebanese offshore made it necessary (expedient) to conduct additional research in this region in order to confirm (or refute) the conclusions made. In this situation, it was quite advisable to decide to carry out work of a similar nature within the well-known hydrocarbon field, located in this region.

Known hydrocarbon deposits (including the Leviathan gas field) in the eastern Mediterranean Sea are shown in Fig. 8. On the satellite image of this region (Fig. 9), a small rectangular contour indicates the local area within the Leviathan gas field. The label in this rectangle denotes a point whose coordinates are borrowed from the site [7]. In the process of research, the frequency-resonance processing of the local fragment of the satellite image in Fig. 9, indicated by a rectangular outline, has been conducted.

When processing the image from the surface the responses were recorded at the frequencies of oil, condensate and gas. Signals from amber, oil shale, gas hydrates, coal and hydrogen were not received.

Responses from sedimentary rocks and salt are also not recorded.

Signals from 7, 8 and 9 groups of igneous rocks were recorded from the surface. By fixing responses at various depths (50, 150, 250, 350, 450, 550, 650, 722, 723 km), the root of a channel

(volcano), filled with the 7th group of igneous rocks (ultramafic rocks), was determined at a depth of 723 km.

There were no responses from water and “dead” water at depths of 56 and 68 km.

At a surface (depth) of 56 km, responses were obtained from oil, condensate (intensive) and gas (intensive).



Fig. 8. Sketch-map of hydrocarbon deposits in the eastern part of the Mediterranean Sea.



Fig. 9. Satellite image of the eastern part of the Mediterranean Sea. A label in a rectangular outline indicates a point within the Leviathan gas field on the Israel offshore. The coordinates of this point are given on the site [7].

Brief comments. 1. During the frequency-resonance processing of a satellite image over a known Leviathan gas field, responses (signals) at the frequencies of oil, condensate and gas were recorded. This circumstance testifies in favor of the reliability of the conclusions made earlier about the results of drilling a prospecting well within Block-4 on the Lebanese offshore.

2. The results of processing a fragment of the image above the Leviathan field indicate that this field is also located within a channel (volcano), filled with ultramafic rocks, with a root at a depth of 723 km.

3. Within this channel (volcano), at depths of 56 and 68 km, responses from water and “dead” water have not been recorded. In this situation, it can be assumed that in this channel (volcano) in the surface area of 69 km there are no conditions for water synthesis. And hydrogen and carbon migrating from below on the surface of 57 km fall into the conditions, under which the synthesis of oil, condensate and gas is carried out.

4. To study (clarify) the conditions under which water is synthesized in the region of the surface (depth) of 69 km, as well as the synthesis of oil, condensate and gas in the region of the surface of 57 km, it is advisable to conduct the detailed studies in the range of the indicated depths. For comparison, detailed work should also be carried out within the location of other channels (volcanoes), filled with ultramafic rocks.

5. At the Leviathan field the commercial gas production is in progress [8].

Conclusions

The conducted experimental studies with the aim of additional testing, as well as demonstrating the potential of mobile direct-prospecting methods at the local site of well drilling, within the search blocks, can be considered a continuation of previously performed work, the results of which are presented in published papers [4-6, 9-15]. The conclusions formulated in these publications are true in general and in relation to the materials of these articles.

Once again, we draw attention to the distinguishing feature of direct-prospecting frequency-resonance methods. Unlike classical geophysical methods, the methods used make it possible to fill the studied cross-section with the appropriate complexes of sedimentary, metamorphic and igneous rocks, as well as to determine the intervals of the cross-section, prospective for the detection of combustible and ore minerals, immediately, during the measurement (signal recording) by the developed instrumentation devices (i.e., without additional stages of modeling and geological interpretation of the geophysical measurements results). In this article, as well as in other published materials, the emphasis is on the presentation of measurement results.

The results of experimental reconnaissance studies, conducted promptly within the Block 9 on Lebanon offshore, allow us to conclude that drilled exploratory wells for oil and gas will be dry.

The results of the reconnaissance studies carried out showed that the probability of obtaining commercial fluid inflows in the drilled well within Block 4 on the Lebanese offshore is close to zero. This forecast was confirmed by the results of well drilling [2-3]!

The materials of the survey also once again confirm the volcanic model of the hydrocarbon deposits formation, the features of which can be formulated as follows.

Conducted experimental studies in various regions of the globe on Earth established the presence of 10 types of volcanic complexes filled with 1) salt; sedimentary rocks 2) 1-6th, 3) 7th (limestones), 4) 8th (dolomites), 5) 9th (marls) and 6) 10th (siliceous) groups, as well as igneous rocks 7) 1st (granites), 8) 6th (gabbro and basalts), 9) 7th (ultramafic) and 10) 11th (kimberlites) groups.

Numerous experiments have shown that the conditions for the synthesis of oil, condensate and gas at the boundary (surface) of 57 km are created only in 5 types of the 10 volcanic complexes listed above: 1) salt, 2) 1-6th groups sedimentary rocks, 3) limestone, 4) granite and 5) ultramafic. It should be noted that the conditions for HC synthesis do not arise in all volcanoes of the 5 listed types.

The results of the reconnaissance survey of the locations of "dry" drilled wells [13-15] showed that almost all of them are located in the contours of volcanic complexes, in which there are no conditions for hydrocarbon synthesis! The low efficiency of prospecting for oil and gas is reasonably justified by the results of instrumental measurements by direct-prospecting methods [12]. Such results should be considered weighty arguments in favor of the expediency of direct-prospecting methods and technologies using for hydrocarbon deposits searching.

The studies performed at oil and gas exploration drilling sites in various regions of the world confirm the feasibility of additional work conducting with direct-prospecting methods using when choosing sites for their location.

Within the areas and blocks that are prospective for the hydrocarbon's detection, identified at the stage of integrated assessment of their oil and gas potential, with using frequency-resonance methods of satellite images and photographs processing, it is advisable to conduct detailed studies that allow:

- a) detect and localize within the blocks and areas local anomalous zones of fixation of responses (signals) at the resonant frequencies of oil, condensate, gas;
- b) in the contours of mapped anomalous zones with using the method of vertical scanning of the cross-section, determine (and refine using a smaller scanning step) the depth of the response intervals at the resonant frequencies of oil, gas and condensate;
- c) in the intervals of responses at HC frequencies, determine the types of reservoir rocks;
- d) establish what types of rocks are tires for the detected response intervals at the resonant frequencies of oil, condensate and gas;

e) determine the types of oil and condensate from which signals (responses) are recorded in the intervals of the cross-section (in the frequency-resonance methods, 117 oil samples and 15 gas condensate samples are traditionally used).

In conclusion, we note once again that the results of frequency-resonance processing of satellite images and photographs of local sites of drilling exploratory wells, as well as on search areas and fields in various oil and gas regions, are sufficient convincingly indicate the appropriateness of the application of the developed methods (in conjunction with the traditionally used) to select the optimal location of prospecting and exploratory wells. The super-operational method of integrated assessment of oil and gas prospects provides an opportunity to significantly accelerate and optimize the geological exploration process for combustible and ore minerals.

The technology as a whole, as well as its individual methods, should be used in various regions for a preliminary assessment of the prospects for oil and gas potential of poorly explored and unexplored exploration blocks and local areas. The use of this technology can bring a significant effect in the search for industrial accumulations of hydrocarbons in unconventional reservoirs (including areas of shale, coal-bearing formations, and crystalline rocks distribution). Additional surveys promptly carried out using direct-prospecting methods in local drilling areas of prospecting and exploratory wells will contribute to an increase in the drilling success rate (an increase in the number of wells with commercial hydrocarbon inflows). The laying of wells in the areas, where vertical fluid migration channels are located, can lead to an increase in hydrocarbon inflows. Mobile technology can also be successfully used during the exploration of poorly explored areas and blocks within known oil and gas fields.

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