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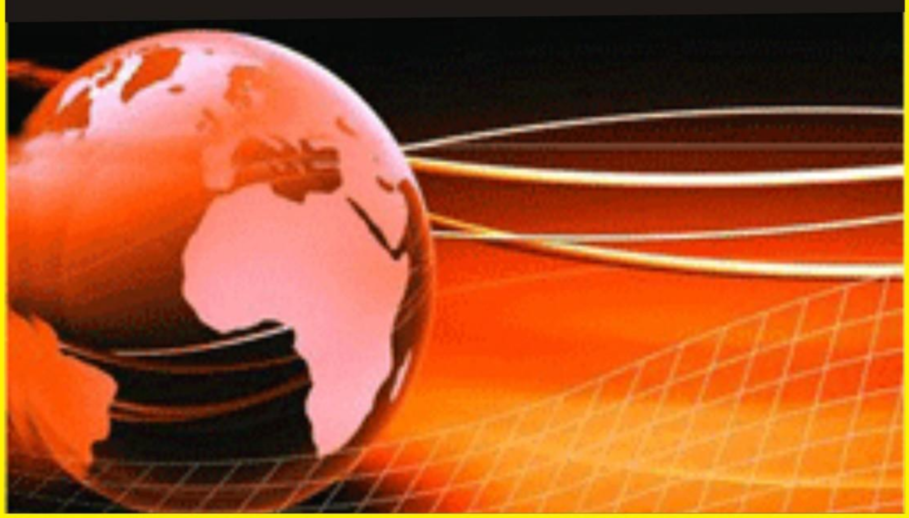

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ACADEMICIA: An International Multidisciplinary Research Journal
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COMPARATIVE ANALYSIS OF LAND COVER OF SOUTH ASIAN COUNTRIES OF BANGLADESH, BHUTAN, MYANMAR, NEPAL AND SRI LANKA (2020)

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ABSTRACT

Land is a primary natural resource and an asset on which all human activities take place. Land cover is the primary observation of land and can range into different categories. Due to multiple uses land is put to, there exist patterns of land use as well affected by the land cover. Land cover is currently very efficiently monitored by satellites these days. The current study is an examination of recent land use patterns of South Asian countries of Bangladesh, Bhutan, Myanmar, Nepal and Sri Lanka using Remote sensing and GIS. Land use information has been derived from ESA World Cover database. Such a study is useful in comparative analysis of geographies and is not readily available.

KEYWORDS: *Land, Land Cover, South Asian, ESA, Earth Engine*

INTRODUCTION

An asset and a resource, land is the base of all human life on earth. The Earth has approxminately 29.18% of its area as land and rest as water (Gregory, 2010) **[1].** In its definitional aspect, a combination of physical characteristics and functions comprise land resource (Vink , 1975) **[2].** One of the most significant aspects of land, besides being a resource, is that it can be delimited. A geographical area with location, geomorphology, soil, plants, and resources are components of the concept of land. In this regard, two aspects emerge as that of- land cover and land use (NOAA, 2021) **[3].** It is commonly mentioned that while the two are used frequently as terms; and many a times synonymously, they are different in meaning (Canada, 2015) **[4]** and that they should never be used interchangeably (Lambin et al. 2006; Coffey, 2013). **[5,6]**

Land cover is considered as the basics of studying land and includes the biological and physical aspects of the Earth. Land cover in this context broadly denotes defined as a cover in its physical manifestation with components such as vegetation, soil, urban built up, hydrology, agricultural land, and other varieties of infrastructure as well. It is taken as the observant and direct view of land as seeing it from above. Changes in land cover are very important to analyse and are a requirement of current scientific studies related to factors altering the Earth’s surface (Turner II & Meyer, 1998; Ariti, van Vliet, and Verburg, 2015) **[7,8]**; particularly when these processes are observed to influence the process of climate change (Zhao, et al. 2006) **[9].** These changes involve simple to complex mechanisms at geographical scales over a period of time.

Land use is the human use of the landscape and its alteration by numerous human activities. The concept begins locally but is gaining significance at the world level in numerous studies (Srivastava et al. 2012) **[10].** Land use as well changes in land cover are constantly taking place (Ramankutty & Foley, 1998) **[11]** but recently this is at an unprecedented rate due to human activities (Giri, 2016) **[12].** Studies related to land cover in various forms at the world level acquires is more so significant due to constant international works and the need of a reliable database (Mora, Tsendbazar, Herold, & Arino, 2014) **[13].** Studies on land use and land cover are not limited to a discipline but are rather complementary amongst different subjects.

Remote sensing and GIS are highlighted as unmatched in providing a study of land use, management, and analysis (Al-Fares 2013; Obi Reddy, Singh, Patil, & Chaturvedi, 2017) **[14,15]** and these studies are more developed in the current context than ever before (Warner, Nellis, & Foody, 2009) **[16].** This is feasible at a various geographical scales (Rogan & Chen, 2004) **[17].** In this context, land cover has a comparative advantage of being mapped through remote sensing and with a greater detail (Sohl & Sleeter, 2011) **[18].** However, a disadvantage in this regard is that short term or rapid alterations in land use do not provide a proper indication of land cover (Green, Kempka, & Lackey, 1994) **[19].** This is particularly observed in the case of mixed vegetation surfaces and heterogenous land uses (Herold et al., 2008) **[20].**Currently as well, majority of the land on the Earth is utilised for agriculture (Ritchie & Roser, 2019) **[21].** This holds true for Asia as a continent as well, which has been observing unprecedented changes in land. Besides, Southeast Asian regions is also experiencing deforestation at unprecedented rates.

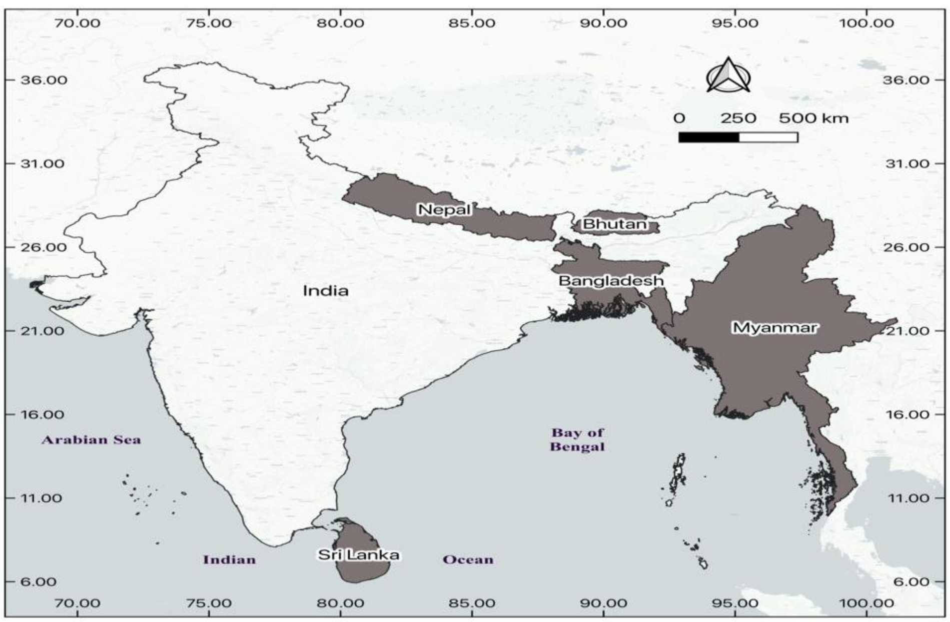
The present study is a recent, one-time analysis of land cover as observed through the satellite data from ESA World Cover 10m 2020 land cover map through the Earth Engine Code Editor. Derived at 10m resolution for 2020, the ESA worldwide land cover mapping is defined as a new and baseline product for global land cover with unparalleled detail and unprecedented gathering of land cover information (Agency, 2022) **[22].** It aims to provide information related to 'bio diversity, food security, carbon assessment and climate modelling'. It uses data from Sentinel 1 and Sentinel 2 satellites and forwards an output of an unmatched resolution since through these satellites information can be generated even if cloud cover is there. This land cover map has 11 land cover classes and the output is generated as 3*3 degree tile as Cloud Optimised GeoTiffs with a minimum overall accuracy of 75%. All these points provide an edge to ESA over other land cover information databases. With these specialities of the data, the current study aims to observe the recent land cover record for the above mentioned South Asian countries which have distinct locations and other specific geographical characteristics. It holds significance in terms of its data source and analysis of updated and recent information which can provide a further base to subsequent such studies.

Study Area- The study area comprises of the South Asian countries of Bangladesh, Bhutan, Nepal, Myanmar and Sri Lanka. As is discussed above regarding their specific characteristics as countries, their location lends them a distinct geography as can be seen in Figure 1. While Bhutan and Nepal lie along the might Himalayan range in proximity to each other, Bangladesh is a largely plain landscape dominated country surrounded by the Bay of Bengal on one side. Mynamar has a mix of topography with the mighty Himalayan range reaching culmination in its extreme eastern part and a vast plain area in the middle and Bay of Bengal in its west. Both countries share borders. Sri Lanka has a distinct location as it is surrounded by mighty water body of the Indian Ocean and the equator passing through the country.

Following specific characteristics can be observed for the study area:

a. Bangladesh- Sharing its international borders with India and Myanmar and the Bay of Bengal in the south, Bangladesh covers an area of approximately 147,630 sq. km. (Worlddata.info, 2022**) [23].** It is mainly a flat land with average elevation reaching just 85 m above sea level. About two-thirds of the eastern Ganga- Brahmaputra Plain lies in the country and the ridges of alluvial plain run north and south separating the border of Bangladesh from its neighbours (Tinker & Hussain, 2021) **[24].** The rivers of the country have played a major role in modifying its topography and numerous rivers and streams flow throughout the country. As of 2021, the estimated population of the country is 170,371,000. Agriculture is the main occupation, besides fishing and manufacturing and majority of the country is rural. Monsoonal climate, high humidity and warmer temperatures mark the country.

Figure 1. Location of Bangladesh, Bhutan, Myanmar, Nepal, and Sri Lanka



Source- Author, 2022

b. Bhutan- The landlocked country is located in the eastern Himalayas with the fertile valleys of the lesser Himalayas separated by continuous high and intricate ridges from north to south (Norbu, Karan, & Pradyumna, 2021) **[25].** It is surrounded by China in the north and India on all other three sides. Its northern part lies in the Great Himalayas, followed by Lesser Himalayas and narrow plains further south with numerous rivers and streams dissecting the landscape. A sparsely populated country, the main occupation is agriculture in limited parts of the country where conditions are favourable along with livestock rearing and mining activities. As of 2022, Bhutan's population is 7,85,717 people (Worldometer, 2022) **[26].** The climate is, mixed ranging from hot, humid and subtropical.

c. Mynamar- Observed as the northern most country of South east Asia, Myanmar is bounded by China in the north and north east, Laos in the east, Thailand in the south east, India in the north west and Bangladesh in the west (Thwin, Aung, & Steinberg, 2021) **[27].** The Himalayan range extends from north to south in the western part of the country, followed by a central basin and the Shan Plateau in the further east with the Irrawaddy, Chindwin and Sittang rivers flowing through it. The Irrawady occupies the maximum drainage of the country. The population of the country as of 2022 is 55,0001,577. The climate is largely tropical and dependent upon elevation. A country of diverse ethnicity, agriculture is the main occupation along with forestry and fishing.

d. **Nepal-** Located along the mighty Himalayan range and bounded by Tibet in the north and India on all other sides, Nepal is a land locked country (Rose, Karan, Proud, & Zuberi, 2022) [28]. It has a rugged terrain and the topography ranges from mountains to plains from the north to south with numerous rivers. The climate ranges depends on the altitude and a large forest area exists. As of present, the population of the country is 29,986,474 persons. Agriculture is the main occupation along with tourism and manufacturing.

e. **Sri Lanka-** A densely populated country, the relief of Sri Lanka is occupied by a mountainous area in its south central region which is surrounded by a dissected plain. This mountains are rugged and very dissected. Besides, numerous rivers run across the country. The climate is tropical with immense amounts of rainfall due to location in the equatorial region. Natural vegetation of variety covers a large part of the country. Majority of the country is rural and agriculture and trade of agricultural goods are the main occupations (Peiris & Arasaratnam, 2022) [29].

Within this broad background, the following database and methodology have been attempted.

Database and Methodology- The current study requires the location of the countries, their administrative maps and the maps of respective land cover to draw interpretations and make comparisons. The administrative map has been depicted in Figure 1. The land use maps have been derived from Google Earth Engine Code Editor from the European Space Agency (ESA) World Cover 10 m 2020 database. This database provides the world cover map for 2020 at 10 m resolution and as mentioned earlier, is a recent, updated and unprecedented database on land cover mapping. It uses data from Sentinel 1 and Sentinel 2 satellites with a maximum accuracy of 81%. There are eleven land cover classes generated by the database. The information has been mapped for the study area and interpretive analysis has been attempted. It is a single time point study covering the South Asian countries which are predominantly agricultural. The eleven classes identified by the database are:

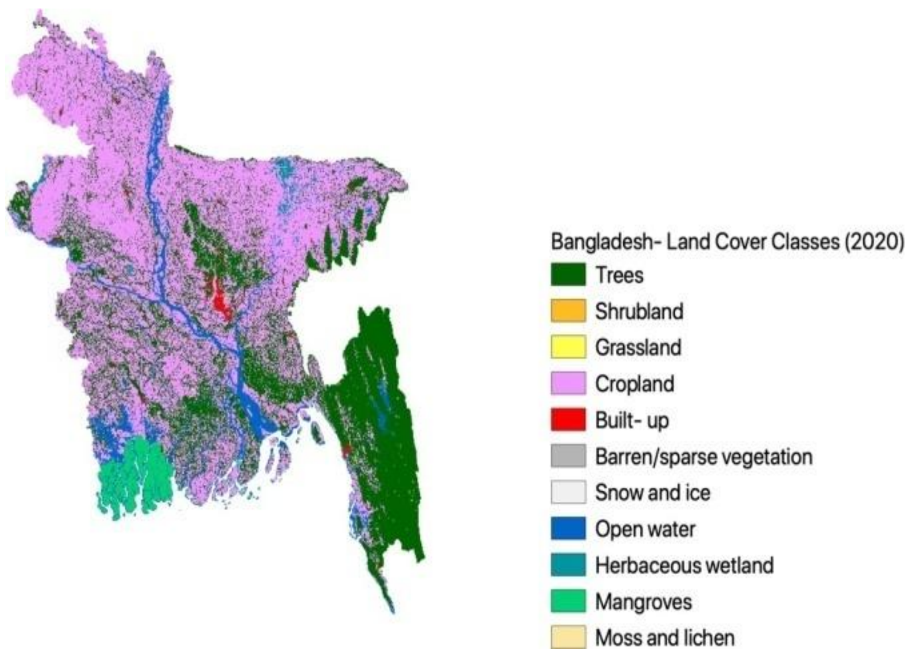
Trees, Shrubland, Grassland, Cropland, Built-up, Barren/ sparse vegetation, Snow and ice, Open water, Herbaceous wetland, Mangroves, and Moss and lichen. The information derived has been further analysed for area under each class of land cover. For this purpose, area under each class is corresponded with the pixel count and pixel resolution of individual land cover classes of the study area. All analysis has been performed in QGIS 3.16 software.

So, such a study would be insightful in observing what pattern land cover generates in these nations when agriculture is the dominant activity in the background of the existing landscape. A collective analysis such as this is not readily observed in literature. The limitation of the study is that the maps for land cover depict the yearly observation while during different seasons some variations can take place particularly in the vegetation category.

Results and Discussions- In the following figures (2.1.-2.5.), the land cover of respective countries is mapped. For Bangladesh, the land cover is in direct consonance with the topography. Cropland dominates the country which is clearly indicative of favourable topography for this activity. Besides, the presence of numerous water sources make this more feasible. Mangroves of the Sunderban delta can be observed as occupying the southern part of the country. Besides, dense built- up is observed along the capital city of Dhaka. Besides, other smaller areas of built-up can be seen as scattered in the country. A dominant land cover in the form of trees is covering the landscape in the eastern most part of the country where it shares its border with Mynamar. Natural vegetation is also scattered in other parts of the country as well.

Figure 2. Observations on Land Cover in the Study Area (Map not to scale)

Figure 2.1. Land Cover- Bangladesh



For Bhutan, the land cover is highly dominated by natural vegetation and in the higher altitudes as discussed above, grassland dominates. In the further higher altitudes, snow and ice category is visible as a land cover. Myanmar's land cover indicates a dominance of natural vegetation, particularly in the physiographic region of the mountains as discussed. The Central Basin is depicting cropland area in dominance, running from north to south and central region of the country. Some cropland is also observed in the western part of the country and in the intermittent regions of the natural vegetation. Open water and herbaceous wetland are also a significant land cover. Grassland is also an important land cover category in the west central and east central part of the country.

Figure 2.2. Land Cover- Bhutan

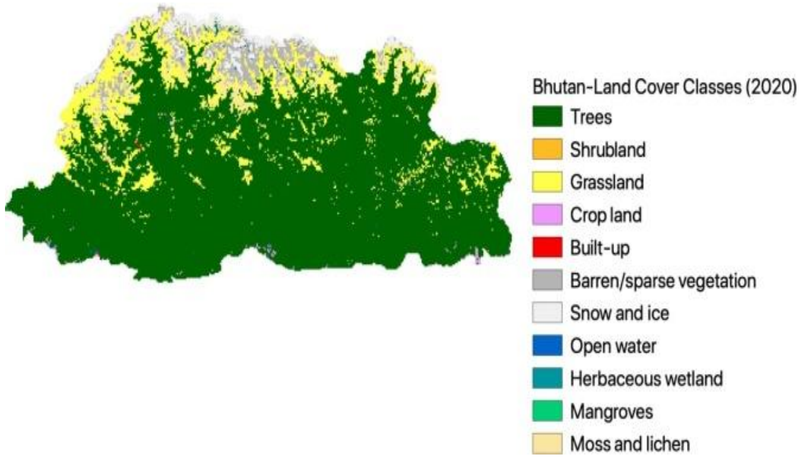


Figure 2.3. Land Cover- Myanmar

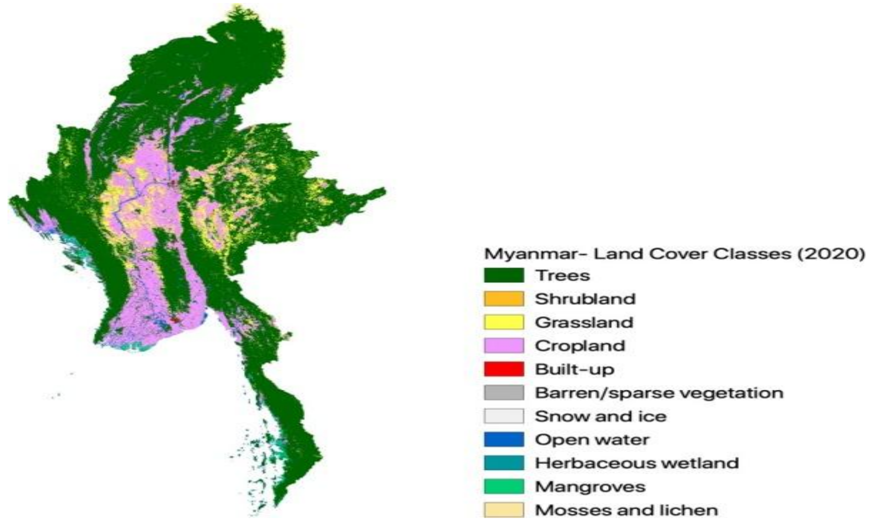
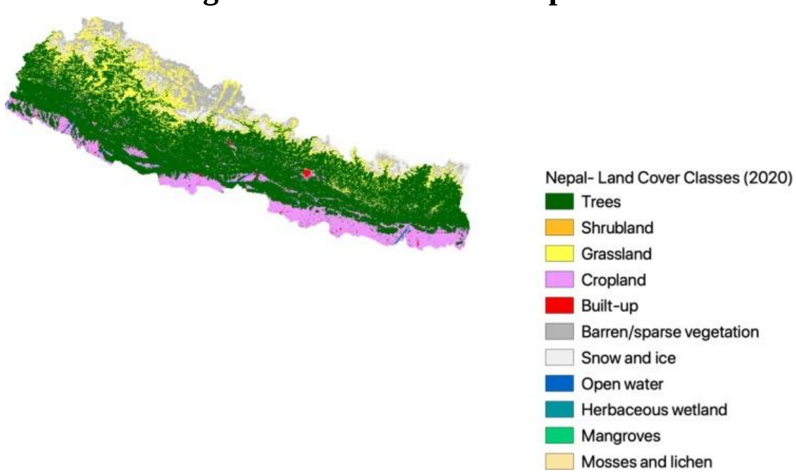
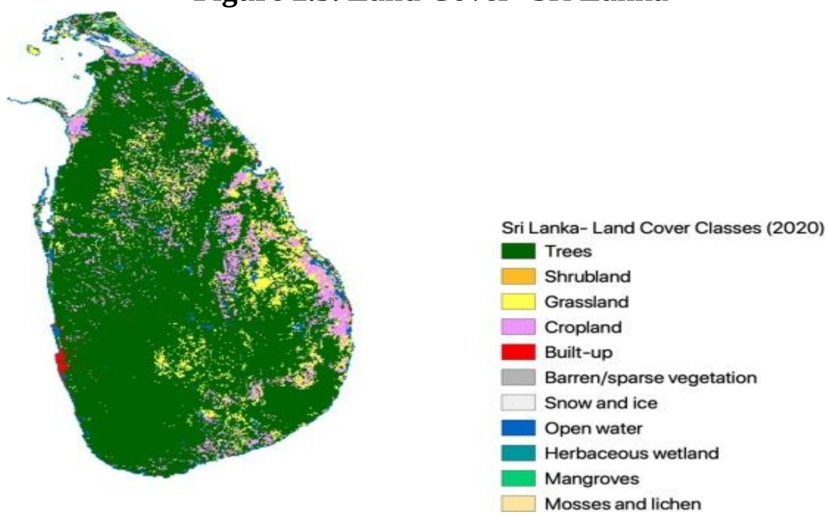


Figure 2.4. Land Cover- Nepal



In Nepal, land cover can be observed as directly following the topography. It is parallel to the mountain ranges. The lofty Himalayan mountains provide a rugged topography and are followed by the Middle Himalayan Range of the Mahabharat Hills and then the low lying marshy Terai region. The rugged range in its higher elevation is marked by Snow and Ice Cover in its higher altitudes and is also covered with Grassland region particularly in the west due to climatic conditions. It is followed by a broad belt of Trees which cover the country from east to west; showing maximum coverage of land cover. A clearly visible built-up area is observed along the capital of Kathmandu and in the Terai belt. The southernmost belt marks the Terai and is covered with cropland.

Figure 2.5. Land Cover- Sri Lanka



Source- Author, 2022

Sri Lanka has a distinctly tree cover in majority of its land. It is interspersed with grassland, open water and built up area. Grassland cover is observed wherever the tree cover ends to the plain region. Open water is clearly visible across the landscape. The built up area in the western part is the capital of the country- Colombo. In the northern most tip, a variety of land cover is visible in the small region.

Thus, it can be concluded that the land cover classes in all these countries follow the geography. This information is further detailed land cover class wise in Table 1. to find the actual area under each land cover for respective countries.

TABLE 1. AREA UNDER LAND COVER CLASS

Land Cover Class/Country	Bhutan	Bangladesh	Myanmar	Nepal	Sri Lanka
	Land cover area in each class (Sq.mt.)				
1. Trees	3303200	5239200	49491300	9535900	5198500
2. Shrubland	-	700	229200	2800	6300
3. Grassland	545000	20500	6307500	2240600	600000
4. Cropland	14100	8548100	13756400	2074200	635600
5. Built-up	1400	100100	159600	57100	28100
6.Barren/sparse vegetation	188700	114800	630600	1532900	67900

7. Snow and ice	119600	-	19800	784100	-
8. Open water	9900	1113900	1563100	82600	273000
9. Herbaceous wetland	-	148400	35000	200	13000
10. Mangroves	-	469100	700400	-	19700
11. Mosses and lichen	144000	-	154300	670500	-

Source- Derived by Author from ESA World Cover 10m 2020, (2022) through QGIS 3.16 software

The distributional share of land cover in the study area can be observed from the above table and Table 2. below

TABLE 2. PERCENTAGE OF AREA UNDER LAND COVER

Land Cover Class/Country	Bhutan	Bangladesh	Myanmar	Nepal	Sri Lanka
	Land cover area in each class (%)				
1. Trees	76.35	33.25	67.75	56.15	75.97
2. Shrub land	-	0.00	0.31	0.01	0.09
3. Grassland	12.59	0.13	8.63	13.19	8.76
4. Cropland	0.32	54.25	18.83	12.21	9.28
5. Built-up	0.03	0.63	0.21	0.33	0.41
6.Barren/sparse vegetation	4.36	0.72	0.86	9.02	0.99
7. Snow and ice	2.76	-	0.02	4.61	-
8. Open water	0.22	7.07	2.13	0.48	3.99
9. Herbaceous wetland	-	0.94	0.04	0	0.19
10. Mangroves	-	2.97	0.95	-	0.28
11. Mosses and lichen	3.32	-	0.21	3.94	-

Source- Derived by Author from Table 1.

It can be observed that the land cover classes calculated correspond to the visual interpretation. For the study area, with the exception of the South Asian nation of Bangladesh, all other countries exhibit a dominance of trees as the land cover class. It is only in Bangladesh that the cropland occupies the maximum share of land cover. Sri Lanka has the highest share of trees as the land cover class. This can also include the plantation agriculture. It can be concluded that trees and cropland emerge as the dominant land cover in the South Asian countries observed for the study.

REFERENCES:

1. Gregory KJ. The Earth's Land Surface: Landforms and Processes in Geomorphology. 2010. P.361.
2. Vink AP. Land Resources. In: A. P. Vink (Ed.), Land Use in Advancing Agriculture. Advanced Series in Agricultural Sciences. 1975. Berlin, Heidelberg: Springer; 1975.
3. NOAA. (2021, Feb 26). Retrieved from https://oceanservice.noaa.gov: https://oceanservice.noaa.gov/facts/lclu.html#:~:text=Land%20cover%20indicates%2

0the%20physical, land%20use%20trends%20and%20changes.

4. Canada OG. (2015, Nov 20). Retrieved from https://www.nrcan.gc.ca/maps-tools-and-publications/satellite-imagery-and-air-photos/tutorial-fundamentals-remote-sensing/educational-resources-applications/land-cover-biomass-mapping/land-cover- land-use/9373.
5. Lambin EF, Geist H, Rindfuss RR. Introduction: Local Processes with Global Impacts. In: Lambin EF, Geist H (Eds.), Land Use and Land Cover Change: Local Processes and Global Impacts. Springer. 2006. pp. 1-8.
6. Coffey R. (2013, 1 18). Retrieved 2022, from https://www.canr.msu.edu/news/the_difference_between_land_use_and_land_cover
7. Turner II BL, Meyer WB. Global Land Use and Land Cover Change. In: Meyer WB, Turner II B L (Eds.), Changes in Land Use and Land Cover. Cambridge University Press; 1998. pp. 3-10.
8. Ariti, Adenew T, Jasper van V, Peter HV. Land-Use and Land-Cover Changes in the Central Rift Valley of Ethiopia: Assessment of Perception and Adaptation of Stakeholders. Applied Geography 2015;65(4):28–37.
9. Zhao S, Changhui P, Hong J, Dalun T, Xiangdong L, Xiaolu Z. 2006. Land Use Change in Asia and the Ecological Consequences. Ecological Research. 2006; 21(6):890–96.
10. Srivastava PK, Dawei H, Rico-Ramirez MA, Bray M, Islam T. Selection of Classification Techniques for Land Use/Land Cover Change Investigation. Advances in Space Research 2012;50(9):1250–65.
11. Ramankutty N, Foley JA. Characterising patterns of global land use: An analysis of global croplands data. Global Biogeochemical Cycles, 1998;12:667-685.
12. Giri CP. Brief overview of Remote Sensing of Land Cover. In: Giri CP (Ed), Remote Sensing of Land Use and Land Cover. CRC Press; 2016. pp. 3-12.
13. Mora B, Tsendbazar NE, Herold M, Arino O. Global Land Cover Mapping: Current Status and Future Trends. In: Manakos I, Braun M (Eds.), Land Use and Land Cover Mapping in Europe: Practices & Trends. Springer. 2014.
14. Al-Fares W. Historical Land Use/Land Cover Classification Using Remote Sensing : A Case Study of the Euphrates River Basin in Syria. 2013. p.261.
15. Obi Reddy GP, Singh SK, Patil NG, Chaturvedi A. Land Resource Inventory, Mapping and Management: An Indian Perspective. Apple Academic Press. 2017.
16. Warner TA, Nellis MD, Foody GM. Remote Sensing Scale and Data Selection Issues. In The Sage Handbook of Remote Sensing. SAGE; 2009. pp. 3-17.
17. Rogan J, Chen DM. Remote sensing technology for mapping and monitoring land-cover and land-use change. Progress in Planning, 2004;61:301-325.
18. Sohl T, Sleeter B.(2011, May 12). Retrieved 2022, From https://www.researchgate.net/profile/Terry-Sohl/publication/259342068_Role_of_Remote_Sensing_for_Land-Use_and_Land-

Cover_Change_Modeling/links/5c812a25458515831f8bfec7/Role-of-Remote- Sensing-for-Land-Use-and-Land-Cover-Change-Modeling.pdf

19. Green K, Kempka D, Lackey L. Using remote sensing to detect and monitor land-cover and land-use change. Photogrammetric Engineering and remote sensing, 1994;60(3):331-337.

20. Herold M, Mayaux P, Woodcock CE, Baccini A, Schmullius C. 2008. Some Challenges in Global Land Cover Mapping : An Assessment of Agreement and Accuracy in Existing 1 Km Datasets. Undefined 2008;112(5):2538–56.

21. Ritchie H, Roser M. (2019, Sep). (Oxford Martin School) Retrieved 2022, from https://ourworldindata.org/land-use

22. Agency SE. Retrieved 2022, from https://esa-worldcover.org: https://esa- worldcover.org/en

23. Worlddata.info. (2022). Retrieved 2022, from https://www.worlddata.info/asia/bangladesh/index.php

24. Tinker HR, Hussain SS. (2021, March 10). Retrieved 2022, from https://www.britannica.com/place/Bangladesh.

25. Norbu D, Karan, Pradyumna P. (2021, March 10). Retrieved 2022, from https://www.britannica.com/place/Bhutan

26. Worldometer. (2022, February). Retrieved 2022, from https://www.worldometers.info/world-population/bhutan-population/

27. Thwin MA, Aung MH, Steinberg DI. (2021, Aug 6). Retrieved 2022, from https://www.britannica.com/place/Myanmar

28. Rose LE, Karan PP, Proud RR, Zuberi M. (2022, Feb 18). Retrieved 2022, from https://www.britannica.com/place/Nepal#ref23635

29. Peiris GH, Arasaratnam S. (2022, Feb 20). Retrieved from https://www.britannica.com/place/Sri-Lanka

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FAUNA IN DEVELOPED BIOTOPES WAYS OF FORMATION

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ABSTRACT

The article provides information on the diversity of vertebrates in different biotopes of the South-Western Kyzylkum Desert formed under the influence of anthropogenic activities, meeting features, distribution ecology, adaptation of species to environmental factors and the organization of their protection.

KEYWORDS: *Desert Zone, Biotope, Ecotone, Colony, Environmental Factors, Adaptation, Ethology.*

INTRODUCTION

Every change that occurs in natural habitats due to human economic activities, first of all, leads to the emergence of unique ecological opportunities for the life of flora and fauna in the region (Turaev, 2006) **[1]** .The rapid change of the natural environment in the world and the formation of anthropogenic biocenoses have a direct impact on the fauna of vertebrates, which today are the basis of the constituent components of natural biogeocenoses. As a result, some peculiar adaptive reactions are forming in the behavior of the representatives of the fauna of the region. At the same time, the formation of anthropogenic biocenoses is leading to the adaptation of animals to man-made structures and their economic activities. This can lead to a number of problems in some industries (fishing, aviation, medicine, agriculture). Sometimes, the measures taken by human activities (natural biotopes, the construction of highways, the construction of railways, the construction of high-voltage power lines, the expansion of arable lands) can negatively affect the state of the fauna of the region. Therefore, today in anthropogenic biocenoses it is important to determine the distribution, number, bioecological and ethological characteristics of animals, to reveal the changes that occur in their behavior. It is also of great scientific and practical importance to determine the role of species in natural and artificial biocenoses, as well as their role in bio-damage, protection of beneficial species, management of pest species, development of measures to reduce and prevent their damage.

MATERIALS AND METHODS

These data show that in all seasons of 2002-2017 and 2019-2021 in different biotopes of Bukhara and Navoi regions along the power grid (35 km along the Amu-Bukhara canal, 7 km along the northern bank of the Tudakul reservoir) a total of 42 km, highway (17 km along the Bukhara-Karshi highway, 23 km of the Bukhara-Gazli highway) for a total of 40 km, along the railway line (along the western border of the Jayron eco-center) at a distance of 2 km, wooded groves (Jayron eco-center and Observations were made in lakes and ponds in the border area, along the Amu-Bukhara canal (57 km) and in the open section of the Jayron Eco-Center and in the developed agrocenoses in the eastern part of the Tudakul Reservoir. The geographical relief of the study area is defined by plains, saline soils, small sand dunes, groves, water basins and agrocenoses and settlements under the influence of human activities. At the same time, ecological analysis of species was carried out on the basis of Novikov's (1949) method, distribution of birds in biotopes on the basis of Kashkarov's method (1927) **[2],** collective analysis of species on the basis of Lanovenko, Felatov, Felatova's (2017) **[3**] method.

Outcome analysis. In the study area, 24 species of vertebrates, 2 species of aquatic and terrestrial species, 21 species of reptiles, 131 species of birds and 26 species of mammals belonging to different biotape of the fauna were recorded and distributed in the following biota of the region (Table 1).

List of vertebrates recorded in different biotope*s*(Table 1).

T/p	Classes of vertebrates	Number of types	Registered biotope			
			Water biotopes	Agrocenoses	Desertsand steppesbiotope	Reeds
1	*Pisces*	24	24			
2	*Amphibia*	2	1	1		1
3	*Reptilia*	21	2	11	19	5
4	*Aves*	131	116	68	39	78
5	*Mammalia*	26	2	23	24	19

Diversity in natural and artificial biotopes was observed, including species distribution, encounter characteristics, number, density, and degree of adaptation to environmental factors. In particular, in desert-based settlements and agrocenoses, species diversity is formed over the years at the expense of natural biotopes, and this composition is characterized not only in terms of diversity, but also in the behavior (ethology) of the species. Although each change in the natural habitat caused by anthropogenic influences is assimilated by the fauna over a period of time, the formation of a stable fauna of the region takes different time, although it is a movement to adapt or move away from it. This process depends on several factors, including: the area developed, the degree of impact of anthropogenic activity in the region, the type of anthropogenic activity For example, the diversity of species in the fauna of the city of Gazli, formed in the desert, has been stable for 25-30 years (Ten, 2012) **[4]**, while in the ecological center of Jayran it has been observed for 5-10 years.

To say stability of the composition of the biocenosis in the second case is difficult, in which the composition of the species' fauna in the adjacent biotopes was somewhat mixed. This is usually explained by the proximity of the biotopes to each other and the extreme similarity of the differences between environmental factors. In these "ecotones" at the border of biotopes, it is usually observed that the representatives of both biotope species (synanthropic species and natural biotope species) have expanded opportunities for life (feeding, reproduction, overnight, rest and sometimes protection from the enemy). However, it is noticeable that some changes in the behavior of representatives of the animal kingdom are intensifying. Including thin-fingered and yellow-tailed deer- Citellus fulvis ,*Rhombomys optimus* ,*Mustella wersmanni* ,*Lepus* tolay coming to feed on discarded food scraps;Bird of sea- *Larus cachinnans* ,*Larus ridibundus*as birds search for food in garbage dumps:*Pterocles orientalus*,*Pterocles alhata, Columba livia, Corvusfrugilegus, Corvusmonedula form a mixed gala and cultivate grain crops planted in agrocenosis fields;From the shores of water bodies, lizards are observed to adapt to fishingHimantopushimantopis, Sterna hurundo.*Similarly, in the Jayron eco-center, the pica pica hunts for sand, the mouse feeds on house mice, Circus arendinosus, Corvusfrugilegus, and Coracias garrogand. it is possible to observe the railway tracks and observe the feeding of animal carcasses that perished at night on the road.We also noted during our observations that due to the duration of such changes, species that sometimes live in natural biotopes later entered zones with strong human activity in urban landscapes and formed adaptations specific to synanthropic species.Nuctocorax, a swan living in the forest and aquatic biota, small blackbird Phalacrocoraxrygmaeus, small white rhinoceros Egrettagarzetta and Egyptian black Bubulcus ibis Karakul of Bukhara regionIn the alleys of Alat, Jondor, Romitan, Kagan districts and in the center of Bukhara city, it is observed that manure is adapted to build nests in the colony Corvusfrugilegus (Turaev, 2019) **[5,6].**This ensures that the species proliferates in the region.

However, in the lives of some species, such changes have a negative impact, including; Gazelle subqutturosa, Otis tarda, Tetraxtetrax, Pteroclesalchata, Syrrhaptes paradoxus, Podocespanderi, leading to a slight reduction in its range, and over the years such species have become one of the few or most declining species in the region. Until the middle of the last century, the Podocespanderi was a typical representative of the region, but today the area of this endemic species has been reduced to the northern city of Gazli. In order to meet the water needs of the desert zone (as well as for water and submarine birds whose lives are associated with the aquatic biotope), the Amu-Bukhara canal in the area and a number of lakes and ponds formed around it should be shown to have a herring. It is observed that 32 species of birds are involved in nesting in reeds and shrubs around the reservoirs (Table 1). The high diversity of species in this biotope is due, firstly, to the lack of water in the desert zone, secondly, the main mass of vegetation cover for animals also grows around the aquifers, and thirdly, the main mass of species that can be found in different biotopes of the Southern Kyzylkumdvrida is recorded in the region. It should be noted that among them there are a number of rare, rare species of our fauna. Since the last years of the last century, in the area of Tudakul, Karakir, Zikri and Kogan fisheries in the area we have observed, there has been an increase in the number of such species as swan, swan, blackbird, and small white carp. (Turaev, 2021) **[7].**

It is also found in the groves of the region, consisting of birch, willow, willow and reeds: Phazanuscolchicus ssp. zerafschanicus, Lusciniamegarhynchos, Turdusmerula, Streptopelaturtur, Laniusexcubitor, Lanius minor, Laniusschach, Athene noctua, Asiootus, Falco tinnunculus, Cuculuscanorus, Parusbokharensis, Remizpendulinus, Columba livia, Streptopela senegalensis, Streptopeladicaocta, Passer montanus, Pasterdomesticus, Acridotherestristis, Oriolusoriolus, form an integrated community and form the forest biocenosisornithofauna.

This habitat is also the main habitat of mammals. From the class in the reeds of trees and puddles formed along the canal, 57 km from the Amu-Bukhara canal: Lepus tolay, Wulpeswulpes, Canisavreus, Ondatra zibethicus, Citellusfulvis, Sus serafa, LutraLutra, Felis uncia, Vormelaperegusna, Mustellawersmanni, such species are recorded. Eight species of amphibians and reptiles have been recorded. Colomberladacensis, Nadrixtessellata, and Pasammophislineolatum dominated the rest of the class.

In the lowland, sandy, and saline biotopes of the region, although the diversity is small, in the low-lying parts of these biotopes, birds blue Coracias garrulus, Meropspersicus, Meropsapiaster, galistacristata, Amomanes dessert, Calandrellabrachydactyla and Calandrellacheleensis species, Pteroclesorientalis, Pteroclesalchata, Oenanthe oenanthe, playful tortoise, Saxicola caprata, bubo bubo were observed to enter agrocenoses.

Bird species recorded in nesting in different biotopes

TABLE 2

T\n	Categories	Number of tours	Biotopes			
			Submerged biotopes	Agrocenoses	Desert and steppe biotope	Bush and reeds
1	Podicipediformes	2	+			
2	Pelecaniformes	2	+			+
3	Ciconiiformes	8	+			+
4	Anseriformes	6	+			
5	Falconiformes	1	+			+
6	Galliformes	1		+		
7	Gruiformes	3	+			+
8	Charadriiformes	13	+	+		
9	Columbiformes	7		+	+	+
10	Cuculiformes	1			+	
11	Strigiformes	4			+	
12	Caprimulgiformes	1			+	
13	Apodiformes	1		+	+	+
14	Coraciiformes	4	+	+	+	
15	Upupiformes	1		+	+	+
16	Piciformes	1				+

17	Passeriformes	38	+	+	+	+
		94				

The activity and species composition of birds in this biotope changed during the season, depending on the type of crop, ie when the seeds of cereals such as wheat, barley, rice, millet were planted (September, October, November): Columba livia, Streptopela senegalensis, Streptopeladicaocta, Passer montanus, Pasterdomesticus, Pteroclesorientalis, white-tailed deer Pteroclesalchata, llowing months by representatives of this genus of geese when the grasses have grown. Occasionally, Anseranser, Tadornaferruginea, Anas platyrhynchos are collected in the range of 25-40 to 60-75 forage per hectare. In early spring, this composition is first replaced by entomophagous species, then by sparrows during the milking process, especially by the field sparrow Passer montanus and the house sparrow Pasterdomesticus. Based on the results of our many years of observations, it should be noted that the duration of anthropogenic activity leads to the reorganization of the biotopes in the region, phytocenoses and zoocenoses.

It also depends on the duration of anthropogenic economic activity and the vital needs of the fauna. As evidence for our view, we noted during our observations that due to the duration of changes in the region, species that sometimes live in natural biotopes later entered zones with strong human activity in urban landscapes and formed adaptations specific to synanthropic species in a short time.These include birds of prey and aquatic biota - Nuctocoraxnuktocorax, Phalacrocoraxrygmaeus, Egrettagarzetta and Bubulcus ibis are found in the alleys of Karakul, Alat, Jondor, Romitan, Kagan districts of Bukhara region and in the center of Bukhara city: We can show that manure is suitable for building nests in a colony mixed with crows (Turaev, 2021) **[8].**

Or the fact that the ornithofauna around Lake Karakir, formed in the foothills of the Kyzylkum desert in the northern part of the region, can be assimilated by aquatic and underwater species in a very short time and take 10-15 years to form a stable biocenosis(the formation of stable fauna is observed in Russia in 30-35 years (Sagitov, Pukinsiy, Pukinskaya 1989**) [9].**

Sometimes the negative effects of anthropogenic activity in the region are obvious. Including; The construction of a high-voltage power line (LEP) across the area where our observations were made could serve as a major holiday for migratory and desert birds, nesting for some species, and food sources for some species. We have witnessed the network claiming the lives of many birds. During our observations, the bodies of a total of 28 birds were found at a distance of 24 km, of which 23.5% are the species listed in the Uzbek and International Red Books. Similar incidents occurred in 2002-2004 and 2013-2019, when 3 km of power lines were laid between the Todakol and Kuyimazor reservoirs. (28.02.2020; 26.03.2006) A total of 14 pink and curly lizards were killed by an electric wire. Collisions of birds with the power grid are mainly observed during the spring and late autumn migrations of birds, especially on rainy and foggy days when birds form a gala and fly to the network (Turaev 2006, 2021) **[10,11].**

There are some negative effects on the fauna of the area, as well as on the roads and railways that cross the area. The highway connecting Bukhara and Karshi is a first-class road, with an average of 2,500 to 4,000 vehicles a day. Due to the small size of the vehicles, the uninterrupted flow of traffic in the area has led to the loss of wildlife and the loss of lives. (Table 3).

TABLE 3 LIST OF BIRDS KILLED IN COLLISIONS WITH POWER TRANSMISSION LINES

т\р	Bird species	Recorded time	Noted location	Number	Recorded material
1	Galeridacristata	29.11.09.	Powersupply	1	Birdbody
2	Piteroclesorientalis	17.01.10.	Powersupply	1	Birdbody
3	*Pelecanus crispus*	26.03.2002, 22.03.2017	Powersupply	1 1	Birdbody
4	*Pelecanus onocrotalus*	28.02.2004, 02.03.2006	Powersupply	1 2	Birdbody
5	*Sturnus vulgaris*	14.11.2010	Powersupply	1	Birdbody
6	*Pica pica*	19.02.13.	Powersupply	1	Birdbody
7	Corvusfrugilegus	7.03.10.	Powersupply	2	Birdfeathers
8	Anas crecca	8.03.10.	Powersupply	1	Birdfeathers
9	Falco tinnuculus	17.02.10.	Powersupply	3	Birdfeathers
10	Bubo bubo	14.03.10.	Powersupply	2	Birdfeathers
11	Aegypiusmonachus	27.02.17.	Powersupply	2	Birdfeathers
12	Buteo lagopus	7.02.10.	Powersupply	1	Birdfeathers

- With the increase in activity and the need for nutrition during the mating season in early spring, it is observed that representatives of vertebrates and invertebrates in the region, especially in the evening, sometimes die on the roadsides while crossing the road. It is during this process that vertebrates often collide with vehicles. Direct collisions of animals with vehicles are often observed in "young" or "insufficiently qualified" representatives**. [12]**

Occasionally, collisions occur when grain is being transported to highways: spilled grain products, food debris dumped by passengers, animal carcasses killed in a car crash are the main factors that attract animals to the tracks. In April, May and June 2010, 59 animal and bird carcasses were recorded at a distance of 14 km from this highway. **[13]**

Animal species killed by vehicles on the Bukhara-Karavulbozor-Karshihighway (March-June). Table – 4

т\р	Animal species	Number	Place of registration	Time of registration (from 24.04.10 to 02.06.10)
1	*Eryx miliaris*	1	*Bukhara – Korovulbozor, (highway)*	24.04.10
2	*Trapelus sanguinolentus*	29	*Bukhara – Korovulbozor, (highway)*	24.04.10 02.06.10
3	*Columber ladacensis*	6	*Bukhara – Korovulbozor, (highway)*	2.05.10
4	*Pasammophis lineolatum*	2	*Bukhara – Korovulbozor, (highway)*	7.05.10

5	*Erinaceidae*	2	*Bukhara – Korovulbozor, (highway)*	12.05.10
6	*Eremias velox*	12	*Bukhara – Korovulbozor, (highway)*	15.05.10
7	*Trapelus sanguinolentus*	4	*Bukhara – Korovulbozor, (highway)*	18.05.10
8	*Rhombomys optimus*	2	*Bukhara – Korovulbozor, (highway)*	8.05.10
9	*Wulpes wulpes*	1	*Bukhara – Korovulbozor, (highway)*	9.05.10
10	*Varanus griseus*	1	*Bukhara – Korovulbozor, (highway)*	19.05.10
11	*Lepus tolay*	1	*Bukhara – Korovulbozor, (highway)*	12.05.10
12	*Sylviacurruca*	1	*Bukhara – Korovulbozor, (highway)*	15.05.10

Similar observations were made in 2004-2007 at the Sarmushsoy settlement in Navoi region, and in 2012-2019 on the Bukhara-Gazli highway. **[14]**

CONCLUSION

Thus, at the end of our observations, we can say that, given the fact that every activity of mankind in nature has its pros and cons, it is necessary to conduct regular monitoring on the ground. Also, to reduce collisions between animals and birds in vehicles and high-voltage power lines (LEPs): **[15-18]**

- Pay attention to the installation of concrete barriers along highways and railways;

- Introduce the installation of special "passage corridors" tunnels for the passage of animals under the highways and railways that cross the area;

- Strengthen control over the speed of vehicles in areas where the wildlife of the desert zone is crowded;

-Increase attention to warning and prohibitory road signs;

-Introduction of installation of various reflectors in high-voltage power lines (LEP); would be appropriate.

REFERENCES:

1. Turaev M, Shernazarov E. Nesting birds of the Tudakul reservoir (South-West Uzbekistan). Kazakhstan Zoological Yearbook Selevinia; 2006;206-208.

2. Kashkarov DN. Method for the quantitative study of vertebrate fauna and analysis of the data obtained: Tr. Wed State University. Tashkent. Publishinghouse Wed Gos. un-that. 1927;8(1):3-24.

3. Lanovenko EN, Filatova EA. Methodical recommendations for conducting ornithological monitoring in the water bodies of southern Uzbekistan. Tashkent, 2017, p. 22.

4. Ten A, Kashkarov R, Maketova G, Turaev M. “Akpetkylakes, Sarykamyshlake, Ayakaghytmalake, and their desert surrounds: three new Important Bird Areas in Uzbekistan” Sandgrouse. 2012;343:137-147.
5. Turaev MM, Rakhmonov RR. Peculiarities of colonies of nesting birds in the water basins of the desert zone of Uzbekistan, Bulletin of the Khorezm Mamun Academy, 2019;3(1):49-55.
6. Turaev MM, Kholliyev AE. The role of environmental factors in the rebreeding of waterfowl in the steppe zone. Asian Journal of Multidimensional Research., TRANS Asian Research Journals. 2019;71-79 .
7. Turaev MM, Rakhmonov R. Data on the ecology of the distribution of the Cygnus olorg.1789 in the waters of the southern Kyzylkum. Bulletin of the Khorezm Mamun Academy, 2021;5:88-93.
8. Turaev MM. Information on the ecology of glossy IBIS-(Plegadisfalcinellus L. 1766) andeurasian spoonbill-(Platalealeucorodia L. 1758) ‘S South-Kyzylkum water distribution - ACADEMICIA: An International Multidisciplinary Research Journal. 2021;11(10):2168-2176.
9. Sagitov RA, Pukinsky YuB, Pukinskaya MV. Modern settlements of copepods and ankle birds on the Karakyr lakes of the Bukhara region. Fauna and ecology of birds of Uzbekistan. Samarkand 1989, 193-205 p.
10. Turaev MM. New information on the ecology of the caraway (Plegadisfalcinellus L.1766). Ecological problems of biodiversity of the Republic of Uzbekistan Proceedings of the Republican scientific-practical conference. Navoi. 2006. pp. 48-50
11. Turayev MM, Shokir Qizi SS. Seasonal Dynamics of Bird Differences and Numbers in the South Western Kizilkum Reservoirs".Scholars Academic and Scientific Society. South Asian Research Journal of Biology and Applied Biosciences (SARJBAB), 2021;3(2): 31-35.
12. Rayimov AR, Rakhmonov RR, Nuriddinova GA, Sanoqulov RA. Around territories of Dengizkul, Kora-Kirand Zamonbobo lakes’ species of reptiles part and numbers’ in spring. Academicia – An International Multidisciplinary Research Journal, 2021;11(10): 800-804.
13. Rakhmonov RR, Rayimov AR. Structure and distribution of animals in the Bukhara region. Nature of inner asia, 2019;2 (11):5-68.
14. Rayimov AR, Ko`shayeva DS, Rustamova MA. Ways to Reduce Acridotheres Tristis with Biological Pollution. International Journal of Academic Multidisciplinary Research (IJAMR), 2021;(4):362-365.
15. Rakhmonov RR, Rayimov R. Ecological positions of hunting species in Bukhara region. International Journal of Genetic Engineering. 2019;7(1):15-18.
16. Rayimov AR, Rustamova MA. Analysis of Summer Nutrient Content in The South- West Kyzylkum Region of Acridotheres Tristis. Solid State Technology. 2020;(5):6145-6151.
17. Rayimov AR, Rakhmonov RR. The role of Acridotheres Tristis in Biotic Connection. International Journal of Virology and Molecular Biology, 2019;8(1):1-3.

18. Rayimov AR, Rakhmonov RR. The distribution and number of Acridotherestristis in different habitats in the Kyzylkum. Nature of inner asia, 2019;2(11):60-64.

DIALOGICAL INTERPRETATION IN MODERN UZBEK POETRY

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ABSTRACT

The article analyses the artistic exploration of the relationship between the world and man in contemporary Uzbek poetry, creative skills in the use of forms of communication, human-nature-society dialogue and the factors that create it, the harmony of image and expression.

KEYWORDS: *Dialogue, Monologue, Image, Expression, Artistry, Image, Form And Content.*

INTRODUCTION

Modern science, like all modern fields, has set clear objectives for literature. After all, one of the main aims of literature is to study the ancient heritage of our people, national values according to universal criteria, and to show their place and significance in the development of world civilisation. In this sense, as can be seen today in all kinds and genres of literature, poetry has undergone a change and renewal of form and content. This manifests itself above all in the reflection on man and his fate, and in the artistic elaboration of such problems specific forms and modes of expression emerge.

A number of monographic studies on various aspects of Uzbek poetry in the post-independence period, including artistic psychology, image and rhythm relations, poetic comprehension of life, artistic features, creative personality and lyrical hero, international poetic thinking, methodological studies, contemporary poetry, etc., have been written in our literature.

Main part. In Uzbek literature, no major research work has been done on dialogue and its interpretation in poetry. The article published by literary scholar, professor B. Sarimsakov on the forms of ghazals-dialogue in the lyrics of A. Navoi provides a scientific analysis of the nature of the genre and the factors of dialogue. **[1, p.12-17].** But the application of dialogues in modern poetry and the elucidation of its scientific and theoretical foundations is one of the important tasks facing our literary criticism today. After all, dialogue is the most important factor in the theory and psychology of artistic creation. In this sense, a work of art, regardless of its type and genre, mainly reflects the artist's dialogue with the universe and man. Because, whether the literary text is poetic, prose or dramatic, the author's "me" is paramount. Poetic text is monologue in nature, dramatic text is mainly dialogic in nature, and prose text is both dialogic and monologic in nature. While the protagonist of a poetic work is the poet himself, and his attitude to the events, persons or things, situations or processes in the work is embedded in the text of the poem, in dramatic and prose texts the protagonists of the work and related situations are given through remarks [9, 38]. The original poetic work emerges as a product of dialogic thinking. In it, the poet expresses his heart's experiences in the form of dialogue (internal and external) in one form or another.

RESULTS AND DISCUSSIONS

The use of dialogues in a work of art requires a unique approach to task and purpose. The method, which manifests itself in different ways in this regard, differs in a certain sense in the lyrics. In this sense, dialogue as a form of artistic speech is, firstly, the main aesthetic tool that determines the way of poetic perception, secondly, the system that unites the levels of social communication, and thirdly, the semiotic center that coordinates expression and image. Consequently, “poetry is an image of emotion. It must have emotion, symbol, image, art; the poem must reflect the subject of the poet, his individual style, his "I", his own voice **[2, p.86].** Here, several aspects are noteworthy: first, the demand of the poet’s subject in the poem implies the predominance of a spiritual attitude in it, and second, the definition of the creative concept is associated with originality and artistic skill in image creation. The general essence of this complex connection makes analysis and description an important condition, and thirdly, the individual style renews the existing connection between the author and the protagonist, in which the image and expression pass to each other:

Maglubning onasi… qanchalar mayus!

(The mother of defeat… how sad)

Yomgirday jontortar, toshday jim, kabir.

(It is as heavy as rain, as silent as a rock, a grave.)

– Ona, menga keladi yana bir imkon?

(Mom, another chance comes to me)

– Bolam, shu turishing qahramonlkdir

My child, this stand is heroic **[3, p.117].**

The author used the form of dialogue in order to renew the existing belief in our people: The lively dialogue in lines such as «– Ona, menga keladi yana bir imkon? (Mom, another chance comes to me) – Bolam, shu turishing qahramonlkdir! (My child, this stand is heroic)» embodies battle scenes in the reader’s imagination, but presents a unique mood in the scene in the poem. Based on the axiom that "life consists of contradictions", the poet contrasts the lyrical protagonist with "crude reality". The mother mourns the loss of her child, saying: “Yomgirday jontortar, toshday jim, kabir”. The lines "Yana bir imkon" (Another chance) indicate the duration of the struggle. Bright lines such as "Samovotda yulduzlar tugal" ("The stars are in the sky"), "Oy vazmin suzadi tunni oralab" The (“Moon swims calmly through the night”) and "Hayot g‘oliblarni bopti saralab" (“Life has selected the winners”) add to the complexity of the idea. Also, the aesthetic burden of detail - "Ona, yetolmadim jonab ketdi yol" (“Mother, I could not reach the road”) - in fact justifies the fact that the address of happiness is far, difficult and difficult.

In poetry, dialogue, on the one hand, manifests itself in the form of a system that determines the creative purpose, on the other hand, the poet serves as a means of shaping the ways of artistic communication. These two speeches cannot be imagined without separating them from each other. Consequently, lyricism relies on the requirements of image psyche. The combination of analysis and perception in the imagination serves to reveal the essence of the matter.

O‘qituvchi eding, men-chi, talaba,

(You were a teacher, I was a student)

bir kun so‘rab qolding darsda nogahon:

(Suddenly in class you asked)

«Kimga qanday shakl yoqadi? – deya –

(Who likes what shape?) – you said

Men aytib beraman, u qanday inson»

(I'll tell you what kind of man he is) **[4, p.17].**

Nasrullo creates a subtle philosophical observation from simple details in this poem, which is based on an event called “Chalkash chiziqlar” (“Confusing Lines”). In it, the conclusion that the logic of the text leads is firm: understanding and expressing love is an impossible event! The emotional weight of the lover “umriga tutash” (“holding on to life”) does not fit into any dimension, does not fit into any description, the lyrical protagonist seeks to animate his feelings in lines. In the poet's description “To‘xtab qolgan eng so‘nggi lahza” ("The Last Moment of Stopping"), communication creates the condition to move from tongue to eye. Because, "in fiction," inner speech "is widely used in order to reveal the psyche of the character, to describe the processes of thought and observation in his mind." **[5, p.250-251].** In the perception of a poetic work, the concept creates a material appearance, which is important because it depends on the relationship between analysis and interpretation. After all, the poetic worldview interconnects the edges of the dialogic mind.

It is well known that inner conflict determines the nature of character, which in turn makes spiritual-moral virtues and vices an inevitable phenomenon of the law of artistic coherence. In fact, consistency and integrity are complementary concepts, the foundation of which is determined by internal contradictions. The interdependence of life and creative processes is connected with the continuity of socio-philosophical and spiritual values.

– Taqdir, meni nega inson yaratding,

(Fate, why did you make me human)

Ko‘ksimda shodligi gamdan yuz nishon.

(A face of sorrow and joy on my chest)

– Men senga qalb ila shuur bahsh etdim,

(I have given you consciousness with all my heart)

Bilgin deb hirs nima, nimadir hayvon.

(Know what lust is, what an animal is)

– Taqdir, nega meni mehmon yaratding,

(Fate, why did you make me human)

Yarq etgan chaqindek ketgum begumon.

(I can't go like a flash of lightning)

– Men senga oʻlchovli umr baxsh etdim,

(I have given you a measure of life)

Bilgin deb ishq nima, nimadir inson...

(Know what love is, something human) **[6, p.151]**

In these lines, written by Jamal Kamal, man enters into a debate with destiny. Mankind's destiny has been complicated from time immemorial. Joy and sorrow go hand in hand. "Heart and Consciousness" are the highest blessings bestowed on a servant by Allah Almighty! The sharper the questions asked, the heavier and heavier the answers. Concepts that take on opposite meanings actually define the meaning of life. In the poem, the lyrical protagonist, thinking about the contradictions of life, asks, “Nega meni mehmon yaratding” ("Why did you make me a guest?"). "Measured life" is "understanding love". The author manages to masterfully incorporate the rhetorical approach to the dialogue.

In the practice of creativity, dialogue combines tone, perception and communication, while being a concise expression of observation and a guarantee of brightness in the image. It strangely combines the liveliness and positive assessment of a popular style of speech. The tool, which provides detail, landscape and situational clarity, enhances the artistic and aesthetic value of the imagination. The form of communication combines the interests of the author-text-reader, directing the poetic goal to the methodological function. It also gathers analysis and interpretation to a specific point, describes the process of information transmission and emotional perception, and determines the ideological-logical development of meaning:

Qancha ishonch, umid baxsh etar,

(How much confidence, how much hope)

Ham Vatanga, ham menga bu dil,

(It is a language for both the Motherland and me)

Qoya kabi yonimdan chiqib,

(Leaving me like a rock)

Suyan, – deydi, – kiftimga dadil

(Lean on my shoulders -said bravely) **[7, p.44].**

The poem “Oʻgʻlum sira boʻlmaydi urush” ("Son, there will never be a war"), which is based on a third-person appeal, has a special place in Zulfiya's work. Created in the form of an artistic manifesto of the Second World War, the majestic work is in fact more of a debate than a rhetorical one: The tragedy of the impressions that tore away "the great joy of the father's name in many homes" still has its consequences! At the heart of the poet's emphasis on "my son, there will be no war" are feelings of longing, hope, anger and hatred. In him, a sense of confidence in the human will opens a wide way to examine the emotions.

In lyric poetry, dialogue serves to combine image, expression, and analysis, in which the subjective relationship creates an objective interpretation. In a poetic observation wrapped in a shell of semantic ambiguity, philosophy and logic achieve a creative alternative, for example, illusion and meditation define the scale of artistic discourse. High emotional pressure is associated with the process of materialization of consciousness. "Poetry, in the eyes of the scientist (M.M.Bakhtin - emphasis ours S.M), on the one hand, represents a dialogic consciousness, because in it every word is directed to the heroic attitude of the author's worldview, on the other hand, takes the form of a monologue. After all, the literary interpretation reflects the poet's ideological integrity and original artistic speech. **[8, p.75].** In this case, the lyrical subject integrates the author, action and situation. The ratio of observation and emotion serves to describe the ambiguity of mental experience:

Ey arablar! Tasanno sizga,

(O Arabs! Laudation to you)

Hikmatingiz keldi menga koʻl.

(Your wisdom has come to me)

Debsiz, «Eng choʻng, uzok masofa

(You said: "The longest, longest distance)

Dil bilan dil aro yotgan yol»

(The road between the heart and the heart ») **[7, p.75].**

The "Dil bilan dil aro yotgan yol" ("path between the heart and the tongue")- the distance to the heart - defines the course of expression. In a targeted approach, the author sings of wonder and beauty. The extent of the pain is severe and aggravated! It directly and indirectly affects the reader's perception. The bound bond thickens the analysis. Indeed, the concepts that knowledge and understanding complement each other, and practice in this way serves as a basis for happiness. However, reaching the "Eng choʻng, uzoq masofa"("longest, longest distance") requires willpower and hard work. The poet points out that goodness and depravity coexist in the new metaphor of "Katraga barg ham kosa ham joy" ("both a leaf and a cup in a drop.") «Bir bulbulning koʻz yoshi qadar» "Up to the tears of a nightingale" transparent dew is able to wash away the dust in the heart! The artist uses the alliteration of "parting, love, rain and lightning" sounds to create the allure of the image by softening the tension of meaning. Linguistic units, in particular, the burden imposed on the word, while creating a change of expression, the symbols of "wine, drop, glass" in the philosophical-artistic generalization "make the heart swell."

"Our emotions always send us somewhere, to something, to someone. What drives us to action is emotions. It is the driver of both the big "I" and the big "YOU". Our personality constitutes the essence, our inner and outer worlds. Organizes. Leads to relaxation or misguidance. And in this love and hate, anger and joy, anger and ignorance are always side by side and always connected to each other. They always deny the great knowledge and are always in close collaboration with it, in a compromise mode. They cannot be explained by just one of them" **[9, p.96]** - writes I.Gafurov.

Poetry is actually based on the experience of music, logic and philosophy. Color and tone always seek to interpret the sense of perception. The spiritual experience, which moves from imagination to consciousness, from observation to emotion, enters the reader's consciousness with a natural sequence:

– Kimlar bu sof dala gullari,

(Who are these pure field flowers)

So‘z dagalday, ko‘z berar savol

(As word is rude, eyes give question) **[7, p.65].**

The sharpness of the question in the passage reinforces the attitude ottenka. The poem "Ukpar jig‘ali" is formed from the beginning to the end on the basis of rhetorical discussion: Tokilarmi toshlardan tomchi, Yo kozda oynar baliklar. Sayrarmi boz Kulash egachi, Yo shoirda sher etilar? The ten-point text is dedicated to the description of seven Kazakh beauties dressed in national costumes. The poet draws the image of young Kazakhstan with the help of biographical strokes (kulash egachi, the master singer Avezov). The glory of the homeland is introduced to the world by great personalities, but there is another powerful tool, the current strength of which is welded to the national values of each nation. The author summarizes the edges of the brightness of the image, as if girls who strictly adhere to mental traditions are singing oriental qualities… The poetic scene seen from the creative point of view is warm, the delicate expression evokes pleasure in the heart of the reader. The poet does not seek to reveal the cause and effect of the detail, but rather to show the process in action. Descriptive condensation and a tense psyche provide a collection of literary interpretations. The descriptions of “Sof dala gullari” ("pure field flowers") and “Ok boyinli yeti okkushday” ("seven swans with white necks") serve to reveal the essence of romantic feelings.

In lyric poetry, artistic communication combines the levels of appeal (monologue) and attitude (dialogue). The process of two-way communication is also reflected in the one-way communication. That is, the rhetorical tone guarantees an overlay of affirmation-affirmation or affirmation-negation. In poetry indexing, observation and evaluation alternate. More precisely, the information-reception link forms the dialog of consciousness. The Russian critic Yu. Lotman introduced the term lyrical indexing to science. According to the scientist, words and images are applied to the index of the internal system of language by the literary critic in the form of artistic speech **[10, p.264-271].** The creative communication that is formed between the subject and the lyrical ‘I’ distinguishes style and function. In fact, in each poet’s narrative technique, the concept shifts to the subject of creative-private research. The materialization of the imagination as the basis of the text is its main quality. With the introduction of communication between the addressee and the addressee's worldview, the poetic structure of the text acquires its own characteristics:

Eldoshing:

«Bu yoniq sham qaydan o‘zi»

deb qilsa so‘roq.

(It's a question of where the burning candle came from)

De:

Yaqin qardoshning bir ona qizi,

(A mother daughter of a close relative)

Vafoli qo‘noq

(Loyal konok) [**11, p.161-162].**

The poem "Konok" is dedicated to the famous Bulgarian poet Kaysin Guliyev. The work, written in a descriptive spirit, begins with a description of a mountain and an eagle's flight: « Togliklar ulkasin burgut siyokli sahiy, oktami » the child's life is complex and full of contradictions. The artist, who was deported from his homeland, lived in Kyrgyzstan from 1944 to 1957. Shukrullo, A. Aripov and Zulfiya, who have a strong place in the culture of the Turkic peoples, translate their poems into Bulgarian. In the text, the author draws elegant scenes from each other, likening the fiery creature, who lived in the conditions of «quyini yuksakka zanjirday ulab, yol ketgan uzok» ("connecting the bottom like a high chain, a long way"), to the poet's “Yoniq sham” ("burning candle"). The son of the Caucasus, who dreamed of freedom, liberty and a prosperous life, highly valued Uzbek nation and worked hard to establish friendly ties between the peoples. The lyrical protagonist, who said, “Bir parvoz istayman shu tob” ("I want a flight, at the moment,") felt the need for spiritual uplift. The depiction of the spiritual experience of a great person is logically demonstrated by means of comparison with nature. In the process of communication, the author's respect, trust in words and creativity is evident. Strong passion adds a wonderful glow to the poem.

CONCLUSION

In lyric poetry, the process of communication leads to a reciprocal balance of expression and narration. It combines the laws of artistic expression and the criteria of life. After all, it is precisely the two pillars that make up a literary composition - style and semantic density - that also emerge from related speech. One gets the impression that dialogues in poetry increase the possibility of subtle observation and vivid observation in interaction, and that a concise form is formed. This condition, firstly, ensures the depth of the mental experience and, secondly, lays the foundation for the harmony of image and expression.

In general, the use of dialogue in poetry is based on the convergence of creative intent and thought. The poet provides a gathering of the imagination through the use of a form of speech, deepens the analysis of the human psyche and shapes the process of imitation. The predominance of situational drama requires a mixture of monologue and dialogue in poetry. Furthermore, its constant exchange of images and expressions turns speech synthesis into an auxiliary aesthetic tool.

In the observed poems, in the creative philosophical-intellectual interpretation, dialogue appears as a convenient and concise means of illuminating the spiritual landscapes. In most of his writings, poets direct artistic communication to universal values. In combining human symptom and societal demand, the author elevates nature to the level of a medium. Debate does not mean that the creative person has passed from the status of a person to the work of society. In them, the dialogue changes into a situation and a factor determining the situation. In this case, the form of communication becomes an inviolable tool that provides the conceptual basis. The continuous movement of emotion and the tension of the state of mind come together in the center of the mind and act as a link between imagination and detail.

REFERENCES:

1. Sarimsokov B. Forms of ghazal-dialogue in Alisher Navoi's lyrics. Uzbek language and literature. 2001;(1):12-17.

2. Karimov B. The Alphabet of Spirituality. Tashkent: Literature and art. 2016. p.86

3. Salom S. Planet of Poetry. Tashkent: Literature. 2020. p.117.
4. Nasrullo. Let the two of us stay on fire. Tashkent: Academpublishing. 2018. p.17.
5. Kuronov D. Fundamentals of Literary Theory. Tashkent: Navoi University. 2018. p.250-251.
6. Kamol J. Mening uvok sherlarim mening dilporam (turkum) (My short poems are my heart) (series). Anthology of Uzbek poetry of the XX century. Tashkent: National Encyclopedia of Uzbekistan. State Scientific Publishing House. 2007. p.151.
7. Zulfiya. Selection. Tashkent: Shark. 2015. p.44.
8. Gutkina E. Lyric creativity as a unity of dialogue and monologue. Bulletin of Nizhny Novgorod University. Nizhny Novgorod, 2013;(1):75.
9. Independence period literature. Tashkent: Literature and Art. 2006. p.96.
10. Lotman Y. Analysis of the Poetic Text. Leningrad: Science, 1972. pp.264-271.
11. Saidkhonov M. The role of remark in the dramatic text. Language and literature education. 2009;(4):161-162.

INVESTIGATION OF THE UNIFORMITY OF THE COURSE OF THE UNIVERSAL SOWER COULTERS IN THE DEPTH OF SOWING

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ABSTRACT

The article presents the results of theoretical studies on the study of the uniformity of the coulter stroke of a universal seeder designed for wheat grain seeds on the opening area and row spacing of cotton in the depth of sowing and it is noted that for given working conditions and known parameters of the coulter, the uniformity of the depth of sowing at the required level is ensured by the correct choice of the moment of inertia of the coulter relative to the point of attachment to the frame, and consequently its mass and thrust length.

KEYWORDS: *Universal Seeder, Coulter, Sowing Depth And Its Uniformity, Moment Of Inertia, Mass, Traction Length.*

INTRODUCTION

From our side, we have developed a shallow seeder, which sows seeds both in open areas and between the rows of buds, and in this article it is investigated the issue of ensuring a smooth March of the sower on the depth of planting. Because if this indicator is at the required level the seeds are planted to the same depth, and the development and ripening of the plant is ensured to be uniform, the yield will increase.

Results of the study. Due to the unevenness on the field surface and between the rows of buds, as well as the variability of the physico-mechanical properties of the soil, during the movement of the sower, the vertical N_z and horizontal N_x forces acting on it by the soil (look at the picture) are constantly changing. Therefore sower in the process of work will V be in vibration motion in relation to the O_1 to ball joint in the longitudinal-upright plane in addition to the act of fastening. This naturally leads to a change in the planting depth of the seeds.

In itself, it is clear that in order for the seeds to be planted to a uniform depth, the amplitude of the oscillations of the sower in the longitudinal plane should be as small as possible. In order to determine that what factors can be satisfied with this demand, we draw up the differential equation of the oscillatory motion of the sower in the longitudinal-perpendicular plane. For this:

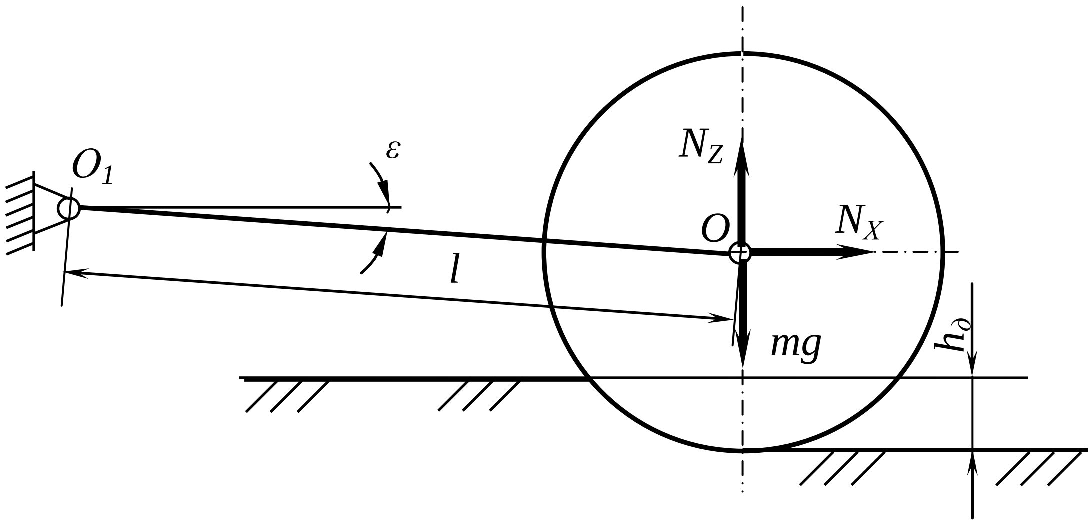
- universal seeder moves straight line with constant speed;

- O_1 the friction in the sharper is low and does not affect the vibrations of the sower;

- the vibrations of the frame of seeder do not affect the vibrations of the sower;

- the equilibrium position of the sower in the working process is horizontal, its deviation from this position is a small angle.

By taking the angle of deviation y from the horizontal position of the sower tortoise as a generalized coordinate and using the differential equation of the rotational motion of the rigid body around the fixed axis **[1, 2],** we obtain the following expression:



1-sower; 2-tow

The oscillation motion of the sower in the longitudinal-perpendicular plane scheme for the study

$$J\frac{d^2\varepsilon}{dt^2} = (mg - N_z)l\cos\varepsilon - l\sin\varepsilon, \qquad (1)$$

where *J* – is the moment of inertia of the impeller and the ball joint with sower to

the tow O_1, kg·m^2;

m – the mass of the sower, kg;

g – free fall acceleration, m/s^2;

l – the length of the tow, m.

ε Since the angle is small, considering *sinε=ε*, *cosε=1*, we bring Equation (1) to the following form

$$J\frac{d^2\varepsilon}{dt^2} = mgl - N_x l\varepsilon. \qquad (2)$$

We assume that the vertical reaction force N_z acting on the sower is the sum of the elastic force $R_э$, the viscosity force $R_к$ and the variable N_z forces depending on the unevenness between the ro ws of cotton and the physical and mechanical properties of the soil **[3]**, that is

$$N_z = R_э + R_к + R_у. \qquad (3)$$

With this in mind, expression (2) takes the following form

$$J\frac{d^2}{dt^2}=(mgR_э+R_к+R_y)l-N_xl\varepsilon. \quad (4)$$

In the case of static equilibrium of the sower, the following equations are valid [3]

$$R_э=h_∂C; \quad (5)$$

$$R_к=0; \quad (6)$$

$$R_y=0, \quad (7)$$

where $h_∂$ – the depth at which the planter sinks into the ground, m;

C – the virginity of the soil, N/m.

When the cultivator tilts from the equilibrium position to angle ε [3]

$$R_э=(h_∂+l\varepsilon)C; \quad (8)$$

$$R_к=bl\frac{d\varepsilon}{dt}; \quad (9)$$

$$R_y=-\Delta R_z(t), \quad (10)$$

where b – soil resistance coefficient, N·s/m;

$\Delta R_z(t)$ – a driving force that changes over time, N.

(4) to $R_э$, $R_к$, and R_y this (5)-(10) Pouring the values on the expressions we get the following

$$J\frac{d^2\varepsilon}{dt^2}=\left[mg-\left(h_∂+l\varepsilon\right)\ C-bl\frac{d\varepsilon}{dt}+\Delta R_z\left(t\right)\right]l-N_xl\varepsilon. \quad (11)$$

When the injector is in static equilibrium position

$$mgl-h_∂Cl=0. \quad (12)$$

Given this expression, we write expression (11) as follows

$$J\frac{d^2\varepsilon}{dt^2}=\Delta R_z(t)l-Cl^2\varepsilon-bl^2\frac{d\varepsilon}{dt}-N_xl\varepsilon \quad (13)$$

or

$$J\frac{d^2\varepsilon}{dt^2}+bl^2\frac{d\varepsilon}{dt}+\left(N_x+Cl\right)l\varepsilon=\Delta R_z\left(t\right)l. \qquad (14)$$

This equation represents the parametric oscillations with respect to ε because the force N_x is variable **[4].** However, due to the large damping properties of the soil, the cultivator is in a state of forced oscillation during operation, mainly under the influence of the excitatory force $\Delta R_z(t)$. Therefore, considering that the force N_x does not change and its mean value is equal to $N_{ўр}$, we consider the forced oscillations of the sower under the influence of the driving force $\Delta R_z\left(t\right)$. In this case, we assume that the force varies according to the following law $\Delta R_z\left(t\right)$

$$\Delta R_z\left(t\right)=\Delta R\sin\omega_\kappa t, \qquad (15)$$

where ΔR – amplitude of the driving force;

ω_κ – the rotational frequency of the driving force.

Considering (15), expression (14) looks like this

$$J\frac{d^2\varepsilon}{dt^2}+bl^2\frac{d\varepsilon}{dt}+(N_{ўр}+Cl)l\varepsilon=\Delta Rl\sin\omega_\kappa t \qquad (16)$$

or

$$\frac{d^2\varepsilon}{dt^2}+2n\frac{d\varepsilon}{dt}+k^2\varepsilon=G\sin\omega_\kappa t, \qquad (17)$$

In this

$$n=\frac{bl^2}{2J};\quad k=\sqrt{\frac{(N_{ўр}+Cl)l}{J}}\quad \text{ва}\quad G=\frac{\Delta Rl}{J}.$$

The solution of equation (17) representing the forced oscillations of the sower is written as follows [1,4]

$$\varepsilon\left(t\right)=\frac{G}{\sqrt{(k^2-\omega_a^2)^2+4n^2\omega_\kappa^2}}\sin\left(\omega_\kappa t-\delta\right) \qquad (18)$$

or given the accepted designations

$$\varepsilon\left(t\right)=\frac{\Delta Rl\sin\left(\omega_\kappa t-\delta\right)}{\sqrt{\left[(N_{ўр}+Cl)l-J\omega_\kappa^2\right]^2+(bl^2)^2\omega_\kappa^2}}, \qquad (19)$$

in this

$$\delta = arctg\frac{bl^2\omega_a}{(N_{\breve{y}p} + Cl)l - J\omega_\kappa^2}.$$

The maximum deflection angle from the equilibrium position of the cultivator

$$\varepsilon_{\max} = \frac{\Delta Rl}{\sqrt{\left[(N_{\breve{y}p} + Cl)l - J\omega_\kappa^2\right]^2 + (bl^2)^2\omega_\kappa^2}}. \qquad (22)$$

As can be seen from expressions (19) and (20), the quality of work of the cultivator, that is a smooth stroke along the sowing depth, depends on its moment of inertia, traction length, pressure spring stiffness, amplitude of driving force and physical and mechanical properties of the soil. Certain parameters, a straight run along that its planting depth is ensured mainly due to the correct selection of the moment of inertia of the relatively to its connection point to the frame and hence its mass and traction length.

CONCLUSIONS

A smooth run of the developed seed drill along the planting depth is ensured by the correct choice of its moment of inertia relative to the point of attachment to the frame and, consequently, the length of the mass and traction.

REFERENCES

1. Butenin NV, Lunts YaL, Merkin DR. Course of theoretical mechanics. Dynamics. 3rd ed., Vol. 2, Rev. Moscow: Science; 1985. 496 p.
2. Tukhtakuziev A, Mansurov M, Karimova D. Scientific and technical solutions to ensure the stability of the working depth of tillage machines attached to the frame of the working bodies. Tashkent; 2019. 84 p.
3. Ibragimov A. Investigation of the angular oscillations of the seed drill for sowing small seed crops. Problems of mechanics. Tashkent, 2009;(5-6):105-108.
4. Panovko YaG. Introduction to the theory of mechanical oscillations. Moscow: Science, 1980. 272p.

ISSUES OF MACROECONOMIC POLICY COORDINATION

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ABSTRACT

In this article, we have learned that coordination of monetary and fiscal policy is one of the most important indicators of country economy regulation and economic growth, and it has been achieved in several ways. Taking into account the views of the above economists, the author considered it expedient to develop his own scientific definition of the concept of "harmonization of macroeconomic policy". The state budget deficit and the use of fiscal and monetary rules in public debt management have certain advantages.

KEYWORDS: *Monetary Policy, Monetary Rules, Fiscal Policy, Interest Rates, Coordination*

INTRODUCTION

Today, the need for a coordination mechanism between the monetary and fiscal policy bodies in the world is considered necessary to achieve the desired ultimate goals of macroeconomic policy.

Decree of the President of the Republic of Uzbekistan "On measures to radically update state policy in the field of economic development and poverty reduction" PD-5975 of March 26, 2020 and the implementation of a coordinated policy with other agencies to ensure macroeconomic stability, including reducing inflation and achieving the set goals **[1].**

Based on the above, the issues related to the harmonization of macroeconomic policy in our country show the need to expand the scope of scientific research in this area in our country.

LITERATURE REVIEW

In recent years, the issue of harmonization of monetary and fiscal policies has again come to the forefront of economic research. Let's talk about some of them.

Economist Cui (2016) in his article "Monetary-fiscal interactions with endogenous liquidity frictions" developed a macromodel that challenged the investment and management of macro-models managed by domestic liquidity assets to understand the relationship between liquidity, monetary and fiscal policy. met with financial intermediaries in the markets **[2].**

Economists Bianchi and Ilut (2017), in their article Monetary / fiscal policy mix and agents' beliefs, formulate a model for the US economy in relation to changes in monetary and fiscal policy **[3].**

Economists Cevik, Dibooglu, and Kutan (2014) in their article "Monetary and fiscal policy interactions: evidence from emerging European economies" suggested that the Markov regime change from the first quarter of 1995 to the fourth quarter of 2010 for some transition countries and developing European countries. and the interrelationships between monetary policy. **[4]**

In their article Monetary-fiscal policy interaction and fiscal inflation: a tale of three countries, Kliem, Kriwoluzky, and Sarferaz (2016) discuss the impact of the relationship between fiscal and monetary policy on the low-frequency relationship between fiscal status and inflation from 1995 to 1999. based on the use of data **[5].**

Research Methodology

Studies have shown that foreign and local economists often use the concept of "macroeconomic policy coordination" and its most important components, rather than fiscal policy, monetary policy, and their relationship to each other.

Taking into account the views of the above economists, the author considered it expedient to develop his own scientific definition of the concept of "harmonization of macroeconomic policy". Coordination of macroeconomic policy is the joint development of general economic, fiscal and monetary policy by the Government and the Central Bank in order to ensure sustainable economic growth, full employment of resources and a stable price level implementation using the means.

Based on this approach, the theoretical and methodological basis for the coordination of macroeconomic policy can be formulated as follows. As can be seen from these figures, the harmonization of fiscal and monetary policies represents a systemic approach that has its own mechanisms. The mechanism includes areas, methods and tools of adaptation.

Areas of coordination include stimulating economic growth, reducing inflation, ensuring effective credit policy, financing the budget deficit and managing the balance of payments deficit.

Budgetary and monetary rules are the main means of coordination. Coordination methods include measures such as clear definition of procedures, methods and tools to ensure cooperation between the Government and the Central Bank, strengthening the legal framework for coordination and development of macroprudential policy to monitor risks. It is obvious that the main need for coordination is related to financial mechanisms.

Analysis and discussion of results

The development of financial markets in the country creates additional opportunities for improving (increasing) the methods of conducting monetary policy and public spending.

The need for harmonization of monetary and fiscal policy in Uzbekistan is clearly seen in practice (Figure 1).

It is obvious that the measures to stimulate the economy are not sufficiently reflected in the additional acceleration of economic growth in a balanced macroeconomic environment. In particular, in 2012-2016, the actual volume of production exceeded its potential, while in 2017-2019, the volume of production lagged behind its potential. It should be noted that the difference in production in our research in recent years, although the annual difference is negative, there is also a positive difference in production during this period, ie quarterly calculations.

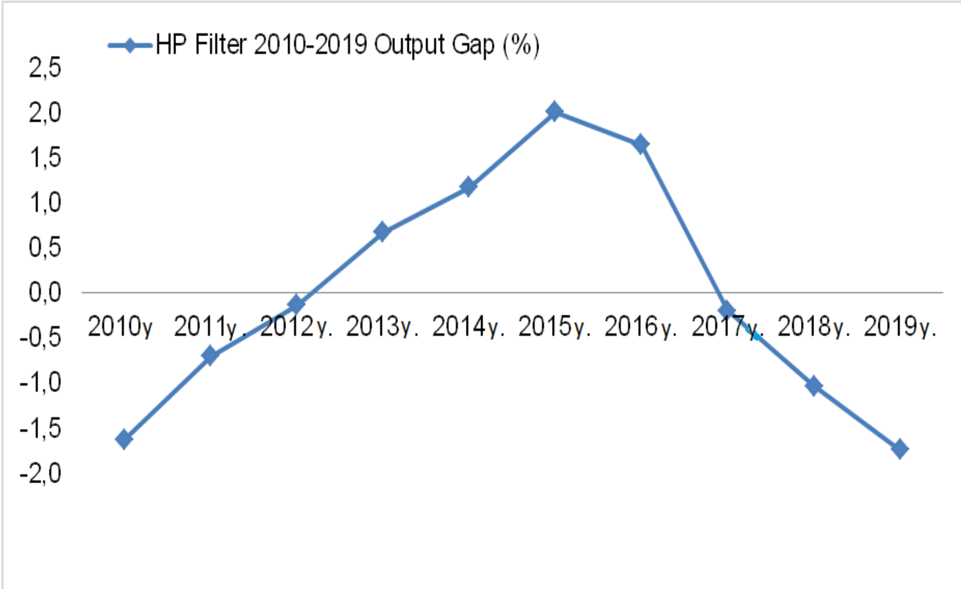

Figure 1. Difference between production potential and actual production volumes in 2010-2019 (Hodrik-Prescott filter).

This is explained by the fact that in the short term (quarter) the total demand is higher than the total supply, and in the intermediate period (annual) the total demand is lower than the total supply. At the same time, observations show that the long-term production gap (average for 2010-2019) has been minimized. At the same time, the author felt the need for operational (quarterly) data to confirm the reliability of this result. This is because the Hodrick-Prescott filter is usually based on the number of large observations over a short period of time. In our filter, the number of observations was small, and the interval was long.

Based on the results of the study, taking into account national and foreign operations, we have divided the mechanisms of coordination of fiscal and monetary policies into the following groups: legal mechanisms, financial mechanisms and economic mechanisms.

CONCLUSION/RECOMMENDATIONS

In conclusion, the harmonization of macroeconomic policy is necessary to achieve the goals of economic policy, including economic growth, achieving price stability and ensuring the balance of payments.

Fiscal policy indicators are closely linked to monetary policy indicators, and their changes have a significant impact on the effectiveness of economic policy. Including:

-Government debt is strongly linked to interest rates, exchange rates and money supply in the country.

- The tax burden, in turn, has a certain relationship with the exchange rate through the dynamics of the trade balance, as well as the money supply and interest rates.

- public expenditures are consistently linked to the exchange rate through both aggregate demand for money supply (through the demand for money) and interest rates through centralized investment, as well as expenditures related to public debt service.

Therefore, it is necessary to ensure that economic policy is harmonized, to improve the mechanism of coordination of macroeconomic policy on the basis of common means, methods and institutional systems of fiscal and monetary policy, and to take urgent measures in the relevant areas. is the main area of coordination.

The state budget deficit and the use of fiscal and monetary rules in public debt management have certain advantages. At the same time, it is effective to use the mechanisms of formation of the yield curve on government securities by establishing restrictive rules on public debt and regulating domestic debt as well as external debt in public debt management.

REFERENCE

1. Decree of the President of the Republic of Uzbekistan No. UP-5975 of March 26, 2020 “On measures to radically update state policy in the field of economic development and poverty reduction”. Available at: https://lex.uz

2. Cui W. Monetary-fiscal interactions with endogenous liquidity frictions. Eur. Econ. Rev. 2016;87(C):1–25.

3. Bianchi F, Ilut C. Monetary / fiscal policy mix and agents' beliefs. Review of Economic Dynamics, 2017;26;113–139.

4. Cevik EI, Dibooglu S, Kutan AM. Monetary and fiscal policy interactions: evidence from emerging European economies. Journal of Comparative Economics, 2014;42(4):1079–1091.

5. Kliem M, Kriwoluzky A, Sarferaz S. Monetary-fiscal policy interaction and fiscal inflation: a tale of three countries. European Economic Review, 2016;88(C):158–184.

THE APPLICATION OF STYLISTIC-SYNTAX FIGURES ON POETIC TEXT

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ABSTRACT

In this article, one of the central questions of poetic syntax - poetic figures - is studied by dividing into two main types - syntactic (inversion, pause, default, punctuation marks in a poetic text (including rhetorical appeal and rhetorical question), dots, italics, etc.) e.) and stylistic (anacoluf, asindeton, polysindeton, anzhambeman, anaphora, epiphora, refrain, etc.).

KEYWORDS: *Poetic Syntax, Poetic Figures, Syntactic Figures, Stylistic Figures, Inversion, Pause, Default, Anacoluf, Asyndeton, Polysindeton, Anzhambeman*

INTRODUCTION

Language, as the paramount factor in the expression of thought, enables the creation of every people's culture, as well as art and literature, which are its most important type. In this sense, it should be noted that in language there is a very wide range of possibilities, especially as a reflection of human artistic thinking. There are thousands of masterpieces that have enriched the spiritual treasures of the peoples of the world, and there is a lot of room for analysis.

However, while language and its units are recognized as the most important and fundamental means of communication **[1-2],** it would also be appropriate to point out that they are not the only means. In this sense, it is common knowledge that "the only and important medium of fiction is the word", "representatives of the art of speech rely on one word - the figurative word" **[3-5]** is appropriate, most importantly, it is necessary to make the necessary changes, in our opinion.

An example of this is the poetic figures with the semantic-syntactic integrity that make up the poetic syntax of a work of art.

It is no secret that poetic syntax as a special concept of literary criticism is widely studied in the science of universal philology **[6-22].** However, the scale of research in Uzbek literature is not very large. It is true that in later textbooks and manuals on Uzbek literature, information and explanations about poetic syntax and the poetic figures that formed its basis began to appear relatively more **[23-29],** but in foreign literature on poetic syntax by comparing and contrasting available information and concepts, it will be possible to have a clear idea of the extent to which the problem has been investigatedIn particular, subsequent research in Russian literature has resulted in the division of poetic figures into two types - syntactic figures and stylistic figures, unlike in previous textbooks, manuals and dictionaries, according to their use and nature [30]. In this case, inversion, pause, to remain silent (silence - as shown in some sources [**31-36],** but this is a poetic phenomenon of longer duration than silence), punctuation in the text in general, including exclamation and question marks (in rhetorical appeals and interrogations), colons, as well as italics (a character in a text that represents a highlighted part - our comment - A.T.) is shown as a syntactic figure, stylistic figures include anacoluf, asindeton, polysindeton, anjambeman (enjambeman), anaphora, epiphora, refrain, gradation, parallelism **[37-41]**, and so on. Information about these concepts in our literature, as before, is generally given under the name of poetic (stylistic) figures. Therefore, there is a big difference between Russian and Uzbek literature in the study of this problem, and this difference shows the level of study of the problem.

Pause is a syntactic technique with a special expression that enhances the expressiveness of the speech, its effect, and thus increases the focus on the image. In other words, the pause is an integral part of living speech in any form of poetic expression, be it prose or prose, as a means serving the above-mentioned poetic purpose, as an overarching figure of figurative expression. It is also widely used as a stylistic figure in modern literature and classical art.

Jimman, birok/ uzolmam kozim,//

Kimlargadir/ kilaman havas.//

Kelishmagan/ yigitman o‘zim//

Sochlarim ham/ jingalak emas.//

(I am silent, but / I can't take my eyes off you, /

Whom do I envy.//

I don't agree / I'm young myself //

My hair is also / not curly.//)

(M.Yusuf. Mehr qolur, muhabbat qolur. T.,1997. – 37)

Gar-chi tok-ti/ qon ko-zum sen-/siz ha-mon kong-/lum ha-mon,//

Ne ko-ngul-din/ bir za-mon chik-/ding, ne ko‘z-din/ bir za-mon.//

(Alisher Navoi. “Karo kozim” (My black eyes). T.,1988. – 514)

Approaching the question from the point of view of substance, it should be noted that context (part of speech or part of text - emphasis our - A.T.), which is an important suprasegmental unit of speech, is clearly marked when it is used in fiction ("Stylistic fixation of figure" - **[42-47]**). For example, analysis of poetic works shows that in most cases the stop is highlighted by the element turak (in classical poetics, rukn), the magnitude of which is not overlooked: smallturok - / (in speech), big turok - // (at the end of poems and verses). In our view, these types of pauses are appropriately considered as manifestations of the turok.

Silence (in Russian literature - umolchanie) [**48-52]** - in contrast to the ellipse, is the deliberate incompleteness of poetic lines or rhetoric, the fact that the author deliberately omits the words that complete the idea means that the reader must explain the unspoken idea. This conditionality gives the speech a unique expression, allowing the image expression to be shaped, defined, and, so to speak, "clarified" by the same student's thinking. **[53]** For example, *Har yonda tokinlik…*

Kuzdan nishona…

Har yonda gozallik yoymish daftarin.

Sonsiz egatlarga sochilmish, ana

Mening shodliklarim, ezgu dardlarim, –

Mening ona xalkim…

Ey qadim, halol,

Rizki ona yerga sepilgan xalkim,

Ushoq chigitni ham etmay deb uvol,

Million egatlarga egilgan xalkim!

(Satisfaction everywhere…

Fall Sign…

A beauty spread book everywhere.

Scattered to endless branches, lo and behold

My joys, my good sorrows, -

My native people…

O ancient, honest,

My people, whose food is scattered on the earth,

Don't even touch the seeds,

My people bowed to a million people!)

(A.Oripov. “Bedorlik”(Sleeplessness). –T.: “Writer”, 1999. P.17)

One of the strengths of the idea expressed by remaining silent, or of the image being conveyed, is that the conditional comment is contrasted with the previous comment, the content of the information, and this does not go unnoticed. In the above verses, the fact that "fullness" is a "sign of autumn" is a logical paradigm with the phrase "a book of beauty everywhere", but at the same time the poet is silenced by the fact that the "sign of autumn", the "fullness", the "beauty like a spread book" is not in itself, it is simply not natural, how much is under it hardship, "joys scattered in innumerable branches, in sorrows",Most importantly, isn't this "autumn and beauty" the owner of the feelings attached to them in "my native people, my ancient and honest people, whose food is sprinkled on the earth, who bows to millions of people who do not waste their bread crumbs"?

Our conclusion about the silencing method in the above verses may be a little vague, but we must not forget that each student must draw their own conclusions from the work and make judgements within their own thinking, in which case it would be appropriate to express a point of view: the purpose of the expression, which is to use the method of silence, is in fact the poetic intention of the writer? After all, it is known fact that speech is contextual and situational in nature …

There is another stylistic figure, this method is common in both classical and modern poetry, it is the phenomenon of intellectual migration anjambeman (enjambeman).

In particular, Alisher Navoi paid great attention to the logical connection between the bytes in ensuring the integrity of the poetic experience and the idea, while maintaining the independence of the couplet in terms of content and expression in the ghazal or other lyrical work. In doing so, he tried to achieve a logical connection between semantically and syntactically independent couplets, not only through anjambeman, which ensures the continuity of thought, but also through methods such as strengthening poetic meaning, explaining the causes of poetic motives. This is probably the reason why in Navoi's ghazals the logical connection between couplets, the transition from one couplet to another, is so delicate and smooth that the reader does not even notice how he passed from one couplet to another. This method is called pseudonym art in Eastern poetics.The question of the logical connection between couplets has not been seriously studied in poetry. Speaking about the art of pseudonyms, the well-known literary critic B. Sarimsakov writes the following: "In theoretical matters of medieval Eastern literature, in particular in science fiction, the term 'pseudonym' was used in the sense of art, which refers to subtle or flawed transitions from verse to verse in verse or ghazal." **[54].**

Observations of Uzbek classical poetry have led us to the conclusion that the verses of the verse must be the same in content, weight and rhyme. The combination of any two strings cannot form a couplet. In order to be a couplet, the common meaning, expression, weight, and rhyme must be preserved. This requires following the law of symmetry - proportionality in couplets.

Although the couplet is a closed rhythmic-semantic and syntactic unit within its scope, researchers note that the presence of semantic shifts between the verses in it has become a traditional method in classical poetry, as evidenced by the research of a number of other scholars **[53-63],** because any content can be expressed in a single line, it may be impossible to fully express the general idea in a byte. Therefore, the poet has to use anjambeman (enjembeman) - migration between the verses. Of course, it is good that byte verses have an independent meaning and syntactic expression. However, real poetic practice is not always complete, because the poetic content, the idea, which the poet wants to express, may not fit into the scope of a poem. In such cases, artistic migration takes place naturally and there is no downside.

Most of the couplets in Uzbek classical poetry are free couplets. Free couplets consist of a couplet without a rhyme in the first line and a rhyme in the second line that is rhyming to a pair of lines before or after it. The first line of a couplet, even if it is not rhyming, must be equal in weight and column to the second line. The first verse without rhyme gives the poet a great opportunity to strengthen the poetic content, to turn it in the right direction. However, the explanatory, complementary, and cause-and-effect relationships between the couplet verses are fully preserved. For example, the following verses from Alisher Navoi's ghazal have achieved semantic integrity through a cause-and-effect relationship:

Gul yafrogi tirnoglar erur bu chaman ichra,

Bulbul paru bolini yulub bergali barbod[Alisher Navoiy.Karo kozim(My black eyes) P.127].

The second line, which means that the nightingale plucks the feathers and destroys them, finds a causal basis in the first line of the couplet, because the flower petals are the nails in this blossoming meadow. If the figurative meaning is translated into the real meaning, then the lovers are the creatures of this world who will tear the fat of the lover and destroy themselves. Hence, if the first line of the above couplet represents the cause of the content in the couplet, the second line serves to express its result. In both verses, the meaning expressed in the cause-and-effect relationship is combined to serve a single holistic meaning.

The semantic-syntactic relationship between couplet verses is based on weight, rhythm, melody and rhyme. Of these, free rhymes are not only rhyming, but also free rhymes, because the first line is rhyming, so the semantic dependence of both lines of this type of byte is always maintained.

Enjambeman is, of course, more widely used in classical poetry. This method of intellectual migration can be found in many modern poetic forms.We would like to fill our minds with examples from modern Uzbek poetry, because free expression in images and images is a characteristic feature of works of art written in this direction. **[66-67].**

Nahrlarda etagi yirti

Loli qizday karganar osmon.

Sohil bo'ylab ketmoqda yortib –

Oppok biya

Bedard,

Bedarmon

Arkon kabi tortiladi yel,

Sugriladi oftobrang kozik.

Sapchiyotgan tolkin uchidan –

Yana torga

Tushadi

Balik(From the collection "Modern Uzbek poetry")

A. Kutbiddin's poem, which begins with the verse “Nahrlarda etagi yirtiq” "The bottom of the streams is torn", contains an abstract, highly symbolic image. The reader can grasp the artistic and ideological essence of the poem through a single verse in the third verse, ”Mukannani sotgan xiyonat” "The betrayal that betrayed Mukanna.".

kor gulxani…

Bigillab kaynayotgan chovgun…

Bogotlarda hakalab yurgan qish…

Kor chakmogi…

Etagi kuygan izgirin…

Kor boroni…

Oyin tushayotgan ayol…

Charx urib… Charx urib…

Charx urib… (Poetry series “Tasavvur lahzalar” ("Moments of Imagination")

koylagini yechayotgan ayolday

tunni yigishtirib olar tabiat

borlik ustidan

va uni

farishtalar takhmoniga solib koyadi

tun xudoning omonati

yulduzlar omonatga tushgan kuyadir

tunni ilma-teshik qilib tashlar yulduzlar (Fakhriyor, “Tong tashbihlari”(“Morning predictions”).

The poem depicts the phases of the night near dawn, when the stars are "skinned" one by one from the sky, and gradually the dark color of darkness disappears. In this case, the poet first of all convinces the reader that the night is a cloth. Therefore, the reader can now easily digest the moths of the stars. It is as if the stars are moths, which have eaten the fabric (the sky) into holes, forming holes in it. There is endless light behind the fabric. Every night, when night wears its clothes, the rays of light pass through these holes (stars).

Oy –

Bolta (Fakhriyor)

Tong orniga nimadir otibdi

bir emas juda ko’p kunduzlar jimirlar

tortburchak uchburchak kunduz va kunduzchalar

ba’zisi nim pushti ba’zisi jigarrang

ba’zisi tundek kop-kora

rangsiz bazisi…

(Something shot instead of dawn

not one, but many days are silent

rectangular triangular diurnal and diurnal

some are half pink some are brown

some are dark-skinned

colorless base…)(B.Rozimukhammad)

Chirildok ovozi

oy nuriga ilashib

chuvaldi koldi… (Bakhrom Rozimukhammadning “Yoz kechasi” (“Summer night ”)

It should be noted that in the following poem by B. Ruzimukhammad, which begins with the verse “Yomgirda ivigan” "Become wet in the rain", it is not difficult to see that the image is almost without objects:

Yomgirda ivigan

orik gulini

xo’roz qichqirigiga orab ushladim

gir atrofda shafaq

kuyoshdan nur emas

qon tomayotgandek

oppoq par

ikki rang hokimligi

men va tevarak…

We can say that the poems used in different forms, both stylistic (with the use of anjambeman) and syntactic (for example, without punctuation) to express the flow of thought.

As mentioned above, the possibilities of expression in the language of fiction are very wide and comprehensive. Works created with the skillful use of various means of expression have also found expression in a variety of genres, of course. The task now is to better understand the features that determine the content of works of art through a poetic analysis of works of art, the placement of images and expressions in them, an in-depth study of the use of certain tools, including poetic figures. To this end, it is important to conduct consistent research in the field of Uzbek poetics, which is less studied in the field of Uzbek poetry. In this sense, the study of poetic syntax and the means of its creation - poetic figures - also awaits a serious, monographic study.

REFERENCES

1. Khojiev A. Explanatory Dictionary of Linguistic Terms. Tashkent: “Science”; 1985.

2. Yodoshev I et al. Fundamentals of Linguistics. Tashkent: TSPU; 2013.

3. Literary theory. Volume II. Tashkent: “Science”, 1979.

4. Umurov H. Introduction to Literary Studies. Tashkent; 1997.

5. Sariyev Sh. Uzbek literature (manual). Tashkent; 2016.

6. Shcherba LV. Selected works on Russian language. Mowcow: Uchpedgiz; 1957. pp.26-44.

7. Potebnya AA. Aesthetics and poetics. Moscow; 1976.

8. Bakhtin MM. Aesthetics of verbal creativity. Mowcow: Art, 1986.

9. Vinokur GO. About language of fiction. Mowcow; 1991.

10. Yakobson RO. Poetry of grammar and poetry grammar. Semiotics. Moscow; 1983.

11. Eagleton T. Theory of Literature. Introduction. Moscow; 2010.

12. Zhirmunsky VM. Theory of verse. Л., 1975. p. 155.

13. Gasparov ML, Skulacheva TV. Rhythm and syntax in free verse. Essays on the Language of Russian Poetry in the 20th Century: Grammatical Categories, Text Syntax. Moscow; 1993. pp. 182-190.

14. Shapir MI. Articles on Pushkin. Moscow; 2009. pp. 164-166.

15. Matyash SA. Once more about the problem of identifying poetic transposition. Bulletin of the Orenburg State University. 2015;11(186);29.

16. Gasparov ML. The Structure of Epinicism. Gasparov ML Selected Works. Vol. 1, Moscow; 1997. p.430.

17. Shapir MI. Metrum er rhythmus sub specie semioticae. Universum versus: Language - Verse - Meaning in Russian Poetry in the Eighteenth and Twentieth Century's. Moscow: Languages of Russian Culture; 2000. pp. 97-98.

18. Kuzmin D. The plan of work on the study of intrasyllabic transfer. New Literary Review. 2003;(59):392-409.

19. Gin JI. From Mandelstam's 'poetry of grammar': the problem of reversibility. On the poetics of grammatical categories. Petrazavodsk: PetrSU; 2006. pp.200-214.

20. Gin JI. On the construction of poetics of grammatical categories. Petrazavodsk: PetrSU; 2006. pp.189-199.

21. Kinzie MA. Poet's guide to poetry. Chicago: Univ. of Chicago press; 1999. p. 407.

22. Moskvin VP. Poetic transposition and poetic division: to the distinction of concepts. Proceedings of the Russian Academy of Sciences. Literature and Language Series. 2019;78(1):39.

23. Toychiyev U. Yassavi and the structure of Uzbek poetry. "OTA". 1999;(2).

24. Sarimsakov B. Alisher Navoi on a method in poetic syntax. "OTA". 2001;(2).

25. Egamkulov B. On the beginning of poetic speech and syncretism. "OTA".1995;(2).

26. Shukurov R. Methodological tasks of syntactic parallelism. "OTA". 2004;(4).

27. Kuronov D. Introduction to Literary Studies. Taskent; 2004.

28. Mamaziyayev O. On a method of poetic speech. "OTA". 2003;(4):86-87.

29. Karimova Sh. About poetic syntax. Comparative literature: past, present, prospects. Collection of articles of the Republican scientific-practical conference. TDOTAU. Taskent: "Firdavs-shoh"; 2020. pp.251-254.

30. Vershinina NL et al. Introduction to Literary Studies. In: Kruppchanov L.M. (Ed). Moscow; 2018.

31. Kuronov D. et al. Dictionary of Literary Studies. Taskent: "Academedition"; 2013.

32. Kuronov D. Adabiyotshunoslikka kirish. Tashkent; 2007.

33. Quronov D. Adabiyot nazariyasi. Tashkent: "Noshir"; 2019.

34. Salayev F. Kurboniyozov G. Glossary of literary terms. Tashkent; 2010.

35. Yuldoshev M. Fundamentals of literary text and its lingvopoetic analysis. Tashkent; 2007.

36. Lapasov J. Literary text and linguistic analysis. Tashkent; 1995.

37. Pospelov G. Introduction to Literary Studies. Moscow; 1987.

38. Varfolomeyev I P. Introduction to Literary Studies. Tashkent; 1987.

39. Tomashevsky BV. Theory of Literature. Poetics. Mowcow; 1986.

40. Literary Encyclopedic Dictionary. Moscow; 1987.

41. Surkov A. Concise Encyclopedic Dictionary, in 9 volumes. Moscow: "Soviet Encyclopedia"; 1962-1978..

42. Vinokur GO. About the language of fiction. Moscow; 1991.

43. Potebnya AA. Aesthetics and poetics. Moscow; 1976.

44. Bakhtin MM. Aesthetics of verbal creativity. Moscow; 1986.

45. Zhirmunsky VM. Verse theory, L.: Science, 1975. p. 146.

46. Yakobson RO. Linguistics and poetics. Structuralism: for and against. Moscow; 1975.

47. Efimov AI. Stylistics of Artistic Speech. Moscow; 1961.

48. Kuronov D. Introduction to Literary Studies. Tashkent; 2007.

49. Tomashevsky BV. Theory of Literature. Poetics. Moscow; 1986.

50. Encyclopaedic Dictionary of Literature. Moscow; 1987.

51. Lapasov J. Literary text and linguistic analysis. Tashkent; 1995.

52. Yuldashev M. The basis of the literary text and its linguopoetic analysis. Tasheknt; 2007.

53. Kuronov D. Introduction to Literary Studies. Tashkent; 2007.

54. Sarimsoqov B. The art of pseudonyms in Alisher Navoi's ghazals. A gift to Navoi. Book 2. Tashkent; 2000. pp.44-50.

55. Osmanov MN. Syntactic Structure of the Couplet (on the Example of Hafiz's "Diwan"). Problems of Oriental Verse. Moscow; 1973. p. 66.

56. Sarimsokov B. About a method in Alisher Navoi's poetic syntax. Uzbek language and literature, 2001;(2):10-14.

57. Kudelin AB. Medieval Arabic Poetics (second half of the VIII-XI centuries). Moscow; 1983. pp. 59-60;

58. Shidfar BY. Image system of Arabic classical literature. (VI-VIII centuries). Moscow; 1974. pp. 162-163.

59. Stableva IV. The Development of Poetic Forms in the 11th Century. Moscow; 1971.

60. Yana O. The Poetics of Old Turkic Literature and its Transformations in the Early Classical Period. Mowcow; 1976.

61. Zarifov X. Rubai. The ancestor of Uzbek literature. Tashkent; 1940.

62. Stebleva IV. Semantics of Babur's ghazals, 1982.

63. Ivanov SN. To the study of genre in the old Uzbek poetry. Turkic Collection 1974. Moscow; 1978. pp. 149-157.

64. Sadullo K. Image in modern poetry. ziyouz.uz, 2019.

65. Kazakhboy Y. Postmodernism: Essence, Roots and Characters. ziyouz.uz, 2018.

66. Dilmurod K. Postmodernism. Tashkent; 2010.

67. Ulugbek K. Uzbek literature and modernism**.** Tashkent; 2020.

THEORETICAL METHODOLOGICAL BASIS OF STUDYING THE AUTHOR'S ART METHOD

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ABSTRACT

The paper concentrates on some issues of the history of the study of the theory of artistic style and the principles of methodological analysis in modern literature. In world cultural studies, style is an integral part of any remarkable artistic phenomenon, and it has attracted the attention of not only literary critics, but also art critics, historians and philosophers for many centuries as one of the most important issues in the field of fiction. It is observed that most theorists of developed countries have expressed their views on the problem of style in different historical periods.

KEYWORDS: *Art style, Farabi, Alisher Navai, individual style, schematic pattern of thinking, ghazal, speech phenomenon.*

INTRODUCTION

Style - The origin of the word "style" is noted in most encyclopaedic dictionaries and reference books as ancient Greece, and then the ancient Roman scholars partially reformed the term and introduced it into use as “stylus.” It is known that the problem of style was first addressed by the philosopher-scientist Aristotle as a scientific issue in Western Ancient culture. He dwells on this subject in his famous work Rhetoric, and gives the first comment on the style, until which the matter has not been interpreted in other ancient written sources on the theory of art. The philosopher, stating of the eloquence of the speaker, states: “We must in our speech present our proofs and arguments in a way that is understandable to the majority...” However, in this interpretation, the philosopher understands style as a phenomenon specific to the art of rhetoric. Well-known art theorists in Roman history, such as Horace, Demosthenes, Cicero, and Quintilian, then focus on this topic, which their predecessors began.

MAIN BODY

In their works, style is interpreted as an important aspect of the art of oratory.

The theories of style by the creators of the ancient world began to be interpreted in the West in unique interpretations by the Middle Ages and the Renaissance. The style retains its status as a feature of the art of oratory throughout the Middle Ages. Even in works on stylistic theory written about the activities of genius playwrights such as Shakespeare and Marlowe in England, we encounter ideas that are interpreted not in terms of the author's style but in terms of the rhetorical requirement of the stylistic feature of character speech. In Europe, especially with regard to Provencal rhetoric, in the eighteenth century, by the time of the Enlightenment, the term “individual style” was used. P. Giro, who is well known in the history of linguistics, introduces this concept into scientific consumption as a means of perceiving existence from an existentialist and essentialist point of view. The scientist puts the practice into practice not as a property of any art form or time, but as a product of the human worldview **[1].** This meaning is emphasized in a number of scientific works in the form of “une genie individuelle”, that is, as an individual quality. George Buffon, who is well known to many art and literature scholars, tries to substantiate the idea that “style is man himself” in his famous lectures at the University of Sorbonne. French enlightened writer J. As a literary critic, Marivo was one of the first to theoretically create a concept of style criteria, applying normative dimensions to style. According to him, the style is divided into “good” and “bad”. The greatest achievement of this expert is that he was able to connect the style with the author's worldview, psyche, in today's language, with the position of artistic aesthetics. For J. Buffon, style is “not a servant of meaning, but itself” - that is, its form **[2, p.240].**

In Uzbek classical literature, too, we encounter very important and noteworthy views on the author’s style. M.Mahmudov, a scholar of classical literature, makes the following comments in this regard: “Abu Nasr Al-Farabi classified the poets from the “Poetics” of Aristotle. “The same poets are not sufficiently aware of the art of poetry, but they are satisfied with the goodness of their innate abilities. They work according to their level of talent. Such poets are not truly thoughtful poets. Because they lack the maturity to master the art of poetry, and there is no stagnation in this art.” In these observations of Farabi, the voice of Plato is more noticeable than that of Aristotle. Because Farabi prefers well-thought-out poets who know the art of poetry (skill, technique) to extraordinarily talented poets. True, in the time of Farabi, as in the time of Navoi, great poets knew the theory and technique of poetry (remember Navoi’s “Mezonul avzon”, Babur's “Aruz” – “Mukhtasar.”) Also, Farabi is not a “thinker”, but a “scholar?” In fact, Farabi is well aware that reasoning, syllogism, and logic do not fall into the realm of poetry. If the truth is more than that, then it is dialectical. If the truth and falsehood are equal, then it is rhetorical. If the truth is completely diminished, then it is sophisticated. If it is a complete lie, then it is undoubtedly called poetic, should be considered. Some modern critics, who do not understand the nature of such poetic lies in poetry, try to cut off the hands and feet of poets if they do not fit into their beds, like the evil Procrustes, in the usual schematic pattern of thinking.” **[3, p.144].**

In modern national and world literature, the issues of artistic style and author's style are widely studied from different angles. In modern literature, the poetics of the author's individual style in Uzbek poetry is defined by Dr. Ph. M. Davronova studies in a broad monographic plan **[4, p.14].** According to the scholar, in Uzbek literature, as early as the beginning of the twentieth century, the writers paid special attention to the issues of language and style and began to study it as a poetic phenomenon. Saadi and A. Fitrates are calculated. A. While studying the Saadi style from a linguistic point of view, the acronym inherent in the style recognizes obsolete words and barbarisms as the most important symbols. It shows their importance in the perfection of style. According to Saadi, “Style is the shadow of the poet's brain.” On this basis, the scientist sees the originality of the style in talent, in new words, in populism, and believes that the viability of the work depends on the style. Also, the style can change under the influence of social conditions, social class and the creative personality.

According to the scientist, Fitrat's views on style are close to those of A. Saadi. The scholar gives a number of examples to prove this point, and in particular, “his view that elements such as adjective, analogy, allegory, allegory, metaphor, animation, and rhetoric as internal elements have not lost their value even today. Thus, in the works of Fitrat and A. Saadi, style issues are studied in detail. It was seen mainly as a poetic phenomenon. The connection of the style with the national language, national literature, creative worldview and social environment, as well as with the artistic form was in the center of attention,” **[4, p.11]** the researcher concludes. It is impossible not to agree with this opinion.

Although the problem of style has been studied as a separate issue in modern Uzbek literature since the twentieth century, in the history of classical literature, as noted above, we encounter certain ideas in this regard.

The gradual development of artistic and aesthetic thinking would not be complete without the works and aesthetic traditions of the great Alisher Navoi, who held a high position in our classical literature, especially in the Turkic world and world civilization. Navoi’s greatness in the world of art, as well as in the world of literary and aesthetic thought, occupies a high position and leaves a scientific legacy of universal significance. “As a result of the great thinker’s unique discoveries and unique works in the fields of art, literary criticism and linguistics, a holistic doctrine in the field of art and aesthetics emerged in the 16th century. It should be noted with pride that the scientific and theoretical teachings created by Navoi, without compromising the achievements of world literary and aesthetic thinking, also serve as a creative guide for the development of rhetoric and the science of refinement in subsequent centuries. Unfortunately, in the totalitarian system it is not possible to fully understand the essence of this priceless literary and aesthetic heritage and to appreciate it properly ”[**5, p. 146].**

Our predecessors noted that Alisher Navoi’s scientific and literary heritage has its own views on the topic of our dissertation research. In particular, the great thinker-poet also dwells on style and reacts to it in a unique way. In this regard, it is mentioned in the research of a number of leading scholars and M. Davronova, mentioned above: Thus, in Eastern literature, Alisher Navoi was the first researcher of Persian and Turkish literature in terms of style. However, in Alisher Navoi’s works, the word style is often used in the sense of genre (ghazal style, verse style).” **[4, p.47]**

The scholar also studied the issue of style on the example of classical Uzbek literature. In Uzbek classical literature, Y.Ishakov classifies the classical style into three types, Turkic style, classic style, high or Navoi style. At the same time, thinking about the style, Y.Ishakov correctly concludes that “the peculiarities of the poetics of Navoi’s lyrics indicate the formation of a complex and weighty artistic style.” There is a sense of structure and consistency in the thoughts of the young scientist in this regard.

If we look at the history of literature of the last century, with the exception of ideas about the style of the former Soviet literature, no matter how ideological and political restrictions, we see that scholars have expressed some ideas about our national literature and the individual style of artists. Especially in this regard, in the teaching of theoretical literature in the system of higher education, the chapters devoted to style are distinguished in monographs that summarize the theoretical conclusions of scientific research. In particular, the literary critic Izzat Sultan, while focusing on the work of Alisher Navoi, examines the style of the poet in the example of his work “Farkhod and Shirin” as the highest style. In general, academician Izzat Sultan draws attention as a scholar with his own unique concept of artistic style compared to other literary critics. At the heart of his concept is the idea of dividing the works created during this period into two categories: the first category, as noted above, is a high (high) style, and the second is a simple style. In addition to the works of Alisher Navoi, the scholar includes the works of Furkat in the high style, and in the simple style he cites the works of Lutfi and Babur as examples. Along with a number of scholars, M. Davronova pays attention to I.Sultan's concept of style and quotes from his views on the emphasized places of the scientist's concept. **[4, p.25]** However, the genesis of this concept critics do not mention that the theory M.Lomonosov "высокий штил" and "низкий штил", that is, the theory of high and low or simple style. However, these views play a very important role not only in the writing of the history of Russian literature of the eighteenth and nineteenth centuries, but also in the classification of them in terms of style, and Izzat Sultan was undoubtedly aware of this doctrine.

Also, in our classical literature, academician B.Valikhodjaev, professors A.Khayitmetov, N.Shukurov, B.Sarimsakov, H.Umurov, H.Boltaboev, D.Salohiy, B.Karimov and others in connection with various artists and various literary processes and classical and valuable insights into the poetics of style in his scientific research on our modern literature. However, most of the views and research are specific to the methodological features of Turkish poetry, more precisely, classical Uzbek poetry, as well as modern literature, in which samples of our national literature, the works of some of its representatives are studied, the comparative study of Uzbek literature is a separate object and the question of style has not been studied on a comparative monographic basis.

It was in the twentieth century that discussions began in scientific circles about the individual style of the artist. By this time, literary critics had achieved a scientific development of style theory. In the analysis of the research conducted at this time, the concept of literary style creates different forms of individual character acquisition by sharpening individual skills, focusing on the perfection of artistic image, originality, improving the concept of creating unique image methods, and this analysis is interpreted.

By the second half of the twentieth century, Russian literary critics had developed a number of studies that summarized the conclusions about individual style while developing the ideas of their predecessors. Among them are such monographs as "The problem of literary style" by N.G.Pospelov (1970), "Theory of style" by A.N.Sokolov (1968), "Problems of artistic style" by A.F.Losev (1994). In general, in the last century, as a result of the study of artistic style, scholars have sought the answer to the riddle of which artistic term to apply to which artistic phenomenon and to what. Most learners have concluded that style is related to form and embodies meanings such as artistic imagery and interpretation. Earlier, however, different approaches had emerged to the term style in Western cultural studies and literature. For example, I.V.Goethe interprets the style as a term that expresses the author's unique image simplicity, a certain way of imitating life, the way he describes it. The German philosopher Gegel, on the other hand, discusses different aspects of the artist's approach and explains the stylistic process through a unique, original approach, concluding that the author can animate living things with the help of textual imagery and express it at the level of art. Although classical Western theorists have done much research, they have not been able to come to a single, systematic conclusion on the method. Indeed, they are often private and, as noted above, of a general philosophical character, and do not excel in the study of fiction on a general philological or public scale. The popularization and large-scale introduction of theoretical methodological conclusions in Western literature into the education system gained momentum in the middle and mainly in the second half of the last century. The same cannot be said of Russian literature, which, unlike in the West, has undergone some systematic and consistent process. An analysis of its status in the last few decades and the development of the basic aspects of the theory of style provides a relatively complete picture of the theoretical and methodological basis of the study of the author's style in European and Russian literature and the principles of industry development.

In the second half of the twentieth century, a process of sharp differentiation of basic research areas such as linguistics and literature took place. In general, the basis for this distinction is known, but at the same time, scientific research in any of these areas requires the study of linguistic and literary sciences of general philological nature, equipped with the skills and knowledge necessary for the philologist to work on the literary text. Both areas have extensive methods and techniques of analysis of the literary text, but among all of them, methodological and stylistic analysis stands out. The main purpose of this dissertation is the comparative study of the principles of methodological analysis, the coverage of the author in terms of individual style and aspects of its preservation in translation. Therefore, in this chapter of our dissertation, in our opinion, it is expedient to dwell in detail on a number of modern views that are directly relevant to our views.

DISCUSSION AND CONCLUSION

At the present stage of scientific development, the text is undoubtedly recognized as the largest unit of speech. The division of the text style into a specific field justifies itself only in view of the great importance of the text for the style **[6, p.49].** In fact, in practice, "the text as a speech phenomenon is such a reality that only in it this or that style directly manifests itself" **[7, p.34].** This means that the development of speech culture and style at the level of the text itself is obvious. Through methodological analysis, it is possible to obtain and observe the material necessary for theoretical generalizations at the text level. The movement from general to specific in terms of style manifests itself in a practical methodology that studies the ways in which theoretical knowledge is applied to the creation of a new text **[8, p.24].**

Methodological analysis itself is the reverse direction, focusing from specific to general, whose main task is the holistic study of a specific set of unique linguistic units of a particular text that performs a unique task or set of tasks. That is, according to the English scholar Ronald Carter, "methodological interpretation is the process of determining (based on logical conclusions) correspondences between linguistic forms and meaning, which are formed in the process of performing tasks in certain artistic contexts" **[9, p.146].** Thus, the application of theoretical methodology by stylistics as a simple identification of events and examples, training in emergencies.

REFERENCES

1. Giro P. Private and public life of the Romans. St. Petersburg: "Aletheya"; 1995. 687 p.

2. Zenkin SN. Buffon's non-classical rhetoric. p. 240.

3. Kukharenko VA. Workshop on the style of the English language: textbook. Allowance. Moscow: Higher school; 1986. 144p.

4. Davronova MI Poetics of individual style in modern Uzbek poetry (on the example of poetry of Usmon Azim, Iqbol Mirzo, Fakhriyor and Abduvali Qutbiddin). doctoral dissertation-abstract. Samarkand, 2019. 66 p.

5. Shuverova TD. Reading, Translation and Style: linguo-stylistic and pre-translation analysis of the text. Moscow: Prometheus; 2012. 146p.

6. Znamenskaya TA. Stylistics of the English language. Basics of the course: study guide. Moscow: Editorial URSS; 2004. 208 p.

7. Galperin IR. Text as an object of linguistic research. Moscow: Kom Book; 2007. 144 p.

8. Shansky NM, Makhmudov ShA. Philological analysis of a literary text. Moscow: Russian word; 2010. 256p.

9. Shuverova TD. Reading, Translation and Style: linguo-stylistic and pre-translation analysis of the text. Moscow: Prometheus; 2012. 146p.

HUMAN CAPITAL AS AN IMPORTANT FACTOR IN THE INNOVATIVE DEVELOPMENT OF THE ECONOMY

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ABSTRACT

The article considers the role of human capital in the innovative development of the economy. The authors carried out theoretical studies of existing knowledge about human capital and substantiated its impact on the innovative development of society. This article discusses innovations in the economy and human capital, which form the complex of knowledge necessary to create new or transform old products. The prerequisites for combining innovation and human capital are analyzed, according to which the productivity of an enterprise directly depends on the qualitative composition of the human capital of an enterprise.

KEYWORDS: *Innovation, Human Capital, Innovative Activity, Technology Parks, Innovation And Technology Centers, Business Incubators, Innovation Environment.*

INTRODUCTION

The sustainable development of the national economy and ensuring its competitiveness require the widespread introduction of innovations in all sectors. At present, an important condition for the sustainable development of the Republic of Uzbekistan is the accelerated introduction of modern innovative technologies with the widespread use of the achievements of science and technology in the economy, social and other spheres.

In the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, special attention is paid to stimulating research and innovation activities, creating effective mechanisms for introducing scientific and innovative achievements into practice, education at higher educational institutions and research institutes of scientific and experimental specialized laboratories, high-tech centers and industrial parks **[1].** The timely fulfillment of these tasks, in particular, the development of research and innovation activities, as well as increasing the innovative potential on this basis, requires the use of direct human capital and the promotion of investment in human capital to effectively solve these problems.

In order to accelerate the development of the country on the basis of modern achievements of world science, innovative ideas, developments and technologies, as well as the consistent implementation of the tasks identified by the Action Strategy in five priority areas of development of the Republic of Uzbekistan in 2017-2021, on September 21, 2018, a Decree of the President of the Republic of Uzbekistan was adopted No.5544 "On approval of the Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021". In accordance with this Decree, the Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021, its goals and objectives, main directions and a roadmap for its implementation were determined.

The main goal of the Strategy is defined as "the development of human capital as the main factor determining the level of a country's competitiveness on the world stage and its innovative progress"**[2].**

To achieve the main goal, the main objectives of the Strategy are:

– the entry of the Republic of Uzbekistan by 2030 into the 50 leading countries of the world according to the rating of the Global Innovation Index;

– improving the quality and coverage of education at all levels, developing the system of continuous education, ensuring the flexibility of the system of training personnel, based on the needs of the economy;

– strengthening the scientific potential and efficiency of scientific research and development, creating effective mechanisms for integrating education, science and entrepreneurship for the wide implementation of the results of research, development and technological work;

– increasing the investment of public and private funds in innovation, research, development and technological work, the introduction of modern and efficient forms of financing activities in these areas;

– improving the efficiency of public authorities through the introduction of modern methods and management tools;

– ensuring the protection of property rights, creating competitive markets and equal conditions for doing business, developing public-private partnerships;

– creation of a sustainable functioning socio-economic infrastructure.

The accelerated development of human capital is a priority for the effective implementation of the tasks set out in the Strategy for Innovative Development of the country.

It should be noted that human capital is an innovative economy, which, at the next stage of development - the knowledge economy, becomes the main factor that forms and develops it.

Of particular relevance in the context of economic modernization is the issue of improving the methodology of human capital management as a determining factor and a necessary condition for activating innovative development. Human capital remains the most important competitive advantage of the national economy.

The Strategy for Innovative Development of the Republic of Uzbekistan for the period up to 2021 notes that the intellectual capabilities and education of the population, the innovative ability of the nation, the creative nature of activity will become the main driving force for sustainable economic growth. Human capital is the basis of the national wealth of the country and is able to solve the problems of the rapid development of the national economy, taking its rightful place among the advanced countries of the world.

LITERATURE REVIEW

For the first time, the concept of "human capital" appeared in economic theory thanks to the efforts of two Nobel Prize winners in economics T. Shultz and G. Becker, who believe that improving the welfare of poor people does not depend on land, technology or their efforts, but rather, from knowledge.

A fundamental contribution to the development of the modern theory of human capital was made by T. Shultz, G. Becker, E. Denison, R. Solow, J. Kendrick, R. Lucas, S. Gulyamov, K. Abdurakhmanov, D. Rakhmanov and other economists, sociologists **[3,4].**

T.Shultz proposed the following definition: “All human resources and abilities are either innate or acquired. Each person is born with an individual complex of genes that determines his innate human potential. Valuable qualities acquired by a person, which can be enhanced by appropriate investments, we call human capital”.

The concept of human capital was put forward by the American economist G. Becker in 1960 and denotes the accumulated knowledge, skills, abilities and skills that an employee possesses and acquires during training, education, vocational training, work experience . Becker considered the main investments in human capital to be the costs of education and training, and estimated their economic efficiency as the ratio of income to costs, having received approximately 12-14% of the annual profit.

J.Kendrick understands by human capital the knowledge of a person, general and specific, his ability to productive work.

Academician S.S. Gulyamov studied the special importance of human capital by financing the social sphere and paid special attention to the Uzbek development model in Uzbekistan. **[5]**

Human capital includes the totality of intellectual abilities, professional skills, knowledge and skills of a person obtained in the process of education and practical activities, quality of life and health.

Modern theorists point out that “the production of human capital is the process of creating human productive abilities through investment” **[6],** which means “any action that increases the skills and abilities and thereby the productivity of workers” **[7].** Other studies note the "clear benefit of investing in human capital" of their employees for companies. Companies “should become a source of human capital development and develop it aggressively” **[8],** as decisions made about investing in employee human capital will shape the future of the organization for years to come.

In Uzbekistan, the main sources of maintaining its high status in the world have always been human and intellectual capital, which is based on a high level of education and cultural traditions, scientific and industrial potential, based on a developed raw material and processing base.

Thus, national human capital is a sustainable and long-term source of economic growth, and the effective development of the socio-economic sphere is the most important condition for improving and improving the quality of human capital in an innovative economy.

Analysis and results

The economy of the most developed countries, increasingly focused on innovation, forms such a system of relationships between science, industry and society, in which innovations serve as the basis for the development of industry and society, and they, in turn, stimulate the development of innovations and determine their directions, and thereby − the most important areas of scientific activity. Consequently, by the joint efforts of the state, the business and scientific environment and society as a whole, it is possible to build a mechanism for developing the country's innovative potential. In this regard, the study of the actual state of innovation activity becomes relevant. The defining link in the creation of innovation is the sphere of science.

Human capital in almost all countries of the world exceeds half of the accumulated national wealth. The developed economies of the leading countries of the world are fighting for the formation of a new economy - the economy of knowledge, innovation, global information systems, the latest technologies and venture business. The basis of such an economy is human capital, which is the main driving force of the socio-economic development of modern society **[9].**

Within the framework of the concept proposed by the World Bank specialists, human capital, including the labor potential, the intellectual power of the nation, the art of management, along with natural resources, accumulated capital and accumulated property, constitutes the national wealth of the country.

The main incentives for the development of human capital are investment, innovation, and competition. On the one hand, the innovative sector of the economy, the creative part of the elite, society, and the state are sources of accumulation of high-quality human capital, which determines the direction and pace of the country's development. On the other hand, the accumulated high-quality human capital underlies the innovation system and economy.

Since the second half of the 20th century, the locomotive of economic development has been science-intensive and “knowledge-intensive” high technologies, the distinctive characteristics of which were high investment attractiveness, a high level of investment risk, the use of advanced scientific technologies, high growth potential and expected income.

Switzerland, Sweden, the United Kingdom, the United States, Finland and Singapore top the rankings according to the Global Innovation Index report published in 2016 by Cornell University, INSEAD business school and the World Intellectual Property Organization. China has been ranked among the top 25 innovators in the world. Russia ranks 38th between Turkey and Chile.

The modern information economy (and developed countries have proven this) requires a global renewal of production, retraining of personnel at all levels (from workers to managers of the highest level), and the prompt introduction of modern management methods. Such an economy requires highly qualified and highly paid personnel who have the opportunity to invest their human capital and develop.

Human capital is one of the hot topics today, since in modern conditions the competitive advantages of the economy and the possibility of its modernization are largely determined by the accumulated and realized human capital. Its formation should be carried out through the achievement of a high quality of life in general and in particular at the micro level - by creating comfortable and safe working conditions, highly paid employment, and the possibility of self-realization. The main task is to stimulate demand for innovation and, as a consequence, for human capital. The transition to innovative development means that innovations should cover not only the creation of new technologies and their introduction into production, but also the promotion of products on the market, an adequate communication infrastructure.

The innovative economy differs from the traditional one and is a new type of economic relations that arise in the process of production between its subjects. It is important to understand that the transition to innovative development is due to the corresponding development of the productive forces of a person - the subject of an innovative economy. The main element of the process of development of innovative production is a creative person, and his human capital becomes the main resource of innovative production based on the generation of new knowledge. For the successful development of the economy, it is necessary to ensure the appropriate quality of labor resources. It is this policy that most developed countries currently invest in this area with significant financial resources.

Financing the development of human capital is, in our opinion, making investments in the fields of education and health, as a result of which there are initiatives to form innovations for economic growth. **[10]**

A feature of innovation-based production is that the production process becomes a creative process of transforming knowledge into a new product. At the same time, the basic effect of an innovative knowledge-based economy is both in the creation of new knowledge and the production of high-tech products, and in their use in all industries and areas.

The determining factor in the sustainable development of the innovative economy in modern conditions is the formation and development of the country's innovative environment associated with the use of the results of scientific research and development to create fundamentally new types of products, the creation and application of new technologies for its production with subsequent implementation and sale on the market.

At the end of 2020, the number of technological innovations introduced in our country amounted to 4011. The number of technological innovations introduced: on their own - 3805; in cooperation with other organizations - 127; other organizations - 79.

At the end of 2020, the number of technological innovations introduced by small enterprises and microfirms in our country amounted to 3285 units, their number by region is as follows: Republic of Karakalpakstan - 16; Andijan region - 47; Bukhara region - 242; Jizzakh region - 128; Kashkadarya region - 34; Navoi region - 292; Namangan region - 187; Samarkand region - 188; Surkhandarya region - 147; Syrdarya region - 111; Tashkent region - 514; Fergana region - 219; Khorezm region - 20; Tashkent city – 1140.

Today, in the Republic of Uzbekistan, the costs of research and development, which are one of the most important indicators that assess the country's innovative activity, amount to 0.14% of GDP.

According to the UNESCO Institute for Statistics (UIS), in 2019, R&D spending in Israel is 4.9% of GDP, in the Republic of Korea 4.6% of GDP, in Taiwan 3.5% of GDP. GDP, in Switzerland 3.0% of GDP, in Sweden 3.4% of GDP and in Japan this figure is 3.2% of GDP.

A significant portion of R&D spending goes towards salaries and salaries of R&D personnel (researchers, technicians and R&D support staff). Reflecting this, the numbers for Researchers per million inhabitants follow a similar pattern, as does the trend for R&D spending, but there are differences.

The ranking is dominated by the following countries, which consider the share of researchers in relation to the total population of countries: Israel (8250), Denmark (7515), Sweden (7153), Republic of Korea (7113) and Singapore (6730). However, in absolute terms (number of researchers in millions), China (1.69 million), USA (1.38 million), Japan (0.67 million), Russian Federation (0.43 million) and Germany dominate (0.40 million).

Effective innovation activity means an increase in the role of a person's creative abilities for self-realization, which establishes a strong dependence of the innovation production process on the development and improvement of the very subject of the innovation economy.

Trends in world economic development identified by the Organization for Economic Co-operation and Development (OECD) indicate a significant impact of the process of accumulation of knowledge and human capital on the pace of economic development.

The formation and effective use of human capital is associated with the implementation of a targeted policy focused on solving a certain range of strategic and tactical tasks specific to each innovative enterprise.

Human capital management is a strategic and planned approach to managing the organization's most valuable workforce. To achieve the goals of the organization, it is necessary to evaluate the value and effectiveness of human capital. **[11]**

Almost all leading countries have a well-thought-out strategy for scientific and technological development, which is being implemented in practice and supported by the allocation of significant financial resources. Such strategies are implemented by the USA, Japan, Germany, Great Britain, China, Brazil and India. The main emphasis in these programs is on increasing public investment in R&D in priority sectors, stimulating domestic demand for high-tech products, taking comprehensive measures to encourage the innovation activity of the private sector, especially small and medium-sized businesses, as well as training qualified scientific and engineering personnel.

In the formation of an innovative economy, the education system is of particular importance. In particular, if the proportion of the working-age population with higher education of the total population in developing countries is 3 percent, in industrialized countries - 30 percent, in an innovative economy - 60 percent, then in the intellectual economy this figure should be 80 percent. **[12]** This shows how important attention is paid to the field of higher education in the knowledge economy.

In this regard, when admitting students to higher education institutions, it is necessary to take into account public-private partnerships, i.e. provide for the allocation of additional places, providing them with funds in accordance with the number of requests for specialties from private sector entities. We also consider it expedient for the private sector to participate in the formation of the structure of academic disciplines with the involvement of their funds. **[13]**

CONCLUSION

The study allows us to draw the following conclusions. To create an effective innovation infrastructure that ensures the transfer of the results of the research and development sector to the national and global economy, it is necessary to ensure the widespread use of the following institutional mechanisms for integrating education, science and business: **[14-16]**

- promoting the development of cooperative ties between the main subjects of the innovation system: education, science and business;
- formation of financial institutions that ensure the continuity of financing of business projects at all stages of the innovation cycle;
- development of the production and technological infrastructure for innovation activities (technoparks, innovation and technology centers, business incubators, technology transfer centers, etc.);
- development of information, expert-consulting and educational infrastructure for innovation activities;
- further improvement of the quality of education in educational institutions through the introduction of new educational programs, modern pedagogical technologies in the educational process;
- organizing a system for training managers in the field of innovation to accelerate the return on innovation;
- development and implementation of a national system for assessing the quality of education and its impact on the level of innovative development of the country on the basis of systematic monitoring of the results of the educational process at the regional and national levels;
- increasing the coverage of the population with higher education;
- strengthening the research component of higher educational institutions based on state support for the most active universities in this field, selected by the number of published scientific articles, citation index, participation in international conferences and seminars, the number of patents received.

REFERENCES

1. Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No.4947 “On the Action Strategy for the Further Development of the Republic of Uzbekistan”, Collection of Legislative Acts of the Republic of Uzbekistan. 2017, No. 6 (766), p.70. Available at: https://cis-legislation.com/

2. Decree of the President of the Republic of Uzbekistan dated September 21, 2018 No.5544 “On approval of the Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021”, National Legislation Database www.lex.uz, September 22, 2018, No. 06/18 /5544/1951. Available at: https://cis-legislation.com/

3. Abdurakhmanov KKh. Trends in the development of human capital in Uzbekistan. Bulletin of the Russian Economic University. 2013;8(62):80-83.

4. Lucas R. On the Mechanics of Economic Development. Journal of Monetary Economics. 1988;22(1):3-42.

5. Gulyamov SS. et al. The effectiveness of the interaction of human capital factors in Uzbekistan. Journal of Finance., 2014;(4):119-127.

6. Dobrynin AI, Dyatlov SA, Tsyrenova ED. Human capital in a transitive economy: formation, evaluation, efficiency of use. St. Petersburg, Nauka; 1999, 309 p.

7. McConnell KR, Bru SL. Economics: Principles, problems and politics: per. from English. Moscow: INFRA-M, 2003. p. 171.
8. Fernandez E, Mauro P. The role of Human capital in Economic Growth. International Monetary Fund; 2000, 3 p.
9. Regent TM. Problems of human capital as an integral part of national wealth. Bulletin of RosNOU. 2016;(4).
10. Solow RM. A contribution to the theory of economic growth. The Quarterly Journal of Economics. 1956;70(1):65-94.
11. Kucharčíková A, Tokarčíková E. Blašková M. Human Capital Management – Aspect of the Human Capital Efficiency in University Education. Procedia - Social and Behavioral Sciences. 2015;177:48-60.
12. Gulomov S, Ochilov I, Saydaxmedov O. Factors of efficiency in the intellectual economy. Journal of Economic Bulletin of Uzbekistan. 2015;(6):38-41.
13. Rakhmonov DA. Improving the methodological foundations of financing the social sphere in Uzbekistan: Abstract of a doctoral (DSc) dissertation in economics. Tashkent: 2018. 72p
14. Schultz T. Investment in Human Capital: The Role of Education and of Research. N.Y., 1971.
15. Becker, Gary S. Human Capital. N.Y.: Columbia University Press; 1964.
16. John WK. The accounting treatment of human investment and capital. The review of income and wealth. 1974;20(4):439-468.

PROBLEMS OF LEXICOGRAPHIC INTERPRETATION OF LEXEMAS THAT EXPRESS THE MANNER OF ACTON IN ENGLISH

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ABSTRACT

In English language, as in Uzbek language, the randomness ofmannerexpressionsin the lexical layer is carried out directly by action verbs and lexemes belonging to word group of adverb, which act as an adverbial modifier in the sentence. These lexemes can also be semantically stratified according to the manner expression they express in speech. In dictionaries, it is important to cite words with mannerexpressions through examples that include level indicators and other semantic-syntactic features. The fact that the means of manner of action in English are widespread at the lexical, morphological, syntactic levels of the language, the fact that a manner of action sema can be expressed at different levels requires extensive coverage, interpretation and study through the principles of dictionary. This article examines the issues of presentingforms of action manner in English language in annotated dictionaries, translation dictionaries, academic dictionaries and thesaurus dictionaries. Therefore, in expressing lexicographic principles, interpretive principles and general linguistic requirements of the manner lexemes in dictionaries are analyzed on the basis of examples. On this basis, scientific evaluation was given tothe achievements of English lexicography in traditional lexicography.

KEYWORDS: *Randomness, Category Of Manner, Semantics, Graduonymy, Lexicographic Principle, Annotated Dictionary, Academic Dictionary, Thesaurus, Language Corps, Microsystem, Microstructure*

INTRODUCTION

English-speaking countries have been leaders in the international economic, political, social and cultural spheres over the past century, and this has certainly had a positive impact on the status of the English language. As a result, English language began to be recognized as one of the world's languages. However, the rapid popularity of English language was due not only to the leading political and economic position of certain countries, but also to the fact that textbooks, manuals and dictionaries created in this language have significant advantages over other language materials in the world. Like many languages, English lexicography has a deep history and has developed steadily over the centuries. For centuries, English linguists have paid special attention to lexicography, evaluating dictionaries as a practical result and achievement of the science of linguistics.

MATERIALS

In general, since the Middle Ages, English linguists, especially lexicographers, were significantly ahead of their contemporaries, and innovations and advanced ideas in the study and analysis of all linguistic phenomena were often applied on the basis of English material. In particular, one of the first major achievements of English lexicography was the "A Table Alphabetical" dictionary, created by R. Cawdrey in the early seventeenth century. This dictionary is the first monolingual dictionary created in English, which includes more than two thousand lexemes. This annotated dictionary does not fully comply with the lexicographic principles and requirements known to us today. However, "A Dictionary of the English Language" **[1]**, which was later created under the direction of Samuel Johnson, is close to modern annotated dictionaries in terms of its formal parameters. The author's use of examples from public discourse in interpreting the words has led to the recognition of this dictionary not only by experts but also by the general public. At the beginning of the last century, "Oxford Encyclopedic Dictionary"was created, **[2]** and it was one of the largest dictionaries of its time. The dictionary, which contains more than four hundred thousand lexemes, has been expanded for several times and was republished again. Most of the annotated, translation, and academic dictionaries created to date have been arranged based on the sample of Oxford annotated dictionary.

Since the middle of the last century, in accordance with the requirements of that period of time, a new branch of English lexicography has emerged - academic lexicography. Academic lexicography is an important area of lexicography, which reflects all the important trends in the development of language pedagogy and methods of teaching English as a foreign language **[3].**

DISCUSSION

When we observe the presentation of lexemes in these types of dictionaries, we see that the microsystems in them, that is, the dictionary articles, differ in form and content from the annotated dictionary articles known to all of us. In particular, academic dictionaries differ from large annotated dictionaries, and this is especially evident in the microstructures of dictionaries **[4],** ie in their microsystems. For example:

embark *Embark*may be used with a number of different prepositions, but by a large margin the usual choice is *on* or *upon*, the former being more common: . . . its avowed intention to embark on unconstitutional action —J. H. Plumb, *England in the Eighteenth Century*, 1950 . . . they embarked upon a thoroughgoing rediscovery of their Englishness —Oscar Handlin, *The American People in the Twentieth Century*, 1954 *Embark* is used with *for* when the object denotes destination: Clark embarked most of the party . . . for the Three	**enter** *Enter* is a verb which may be used with many prepositions, but most often it is used with *into* or with *upon* or *on;* of these, *into* occurs most frequently: Mr. Sloane didn't enter into the conversation —F. Scott Fitzgerald, *The Great Gatsby*, 1925 Nor shall I enter into details concerning the ensuing half-dozen nights —Katherine Anne Porter, *Ladies' Home Jour.*, August 1971 . . . wondered whether . . . this marriage had been entered upon late —Jean Stafford, *Children Are Bored on Sunday,* 1953 . . . the house has now entered on a distinctly new phase —Edmund Wilson, *New Yorker, 5* June 1971

Forks —Bernard DeVoto, *The Course of Empire,* **1952** And we have a few citations for *embark from* to indicate the point of departure: . . . four companions, embarking from Floyd Bennett Field, circled the globe —*American Guide Series: N.Y. City,* 1939 At one time, *embark in* was a fairly common construction; however, it seems to have been dropping out of use during the last 40 years or so, as travel by ship has decreased	Less often, *enter* is used with *in:* Where doubt enters in, there enters the judicial function —*Selected Writings of Benjamin N. Cardozo,* ed. Margaret E. Hall, 1947 *Enter* is also used with complements introduced by *for, as, at, by,* and *with.* Of this grouper and *as* appear more often than the others: Six . . . were entered for the English Derby —George Whiting, *Irish Digest,* June 1954 . . . the United States Army, which he entered as a captain —*Current Biography,* December 1964 . . . he had come to America, probably entering at the port of Charleston, S.C. —*Dictionary of American Biography,* 1928 . . . even though such language entered by way of the ruling classes —W. F. Bolton, *A Short History of Literary English,* 1967 . . . a United States Naval Reserve chaplain, entering with the rank of lieutenant (j.g.) —*Current Biography,* January 1964 A final example shows vividly the wide range of prepositions that can be used with *enter:* Christianity entered the region of upstate New York from two directions, under two flags, and in two forms —*American Guide Series: New York,* 1940 [7].

According to some lexicographers, there is almost no difference between academic dictionaries and annotated dictionaries. In particular, according to linguist V.G.Gak, “Every dictionary is a work of didactic significance, intended for reading and study” **[5].** The formal and semantic differences between academic and annotated dictionaries cannot be completely ruled out. In particular, the academic dictionaries provide transcription and pronunciation of words. Annotated dictionaries do not provide transcriptions. In academic dictionaries, word explanations are relatively short, with a strong emphasis on examples. Because dictionaries are intended for audiences learning English as a foreign language, words are adapted to the level of language proficiency. The dictionary article cited above as an exampleis taken from the “Webster Dictionary”, which is now one of the largest encyclopedic dictionaries. What makes this dictionary different from others is that it contains more information about the practical use of lexemes. “Webster Dictionary of English Usage” is called an encyclopedic dictionary by it’s creators. That is, this dictionary is not intended for a direct audience of language learners. The microsystems in it, i.e. the dictionary articles, differ in form and content from the annotated dictionary articles known to all of us. A dictionary article begins with a word that is traditionally defined. Unlike translation or academic annotated dictionaries, this dictionary does not provide a transcription of the word. It also does not provide information on the grammatical category of the lexeme, which is an invariable general aspect for almost all dictionaries, i.e. an abbreviation of the grammatical category. Thus, this dictionary provides information on its use after the main lexeme. Recommendations for the use of the word are substantiated using examples from fiction or other types of literature. In addition, the articles focus on the prepositions of the lexeme and what new meanings are formed as a result. In such explanatory dictionaries, emphasis is placed mainly on the word explanation, and in most cases, along with the word explanation, its etymology is also emphasized. Some major annotated dictionaries may also include synonyms, figurative meanings, and stylistic counterparts of words. **[6]**

As for the academic dictionaries, it is worth noting that the assumption that they are similar to encyclopedic dictionaries is incorrect. For example, consider the following dictionary articles from the "Cambridge Learners Dictionary"**:**

flow *verb* [I] (CONTINUE)

to continue to arrive or be produced:

- *Please keep the money flowing* ***in****!*
- *Offers of help are flowing* ***into*** *the disaster area from all over the country.*
- *My* ***thoughts*** *flow more easily if I work on a computer.*
- *By eleven o'clock, the* ***wine*** *was starting to flow.*

flow *noun* (CONTINUOUS NUMBER)

[C usually singular]

a regular and quite large number of something:

- *There's been a* ***steady*** *flow* ***of*** *visitors.*

[S]

a situation in which something is produced or moved continuously:

drop

verb

UK /drɒp/ US /drɑːp/

-pp-

drop *verb* (FALL)

B1 [I or T]

to fall or to allow something to fall:

- *She dropped her keys.*
- *I'm always dropping things.*
- *Amanda dropped her sunglasses* ***in/into*** *the fountain.*

drop *verb* (LOWER)

B2 [I or T]

to move to a lower level, or cause something to move to a lower level:

- *The water level in the flooded region has finally begun to drop.*
- *The land drops* ***(away)*** *(= slopes down) sharply behind the barrier.*
- *We had to drop our prices because of the recession.*

manage

verb

UK /ˈmæn.ɪdʒ/ US /ˈmæn.ədʒ/

manage *verb* (SUCCEED)

B1 [I or T]

to succeed in doing or dealing with something, especially something difficult:

- [+ to infinitive] *Did you manage* ***to*** *get any bread?*
- *I* ***only just*** *managed* ***to*** *finish on time.*
- *A small dog had* ***somehow*** *managed* ***to*** *survive the fire.*
- *I can't manage all this work on my own.*
- *Don't worry about us - we'll manage!*
- mainly UK *I'm afraid I can't manage the time (= to find enough time) to see you at the moment.*

[I]

to succeed in living on a small amount of money:

- *After she lost her job, they had to manage* ***on*** *his salary.*

B2 [I or T]

to defeat or succeed in controlling or dealing with something:

- *Juventus overcame Ajax in a thrilling game.*
- *to overcome* ***difficulties/obstacles/problems/resistance***
- *Eventually she managed to overcome her shyness in class.*
- *20,000 demonstrators sang "We shall overcome" as they marched through Washington.*

− More examples

- *Their resolute opposition to new working methods was difficult to overcome.*
- *The plan was designed to help women and minorities overcome discrimination in the workplace.*
- *He overcame all obstacles in his path to the top.*
- *What are the prospects for overcoming the strife between the Christian minority and Muslim majority?*
- *This film reveals their resourcefulness in overcoming appalling weather and treacherous terrain.*

Unlike encyclopedic dictionaries, in academic dictionaries the word interpretation is concise and simple. In such dictionaries, lexicographers mainly emphasize examples of the use of the word in speech. In the above examples, the action verbs, which vaguely express the mannerexpressions are not meant as meaning of manner in the first explanation given to them, whereas in the subsequent comments and examples the mannerexpression of the lexeme is clearly defined.

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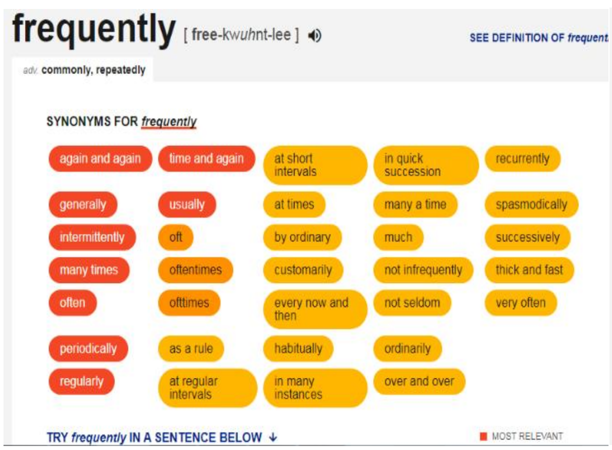
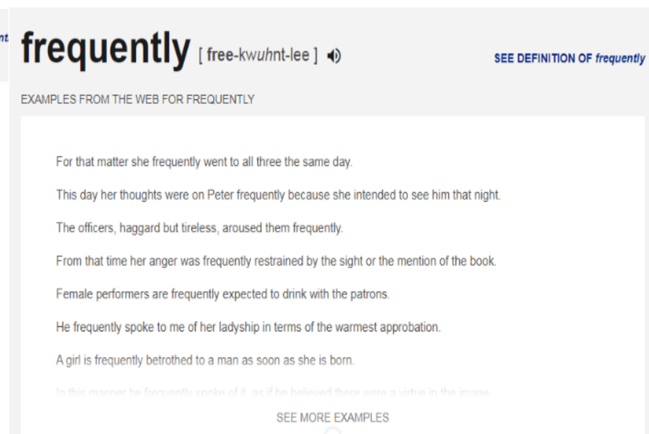
Although words are briefly interpreted in academic annotated dictionaries, academic annotated dictionary microsystems tend to cover all meanings of a word, and this predominance is especially evident in the example of multifunctional and polysemantic verbs. **[7]**

ANALYSIS

The role of corps linguistics in the development of linguistics is incomparable. Indeed, descriptions of the grammatical structure of languages and prominent scientific dictionaries are compiled on the basis of corpus **[8].** Undoubtedly, the formation and development of corps linguistics has led to the emergence of modern trends in lexicography as well. As a result, electronic dictionaries, online dictionaries and thesaurus dictionaries were created. Electronic dictionaries, especially thesaurus dictionaries, provide tremendous convenience in a comprehensive analysis of lexical and semantic categories. In thesauruses, lexemes are presented with a list of synonyms or antonyms, unlike in traditional dictionaries. Also, thesaurus dictionaries are often linked to a link to another online annotated dictionary so that the reader can find the explanation of the word through this external link at any time. The largest thesaurus dictionary source in English today is undoubtedly www.thesaurus.com and it has sections showing synonyms, antonyms, meaning and usage of words. For example:





Above we see how the adverb ***frequently*** is presented in the thesaurus dictionary. Firstly, the synonyms of a word were arranged according to the degree of similarity of meaning, that is, according to the principle of semantics graduonymy. Then there are examples where the word is used directly. After the examples, the specific meanings of each synonymous word are divided into groups, as evidenced by examples of their use in speech. All linguistic units in the thesaurus are classified on the same principle. Of course, such a classification has a number of achievements. In particular, if we take the example of lexemes with manner expression, thesaurus dictionaries represent other lexemes with meaning of process or ability, but also reveal synonymous and contradictory semantic connections between lexemes with manner expression. Thesaurus dictionaries, which clearly show the semantic connections in the lexical layer of the language, raise the process of direct and indirect translation, text editing, and even foreign language teaching to a qualitatively higher level. However, the peculiar structure of these modern dictionaries can be, albeit indirectly, the cause of methodological errors in oral speech and text, misunderstandings in the process of learning a foreign language.

To be more precise, in the example of the above mentioned adverb ***frequently***, its close synonyms ***again and again, generally, intermittently, many times, often, periodically, regularly, time and again, usually*** are presented in the same sequence. It's true, that the meaning of the root word ***frequently*** predominates even in the semantics of these versions of the word. Nevertheless, it should also be noted that the basic lexeme ***frequently*** belongs to the scope of formal speech according to its methodological feature. Synonyms such as ***many times*** and ***again and again*** are used in informal speech. Although these units are synonymous with each other in terms of lexical meaning, they can be called contradictory means according to their stylistic function. In the dictionary article, any special characters do not highlight this feature. Such a deficiency is observed not only in the forms of action verbs or adverbs, but also in the interpretation of all lexical units in the thesaurus. This shortcoming, which at first glance seems to be a minor error, may in the future lead to inaccuracies in text editing and translations based on this thesaurus, and significant shortcomings in the speech of language learners. For this reason, we believe that it is possible to prevent possible errors by distinguishing whether scope of synonymous words as well as root lexemes are formal or informal, and to leave words with unlimited scope unmarked as a neutral lexeme. **[9]**

RESULT

As a result of our analysis, it should be noted that among all the dictionaries cited, translation dictionaries are distinguished by the brevity of information about the word. Translation dictionaries traditionally provide transcriptions of words, but do not give examples that reflect the figurative meaning of the word. Examples may not be given that reflect the use of certain words in speech. For example:

<table>
<tr><td>abandon /əˈbændən / v [T] 1 tashlab ketmoq, tark etmoq 2 to'xtatmoq, oxiriga yetkazmaslik</td><td rowspan="3">achieve /əˈtʃiːv/ v [T] 1 qozonmoq, erishmoq, yetishmoq 2 ado etmoq, bajarmoq, amalga oshirmoq – achievement n 1 [C] muvaffaqiyat, qiyinchilik bilan erilshilingan narsa 2 [U] muvaffaqiyat qozonish, g'alaba, yutuq; g'oliblik hissi
acid /ˈæsɪd/ acid adj 1 (meva va boshqalarga nisbatan) o'tkir ta'mli, nordon 2 (also acidic) kislotali – acidify /əˈsɪdɪˌfaɪ/ v [T,I] oksidlamoq – acidification /əˌsɪdɪfɪˌkeɪʃn/ n [U] – acidity /əˈsɪdətɪ/ n [U] kislotalilik, kislotalilik xossasi –</td></tr>
<tr><td>abide /əˈbaɪd/ can't/couldn't abide sb/sth/ doing sth chidamoq, sabr qilmoq, toqat qilmoq, ko'tarmoq – (ph.v) abide by sth bo'ysunmoq, amal qilmoq</td></tr>
<tr><td>accelerate /əkˈseləreɪt/ v [I,T] tezlatmoq, tezlashtirmoq, jadallamoq – acceleration /əkˌseləˈreɪʃn/ n [U] tezlashish; tezlanish</td></tr>
</table>

As can be seen from the above examples, manner lexemes are not supported by examples in translation dictionaries. In general, giving an example as a complete sentence is not typical of translation dictionaries. This is because changes in the syntactic structure of the sentence in translation and as a result the grammatical features of the keyword can lead to the formation of confusing conclusions in students. However, although these lexemes are not substantiated as words in translation dictionaries, it is appropriate to give them in the context of various phrases. Instances of lexemes being given as examples in the compounds are common in English-Russian translation dictionaries. For example:

complete [kəm´pli:t] **I** *a* полный; законченный; **he is a ~ failure** он совершенный неудачник; **~ works** полное собрание сочинений; **II** *v* заканчивать, завершать; комплектовать	**drop** [drɔp] **I** *n* **1.** капля; **a ~ in the bucket** (*или* **in the ocean**) = капля в море; **2.** *pl мед.* капли; **3.** глоток; **to have a ~ in one's eye** *разг.* хлебнуть лишнего; **4.** драже; леденец; **5.** серьга, подвеска; **6.** падение, понижение; **~ in prices (temperature)** падение цен (температуры); **7.** падающий занавес (*в театре*); **8.** расстояние между выше и ниже находящимися предметами; **a ~ of 10 feet from the window to the ground** от окна до земли 10 футов; **9.** *спорт.* удар по мячу, отпрыгнувшему от земли (*в футболе*); **10.** наличник (*замка*); **II** *v* **1.** капать; выступать каплями; **2.** ронять; **3.** падать; спадать; **4.** бросать; опускать; **~ me a line** черкните мне строчку; **5.** бросать (*привычку, занятие*); **to ~ smoking** бросить курить; **6.** сбрасывать; **7.** проронить (*слово*); **to ~ a hint** сделать намек; **8.** прекращать (*работу, разговор*); **to ~ one's friends** покинуть своих друзей; **9.** понижать (*голос*); потуплять (*глаза*); **10.** падать, снижаться; **11.** высадить; довозить; оставлять; **I'll ~ you at your door** я подвезу вас до вашего дома; **12.** сразить (*ударом, пулей*);
record **I** *v* [rı´kɔ:d] **1.** записывать, регистрировать; протоколировать; **2.** увековечивать; **II** *n* [´rekɔ:d] **1.** летопись, мемуары, рассказ о событиях; **to bear ~ to** удостоверять истину (*фактов и т. п.*); **2.** протокол заседания суда; **3.** официальный документ, запись, отчет; **4.** памятник прошлого; **5.** рекорд; **to beat, to break, to cut the ~** побить рекорд; **6.** *юр.* право на владение; право на отвод; **III** *a* рекордный	

obvious in the example of articles in this dictionary. In English-Russian dictionaries, the main lexeme in the microsystem is given within the phrases, and such an approach enhances the informative properties of the dictionary. Encyclopedic dictionaries, academic dictionaries, and translation dictionaries are each designed for a separate audience. These dictionaries are designed for different purposes, and their functions are also different, so that their formation and structural differences are also noticeable. Each dictionary also has its own shortcomings, and these shortcomings are observed not only in manner lexemes, but in the entire dictionary macro system. For example, in encyclopedic dictionaries, although the etymology and interpretation of a word are widely covered, examples of the use of lexemes in speech are rare. In academic dictionaries, on the contrary, great emphasis is placed on examples, and the explanation of the word is very short. In modern thesaurus dictionaries, it is expedient to define the area of speech of the given semantic units. In translation dictionaries, microsystems are shorter, and in most cases, lexicographers limit themselves to quoting an alternative to the word in another language. As long as the whole sentence cannot be cited as an example, these lexemes can be given as phrases, and this should also be given directly in translation, without grammatical changes.

CONCLUSION

In our opinion, it is expedient to give examples in philological dictionaries, which include level indicators and other semantic-syntactic features of words with manner semantics. Of course, it is difficult task to cover all lexemes with manner expression. Despite this, it is worth to note by identifying words that are actively used in oral, written, everyday speech, to define words with manner sema in good volume in this lexical minimum, substantiate them with examples showing all their parameters.

Our observations on the presentation of manner semantic lexemes in dictionaries, their interpretation on the basis of lexicographic principles have shown that English lexicography in traditional lexicography differs from lexical schools of world languages with its distinctive achievements. To date, English dictionaries are divided into three major groups such as encyclopedic annotated dictionaries, academic dictionaries, and specialty dictionaries. In this regard, the creation of academic dictionaries that differ from the annotated dictionaries with a number of indicators, such as the specificity of the interpretation of English lexicography, the limited number of lexemes, and on this basis as a product of gradual improvement of academic lexicon. And also we can note the emergence of a new generation of lexicographic sources, such as minimums, electronic dictionaries, as a special achievement of English linguistics. In addition, it is noteworthy that translation dictionaries are compiled not only by lexicographers who speak English as their mother tongue, but also by foreign experts.

As noted above, in traditional lexicography, English language has gained a major advantage over other languages. This leadership, in turn, has had a positive impact on modern lexicography as well. As a result, several large English language corpses, thesaurus dictionaries, and many electronic and online dictionaries have been created.

REFERENCES

1. A Dictionary of the English Language. Available at: https://en.wikipedia.org/wiki/A_Dictionary_of_the_English_Language

2. Simpson JA, Weiner ESC. The Oxford English Dictionary. Oxford: Clarendon Press, 1989. Available at: https://www.worldcat.org/title/oxford-english-dictionary/oclc/59112453

3. Bukina V. Modern English lexicography. Moscow; 2014. p. 10.

4. Hartmann R, James G. Dictionary of Lexicography. London; 1998.

5. Gak G. On some patterns of development of lexicography (educational and general lexicography in the historical aspect). Actual problems of educational lexicography. Moscow, 1977. p.12.

6. Butaev Sh, Iriskulov A. English-Uzbek, Uzbek-English. Tashkent: Fan; 2009.

7. Isakov U, Rakhimov B, Sobirov B, Temirov S, Isakov Sh, Mazaitov J, Yusupova N. English-Uzbek, Uzbek-English.Tashkent: Yangiasravlodi; 2010.

8. Sivakova N. Lexicographic description of English and Russian phytonyms in an electronic glossary: Abstract of the thesis. dis. ... cand. philol. Sciences. Tyumen; 2004. 34 p.

9. Webster's dictionary of English usage. Copyright © by Merriam-Webster Inc, 1989.

THE DEVELOPMENT OF A CULTURE OF HEALTHY LIFESTYLE IN STUDENT GIRLS THROUGH PHYSICAL EDUCATION AND SPORTS AS A PEDAGOGICAL PROBLEM

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ABSTRACT

The content of the article explores the pedagogical conditions for the involvement of female students in physical education and sports, the inclusion and development of the concept of healthy lifestyle culture, the possibilities and effectiveness of physical education and sports, the technological conditions of targeted pedagogical process.

KEYWORDS: *Healthy Lifestyle Culture, Pedagogical Tool, Mechanism, Motivation, Technological Process.*

INTRODUCTION

The current development of modern educational processes in the world is determined by the diversity of its various socio-pedagogical directions and changes, reforms, actions. In order to popularize physical culture and sports in the Republic of Uzbekistan in recent years, to promote a healthy lifestyle among the population, to establish priorities for improving the skills and knowledge of the population in the field of physical culture and sports, , the implementation of specific programs in the field of physical culture and sports, which will help to strengthen the health of the population, is very important and relevant **[1-3].**

At the current stage of development of society, attention is paid to the healthy lifestyle of students, which is associated with an increase in the health of graduates and their incidence in the process of professional training, followed by a decrease in working capacity **[4].**

The problem of developing a culture of healthy lifestyle in student girls through physical education and sports is an important issue that needs to be addressed. The state of women's health is an important component of the nation's healthy potential, so maintaining and promoting the health of student girls and developing a culture of healthy lifestyles in them is a priority today. Student girls' health is one of the most pressing socially important issues that need to be addressed in today's society, and to ignore this problem is to lose sight of the future generation.

One of the main conditions for the modernization of society in the process of globalization is the development of the culture of life and the improvement of the social environment **[5]**

The purpose of the study

The pedagogical conditions for the formation of a healthy lifestyle in students, the identification of factors influencing development, the formation of a healthy lifestyle through physical education and sports, improving health, the development of a culture of healthy living are studied and investigated.

Research methods

Theoretical analysis of the general factors of the development of a culture of healthy life in student girls, the educational value of physical education and sports as a pedagogical tool, and research methods of the literature were used.

Research results and discussion

The concept, content, principles of a healthy lifestyle, in the process of education and upbringing, mechanisms of formation and development of physical culture of a healthy lifestyle in students N.AMeshelkova (2005), T.M.Kravchenko (2004), B.M. Zimasov (2006), I.D.Manchanov (2001), K.Sodikov (2007), O.Jamoliddinova (2010). D.J.Sharipova (2010), A.Raxmonov (2012), S.A.Abitova (2019), N.Sh.Mannapova (2019), Sh.Xankeldiev, A.Abdullaev, Q.Jabborov, R.Hamroqulov , R.Rasulov, A.Hasanov (2010,2011) articles on some problems of the subject, textbooks are the primary literature.

Spelling developments on the pedagogical conditions - conditions, opportunities and effectiveness of the development of a culture of healthy lifestyles of female students through physical education and sports are not enough.

In the available sources, the general aspects of the problem have been studied, and the students, while acknowledging the urgency of the problems of a healthy lifestyle in students, stressed the need to further expand the scope of research.

Study of available scientific sources on the subject Higher education physical culture: including conditions for organizing the pedagogical, technological process of developing a culture of healthy lifestyle through in-class and out-of-class physical education and sports based on observations in the educational process of (women's) education identified:

1.The development of a culture of healthy lifestyle through physical education and sports is described as a social, pedagogical problem, the role and importance of physical culture and sports in the development of a culture of healthy lifestyle and opportunities in higher education.

2. Improving students' knowledge based on behavioral, habits, healthy lifestyles, health care and development skills during the learning process, physical education and sports.

3. Introduction of educational technologies in educational activities, development of the theory of physical education and its harmonization with pedagogical theories of person-centered education.

4. Introduce non-traditional teaching methods in classroom and extracurricular activities aimed at developing a culture of healthy lifestyles among female students.

5. Achieving effectiveness through the use of forms, methods and tools to develop a culture of healthy lifestyles of student girls through physical education and sports.

6. Implementation of mechanisms to ensure the effectiveness of the process of developing a culture of healthy lifestyles in female students through physical education and sports.

7. Criteria for determining the level of students through the development of a culture of healthy lifestyle through physical education and sports, the introduction of its effectiveness in practice.

Physical education is part of a person's overall culture. In physical culture, man acquires not only his natural existence, but also the culture of humanity, striving to harmonize with himself, the world around him, nature and society.

At the current stage of development of society, the formation of an individual's physical culture is a multifaceted and at the same time integral process, mainly focused on the implementation of physical health programs, physical self-improvement and changes in the level of development of psychophysical qualities and characteristics **[6].**

Physical education and sports play an important role in the formation of a culture of healthy lifestyle, strengthening human health, increasing its physical and functional capabilities. A person should feel a legitimate and mandatory need for physical activity as part of their lifestyle.

A healthy lifestyle, strengthening health requires regular physical activity and sports. After all, maintaining and strengthening the health of students, the formation of their need for physical education in their physical development is an important task facing educational institutions.

Therefore, there is a need for higher education institutions to conduct in-depth research and studies on the development of a culture of healthy lifestyles among female students through physical education and sports, which determines the relevance of this research.

The institution of higher education is a scientific study of the current practical situation in the culture of healthy lifestyles among female students and shows that it has several distinctive features.

Today, the development of technology, the replacement of work in human activities by technical means has a negative impact on strengthening human health. Also, the modern learning process often leads to a deterioration in student health.

The issue of developing a culture of healthy living in students is very important. A healthy lifestyle starts with the family.

It is important to inculcate in students the concept of "healthy lifestyle", "culture of healthy living" and the idea of "healthy living" from an early age.

There are a number of factors that contribute to the deterioration of the health of female students in educational institutions. For example:

- improper adherence to the agenda;

- not to exercise, hygienic requirements;

- connects leisure and leisure time with computer networks, social networks, which are not necessary from mobile devices.

The above-mentioned cases indicate that the student girls spend their time in various idle jobs, have a low culture of health, and are indifferent to their health. Therefore, in the process of physical education of future students of physical culture, in the development of a culture of healthy lifestyle, organization of leisure and leisure, systematic, effective organization of extracurricular activities of national and mass sports clubs in educational institutions plays an important role in shaping and developing a healthy lifestyle . After all, the formation of a motivational attitude to the work of physical education should focus on the acquisition of health as a value direction for students. Therefore, the main goal of physical education and sports in the development of a culture of healthy lifestyle in student girls is to increase the functional, adaptive abilities of the body, the physical development of the individual. **[7-14]**

CONCLUSION

The importance of physical education and sports in the multifaceted process of developing mental, moral and physical qualities, strengthening health, improving work skills, developing a culture of healthy lifestyle and creating a healthy environment in student girls through physical education and sports. Because physical education and sports are effective means of the educational process in the development of a person to mental and moral perfection, physical perfection.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan dated June 3, 2017 No PP-3031 "On measures to further develop physical culture and mass sports." Available at: https://cis-legislation.com/

2. Resolution of the President of the Republic of Uzbekistan No. PP-3306 of October 2, 2017 "On measures to further develop the national sport" Kurash ". Available at: https://cis-legislation.com/

3. Decree of the President of the Republic of Uzbekistan No. PF-5924 of January 24, 2020 "On measures to further improve and popularize physical culture and sports in the Republic of Uzbekistan." Available at: https://cis-legislation.com/

4. Meleshkova NA. Formation of a healthy image of the life of students in the university in the process of physical education: dis. … Kand. ped. nauk. Kemerovo, 2005.

5. Jamoldinova OR. Improving pedagogical mechanisms for the implementation of the principles of continuity and continuity in the development of a culture of healthy living: p.f.n ...... disser.aftoreferati .Tashkent, 2015.

6. Stepanok I.A. Developed motivations of students of the university to a healthy education through the means of physical: dis. … Cand. ped. Sciences. Magnitogorsk, 2005.

7. Shukurov RS. Experimental Basis of Elective Subjects in the Context of Informatization of Modern Education. Central Asian journal of theoretical and applied sciences. 2021;2(9):31-37.

8. Shukurov RS. The development of a healthy culture of living for students-youngstres through physical education and sports as a pedagogical problem. TECH-FEST-21International Multidisciplinary Conference Hosted from Boston, USA. https: conferencea.org October 3, 2021. pp. 63-65.

9. Shukurov RS. Developing a culture of healthy life among the students through turon wrestling. TECH-FEST-21International Multidisciplinary Conference Hosted from Boston, USA. https: //conferencea.org October 3, 2021, pp 66-68.

10. Shukurov RS. The ways of activating the independent works nof the students in the educational platform moodle. Asian Journal of Multidimensional Research. 2020;8(2):24-30.

11. Shukurov RS. Developing a culture of healthy life among the students through turon wrestling. International Journal of Yogic, Human Movement and Sports Sciences. 2020; 5(2):4-6.

12. Shukurov RS. The development of a healthy culture of living for students-youngstres through physical education and sports as a pedagogical problem. ACADEMICIA: An International Multidisciplinary Research Journal. 2020;10(8):629-634.

13. Shukurov RS. Developing a culture of healithy life among the students though turonversling. EPRA International of Environmental Economics, Commerce and Educational Management Journal, 2020; 19-22

14. Kadirov RKh, Shukurov RS. Experimental Test of Effectiveness of Elective Courses in Higher Education. International Journal of Progressive Sciences and Technologies (IJPSAT). 2021;25(1); 143-151.

A STUDY OF IMPROVEMENT OF PREVENTION OF KIDNEY DISEASE IN CHILDREN OF PRESCHOOL AND SCHOOL AGE

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ABSTRACT

In the complex treatment of acute and chronic kidney diseases in children, diet therapy plays an important role. High requirements are imposed on therapeutic nutrition, since the kidney is the main organ for the excretion of metabolic products that come with food and are formed as a result of the breakdown of body tissues, as well as the organ responsible for maintaining the constancy of the internal environment. Under certain conditions, it becomes necessary to correct in the diet of nutrients such as animal protein, gluten, oxalates, urates, phosphates, the metabolic products of which are excreted through the kidneys and affect not only the pathogenetic mechanisms of the development of the disease, but also participate in the formation of non-immune processes of progression disease to the stage of renal failure.

KEYWORDS: *Children, Dysmetabolic Nephropathy, Crystalluria, Oxalaturia.*

INTRODUCTION

Diseases of the urinary system are becoming one of the most pressing problems among children worldwide. According to the World Health Organization, kidney disease complications are important to the public health system in all countries, depending on the living space, lifestyle, gender, age, nutritional status of the population, the risk to life of children and adults in environmental conditions. factors. According to the authors, ".... in areas contaminated with industrial or agricultural toxicants, dysmetabolic nephropathy occurs in one in three children and increases with age ... Despite advances in the treatment of dysmetabolic nephropathy (DND) in children, it is becoming one of the most pressing problems of applied medicine. Particular attention is paid to a number of targeted research studies aimed at improving the clinical and pathogenetic characteristics, diagnosis and treatment of the disease in children and adolescents around the world, especially in children and adolescents living in environmentally disadvantaged areas. In this regard, the relationship between changes in renal function in children, the level of salts in the urine in the development of complications of dysmetabolic nephropathy, the correlation of clinical and laboratory parameters in the formation and course of oxalate nephropathy, renal function, hemodynamics. **[1-5]**

Objective of the study

To work out propositions and recommendations concerning dysmetabolic nephropathy prophylaxis in preschool and school-age children in Khorezm region.

Materials and methods of the study

In our study 120 children aged 3 to 15 years old diagnosed with dysmetabolic nephropathy were taken to Khorezm Regional Children's Multidisciplinary Medical Center and family polyclinics. Of these, 72 (60%) were girls and 48 (40%) were boys.

There were 72 children in the Uralesan + diet group. Age-appropriate quantitative treatment course was conducted during one month. Preschool children received 2-4 ml of Uralesan 3 times a day, and school-age children received specially recommended diet: 5 ml of Uralesan + 3 times a day for children.

2-nd group - the group of children receiving "Uralesan" syrup - 48 children at the age of 3 to 15 years old are recommended a month course of treatment depending on their age: preschool children - 2-4 ml 3 times a day; schoolchildren - 5 ml 3 times a day.

Questionnaires, retrospective data, assessment of the clinical picture, biochemical, instrumental, functional and statistical methods of analysis were used in the study.

Practical results of the study. To fulfill our objectives we conducted the study in 3 phases:

Phase 1. Retrospective determination of the use and effectiveness of therapeutic and preventive measures in children receiving inpatient treatment with DMN and other kidney diseases, child developmental history (form 112), medical history of the somatic department (form 003).

Phase 2. Taking into account the latent nature of the disease clinic in the early stages of DMN, the almost complete absence of complaints in patients and the appearance of salt crystals in the urine, general clinical examinations were performed among healthy children, i.e. 120 children aged 3 to 15 years who did not complain of kidney disease.

Step 3. In order to correct and prevent oxalate nephropathy treatment in Khorezm region with regard to actual diet and drinking water clinical study was conducted in 120 children. The children were divided into 2 groups to determine the use and efficacy of Uralesan in combination with diet.

Practical results of the study. In the first phase of our study, according to statistics from 2012 to 2019 in Khorezm region, the incidence of urinary tract disease in children increased from 23.7% in 2012 to 46.1% in 2019. A retrospective review of the case histories of 2976 children aged 3-15 years who were treated in pediatric-only units from 2011-2018 showed that 74%, had oxalate salts in their urine.

According to the comparative analysis of the municipal analysis of WDSENM of Khorezm region in 2016-2019, the content of trace elements in drinking water did not meet the requirements of the state standard. As a result, metabolic disorders and the formation of dysmetabolic nephropathy in children were revealed, which was confirmed on the basis of clinical and laboratory parameters, such as glomerular filtration rate, urea, creatinine.

The frequency of persistent crystalluria and microhematuria was 27,7% in preschool children of the main group. In the main group during the school period, more than half of the respondents showed minor proteinuria, as well as intermittent pain in the morning eyelids, lower back, and lower abdomen. Despite the early onset of metabolic disease, the risk of STK (7%) was observed in children older than 10 years. Enuresis was present in almost 4,5% of preschool children, but not in school-age children. Stunting of physical development was almost identical in school-age children (11,4%) and preschool-age children (11,1%).

Glomerular filtration rate is the most accurate indicator allowing to estimate the functional state of kidneys in the form of one exact number. Our next study was to determine CFT in children with oxalate nephropathy, the most common (45,6%) in our main group, against the background of impaired phosphorus-calcium metabolism in renal function. The results of the study showed a significant increase in serum creatinine and urea with a significant decrease in GFR (76,24).

Recommended diet "Uralesan +" renal GFR increased by 50% in children of our group 1, while in children of group 2 this index did not exceed 7%. This testifies to the fact that CFR in group 1 children was 2 times higher than in the previous case.

Group 2 In the group of children who received only Uralesan syrup the daily amount of oxalates in the urine was significantly different from the conditions before and after treatment (first 1751,0 ± 88.6 μmol / day, then 964,9 ± 52,8 μmol / day) . Oxalate content in the urine of these children was reduced almost 2-fold. This is mainly due to the fact that the drug Uralesan has the property of increasing the excretion of urea and chlorides, helping to dislodge small stones and sand from the bladder and kidneys. However, on the 30th day of treatment, oxalate crystalluria was observed in 12% of the children in this group; the same condition was detected again at the examination three months after the beginning of the therapy. After administration of the drug Uralesan diuresis slightly increased (previously 796,3 ± 83.6 ml/day, then 1126 ± 60,5 ml/day). At the same time, we were convinced that the drug Uralesan increases diuresis.

In group 1 - Uralesan diet + recommended for children - the amount of oxalates in the urine decreased 3 times (first 1757,0 ± 88,9 μmol / day, then 665,78 ± 49,3 μmol / day). Here it should be noted that the Uralesan + diet, together with the elimination of the food factor in the body immediately prevents the formation of oxalates, forming a protective colloid in the urine. In this group of children before treatment, daily diuresis was also less pronounced. After the combined administration of the diet Uralesan + diuresis increased and reached the daily norm (at first 828,6 ± 84,2 ml/day. Then 1222,2 ± 96.8 ml/day. And here we were convinced that Uralesan increases diuresis.

CONCLUSIONS

Thus, the results of the investigation show that oxalate nephropathy in schoolchildren and preschool children of Khorezm region appeared to be highly effective both in the rehabilitation period of the 1st group and in children taken together with the diet Uralesan. The combined use of the drug with the diet promotes the normalization of metabolic processes, strengthens the cytomembranes, has an anti-inflammatory effect on the renal parenchyma and improves capillary blood flow. This complex can be recommended for the complex therapy of children with oxalate nephropathy. However, the criteria of dysmetabolic nephropathy risk group in children and an algorithm for early diagnosis have been developed and recommended for practice. **[6-10]**

REFERENCES

1. Averyanova NI, Balueva LG. Oxalate crystalluria in children. International Journal of Applied and Fundamental Research. 2012;2:25-28.
2. Baranov AA. et al. Sanatorium-resort treatment of renal diseases. 2008.
3. Starodubov VI. et al. Health Reforms in Uzbekistan. 2004.
4. Smirnova IS, Ignatova OA. Risk factors for the development of secondary oxaluria in children. Human Ecology. 2009;11:57-62.
5. Kitaeva Yu. Dissertation 2011 on Epidemiology and prevention of chronic kidney diseases in children and adolescents. Scientific Library of Dissertations and Abstracts. 2011
6. Ignatova MS. The role of harmful environmental factors in the development of nephropathy in children. Pediatric Nephrology. Moscow: MVC; 2011. pp. 75-81.
7. Ignatova MS, Korovina NA. Diagnosis and treatment of nephropathies in children. Manual for physicians. 2007.
8. Shaikhova GI. Biological significance of food ingredients. Healthy nutrition - an indicator of health. Monograph; 2015.
9. Unsal A et al. Standard and non-contact mini-cutaneous nephrolithotomy: a randomized controlled trial. Arabian Journal of Urology, 2013;14(1).
10. Ulugbek Ataullaevich KU. Early diagnosis and prevention of common urological diseases in the conditions of primary health care. diss. Robota; 2018.

REQUIREMENTS FOR WRITING A SYNOPSIS FOR STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS

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ABSTRACT

This article describes in detail the technology of organization and management of independent work of students in the organization of higher education on a scientific and methodological basis, the organization of professional and pedagogical activities of students, the requirements for writing an essay, the organizational basis.

KEYWORDS: *Higher Education, Education, Student, Requirement, Technology, Text, Knowledge, Skills, Qualification, Analysis, Synthesis, Abstract, Author.*

INTRODUCTION

Autonomous education, independent work of students is one of the types of training, a major form and technique of education, according to the Republic of Uzbekistan's normative documents on higher education. Presidential Resolution of the Republic of Uzbekistan on April 20, 2017, NoPR-2909 "On measures to further develop the higher education system" among the general requirements for the content of higher education programs in the "State educational standard of higher education" is the acquisition of independent knowledge of students on a number of issues and problems related to the study of the *bachelor's* degree program.

"The ability to autonomously acquire new knowledge, operate independently, and organize work on a scientific foundation" is one of the general qualifying requirements of the state standard for the preparation of students in higher education. In this regard, there are also certain prerequisites for writing an essay.

An abstract is one of the ways to interpret a text or a group of texts. As a result, the abstract, unlike the abstract, is a fresh, authorial piece. A distinct author's approach is understood in this situation in the display of innovation, sorting of materials, and comparison of various points of view.

As a result, *abstracting entails the formulation of a specific issue based on the classification, generalization, analysis, and synthesis of one or more sources.*[1]

An abstract is a short written presentation of an idea that includes one or more sources and necessitates the capacity to compare and interpret various points of view.

Feature of the abstract:

– does not include detailed evidence, comparisons, comments, assessments;

- answers new, important questions in the text.

Types of abstracts

According to the completeness of the expression → Informative (abstracts - thesis) Indicative (abstracts - resume (summary))

According to the number of referenced sources → Monographic In the form of comments

The abstract should not include the subjective views of the referee on the question being expressed, as well as the assessment of the text.

Abstract content

1. Bibliographic record

Name of the author. The name of the work. Printed address. Publishing, year. Number of pages.

2. Abstract text

- topic, problem; the subject, purpose and content of the work to be abstracted;
- research methods;
- clear results;
- author's conclusion;
- scope of work results

(Name of the author) in the book of “...” “...” is given. The author derives from that, i.e. .... At the same time, he finds it …. necessary.
The book (quantity) consists of parts: “...”, “...”, “...”.
The author emphasizes that, i.e. (author) introduces the following ..., ... considers the issues.
The book ends with a list of ... dictionaries and titles of published works.

The abstract focuses on new information and determines whether it is appropriate to focus on the original text!

Preparation of an abstract on the subject involves the solution of the following tasks:

- to deepen the knowledge of the subject on topical theoretical issues, to develop the student's ability to creatively apply this theoretical knowledge to the topic.
- mastering foreign experience in the chosen professional field, opportunities and problems of their practical application in the current conditions.
- improving the ability to study various literary sources on the chosen topic (monographs, scientific articles in periodicals, etc.) and independently and knowledgeably present the material in a critical approach based on their results, make convincing conclusions and suggestions.
- develop the skills of correct writing.

The abstract never compromises with simply copying materials, plagiarising materials from one or more sources. It should clearly express the views, opinions, conclusions and suggestions of the author through the study of the literature.

The order of work on the abstract

1. Topic selection

Abstract topics suggested by the department are examples. It is advisable to try to choose a topic that meets your personal interests and inclinations. Depending on your interests, you can present an abstract topic that is not included in the topic proposed by the department, based on the selected problem and its justification. In this case, you will need to strongly agree on the topic you are proposing with your supervisor.

2. Preparatory stage: study of the main sources

After selecting the topic of the abstract, get acquainted with the range of questions on the selected topic:

• review the report materials;

• to study this topic in a science curriculum review the recommended literature and analyze them.

These will help you to have a clear idea of the essence of the topic, its place and importance in the course being studied.

Expand the range of literary sources on the topic of the abstract, using the higher education information-library complex, as well as catalogs available in the libraries of higher education institutions.

Along with educational and monographic literature in the following periodicals: "Bulletin of pedagogy and psychology of Uzbekistan", "Public education", "Journal of biology of Uzbekistan", "School and life", "Child and time", "Education marketing" and in similar journals published scientific articles are also available.

The use of relevant legislation of the Republic of Uzbekistan and government decisions also plays an important role in improving the quality of the abstract.

The first stage of the work is the bibliography.

3. Summarizing the necessary materials

4. Creating the logic of the research problem, creating an abstract plan

The abstract plan should consist of:

– access;

- main part;

- conclusion;

- list of used literature;

- appendix (if it is necessary).

The abstract plan defines the range of questions related to the selected topic and covering its main content. It allows the referent to get a general direction in the collection of topic materials, ensuring its correct selection and expression.

A well-thought-out plan, each part of which is provided with selected material, is an important foundation for successful essay writing.

The main part of the abstract should be divided into a question with a concise and clear name and small questions (parts).

5. Sort and write the collected material

The introductory part is based on the theoretical and practical relevance of the topic, goals are formulated and tasks are set.

If the abstract is in the form of a monograph (single source and author's abstract), in the introductory part:

- brief information about the author (academic degree, title, his specialty, other works),
- a summary of the source of the topic;
- purpose of work;
- rubrics;
- the position of the author, etc.

All important points should be reflected in the main part of the abstract.

According to the plan, the main part of the abstract is required to be divided into questions and questionnaires (parts) according to the distribution of the collected material.

Each separated question, questionnaire (part), the division of the abstract into components should be based entirely on the following formula task - development - conclusion.

Form of expression - the choice of the referent: abstract, fragmentary, analytical.

It is not allowed to jump to the annotation path of the literature. Each source will have to be analyzed within the scope of the research topic.

Examples of phrases and expressions in the text of the abstract

"... at work ... the system will be considered"
"In the introduction it is shown that ..."
"The author implies that ..."
"The following questions are covered in Chapter 1 ..."
"... will be examined in Chapter 2"
"Speaking of ..., the author emphasizes that ..."
"The case also focuses on ..."
"So the author concludes ..."
"Chapter 3 ... examines, ... considers"
"... the need is determined ..."
"In conclusion, the author writes: ..."

The expression of the material should not be descriptive in nature. There should be an analysis with appropriate conclusions, as well as an analysis of statistical material that is inextricably linked to the text.

It is advisable to tabulate large volumes of statistics. The construction of diagrams, graphs, histograms on the basis of statistical data helps to more clearly express this or that socio-pedagogical and psychological phenomena and processes.

All *tables, diagrams, graphs, diagrams, pictures in the abstract should be named and numbered.* It is strongly recommended that these statistics be placed under the *pages of the sources* from which they are obtained.

All numbers in the text are required to be referenced to *relevant sources*.

References are inevitable when the text is *quoted* or when the authors use conclusions, notes, comments and opinions in their research work.

The value of the abstract is to analyze the different views on problematic issues, to justify the position that is accepted or held.

The summary includes the conclusions made by the student as a result of the study of the selected topic, as well as the unresolved issues that need to be addressed in the future.

6. Checking the list of references

The list of used literature is made in a certain order:

1. Laws of the Republic of Uzbekistan;

2. Decrees of the Republic of Uzbekistan;

3. Resolutions of the Government of the Republic of Uzbekistan;

4. Normative acts, instructions;

5. Books and articles published in periodicals.

The bibliographic record of sources includes: the name and surname of the author, the name of the book, the address of publication, the name of the publisher and the year of publication. If the article is published in a magazine (newspaper), the name of the magazine (newspaper), serial number, year and page are given.

7. Edit text. Examination of the text in terms of spelling and style (stylistics).

The abstract should be clearly written in fluent language and have an attractive appearance. Abbreviations of words, except for the generally accepted ones, as well as errors, misunderstandings, stylistic differences are not allowed.

In case of presentation of the abstract to the supervisor, all aspects should be brought to the maximum level.

8. Registration of the abstract

The abstract to be presented to the supervisor, i.e. the teacher, should be typed on a computer in 12 fonts, 1,5 spaces, on one side of A4 paper, left – 2,5 cm, right – 1,5 cm, top and bottom - no less than 2 cm.

Text pages must have ordinal numbers. Sequence numbers should move from one page to another and start on page 3 (the first and second sheets are the title page and work plan, not numbered).

The sheet sequence number is placed at the top, in the middle, or to the right.

The volume of the abstract should not exceed 16-20 pages.

Abstract:

1) title sheet;

2) the order number of each question, questionnaire (section) sheet

specified work plan;

3) access, serial number is not set;

4) questions and questionnaires with references to sources

text expression divided into (parts);

5) Conclusion, serial number is not given;

6) List of used literature;

7) Consists of an application consisting of tables, diagrams, graphs, pictures and diagrams.

Appendixes are sewn in a strict sequence.

Assessment of the abstract

The abstract is evaluated by the supervisor. In this case, the conditional indicator and evaluation criteria can be applied as follows:

Assessment indicators	**Assessment criteria**
1.1. Abstract text novelty Maximum rating - 20 points	– problem and topic relevance; - novelty and independence of the problem statement, the formation of new aspects selected for problem analysis; - the presence of the author's status, independence in thinking.
1.2. The degree to which the nature of the problem is disclosed Maximum rating - 30 points	- relevance of the abstract plan to the topic; - the content of the topic corresponds to the topic and plan of the abstract; - completeness and scope of the basic concepts of the problem; - justification of methods and techniques of working with materials; - skills in working with literature, systematization and sorting of materials; - generalization of different views on the issue under consideration, the ability to compare, substantiate the main considerations and conclusions.
1.3. The choice of sources is justified Maximum rating - 20 points	– the scope of literary sources on the problem, the degree of completeness of their use; - attract the latest source on the problem (published in the journal, collections of scientific papers, etc.)[2]
1.4. Follow the rules of registration Maximum rating - 15 points	- correct reference to the literature used; - accuracy and culture of expression; - effective use of the apparatus of problem terms and concepts; - strict adherence to the volume of the abstract; - the culture of clearance is the separation of paragraphs
1.5. Fluency, literacy Maximum rating - 15 points	- no spelling and syntactic errors, no stylistic differences; - errors, abbreviations, general non-acceptance; - literary style.

In the end, the abstract is evaluated on a 100-point scale, and the assessment of knowledge on a 5-point scale is carried out as follows:

86 - 100 points - "excellent";

70 – 85 points – “good”;

51 - 69 points - "average";

below 51 points - "unsatisfactory".

Scores are taken into account in the daily assessment of knowledge in the material provided in the program.

1. In consultation with the teacher, select the topic of the essay.

2. Create a bibliography on the selected topic.

3. Conduct research on the selected case. Make a note on it in the form of a plan or abstract - choose a working note in the optimal option for yourself.

4. Write an essay on all the requirements using the selected materials.

In general, the role of independent education in the study of social sciences and humanities, independent learning and organization of students, setting the direction of our future, training of personnel is invaluable. *Personal perfection can be achieved by increasing the activity of students, instilling goodness in strengthening their independent thinking skills.*

Thus, in solving educational problems in accordance with the pedagogical and psychological purpose of the formation of the student's independent opinion, it is characterized by the formation of new knowledge, creative acquisition and practical application of students' creative application of their knowledge, their inquisitiveness, intellectual development.

REFERENCES

1. Bespalko V.P. Components of pedagogical technology. - Moscow "Pedagogy", 1989.
2. Boymatova N. Formation of creative skills in future teachers of vocational education // Vocational Education, 2008. № 4.
3. Juraev R., Isaeva G. The role of students' independence in the learning process.// Public Education, 2004, No. 4.
4. Omonov H. Eshchanov E. On the pedagogical and psychological basis of the organization of independent education. "Organizational and scientific-methodological problems of modern education." Collection of materials of scientific-practical conference. – T.: 2005.
5. Rakhmatullaev V. Methods of organizing independent learning in educational institutions // EDUCATIONAL TECHNOLOGIES, 2007. No.2.
6. Sodikov F. Didactic principles of the organization of independent work.//VOCATIONAL EDUCATION, 2007. No.5.
7. Saidakhmedov N., Mirzajonova D. Criteria for the use of interactive methods in the formation of independent thinking in students // CONTINUOUS EDUCATION, 2006. No.1.

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SMART CITIES: A RISING HOPE FOR INDIAN DEVELOPMENT

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ABSTRACT

The need of the hour is for change. As per the famous saying, "Change is the only constant", well-designed and equipped smart technologies have replaced the human capital which is the most precious asset of a developing economy like, India. One of the finest creations of the technological development is the Smart Cities. They have evolved as the provider of efficient services which will eliminate the difficulties, save money, time, and energy and also provide for high-quality services at its best lower prices. This article is an attempt to help for the understanding the concept of smart cities, facilities it will provide to the public, government policies to support smart cities and use the foreign direct investment in the construction and upgradation of the facilities provided by smart cities. Smart cities will be smart with smart buildings, automated operation procedures, lighting and security services etc. Seamless connectivity will support new trends for living, parking services, grocery services, plumbing and other daily needed and essential services.

KEYWORDS: *Smart Cities, Technology, Facilities, Services, Developing Economy, Equipped.*

INTRODUCTION

The world has now changed its dimensions and is witnessing automated technologies, robotization, digital advancements, better working conditions etc. due to the new industrial revolution. There are better investments and production opportunities which have become more profitable and economical with all these developments, which have lead the path to economic growth and sustainable development. India ranking the 10th largest economy in the world, even though standing 2nd position in the global population. For the best economic growth, India still needs to be focused much more that have been consistently growing sectors like Telecom, Infrastructure, Industries, Hospital, Tourism, Information Technology, Service industries, e-commerce in a better and more efficient way. With increasing urbanization, India's urban population is expected to increase from 377 million in 2011 to 600 million people by the year 2031. Almost 50% percent of the total population will live in urban areas. According to a recent report on Indian urban infrastructure and services by a high-powered expert committee set by the Indian government, the urban share of the GDP is expected to rise to 75% in the year 2030 from around 62-63 percent in the year 2009-2010.The number of cities is projected to increase to 87 in the year 2031 from 50 in 2011. Urban areas will be critical to the economic growth of the country and they will require a massive overhaul to accommodate the future population.

The world economy has been seeing rapid increase in foreign direct investment (FDI) for more than three and half decades. They have been the basis of development and growth for most of the developing countries. Singh (2008) **[1]** explains that one of the significant contributions of globalisation in the past is the growing and spreading FDI amongst the countries, contributing significantly to positive effects on the labour productivity of domestic firms. Attracting FDI inflows with favourable policies has therefore become a key battleground in the transition and emerging markets as pointed out by Singh (2008**)[1] .** The New Growth theory states that in order to have higher economic growth, productivity per person should be higher. This will, in turn raise the real gross domestic product (GDP) and

thereby help in satisfying people's pursuit for profits. Therefore, FDI helps the economies

by bringing new growth opportunities and massive profits having spill overs effect across various sectors of the economies in terms of: technical and managerial know how, skill up gradation, better and improved infrastructure, employment opportunities, increased competitiveness and opportunity for local markets to expand globally.

The Smart City Concept- Indian Concept:

According to the famous quote by Mahatma Gandhi, "India lives in its villages." Around 70% of the Indian population lives in rural areas being deprived of the basic facilities of electricity, clean drinking water, good sanitation facilities to lead a healthy life. They lead life being unaware about basic health care facilities, education facilities, enhanced technologies etc.

In 1933, at the height of the great depression, noted British economist John Maynard Keynes wrote an open letter to the President of the United States, Franklin D Roosevelt, encouraging him to enact what came to be known as the New Deal, where investment in infrastructure became the silver bullet to pull the world out of the great depression.

Some of the seeds of today's metaphor for urban modernity; "Smart Cities" originated in the U.S. information technology company IBM when The CEO Sam Palmisano put forward this concept of **Smart Earth**. To cater to this increasing urban population in the future, cities need to plan and provide a suitable environment for future investments, create new jobs and livelihoods, build reliable public infrastructure, provide social services with ample access to

affordable housing and most importantly support efficient use of resources for a sustainable quality of life. In addition to all these, building of "100 New Smart Cities" in India could be boosting of much more economic growth on par with other countries across globe like China (Meixi, Zhenjiang), Abu Dhabi (Masdar), South Korea (Sangdo), Singapore, Malta and Russia (Skolkovo).

According to Frost and Sullivan (2003) smart cities include smart Governance and smart education, smart healthcare, smart building, smart mobility, smart infrastructure, smart technology, smart energy and smart citizen.

The concept of smart cities in India, under the vision of the prime minister is a little broader. The smart cities in India are expected to attract investments, building cities that work well especially for businesses and developing new technologies for communication and dissemination.

"Smart Cities" was one of Modi's principle guarantees in the run-up to his race in 2014. After the decision, Modi revealed a goal-oriented arrangement characterizing the key components of

100 smart cities he wants to build up crosswise over India, and Finance Minister Arun Jaitley apportioned US$1.2 billion for Smart Cities in the 2014-2015 budget.

The Indian Economic Survey 2017-18 estimated that the country will require $4.5 trillion infrastructure investment by 2040. Much of this infrastructure investment will need to be focused on urban India, as by 2030, 40% of the country's population, or 600 million people, will reside in cities. Even more importantly, India requires 700 to 900 million square meters of residential and commercial space (equivalent to Chicago) to be built every year from now till 2030 to accommodate this 600 million i.e. 70% of India of 2030 will be built in the next decade. Taking cognisance of the growing need and importance of urban development, PM Narendra Modi embarked on the world's most ambitious planned urbanisation programme. In June 2015, he launched three flagship missions, namely, Pradhan Mantri Awas Yojana (PMAY), Smart Cities Mission, and Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

According to the planning commission 12th five year plan, the smart cities would be engines of growth as they would increasingly compete for investments nationally and internationally too. Therefore, cities must provide world class infrastructure and services at affordable costs to give a competitive edge to the economic activities they host. Besides, cities should be able to provide basic services to migrant workers, their families and other vulnerable sections of society including women and children.

Figure1.1: The Smart Solutions of Smart Cities

Smart cities is an innovative initiative by the Government of India towards improving the quality of life and attracting people and investment, setting in motion a virtuous cycle of growth and development. Urban areas are expected to house 40percent of India's population and contribute 75 percent of India's GDP by 2030. This requires comprehensive development of physical, institutional, social and economic infrastructure. Smart cities is an innovative initiative by the Government of India towards improving the quality of life and attracting people and investment, setting in motion a virtuous cycle of growth and development.

Review of Literature:

Smart city is a new urban concept and is not used in a consistent manner. Smart city entails sustainable development, sound economic growth, and better quality of life for their citizens (Census of India, 2011) **[2].**They associate smart with achieving policy success in their jurisdictions. Dicken (2011) **[3]** recognized smart city as an "urban labeling" phenomenon. The label smart city is a nebulous concept and is inconsistent.

"A city that monitors and integrates conditions of all of its critical infrastructures is a smart city" (Gupta, 2014) **[4].** 'It is a type of cities that uses new technologies to make them more liveable, functional, competitive and modern through the use of new technologies, the promotion of innovation and knowledge management" Carlino, (2011) **[5].** "Smart cities are often small and mid-size metropolitan areas containing flagship state universities. Smart cities are centers of higher education" (Hoff, 2020) **[6].** Sassen (1991) **[7]** considers it to be a collection of smart computing technologies. Smart city is an admired city, a vessel to intelligence, but ultimately an incubator of empowered spaces." (Friedmann, 1986) **[8]** Smart city is such city "when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance."(Allam, 2018) **[9].**

To build smart cities there are utilities using smart technology that is needed to translate the data that is captured to intelligence and then knowledge. Not just stopping at the knowing something an action has to be taken where intelligence comes into play and steps like actuation, where action is taken with monitoring and controlling that action to give the desired results (Aurigi, 2005) **[10].** More intelligent utilities under city management especially the public utilities and services in smart cities needs a massive and intricate multi-dimensional calculations and its analysis, leading to data mining on cloud computing platforms. A smart city's representative characteristics are that smart cities are superior for offering digital securities systems and intelligent services. (Bhattacharya et al., 2015) **[11].**

The existing funding options primarily used by government and entrepreneurs mainly comprises of the PPP which is defined as "the transfer to the private sector of investment projects that traditionally have been executed or financed by the public sector", Bank financing, Capital and Money market instruments etc. Debt and equity are not merely alternative modes of finance, but are also alternative modes of governance. Corporate governance is meant to create some rules and regulations which would ensure that external investors and creditors in a firm can get their money back and would not simply be expropriated by those who are managing the firm.

Conceptualising Smart Cities: Opening New Opportunities for India:

According to the State of World Population Report, for the first time in human history every 10 people will live in a city, and by 2050, this proportion will increase to 7 out of 10 people. Smart cities are considered to be critical necessity at the face of growing more than half of the world's population were in urban areas. Besides this according to Global Health Observatory (GHO) which is part of World Health Organization (WHO) revealed that by 1990, less than 40% of global population lived in a cities, but as of 2010, more than half of all people lived in an urban area. It is a new concept in India enthusiastically proclaimed by the new government keeping in mind the urgency and need of urban life. Smart cities aim to reduce anticipated complexities and expenses that accompany future urbanization. Hence, integration of Information and

Communication Technology (ICT), energy efficiency and sustainability form the backbone of these cities. For enabling and supporting these initiatives, the smart cities also require accountable, empowered urban local bodies. Overall, smart cities promise to provide a quality of life that can support future generations sustainably. Urban areas are expected to house 40percent of India's population and contribute 75 percent of India's GDP by 2030. This requires comprehensive development of physical, institutional, social and economic infrastructure. Smart cities is an innovative initiative by the Government of India towards improving the quality of life and attracting people and investment, setting in motion a virtuous cycle of growth and development.

According to the Ministry of Urban Development, the core elements of India's Smart Cities are:

1. Adequate Water Supply
2. Assured Electricity Supply
3. Sanitation, including Solid Waste Management
4. Efficient Urban Mobility and Public Transport
5. Affordable housing, especially for the poor
6. Robust IT connectivity and Digitalization
7. Sustainable Environment
8. Health and Education
9. Safety and Security of Citizens (especially women, children, elderly persons)
10. Good Governance, especially e-Governance and Citizen Participation

In its two years at the centre, BJP-led NDA government has managed to achieve growth of 7.6 per cent. A major portion of this growth story should be attributed to government's efforts towards improving FDI flow in India. In November 2015, it reformed the FDI norms and made it more investor friendly. To talk about construction sector, in particular, there were three path-breaking reforms. Earlier, the FDI policy enforced conditions with regards to project status, project size, lock-in periods, etc. due to which the eligible options in real estate projects for foreign investors were limited predominantly to large projects with development size of over 0.54 million sq. ft. With the relaxation in FDI norms where the government removed all these caps, the entire real estate became accessible to foreign investors. As per a report entitled "Opportunities for foreign investors in Indian Real Estate", global real estate consultancy (Cushman & Wakefield) reported that the total private equity investments from foreign funds in Indian real estate increased 33%, from USD 1,676 million in 2014 to USD 2,220 million in 2015. It also reported that owing to high property prices and high investment potential, Mumbai was accounted for about 35% of the total foreign investments in 2015, followed by Delhi NCR accounting for about 25% of the investments. By duly identifying the potential of FDI, the Government is keeping no stone unturned. Its initiative of developing 100 Smart Cities is one such masterstroke which will, potentially, draw more FDI into the economy. It has so far announced 33 cities out of which 13 were announced recently. Minister for Urban Development, Venkaiya Naidu, while announcing these names, said, "New urban sector initiatives in India have a total investment potential of $15 billion at the moment". Creating new smart cities across

India may be looked as a strategy to pitch more cities accessible to Foreign Investments and release pressure off the existing urban cities. This smart move will regularize the flow of foreign funds across the country.

Foreign Direct Investment Policies of Construction Sector:

→ The construction industry makes up for a major part of India's GDP. Being a significant contributor to the GDP of India, the industry acts as a gateway for more opportunities. Investment in the construction industry in India, therefore, directly leads to the country's economic development. The Construction industry in India consists of the real estate as well as the urban development segment.

→ 25.05 bn FDI equity Inflows in Construction Development during April 2000 – September 2018

→ $540 mn overseas investment in the Construction Industry In India during April 2007 – March 2018

→ $13.4 bn FDI in Construction Development In North India and South India in construction (infrastructure) activities during April 2000 – September 2018

→ To help attract foreign funds in construction of townships, hospitals and hotels, the government relaxed the FDI policy for this sector by easing exit norms and reducing built-up area and capital needs.

→ The revised norms relating to construction development sector has been notified by the Department of Industrial Policy and Promotion (DIPP). India allows 100 per cent FDI in the sector through the automatic route. The new policy has done away with the three-year lock-in period for repatriation of investment.

→ US$ 90 billion was allocated for the infrastructure development in 2018-19. Which will ultimately generate revenue of US$ 739 billion by 2022 and US$1 trillion by 2025, giving employment benefits to around 44 million population.

→ Taking cognisance of the growing need and importance of urban development, PM

Narendra Modi embarked on the world's most ambitious planned urbanisation programme. In June 2015, he launched three flagship missions, namely, Pradhan Mantri Awas Yojana (PMAY), Smart Cities Mission, and Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

- **Pradhan Mantri Awas Yojana (PMAY)** is predicated on the vision of providing each Indian a home he/she can call his/her own. To meet this objective, we need to build 1crore dwelling units in urban spaces as had been assessed by the states and UTs. 81 lakh homes have already been sanctioned, 48 lakh grounded for construction, and 26 lakh homes have been completed and handed over. Crucial aspect of the Mission is that the title of the home will be in the name of the lady of the house or co-jointly, providing a major fillip to women's empowerment. The scheme through its four verticals— In Situ Slum Redevelopment (ISSR); Affordable Housing in Partnership (AHP); Credit Linked Subsidy Scheme (CLSS) and Beneficiary Led Construction (BLC)—offers a bouquet of options to the beneficiaries and states/UTs . The Mission looks at the daunting issue of slums; it focuses on affordable housing; it provides for a very attractive interest subsidy for those wanting to avail a housing loan; and it provides assistance to those who already own land but find it difficult to raise the necessary resources to construct a house. 81, 63,251 houses have been built between 2017 and 2019.

- The objective of the **Smart Cities Mission** is to build the next generation of Indian cities, where infrastructure is easy accessible and affordable, and where citizen-government engagement is efficient and effective. It aims to achieve this by adopting the latest in technological advancement — whether it is RFID tags that make garbage collection easier or integrated traffic management systems that ease road congestion—technology offers 'smart' solutions to many of our infrastructure challenges. Simply put, technology allows urban governance systems to do more with less, thereby easing the resource deficit burden. The total investment in the Smart Cities Mission is envisaged to be over Rs 2, 05,000 crore through 5,151 projects. 896 projects worth approximately Rs 15,000 crore have been completed and another 1,895 projects worth Rs 75,000 crore are under implementation. The mission works closely with private players, including international firms, to leverage their capital, expertise, human resource, and technology. So far, under public-private participation model, 65 projects worth over Rs 2,000 crore in 26 cities have been completed. 116 projects worth over Rs 10,000 crore in 45 cities are being implemented; and 91 projects worth over Rs 9,600 crore in 36 cities are in advanced stages of tendering. Moreover, 10 leading international companies are participating in at least 40 of the 100 selected Smart Cities.
- **AMRUT** complements the efforts of both PMAY and the Smart Cities Mission. It seeks to provide water supply, sewerage, urban transport, and safe public spaces to residents of urban centers in 500 cities with populations over 1, 00,000. The total mission outlay is expected to be Rs 1, 00,000 crore. Projects worth Rs 4,263 have already been completed and contracts worth another Rs 61,093 crore have been awarded. AMRUT is predicated on the PM Modi's motto of 'cooperative federalism', i.e., state governments take the lead in all three aspects of infrastructure development: (a) designing schemes based on the needs of their respective cities; (b) creating State Annual Action Plans (SAAP) for execution of programmes; and (c) monitoring the progress once funds are released. This is planned to provide a home for every Indian by 2022.

CONCLUSION:

A smart city is all about building connections which transcend geography- something more deep-rooted and emotional. The notion of Smart Cities is a major part of how cities across the globe are approaching the future. In the academic literature and practice, Smart Cities are generally focused on heavy investment in state-of-the-art ICT, especially ICT-based sensors, to offer big data that will be analyzed in real-time to lead to informed decision-making.

India's planned urbanisation programme can be termed the 21st century's New Deal. It is for the first time that a democratically elected government, in a federal framework, in partnership with the private sector, is quite literally 'building' a nation from bottoms-up. Add to this the imperative of building green and resilient infrastructure; what we get is a development model that is a first of its kind. Put another way, what India is doing today in its urban spaces, the rest of the world will do tomorrow.

Excerpts from the Recommendations of the 12th Plan Working Group on Urban Strategic Planning- Capacity Building

- Setting up Indian Institutes of Urban Management
- Create a Reform and Performance Management Cell (RPMC) in the Government of India (and at state level and in large cities) with a multidisciplinary team undertaking activities like:

- Promote think tank initiatives in urban policy

- Declare leading institutions as Centers of Excellence

- Create a Scheme for funding Strategic (Spatial) Planning Research through Centers of excellence.

- Create an annual forum for sharing of research outcomes
- Establish new schools of planning and enhance capacity of existing ones
- Producing new breed of professionals and training the resources who are already carrying out these functions.
- Funding for training & certification of in-service personnel as well as for producing more planning professionals
- Central funding for creation of state level data infrastructure for planning

These recommendations can be kept in view or as role norms to be followed to achieve the dream of India as a hub for Smart Cities and their developed facilities to set up an example of becoming a role model for developing nations and economies worldwide.

An assessment needs to be conducted to identify the changes needed in India's urban planning acts and regulations and the provisions of different plans.

"A smart city is a city where humans, trees, birds and other animals grow with all their glories, imperfections, freedom and creativity. They are not just cities of technology but cities of love, life, beauty, dignity, freedom and equality."

REFERENCES:

1. Singh PJ. Recommendations for Meaningful and Successful e-Governance in India. IT for change Bangalore, India. 2008. Retrieved from

   http://itforchange.net/sites/default/files/ITfC/ARCPaper_Full.pdf
2. Census of India. Census of India Website: Office of the Registrar General & Census Commissioner, India. 2011. Retrieved from http://www.censusindia.gov.in/
3. Dicken P. Global shift, sixth edition: Mapping the changing contours of the world economy. New York: The Guilford Press; 2011.
4. Gupta R. The Pattern of Urban Land-use Changes a Case Study of the Indian Cities. SAGE Journals; 2014;5(1);83–104
5. Carlino GA. Three keys to the city: resources, agglomeration economies, and sorting. Business Review, 2011;(Q3):1–13.

6. Hoff M, Ronald W. Business districts: the spatial characteristics of FDI within cities. European Planning Studies, 2020;28(2):273-295.

7. Sasse S. The global city: New York, London, Tokyo. 2nd edition 2001, Princeton, NJ: Princeton University Press; 1991.

8. Friedmann J. The world city hypothesis. Development and Change. 1985;17(1):69–83.

9. Allam Z, Newman P. Redefining the Smart City: Culture, Metabolism and Governance. Smart Cities, 2018;1(1):4-25.

10. Aurigi A. Making the Digital City the Early Shaping of Urban Internet Space. 2005. Retrieved from http://www.ashgate.com/isbn/9780754643647

11. Bhattacharya S, Rathi S. Reconceptualising Smart Cities: A Reference Framework for India. (CSTEP-Report-2015-03). 2015.

SOURCES OF ABDULLA ARIPOV'S LITERARY AND AESTHETIC WORLD

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ABSTRACT

This article discusses the sources of Abdulla Aripov's literary and aesthetic world. The author analyzes the poet's work on the basis of sources. The poet interprets the criterion of destiny in connection with the names of these two great creators. Fate is an industry that is difficult for anyone to understand. For in the face of destiny, the maple and the hash are equal. The most important aspect of Mirtemir's teaching status is that he treats students with respect and can set an example for them in the area of responsibility. He mentions their name with great reverence and respect. Because one of them is the truth for the poet, the second is the symbol of courage, the third is the symbol of struggle, and the fourth is the symbol of humanity.

KEYWORDS: *Fiction, poetic thinking, literary-aesthetic views, creativity, poetry*

INTRODUCTION

The development of fiction is inseparable from the activities of rare talents. But no talented person can achieve perfection without deeply studying the traditions of the salaf and synthesizing in his work the achievements of his own in poetic thinking. The development of literary and aesthetic views of the great poet of our time Abdulla Aripov is closely connected with the poetic world of his contemporaries, from Cholpon, Oybek, Mirtemir to E.Vakhidov, U.Azim, Rauf Parfi. **[1]**

Cholpon is ideal for later poets. Undoubtedly, Abdulla Aripov also appreciates Cholpon's work, studies and perfects his poetic traditions. For example, in his poem "Mirror of Justice", the poet refers to the fate of Cholpon and writes:

Garchi barchamizga xukmdor taqdir,

Garchi teng qoshida chinordir, xasdir,

Pushkin atalmagay har bitta qurbon,

Har bir qamalgan ham Cho'lpon emasdir… **[2]**

In the same poem, through the names of two creators, Abdulla Oripov skillfully uses the opportunity of the art of talmeh, typical of classical poetry. One is Pushkin, a famous representative of Russian poetry, and the other is the great Uzbek poet Cholpon. The poet interprets the criterion of destiny in connection with the names of these two great creators. Fate is an industry that is difficult for anyone to understand. For in the face of destiny, the maple and the hash are equal. But another clear truth is that not everyone is fortunate enough to reach the level of Pushkin or Cholpon as a creator and a person. Abdulla Aripov, pointing to the tragic fate of these two poets, artistically expresses their unique role in the development of artistic and aesthetic thinking of mankind**. [3]**

The work of Abdulla Qodiri, a great representative of Uzbek literature and the founder of Uzbek novels, has a special place in the development of Abdulla Aripov's literary aesthetic views. The poet's poems "In memory of Abdullah Qadiri", "The last lesson of Abdulla Qadiri", "Qadiri" "are a clear proof of this. In the poem "In memory of Abdullah Qadiri", the poet writes, in particular: **[4]**

Azaliy haq gapni yashirmoq nechun,

Zavol yo'q eng asl iste;dod uchun.

Agarda koinot tegirmon bo'lib,

Olamni yanchsa ham qolgay u butun.

The literary-aesthetic concept that the basis of artistic creation is the original talent is the essence of the poem. The poet argues that there is no downfall for original talent by turning a deep life reality into an artistic reality. That is, in the poet's view, even when the universe is a mill and crushes the universe, the original talent remains intact, he does not know the decline. **[5]**

Abdulla Aripov in his poem The Last Lesson of Abdulla Qadiri:

Biringiz Otabek, biringiz Kumush

Doim yashnab tursin sevgingiz bog'i.

Haqiqiy muxabbat bo'lmasin so'lish,

Ustoz Qodiriyning bu ilk sabog'i.

while writing such poems as "Otabek and Kumush" in the novel "Otgan kunlar", the poet uniquely interprets the philosophy of life that the garden of love is always flourishing, that it is necessary to know that true love never dies. This philosophy of life emphasizes that this is the last lesson of Kadyri. In general, the expression of philosophical thinking through images and, in turn, the depiction of the poetic image in harmony with the philosophy of life is the basis of Abdulla Aripov's poetry. The following lines also confirm this idea: **[6]**

Adib yuragida alamlar qat-qat,

Lekin bittasi bor, o'chmasdir dog'i.

Jonni tik ozodlik yo'lida faqat,

Bu esa ustozning so'ngi sabog'i.

In the second verse of the poem, the spirit of freedom Abdulla Aripov forms the basis of the artistic and aesthetic ideal. In order to poetically depict this creative intention, the poet Abdullah Qadiri speaks of the many pains in his heart. But one of them is the need to sacrifice one's life for the path of liberation, which is interpreted as the last lesson of the writer. Literary critic Jabbor Eshanqul's words: "Abdullah Qadiri is a writer who sacrificed his life for the freedom of the homeland, the prosperity of the people, the understanding of the nation's identity, created eternal and immortal works" are in line with the interpretation of the poem. **[7]**

Abdulla Aripov diligently studied the creative achievements of almost all poets and writers of our national literature. They drew the necessary conclusions for themselves from the mysteries of art in their work. In his works, he enriched their achievements with new poetic discoveries. The poet writes about his teacher Mirtemir, about his teachings in the poem "Lessons of Master Mirtemir", including:

Ishlang, - derdi Ustoz, - she'r bo'lsin ravon,

Mehnatdan qochmasin ijodkor xalqi.

Lekin kamsitmasdi bizni hechqachon,

Ustoz shuning uchun Ustozdir balki. **[8]**

The poet never forgets this advice. It has become a beautiful tradition of hard work from his teacher. Because a poet who values the word, who considers the harmony of national spirit and high art as a criterion in his work, cannot do otherwise. The most important aspect of Mirtemir's teaching status is that he treats students with respect and can set an example for them in the area of responsibility. Abdulla Oripov proves that Mirtemir is a hard-working artist in the article "Poet's Smile" on the basis of deep logic: It is not difficult for anyone who is more or less aware of the hardships of creativity to read Mirtemir's poems and imagine how much he worked on each line." In this regard, Kazakboy Yuldashev said: "Mirtemir sees the events of the world and the human psyche in a way that no one notices, is influenced by a different language, interprets it with a different logic, describes it in a way that no one can." **[9]**

In the poem "Caravan" dedicated to the memory of Abdulla Aripov:

She'ringiz uchquru o'zingiz karvon,

Manzilga shoshilmya kelar edingiz

Mirtemir praises his work and likens it to a caravan, pointing out that his students are following in his footsteps. **[10]**

Mirtemir and Abdulla Aripov's work is based on the enjoyment of creative work, high responsibility for the word, the clarity and height of the artistic concept. Because Abdulla Aripov is a worthy follower of Mirtemir and has a unique creative potential. Sensing that his talent was higher than that of other artists, Mirtemir himself praised Abdulla Aripov: "Abdulla Aripov. Shoir! Even when he is a poet, he is not one of those. From what God has made whole. Great! " **[11]**

Abdulla Aripov wrote poems about his contemporary Erkin Vahidov, such as "The Lion Called" and "In Memory of Erkin Vahidov". Erkin Vahidov was in a sense similar to Abdulla Aripov. Abdulla Aripov looked at his own life and the life of Erkin Vahidov and expressed his attitude to the fate of Erkin Vahidov and himself, who were struggling to find like-minded people in life: **[12]**

Biz ham yuksaklarga tikkandik ko'zni,

Bizda ham bor edi matonat, bardosh.

Arslon chorlagandi qoshiga bizni,

Lekin qumursqalar bo'ldi safardosh.

At this point, Abdulla Aripov and Erkin Vahidov, who are aware of their personal lives, understand what the poet means. After all, there are more ants in this life than lions. The above lines express a figurative attitude to such categories, which sought to hinder the creative growth of these two rare talents, who did everything in their power to prevent the realization of their potential. In the next verse of the poem, the poet warns his creative companion of the danger that may come from ants as follows: **[13]**

Jami tiriklikka tanish shu xatar

Qumursqa yarakgan yoppa talarga

Do'stim, alam qilar, arslon bexabar,

Yem bo'lib ketsak shu qumursqalarga.

Abdulla Aripov and Erkin Vahidov, as two colleagues who lived and worked at the same time, made a worthy contribution to the development of our literature. **[14,15]**

In short, the literary and historical factors of Abdulla Aripov's aesthetic views go back to the original sources of Uzbek literature. The poet considers his predecessors to be his masters not only in creativity, but also in profession and way of life. He mentions their name with great reverence and respect. Because one of them is the truth for the poet, the second is the symbol of courage, the third is the symbol of struggle, and the fourth is the symbol of humanity. As the poet diligently studied their literary heritage, he was not influenced by the traditions of these creators, but renewed and perfected them. As a creator of the school of modern Uzbek poetry, he raised the literary and aesthetic thinking of the nation to an unprecedented level. **[16,17]**

REFERENCES:

1. Oripov ?. The mirror of justice. Tashkent: "Mirror of Justice"; 2005.
2. Oripov ?. Need a child. Tashkent: Young Guard Publishing House, 1988.
3. Oripov ?. Selected works. Tashkent: "Sharq"; 2019.
4. Olimjon H. Selected works. Fascinating poetry. Tashkent: "Sharq"; 2019.
5. Kushjonov M. Selected works. Tashkent: "Sharq"; 2018.
6. Literature is the heart of the people. Abdullah Qadiri and Uzbek novels. Tashkent: Literature; 2021. p. 152.
7. Tursunkulova ShT. Complicated features and theoretical basis of forming person's esthetic consciousness. ISJ Theoretical & Applied Science, 2021;5(97):178-183.
8. Tursunkulova ST. Philosophical problems of women's social activity today. Scientific-methodical and theoretical journal, 2014;35.
9. Karimova Vasila V. The Analysis of Lexical-Semantic Variants of Kinship (Wife, Stepmother) Expression Means In Female Gender. International Journal of Progressive Sciences and Technologies, 2021;24(1):71-72.

10. Rasulova ShKh, Karimova VV. On the onomasiological aspect of the study of female kinship terms in the Uzbek and Tajik languages. Bulletin of the Bokhtar State University named after Nosir Khusrav. Humanities and Economics Series. 2020;1-1(71):75-78.

11. Vakhobovna KV. The Lexical Plan Suppletivism in Turkic Languages. International Journal on Integrated Education, 2020;3(12):184-185.

12. Karimova V. Brief history of researching terms of kinship in uzbek and english languages. Scientific Bulletin of Namangan State University, 2019;1(12):156-162.

13. ???????? ??, ???????? ??.) The Responsibility of a Teacher for Increasing the Probability of Advancing Student Achievement. ??????? ??????, 2016;3-1(107): 40-45.

14. Khamzaevna RM. Modern pedagogical technologies in Russian language lessons. epra International Journal of Multidisciplinary Research (IJMR), 2021;7(4);148-150.

15. Khamzaevna RM. Linguistic features of the novel "New Moscow Philosophy" by V. Pyetsuh. International Journal of Research 2020;7 (3):198-201.

16. Rasulova MH. Reception of feedback in the lessons of literature. In Youth and Science: Reality and the Future; 2018. pp. 554-555.

17. Rasulova MH. Innovative technologies in environmental education. In Youth and Science: Reality and the Future; 2017. pp. 302-305.

ISSUES OF ENSURING INFORMATION SECURITY IN THE DIGITAL ECONOMY

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ABSTRACT

In the modern conditions of the development of the digital economy, information security remains one of the most pressing problems at the global, state, economic and individual levels. The rapid penetration of digital technologies into all socio-economic spheres is an undeniable process that will exacerbate this problem. As a result, new types and methods of threats to information security appear. The article analyzes the main global trends in the field of information security, and also considers ways to solve the problem of protecting digital information. The area of information security of the Republic of Uzbekistan is analyzed. Suggestions and conclusions are made on information security both at the state level and at the level of individual economic entities.

KEYWORDS: *Digital Economy, Information Security, Incident, Cybersecurity, Deface, Hidden Miner, Threat, Attack.*

INTRODUCTION

In the process of globalization and integration, the digital economy is being formed on the basis of the development and introduction of advanced digital technologies in all socio-economic spheres. Improving big data analysis, the widespread use of mobile devices, the development of the Internet, and the advent of the Internet of Things are, of course, innovative elements designed to address socio-economic problems at the regional and global levels **[1].** At the same time, the acceleration and complexity of the processes taking place in the current context of the development of these technologies raises the issue of information security for economic entities. The theft of personal data of citizens and organizations is manifested not only in material damage, but also in serious damage to their position in society and business reputation. It should be noted that with the development of information and communication technologies, cybersecurity threats are growing, and cybersecurity is recognized as one of the major challenges on a global scale.

Currently, the following types of information security threats are distinguished in world practice:

1. An Incident (IT Incident) - is any event that goes beyond the normal operation of an IT structure, directly, indirectly or potentially, causing system processes to stop and adversely affecting the quality of its performance.
2. A deface - is a hacker attack that unauthorizedly manipulates the content of a page on a website, often turning it into a page that attracts advertisements, threats, or warnings. In addition, attackers can block access to the rest of the site or completely delete the previous content of the resource. Some do this to attract attention or to show the server administrator that there are security vulnerabilities.
3. Hidden miner (stealth miner, miner bot, botnet)- is a program that automatically performs mining without the user's knowledge. That is, this is external software that is installed on a computer, uses its resources and transfers all the money earned to the developer's wallet.

Review of the literature on the subject

In the 21st century, when information is used as an economic resource in world practice, the issue of protection of economic information has always been recognized as one of the major global problems and is an ongoing process. Experience with existing information and computer systems, which are the main means of information processing shows that the problem of information security has not been fully resolved, and the system of protection toolsare provided by various manufacturers in terms of problems and methods used, as well as the results achieved, differ greatly from each other. This makes it clear that the problem of information security in the global economy remains topical. The novelty of this approach as economic security raises a number of problems related to the study and research of methodological aspects of information security assessment in the world economy **[2].**

Therefore, it is necessary to take appropriate measures in the field of information security at the level of the state, a separate organization. Today, cyber-attacks or crimes are also a global problem: in May 2017, computers are more than 150 countries were infected with the WannaCry virus, resulting in the UK's National Health Service (NHS), Spain's Telefonica, Germany's largest Deutsche Bahn. Disrupted the activities of the railway operator, the American logistics company FedEx, and many other organizations around the world **[3];** Nissan Motor and Renault have suspended production at several production sites **[4].**

Creating a secure information environment in the context of digital interdependence between different economic entities will become an integral part of building a sustainable digital economy **[5].** From the point of view of information security, many digital technologies include data, Internet of Things, and artificial intelligence technologies that are difficult to manage. Today, companies such as Amazon, Apple, and Google have created digital platforms using artificial intelligence, and the social network Facebook has launched DeepTex technology, which can recognize the behavior of users through messages **[6,7].** The potential benefits of these digital technologies are certainly significant, but their introduction poses a threat to the security of the population's personal data, and even a small amount of data leakage undermines confidence in innovation and the economy as a whole **[8].**

In the context of the digitalization of the economy, the growing number of threats to information security is associated with the constant complication and improvement of the use of digital technologies. In recent years, as in the case of large organizations, there have been frequent and serious information attacks on the business activities of small organizations.

Data loss can have many negative consequences: damage to business reputation in the event of fraud, loss of competitiveness, financial losses, as well as disruption of production and delivery plans due to the need to recover lost data, and increased costs. can be said to be coming.

Research methodology

The study examined and analyzed the impact of information and cybersecurity for economic entities operating on the basis of information and communication technologies, the work of foreign and domestic scientists in this area.

The article effectively uses methods such as theoretical observation, systematic approach, observation, generalization, analysis, synthesis, as well as draws conclusions and recommendations on the problems of information and cybersecurity of real sector enterprises and their solutions.

Analysis and results

In the current context of the digital economy, every organization needs to regularly assess the level of information security it has by addressing the following questions **[9]:**

1. How effectively are financial resources for information security distributed between the organization's staffing and digital technology? Hiring a new employee without raising awareness of existing digital technologies is a less effective way to increase an organization's information security. Digital technologies are also constantly evolving, and it is important to take advantage of all the opportunities offered by modern means of data protection to remain competitive in the market.

2. Is the importance of information security measures properly assessed? Determining the level of information security of data helps to optimally assess the contribution of various information security tools.

3. Is the organization created conditions for the introduction of modern digital technologies in the information security system? In order to use a new technology effectively, it is necessary to plan and create conditions for its effective use, which reduces the number of failures and errors and reduces the cost of setting up the technology.

4. How rational is information security in a service or work chain? As the organization interacts with many information-sharing partners, it will be necessary to analyze the security of data transmission to foreign economic entities **[10].**

5. Can the organization's management effectively deal with information security issues? Since the success of security measures depends in large part on the coordination of the actions of employees, the management of the organization is an important element in the formation of information security.

We believe that improving the organization's level of information security can be achieved through a multi-stage analysis of emerging threats:

Step 1: Perform the analysis. At this stage, the analysis of emerging information threats identifies the need to review the organization's data security practices. As a rule, existing measures of partial information protection are identified and the organization's internal standards for optimal data protection are required.

Step 2: Process management. Information security is divided into separate processes, each of which is responsible.

Step 3: Implementation and control. The process of ensuring information security integrated into the business model will be adapted to the development strategy of the organization, the implementation of measures will be monitored and the effectiveness of innovations will be evaluated.

Step 4: Forecasting. There is a need to review the measures taken to ensure information security and to introduce advanced digital technologies to better address potential threats.

Step 5: Optimization. The information security system is constantly being improved; data protection becomes a fully automated process integrated into all areas of the organization's activities. In the context of the digital economy, information security is an issue that needs to be addressed not only at the individual level, but also at the state level.

Currently, Uzbekistan pays special attention to the tasks and problems of cybersecurity at the state level, as well as taking strict measures to identify threats, vulnerabilities and incidents in cyberspace. In particular, in accordance with the Decree of the President of the Republic of Uzbekistan dated November 21, 2018 No. PP-4024, the "State Inspectorate for Control in the field of informatization and telecommunications" was established.

In 2018, there were about 65,000 domains in the national domain zone "UZ", in 2019 - 73,674 domains, and as of October 2020, 83,925 domains were active. However, it should be noted that the more actively the global network is used, the greater the number and sources of threats.

In 2019, 268 cyber security incidents were detected on the websites of the national segment of the Internet (diagram 1), of which 222 were related to unauthorized content download (RKYuO), 45 were defaced, and 1 was hidden by mining. In particular, 27 of the identified incidents occurred on government websites.

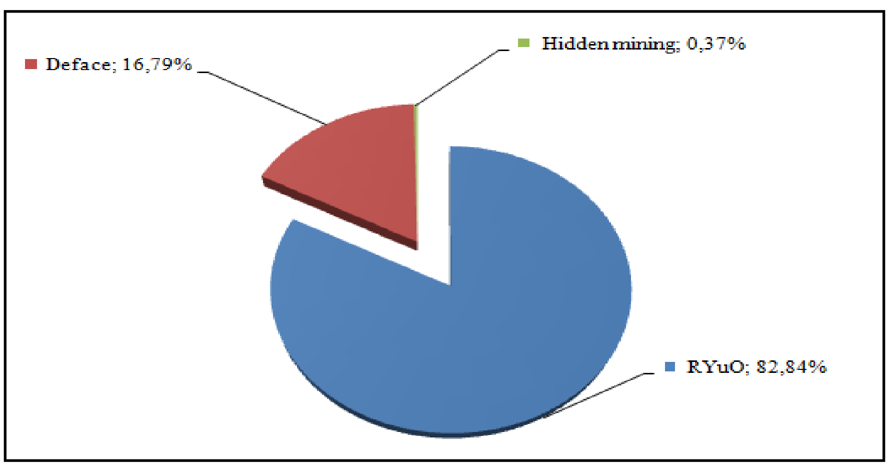

Diagram 1. In 2019, a total of 268 incidents were detected in Uzbekistan[1]

A comparative analysis of the number of incidents from 2017 to 2019 shows a positive trend as a result of the effective implementation of cyber security measures in Uzbekistan, the number of incidents in 2019 decreased by 61% compared to 2017 and 44% compared to 2018 Diagram 2).

The comparative chart shows that the threat of unauthorized download of content is still relevant, but it should be noted that in 2019, for the first time in the field of cyber security in Uzbekistan, a new threat appeared - the hidden mine.

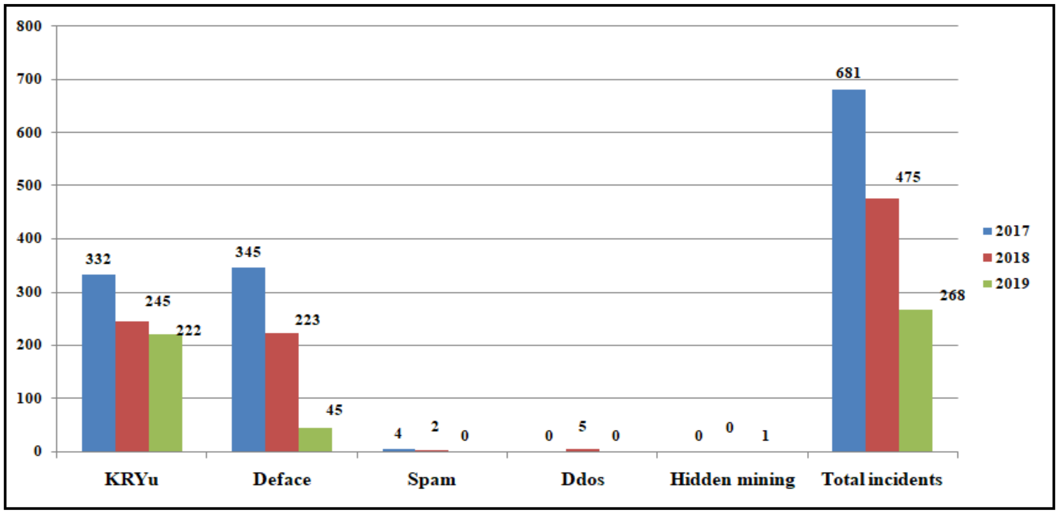

Diagram 2. Comparative analysis of the number of incidents in 2017-2019

At the same time, the analysis of incidents in the public sector during this period showed a decreasing of 62.5% compared to 2017, but more than 2 times more than in 2018, including a negative increase in threats to KRYu and defeys, although Spam and Ddos attacks were completely eliminated (Diagram 3).

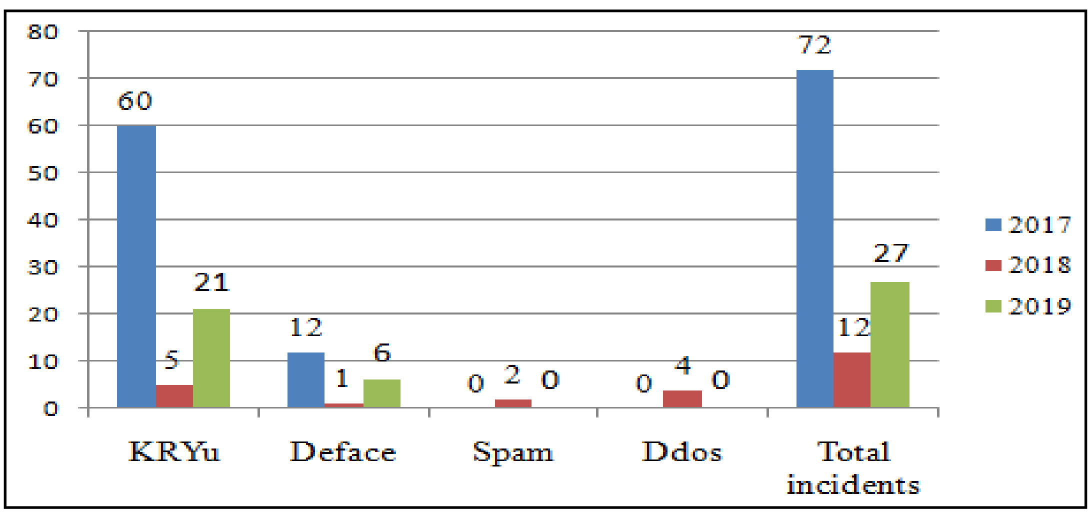

Diagram 3. Dynamics of organized threats to the public sector in 2017-2019

The highest number of cybersecurity incidents was detected in the WordPress CMS, the most popular web developer in Uzbekistan, and this figure remains high. Comparison of the identified events in 2017-2018 revealed deficiencies in the content management systems Magento, Drupal and 1C-Bitrix (Diagram 4).

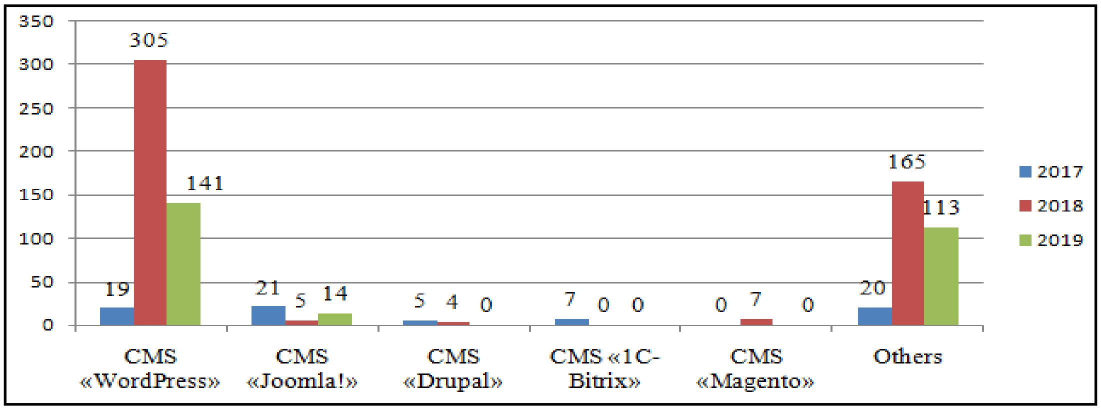

Diagram 4. Dynamics of incidents in the field of content management systems in Uzbekistan

69% of the incidents (down 6% compared to 2018) were detected on websites hosted by hosting providers in Uzbekistan, and the remaining 31% were detected on hosting in foreign countries (Diagram 5).

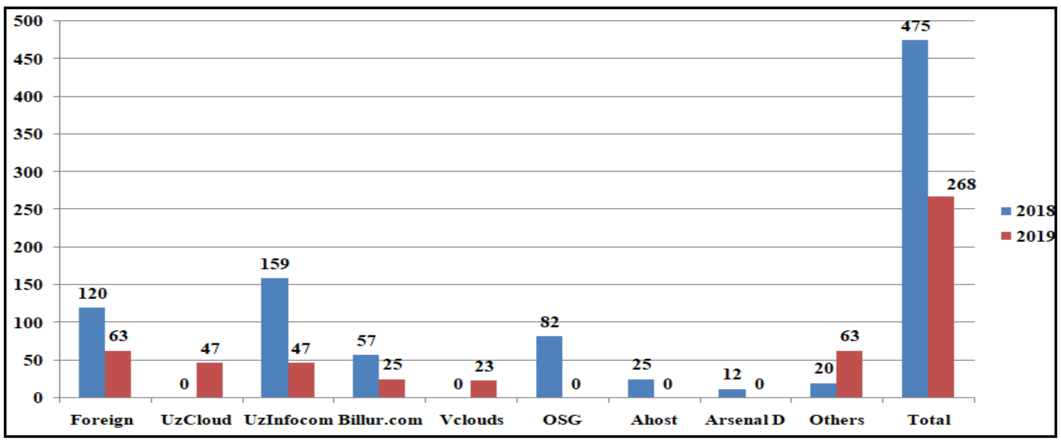

Diagram 5. Dynamics of Web site incidents in Uzbekistan in terms of hosting

A study of the various threats in the country's cyberspace in 2017-2019 shows that in most cases, incidents are detected in the following cases:

- Outdated versions of the content management system (CMS) and errors in the security code as a result of their additions;

- Simplicity of passwords;

- Templates and extensions downloaded from unsafe sources;

- Viruses on the computers on which the website is managed / configured;

- Not available or lack of protection on the website;

- Consumers use authentication;

- Password recovery (“brute force” attack)

- Connection of information systems to the external Internet;

- Use of VPN-service;

- System malware;

- targeted attacks similar to SQL injection;

- use of MBBT software and data without authentication mechanism, as well as expired or invalid SSL certificates;

- Use of RDP (Remote Desktop Protocol) protocol with weak protection system;

- Hosts that are members of botnet networks;

- use of ports that can lead to the download of third-party content due to the lack of TFTP-Protocol (Trivial File Transfer Protocol) and associated authentication mechanisms.

CONCLUSION AND SUGGESTIONS

In the process of digital transformation in many sectors of the economy, the expansion of the activities of economic entities leads to the emergence of completely new types of risks and threats in the field of cybersecurity, economic security and information security. World practice shows that the proper formation and effectiveness of the digital economy largely depends on information security. The emergence of threats to digital data security is becoming one of the main areas of security at the level of all - the state, individual organizations and citizens. Today, as attacks on data storage systems become more complex and common, the country's economic stability and Information security should be a priority in ensuring competitiveness.

In view of the above, we believe that the following organizational and technical measures will be taken to prevent and eliminate internal and external threats to cyberspace and information systems in order to eliminate and protect information security threats to the websites and corporate networks of economic network organizations. :

- constantly update the content management system (CMS);

- backup. The essence of backing up a site is to copy the database, site files, mail, FTP accounts and many other hosting settings. Backups can be done using the tools installed on the CMS site, a special plugin, tools provided by the hosting provider, or any other convenient method;

- delete unused plugins. Any new plug-in or extension increases the likelihood of an external attack. In this regard, it is recommended to disable and remove unused plug-ins and, if possible, to use built-in mechanisms instead of installing plug-ins for each individual case;

- strengthening password authentication. It is strongly recommended to use a complex password that is not repeated on other services and sites for the administrative account in the CMS, the personal account on the service provider's website and the server account;

- safe administration. It is recommended to access the administrator's account in the CMS, personal account on the service provider's website and server account from devices (computers, tablets) with updated antivirus software;

- security plugins. To protect your website from various attacks, it is recommended to use security plugins that have the functions of searching for, removing, and protecting against malware in the future;

- carrying out of examination of a website. Regularly examine the website for compliance with information security requirements and vulnerabilities;

- installation of necessary software and hardware to eliminate internal threats to information security, as well as information security tools;

- ensuring information security and improving the skills of users (employees) working with information and communication technologies and direct information systems;

- not to use information systems that interact with other information systems through the global Internet within the inter-branch data transmission network.

Adopting the above and other additional protection measures will help to significantly reduce the risk of information security threats to the website, information system and information resources of the company. This, in turn, helps to defend against potential attacks and to identify the causes and consequences of subsequent information security incidents.

REFERENCES

1. Ablyazov T, Asaul V. On competitive potential of organization under conditions of new industrial base formation. SHS Web of Conferences. 2018;44:00003.
2. Steve Culp. Cybercrime: A Major Threat to Trust in the Digital Economy. Available at: https://www.forbes.com/sites/steveculp/2019/03/25/cybercrime-a-major-threat-to-trust-in-the-digital-economy/?sh=376360e92cb7 (access date 03.10.2020).
3. NHS cyber-attack: GPs and hospitals hit by ransom ware. [Electronic resource]: www.bbc.com/news/health-39899646 (access date 03.10.2020).
4. Sharman J. Cyber-attack that crippled NHS systems hits Nissan car factory in Sunderland and Renault in France. [Electronic resource] Available at: https://www.independent.co.uk/news/uk/home-news/nissan-sunderland-cyber-attack-ransomware-nhs-malware-wannacry-car-factory-a7733936.html (access date 04.10.2020)
5. Mayer RC, Davis JH, Schoorman FD. An integrative model of organizational trust. The Academy of Management Review. 1995;20(3):709-734.
6. Matniyazov R, Asraev U, Ruziev A. The role of e-commerce in the world economy. Psychology and education. 2021;58(2):6281-6285.
7. Guillaume Desjardins. Your personal data is the currency of the digital age. The Conversation CA. Available at: https://theconversation.com/your-personal-data-is-the-currency-of-the-digital-age-146386.
8. Ruziev AO, Matniyazov RR, Asraev UM. Effective implementation of large-scale databases and cloud technologies in industry. Journal of Critical Reviews. 2020;7(2).
9. The State of Cyber security and Digital Trust. [Electronic resource]. Available at: https://www.accen-ture.com/es-es/_acnmedia/PDF-23/Accenture-State-Cybersecurity-and-Digital-Trust-2016-Report-June.pdf (access date03.10.2020).
10. Matniyazov R, Asraev U, Ruziev A. The role of e-commerce in the world economy. Psychology and education. 2021;58(2):6281-6285.

HEALTHY LIFESTYLE GUARANTEED A HEALTHY FUTURE

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ABSTRACT

This article addresses the issue of healthy lifestyles. The importance of a healthy lifestyle in improving people's health and quality of life has been highlighted. Human life and health are the greatest social wealth. This puts the challenge of creating a healthy lifestyle in front of the family, school and other places of human development. As a result, they have more responsibility to choose the mental, emotional, and volitional behaviors that are necessary for their destiny, family, and community. It is necessary to prevent the resulting neurological diseases.

KEYWORDS: *Healthy Lifestyle, Sports, Physical Education, Proper Nutrition, Health*

INTRODUCTION

The process of profound changes, gradual reform and liberalization of all aspects of political and socio-economic life, democratic renewal and modernization of our society is developing rapidly in our country. At the same time, the huge tasks set and consistently implemented to build a strong civil society provide a solid foundation. In connection with the great milestone in our history, how has the quality of life, the image of our country changed, what achievements and results have we achieved, how to build an open democratic state and civil society based on a socially oriented market economy? there is a need to assess how we are evolving with horses. In short, the long-term strategic goals we have set for ourselves are to join the ranks of modern developed democracies, to ensure the sustainable growth of our economy, to improve the quality of life and to take a worthy place in the world community. - It is natural that we evaluate our actions objectively from today's point of view. **[1]**

Human health is, first of all, the development of his mental and physiological qualities, maintaining an acceptable level of work ability and social activity for the maximum life expectancy. According to many scientists, the functional capacity of the human body and its resistance to adverse environmental factors change throughout life, because health is an active process, it is age, gender, professional activity, living. depending on the environment (health relaxes or strengthens). Human life and health are the greatest social wealth. This puts the challenge of creating a healthy lifestyle in front of the family, school and other places of human development. The health of a nation is also naturally addressed through a healthy lifestyle. **[2-6]**

Health is a balanced unit of biological, mental, physical conditions and labor activity of the human body. Health is happiness for everyone. Its labor productivity is a necessary condition for the development of the country's economic power, the welfare of the people. A conscious and responsible approach to public health as a public good should be the norm of life and morality of society and all its members. To maintain and strengthen health, a person must first know the laws of normal functioning, growth, development and reproduction of all the tissues and organs of the body. It is also necessary to know and create the conditions necessary for the preservation and further development of these biological features, which, like all living things, are inherent in man. **[7-10]**

The transition of the Republic of Uzbekistan to independent development, building an economic and democratic society, renewing the morale of society, promoting a healthy lifestyle to achieve high results in state and social construction is now the health of the younger generation, the whole nation. Conservation is an important issue. Promoting a healthy lifestyle should be done in different ways. On the one hand, it aims to provide students and adults with certain medical and hygienic knowledge about healthy living, to awaken their understanding of how a healthy lifestyle affects the development of the organism, on the other hand, depends on the observance of hygienic rules in lim-education, the formation of skills to make the habit of taking care of oneself and those around one a daily habit. In this regard, a healthy lifestyle should be widely promoted in the media, in high schools and colleges, in conjunction with all educational institutions. **[11-16]**

A healthy lifestyle is a social phenomenon that promotes the pursuit of a high level of health and the pursuit of a healthy life based on the acquisition of skills that ensure the safety of the individual and his or her health. **[17]**

A healthy lifestyle is a way of actively mastering the conditions of human life, adhering to the routine, strengthening the body through active movement, playing sports, eating a full and quality diet, following the rules of hygienic nutrition, communication and to achieve ecological culture, to receive spiritual education on the basis of universal and national values, to be able to behave from harmful habits. **[18-20]**

Each person's lifestyle is shaped by the events and changes that take place on a daily basis. Changing relationships are affecting students' morale. As a result, they have more responsibility to choose the mental, emotional, and volitional behaviors that are necessary for their destiny, family, and community. It is necessary to prevent the resulting neurological diseases. This requires, first of all, the organization of a healthy lifestyle on a personal and social scale, and knowledge of the main directions and ways to implement a healthy lifestyle. Active lifestyle, exercise, physical activity and sports are important factors in a healthy lifestyle. Active exercise, that is, exercise, plays a key role in a healthy lifestyle. **[21]**

I.P. Pavlov describes the effect of physical activity on human health as a sign that the body is closely connected with the external environment. These connections and the activity of biological organs are controlled by the central nervous system. Exercise does not affect a particular muscle group, but affects the whole organism. In particular, regular physical activity is good for your health. Metabolism is improved, the body's tissues absorb nutrients better, and broken down substances are eliminated faster. The heart hardens and becomes more resilient. As a result, people who are physically active are alert, mentally relaxed, full of energy, in high spirits, and have a clear mind. As a result of exercise, the body's defenses are well developed. Exercise, which begins in childhood and adolescence, is especially helpful. **[22]**

It is necessary to cultivate the habit of following a strict regimen in everyone. Exercise, walking in the fresh air, playing sports, longevity and health are all factors. Each person should be accustomed to performing physical activities on a regular basis that are consistent with a certain level of physical ability. **[23]**

In addition, in our hot climate, it is better to train the body in non-traditional ways. That is, various forms of exercise, such as foot baths, walking on salt and rocky paths, as well as walking in the open air before and after sleep, strengthen the immune system. **[24-26]**

The effects of active action on the body can be summarized as follows:

- activates cardiovascular function;

- breathing improves;

- bones become stronger, muscles become stronger, joint mobility increases;

- good digestion of food;

- the functioning of some bodies will be improved;

- strengthens the nervous system, which is of great importance in maintaining the balance of excitatory events in the central nervous system;

- has a positive effect on human psychology;

- promotes proper posture, etc.

A healthy lifestyle includes the following components.

Lifestyle factors include the following.

Proper organization of life, good living conditions (level of housing), level of education and culture of family members, personal behavior and harmful habits in the family (as well as alcohol consumption, smoking, drug use), drug overdose, hypodynamics, adynamism, loneliness, unemployment, and various stressful situations resulting from them are the main causes of the disease. It seems that we need to improve our quality of life in order to reduce and prevent diseases. **[27-29]**

REFERENCES:

1. Makulov SZ. Physical Culture-The Guarantee of Health. Economy and society, 2019;(5):129-130.

2. Ortikov WH. Physical Culture in Society. Economics and Society, 2019;(5):1025-1028.

3. Ortikov UK, Satimov AI. The Importance of Physical Education and Sports in Esthetic Education of Students. Economy and society, 2019;(9):17-18.

4. Ismoilov AT, Azizov MA. The Role Of Physical Education And Sport In Emphasizing The Spiritual And Moral Claims Of Students. Economics and Society, 2019;(9): 6-7.

5. Makulov SZ. The Role Of Physical Education And Sport In Emphasizing The Spiritual And Moral Qualities Of Students. Scientific Bulletin of Namangan State University, 2019;1(8):334-339.
6. Zokirovich MS. Topical Problems in Pedagogical Activity. European Journal of Life Safety and Stability. 2021;9: 85-89.
7. Niyozmatov E. Physical Education and Its Impact on Human Health. In Innovative approaches in modern science. 2021. pp. 77-81.
8. Kuzmetov AR, Abdinazarov KhH. Seasonal succession of the qualitative composition of zooplankton in the reservoirs of Uzbekistan. The Way of Science, 2017;(3);27-29.
9. Mirabdullaev IM, Abdurahimova AN, Abdinazarov HH. Determinant of copepods form order of Calanoida (Crustacea, Copepoda) in fauna of Uzbekistan. Zoological Research during, 2020;20:144-146.
10. Karimova Vasila V. The Analysis of Lexical-Semantic Variants of Kinship (Wife, Stepmother) Expression Means in Female Gender. International Journal of Progressive Sciences and Technologies, 2021;24(1):71-72.
11. Rasulova ShKh, Karimova VV. On the onomasiological aspect of the study of female kinship terms in the Uzbek and Tajik languages. Bulletin of the Bokhtar State University named after Nosir Khusrav. Humanities and Economics Series. 2020;1-1(71):75-78.
12. Vakhobovna KV. The Lexical Plan Suppletivism in Turkic Languages. International Journal on Integrated Education, 2020;3(12);184-185.
13. Karimova V. Brief History of Researching Terms of Kinship in Uzbek and English Languages. Scientific Bulletin of Namangan State University, 2019;1(12):156-162.
14. Каримова ВВ, Юлдашева ДА. The Responsibility of a Teacher for Increasing the Probability of Advancing Student Achievement. Молодой ученый, 2016;3-1(107):41-45.
15. Khamzaevna RM. Modern Pedagogical Technologies In Russian Lessons. EPRA International Journal of Multidisciplinary Research (IJMR), 2020;7(4):148-150.
16. Khamzaevna RM. Linguistic features of the novel "New Moscow Philosophy" by V. Pyetsuh. International Journal of Research 2020;7 (3):198-201.
17. Rasulova MH. Reception of feedback in the lessons of literature. In Youth and Science: Reality and the Future. 2018. pp. 554-555.
18. Rasulova MKh. Innovative technologies in environmental education. In Youth and Science: Reality and the Future. 2017. pp. 302-305.
19. Rasulova MKh. Project work in the classroom on Russian literature. In Youth and Science: Reality and the Future. 2016. pp. 329-330.
20. Rasulova MKh. Experience in applying the project method in teaching the Russian language. In Youth and Science: Reality and the Future. 2016. pp. 327-329.
21. Rasulova MKh. Moral yardstick in Russian literature. In Youth and Science: Reality and the Future. 2015. pp. 339-340.

22. Rasulova MKh. The task of modern higher education is to teach students. In Youth and Science: Reality and the Future. 2019. pp.463-464.

23. Умаров АО, Мадрахимов ММ, Zakhidov IO, Мирзаева МА. 8th Grade Physics Course Subject "C ++" Program on "Electric Resistance". Academic research in educational sciences, 2021;2 (6):1129-1134.

24. Zokhidov I. Educational and Edifying Roles of the Physics Extracurricular Activities. Scientific Bulletin of Namangan State University, 2019;1(2):319-322.

25. Akramov KhM, Zakhidov IO. Use of Interactive Technologies in The Process of Pedagogical Activity in the University. In the First International Scientific and Methodological Conference. 2016;11(18):12528-12539.

26. Ortikovich UA, Obidjonovich ZI. School Physics Course Studying Constant and Accounting Current. Oriental renaissance: Innovative, educational, natural and social sciences, 2021;1 (3);433-436.

27. Babaeva NM. The securities market as a supplier of investment resources for the development of corporate enterprises. Innovative economy: prospects for development and improvement, 2017,4(22).

28. Babayeva NM. Economic Education as a Necessary Factor to Ensure Comprehensive Youth Development in Uzbekistan. In Modern Approaches to the Transformation of the Concepts Of State Regulation and Management in Socio-Economic Systems. 2015. pp. 13-16.

29. Babayeva N. On the Issue of Effective Modeling of the Investment Portfolio of Insurance Companies. Journal of Contemporary Issues in Business and Government. 2021;27(3).

HISTORY OF TOURISM AND LEXICO-SEMANTIC GROUPS OF FIELD TERMS

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ABSTRACT

The article provides information on the emerging etymology and history of tourism terminology and references to sources. Similarly, the lexical-semantic aspect of the tourism industry is structured. The division of lexemes into semantic groups is associated with the rapid development of the tourism industry. We know that as a result of economic-political, cultural relations, many different terms related to tourism appear in the dictionary. Thus, by adding a tour from French, two new tourist and tourism terms have emerged in English, which have a new meaning relative to French, which can be explained by non-linguistic vocabulary facts.

KEYWORDS: *Tourism, Lexical-Semantic Group, Railway, Excursions, Guide, Hotel, Travel Agency, Economic Sphere, History Of Tourism.*

INTRODUCTION

In today's globalization, the role of tourism in the development and strengthening of ties between many countries and peoples is of particular importance. “Tourism - one of the most important sectors of the economy. While taking advantage of the existing opportunities, it is necessary to further improve this sector, which is required by the times. "**[1]** The main purpose of tourism is to improve cultural ties between peoples, to study customs and traditions, to look at history.

It is known that mankind has organized travel since the beginning of the primitive community system. Later, this process gradually developed. According to Russian linguist A. Yu. Alexandrova, the first scenes of the trip played a purely practical role: identifying the mood of the neighbors, exchange of experience, sales, market penetration and purchase of goods **[2, p.57].** As a result of the historical development and formation of tourism, its definition and purpose are constantly changing.

The basic term of tourism terminology is given in the "Oxford ENGLISH Etymological Dictionary", the term tourism was adopted from the French in the XIX century. A later analysis of the etymology of the French term tourisme, in some sources, dates back to the seventeenth century. At that time, the term tour was considered to have been used, and even before it came from the Latin word tornus **[3, p.499].** From this point of view, it should be noted that there are two language interpretations. In particular:

a) first, the French term tour was transferred from Latin to French, which is confirmed by both the explanatory dictionary of DN Ushakov **[4]** and the etymological dictionary of M. Fassmer **[5]**; b) secondly, DN Ushakov's dictionary states that the term tour is derived from the Latin word toro, and M. Fasmer's dictionary contains information that the term tour is etymologically connected with the Latin word tornus - circle. So, these ideas are completely consistent with the interpretation of the etymological meaning of the English language "Oxford". Thus, in this case, we are dealing with a metaphorical transfer of meaning: tornus - a circle, turn and mur - a journey around the circle. In this regard, we can say that the basis of modern tourism is the movement or routes that were in demand in ancient times. For centuries, the only purpose of travel has been to find new places to live and eat, markets for goods and services, and the process of getting acquainted with foreign cultures, customs, and traditions has remained unchanged. as far as travel is concerned, relocation. **[6]**

Going back to the etymology of the tour term, it should be noted that the authors of the Oxford English etymological dictionary use a modern English tornado to "turn" and turn around to determine the size of the "tornus" term. Thus, by adding a tour from French, two new tourist and tourism terms have emerged in English, which have a new meaning relative to French, which can be explained by non-linguistic vocabulary facts. Historically, the terms tourist and tourism were first coined by Thomas Cook (1843), the founder of modern tourism in England, in the mid-19th century, when the first mass tourist tour of London was organized.

In turn, the term has been incorporated into Uzbek dictionaries. In the Russian-international dictionary of words: Tourism is described as (French tourisme tour caup) "Travel and recreation on a certain route, organized for the purpose of both sports and general education, and such trips" **[7, p.465].** In the explanatory dictionary of the Uzbek language it is said "Tourism French tourisme tour - rotation, travel". **[8, p.195].**

In today's world, where the rapid development of science and technology determines a large flow of terminological units, there is a need to study all areas of knowledge, including systems of terminology in the field of tourism. **[9]**

As in all areas of Uzbek language terminology, lexemes in the field of tourism are divided into certain semantic groups. The division of lexemes into semantic groups is associated with the rapid development of the tourism industry. We know that as a result of economic-political, cultural relations, many different terms related to tourism appear in the dictionary. This condition is acquired through live speech or printed sources. Once the terms are accepted by the general public, they are accepted and used in our language in the form of kalkaro term. In turn, it occupies a strong place in the dictionary. At each stage of the formation and development of tourism terminology of the Uzbek language there are basic lexical-semantic groups, which contain the terms of the sample under study and played a significant role in different stages of formation and development of tourism. As an example, the international terms within the following tourism terms have emerged in the process of development of tourism as a type of professional activity in the terminology under study. This indicates an increasing trend in the number of terms that can help increase the efficiency of data transmission in the process of international professional communication. Below we have divided some words and terms that are frequently used in the field of tourism into certain lexical-semantic groups. In the process of analysis, we used the translation of the term assimilation in our language or itself: **[10]**

Transport – panoramic, mirrored bus, caravan, wheeled trailer for camping, one ticket, documents, legal rules, customs regulations, car insurance, duty free and others.

Airport – aircraft, pilot, stewardess, in-flight service (in-flight service), long-distance flight and others.

Railway – railway station, train, wagon, drum, railway, razezd, railway tourist routes, railway ticket, booking and others.

Types of tourism – international tourism, domestic tourism, mountain tourism, pilgrimage tourism, scientific business tourism and others.

Organizations and associations in the field of tourism – ATO = All-Union Tourism Organization, BTB = British Tourism Board, CCC = Camping and Caravan Club, CTC = Certified Tourism Council, WTTC = (World Travel and Tourism Counsil), ie WTTC= World Travel and Tourism Council and others.

Tourist establishments – travel agency, tourist information office, tourist information center and others.

Excursion tours – holidays, trips, inclusive tours, complex travel, separate hobbies, vacations, family vacations, dating tours, study tours, incentive tours, country tours, vacations and more.

Services in tourism – booking, rerouting, compensation to tourists, rerouting if necessary.

Documents, legal rules in tourism – *voucher* - this is tourism company 's written order, *multiple visas* can be used several times , *wallet*- a cardboard folder for a visa, tourist documents.

Tourist staff – an organization that sells tours in bulk, a travel agent, a booking agent, a tour guide and others.

Catering system – cafe, cafeteria, buffet, self-service restaurant, restaurant, bar.

Food terms – dishes (spoons, forks, knives, cups, teapots, bowls, cups, glasses, etc.), sauces, condiments, pies, drinks, coffee, snacks, liquids, desserts, first course, second course, etc. .

Recreation facilities – swimming pool, wellness club, games, bowling, chess, checkers, backgammon, television and more.

Attractions – alleys, parks, zoos, ancient monuments, mausoleums, famous places, mountains and more.

Accommodation types:

1. *Location* – camping, condominium (cooperative apartment building for living during the holidays), timeshare (a house or apartment rented for living during the holidays), chalet (a small wooden house on the outskirts of the city to rest during the holidays).

2. *Ski resort* – ski jumping, ski jumping on a ski jump, ski trail, ski pass, guide to use the elevator in ski resorts, dry skiing, cross-country skiing on artificial slopes.

3. *Hotels* – star hotels (three-star, four-star, five-star hotels), cheap hotels, guest houses, the hotel is located in the village.

4. *Types of hotels according to the purpose of tourists* – hotels with residential halls, resort hotels, hotels for congresses, halls for business meetings, negotiations and others.

The maintenance base of hotels and camps – sauna, jacuzzi bath, king-size bed, large bed, camping bed, camping clothes, camping equipment and more.

Hotel staff – hotel manager, doorman, porters, servants, guides.

Economic sector – exchange rate, exchange office, currency buying rate, currency selling rate, payment methods, cash payment, credit payment, credit cards, payment cards, plastic card, "smart cards", bank multifunction cards, electronic payment and others.

History of tourism:

1. *The first travelers* – nomads, pilgrims, merchants.

2. *Vehicles* – camels, horses, donkeys and others.

3. *Accommodation* – rabots, guest houses, temporary tent houses.

4. *Cultural and educational tourism* - health tourism, sports tourism, elite tourism, hiking tourism, rural tourism, mountain tourism, pilgrimage tourism, scientific tourism, youth tourism, family tourism and others.

The conclusion is that the study of the history of the tourism industry and the division of terms used in the industry into lexical-semantic groups is important for the history of tourism to date. Because in order to reveal and group the meaning of each term in the field of tourism, the historical process it went through is taken into account. In other words, it is determined to which language the term being interpreted belongs and what meaning this term has in the field of tourism. So every term we study is important for tourism users. The dictionaries that will be developed in our next research will be a practical proof of this.

REFERENCES:

1. Discussion of issues of further development of tourism. "People's Word" newspaper. Tashkent: October 4, 2017.

2. Aleksandrova A. Yu. International tourism. Moscow: Aspect Press; 2004.

3. Hoad TF. The Concise Oxford Dictionary of English Etymology. Great Britain: Oxford University Press; 2003.

4. Ushakov DN. Explanatory Dictionary of the Russian Language: Moscow: TERRA, Book Club; 2007.

5. Fasmer M. Etymological Dictionary of the Russian Language: Moscow: TERRA, Book Club; 2008.

6. Birzhakov MB. et al. History of tourism: Thomas Cook and his role in the development of tourism. Travel companies. St. Petersburg: Neva; 2000.

7. Usmon O, Daniyarov R. Explanatory dictionary of Russian-international words.Tashkent; 1965.

8. Explanatory dictionary of the Uzbek language. “National Encyclopedia of Uzbekistan”. Vol. 4-5. State Scientific Publishing House, Tashkent; 2008.

9. Sherzodovich AS. The role of online teaching and innovative methods. Science and education, 2020;1(3):524-528.

10. Aslonov ShSh. Computer Linguistics and Philology: Problems and Solutions. Humanitarian Treatise, 2020;(84):17-19.

THE ROLE OF BIOETHICS IN THE HUMAN-SOCIAL SYSTEM

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ABSTRACT

This article analyzes the parable of the role of bioethics in the human-social system. Trends in the development of bioethics have been studied. Based on the need for biotechnology. The scope of efforts to study the problems of bioethics is also expanding. Because at all stages of its history, humanity has sought a deeper understanding of the essence of this issue. From this perspective, bioethics has a very ancient history. We recall the methodological principle of philosophical anthropology, according to which culture is a way of preserving human nature. Thus, it can be said that medical ethics is an integral part that serves to further define the principles of bioethics. Medical ethics, on the other hand, is enriched with new approaches through a deeper understanding of critical issues from a bioethical perspective.

KEYWORDS: *Bioethics, Culture, Society, Human Factor, Nature, Medical Ethics*

INTRODUCTION

The first question in bioethics is formulated by all its representatives in almost the same way, regardless of the biocentric or anthropocentric approach to research. It is a question of who is morally responsible for human life and health. **[1]**

The modern position of bioethics in the world is largely comparable to scientific advances. At the same time, its managerial role in society implies the existence of organizations, a certain system of documentation, some kind of training of qualified personnel. These three links form the structural basis of the institutionalization of bioethics. The functional aspect of this process involves the formation of a specific field in terms of social life, in which the regulatory influence of the norms and principles of bioethics is mandatory. **[2]**

Thus, the impact of bioethics principles and values is much broader, but more attention is paid to it in critical health-related situations. At the same time, medical practice, although directly related to the problems of tissue transplantation, cloning, and genetic engineering, does not always address the issues of life and death. The significance of the issue, however, is that patients are average statistical individuals who may or may not have polysomatic nausea and may or may not be mentally healthy. They can be rich or poor, belonging to different professions, nationalities, age groups and religions. In short, the importance of applying the principles of bioethics in medicine is primarily explained by the universality of this area of knowledge and activity. Because today, as VI Vernadsky rightly points out, "The face of our planet - the biosphere - is undergoing dramatic chemical changes by man, consciously and mostly unconsciously," he writes. -Man is changing the physical and chemical atmosphere of the land, all its natural waters ... Now we are experiencing new geological evolutionary changes in the biosphere. We are entering the noosphere. " **[3]**

In the development of modern philosophical thinking, the problems of bioethics are manifested in a unique way. This situation is determined by the impact of science, technology and technological progress. The scope of efforts to study the problems of bioethics is also expanding. Because at all stages of its history, humanity has sought a deeper understanding of the essence of this issue. From this perspective, bioethics has a very ancient history. If we pay attention, we can see ideas and approaches related to bioethics in many religious views as well. The formation of bioethical views has been inextricably linked with medical ethics. That is why most people understand medical ethics when they say bioethics. In our view, the confusion between the concepts of “bioethics” and “medical ethics” can be easily overcome through categorical analysis. The central value of bioethics is life in general (while acknowledging that it is an absolute value), and the central concept of medical ethics is individual life. On top of that, there is another value in medical ethics that equates to life, and that is health. While the question of whether it is ethical to save life without maintaining health is a private matter for bioethics, it is one of the key issues for medical ethics. The subject of spirituality in medicine is the medical worker, and the subject of spirituality in bioethics is everyone. **[4]**

In this regard, while medical ethics discusses the issue of physician responsibility for patient health, bioethics addresses the issue of individual responsibility for one’s own health and the health of others. In medical ethics, by the very nature of the case, although our health depends more to a greater extent than heredity, there are no relevant (environmental ethics) norms for them. Bioethics, on the other hand, includes environmental standards as mandatory standards. Thus, it can be said that medical ethics is an integral part that serves to further define the principles of bioethics. Medical ethics, on the other hand, is enriched with new approaches through a deeper understanding of critical issues from a bioethical perspective. But the essence of modern bioethics is easier to understand from a medical point of view, because it is here that life, death, and health take completely definite forms, and therefore theoretical views can be clearly empirically confirmed or rejected. Moreover, even the main issues in bioethics are directly related to the life and health of an individual in the first place. **[5]**

The rapid development of technology and technology in and around medicine necessitates a transition from informal regulation of people's attitudes to life as a high value to formal management in the system of social institutions. However, this process can only be successful if the general task - the place and role of bioethics in the cultural system - is defined. At the same time, it is impossible to move to the modeling of some links of culture and cultural complexes without a general cultural analysis. We recall the methodological principle of philosophical anthropology, according to which culture is a way of preserving human nature. The transition to legal governance will be possible only when the issues of ethnic settlement are resolved. In this sense, too, bioethics as one of the ways to preserve human nature through the means of culture needs to define its status more clearly. To do this, it is necessary to determine which natural joints and by what cultural means to preserve them, and what is the mechanism of their preservation. **[6]**

Bioethics was created to answer questions posed by transgumanists, as well as the challenges of advancing technology in medicine. A. Boyd argues that transgumanism is a field of science aimed at ensuring the continuity and acceleration of conscious life, that it moves beyond the boundaries of modern human development through science and technology. for them reason, science, progress, and longevity are the core values, while transgumanists continue the traditions of the Enlightenment by relying on the advancement of science and technology. Transgumanists in particular focus on the development of areas such as genetics, nanotechnology, and robotics, and see them as a means of human development. Boyd is also researching whether genetic technology can increase sympathy and altruism in human relationships. According to the author, the representatives of transgumanism actually create the concept of what a person should be, and in the second half of the current century, the boundaries between man and artificial intelligence will probably go unnoticed. These ideas of Boyd are very controversial, and even in these thoughts there seems to be a violation of the boundaries of the human spiritual world. **[7]**

In the system "Man - Society", it is self-evident that the state has a moral responsibility for human life and health. It should guarantee everyone's chances of survival and the conditions to ensure their health. To some extent, these tasks are performed by all social institutions: production, law enforcement agencies, social structures. However, the state has a social institution - the health care system, which serves only this purpose. **[8]**

Social and personal morality is experiencing a severe crisis today. There are so many things that people are worried about. These include the rise of crime, social injustice, the disappearance of ideals that have officially served as the basis for morality, and so on. What is clear is that if the social system works inefficiently and ignores the demand for justice and deep meaning, moral education or culture will never rise a single step. **[9]**

We have come to the conclusion that it is necessary to define the social nature of man, which is determined by a number of circumstances, based on the study of daily practice of human interaction with man. This is primarily due to the tasks of forming a harmoniously developed person, building new social relations. These tasks are embodied in the social and spiritual image of the modern person. The need to correct people's relationships through a moral culture, which is a factor in the development of a rational society, is becoming more and more apparent. Such an approach to the consideration of this problem means, first of all, the understanding that man is a crucial link in the activities of any organization, and neither material and technical conditions nor advanced technology can guarantee success on its own. A person's attitude to work, his interest in the results of his work, his place in society, his sensitivity to various social and political events in the world, constitute the spiritual and social aspects of personal activity. These are necessary for further research, but it is expedient to distinguish the most important of them, that is, those that are crucial in bringing our society out of crisis and implementing a newly created model for building a rational, humane society. **[10,11]**

In the human-social group system, the responsibility for a person's health and life rests with the group members (and more often with the group leader). In this sense, the family can be an example of such a group. In groups known as work teams, however, such responsibility is relatively less. **[12]**

In the human-to-human system, there is the phenomenon of mutual responsibility of each person for each person, which is also important for our research. However, if the other party in the interpersonal daily health relationship is the physician and there are some misunderstandings, this situation may be interpreted quite differently. His human responsibility for the life and health of his partner is a professional duty, strengthened by the responsibilities placed on him by society. Therefore, the idea arises that the only people who are morally responsible for the lives and health of others are the medical staff. This view is to link bioethics to medical ethics, to understand that the two fields are exactly the same. It should be noted that a physician is only professionally responsible for the life and health of the person with whom he or she interacts. In other words, the physician is not morally responsible for the lives and health of those who may be his or her probable patients. **[13,14]**

The second question is who is responsible for a person's life and health, except for the people with whom he interacts? The answer is very simple - man is responsible for it. However, this simple concept is not understood by many spiritually. Taking care of one's own health and a sense of self-preservation is one thing, and being responsible to others for one's own life and health is something else entirely. This notion, which is the norm of morality, has not yet become a guideline, and the attitude of dependence on one's own health is leading to the emergence of new diseases in practice. In this sense, too, the problem of everyone's responsibility for their own life and health is one of the central problems in bioethics. **[15]**

In short, it is no longer possible to describe the norms of activity in the new scientific and social conditions in society at the present time. This is due to the trend of more globalization. Globalization involves the integration of scientific knowledge - because there are elements of ticketing in ecology, healthy eating, computerization, terrorism, market relations, ethnic issues and more. Therefore, bioethics is a spiritual paradigm of such a society, although it has different meanings in different structures of global society. **[16]**

REFERENCES:

1. Tursunkulova ShT. Maternal and child health as a basis for the stability of society. In Philosophy in the Modern World. 2017. pp. 194-197.
2. Abdullaev AN. Coevolition Challenge in Society and Nature of Social-Philosophical Analysis. Scientific Bulletin of Namangan State University, 2019;1(10):157-160.
3. Tursunkulova ShT. Complicated features and theoretical basis of forming person's esthetic consciousness. ISJ Theoretical & Applied Science, 2021;5(97):178-183.
4. Abdullaev AN. The Role of the National Traditions and Rites In Family Upbringing. Modern Science, 2017;(4-2);6-8.
5. Tursunkulova ST. Philosophical problems of women's social activity today. Scientific-methodical and theoretical journal, 2014;35.
6. Karimova Vasila V. The Analysis of Lexical-Semantic Variants of Kinship (Wife, Stepmother) Expression Means in Female Gender. International Journal of Progressive Sciences and Technologies, 2021;24(1):71-72.
7. Rasulova ShKh, Karimova VV. On the onomasiological aspect of the study of female kinship terms in the Uzbek and Tajik languages. Bulletin of the Bokhtar State University named after Nosir Khusrav. Humanities and Economics Series. 2020;1-1(71):75-78.
8. Vakhobovna KV. The Lexical Plan Suppletivism in Turkic Languages. International Journal on Integrated Education, 2020;3(12):184-185.
9. Karimova V. Brief History of Researching Terms of Kinship in Uzbek and English Languages. Scientific Bulletin of Namangan State University, 2019;1(12):156-162.

10. Каримова ВВ, Юлдашева ДА. The Responsibility of a Teacher for Increasing the Probability of Advancing Student Achievement. Молодой ученый, 2016;3-1(107):41.

11. Khamzaevna RM. Linguistic features of the novel "New Moscow Philosophy" by V. Pyetsuh. International Journal of Research 2020;7 (3):198-201.

12. Zokhidov I. Educational and Edifying Roles of the Physics Extracurricular Activities. Scientific Bulletin of Namangan State University, 2019;1(2):319-322.

13. Abdullaev AN. Philosophical analysis of the phenomenon of creativity. Bulletin of science and education, 2020;3-3(81).

14. Abdullaev AN. The Social Philosophical Essence of the Coevolution of Society and Family. Theoretical & Applied Science, 2020;(2):733-736.

15. Nasriddinovich AA. (2020). The Features of Appearing Family in Modern Society. European science review, 2020;(3-4):69-72.

16. Abdullayev A. The relationship in the development of the family and society. Scientific Bulletin of Namangan State University, 2019;1(1):114-118.

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SARDOBA IS A UNIQUE "SOURCE OF LIFE"

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ABSTRACT

This article covers the issues of the emergence, architecture, the use and the restoration of the SARDOBA - man-made water reservoirs, representing special medieval hydraulic structure and material culture of the past as well as their modern use as objects of tourist sites.

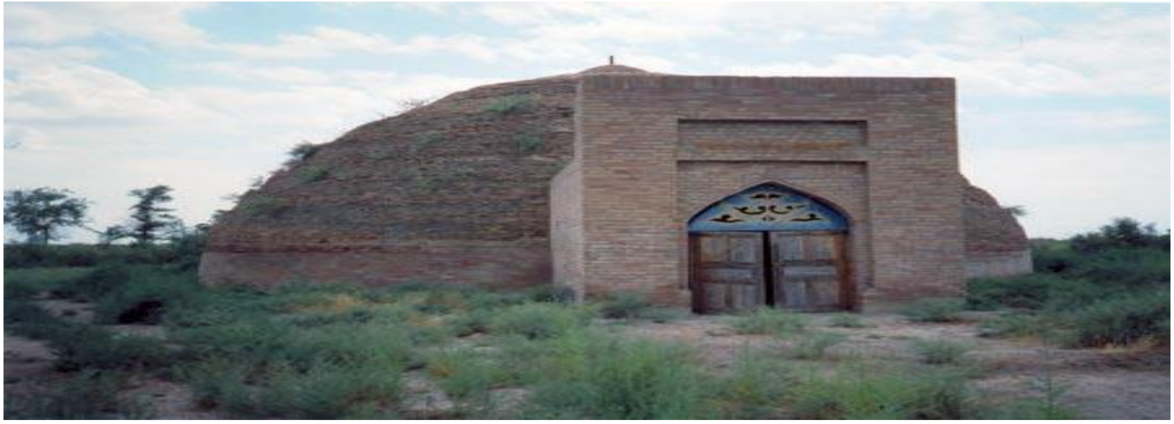
KEYWORDS: *Sardoba, Hydraulic Structure, Dome, Water Reservoir.*

INTRODUCTION

"Without the past there is no future," the proverb says. It is difficult to disagree with this indisputable truth, who has been thinking: "You do not know the world, not knowing our history."

Ancient legend says: "The caravan with a high-ranking official stopped in the steppe for the night. At night, when the official went to bed, the faithful servant, as usual, guarded his sleep. And over the headboard, the official put a bowl with water as well as the knife and fell asleep, suddenly flies flew, went around the bowl, passed through the knife, spoiled sleep and woke him up. Waking up he told the servant that in the place where he slept the wealth of gold was buried. The servant thought over the words of his master as he speculated such dreams were sacred and pretended to be illin order to test his guess-work. **[1]**

The owner, believed his servant, like himself, and the servant was devoted to his owner, so I left him food, water and went on, offering to join the caravan after his recovery. The caravan went on the road and servant remaining at the place of overnight stay, he keptdigging until he found the jugs with jewels and he built a reservoir of water in this place - Sardoba. "



Picture 1. View of the usual sardoba

Construction and architecture of the Sardoba.

The design of the Sardoba is a complex engineering and architectural structure. Hauz - a hemispherical pool with a stone staircase leading down. This construction consists of several basic elements - input, water tank, descent to water and ventilation system. In the plan - at the sight of from above, Hauz has an ideal round shape. This form is necessary for the construction of the right domes-Ghumbaz over the Hause. Hauz was plunged into the ground so that there was a natural way to flow and defended fresh water. **[2]**

Hauz overlapped round in terms of Gumbaz dome, usually had the form of the right hemisphere. Then Sardoba combined the functions of the warehouse of water and caravan shed. On the gallery it was possible in the shadow of Ghumbaz to hide from the scorching heat in the afternoon or lie down for the night. However, in different historical epochs and in various localities Ghumbaz also had engineering and architectural different relations, apparently, satisfying the tastes of the customer or the design of the architect and builder.

Dome-Ghumbaz Karaulbazar-Sardoba near Bukhara in the steppe Urtachul was separated from the inside of the tiles, for which the Sardoba was called the "Palace". The Sardoba was given one or more inlets. Sometimes the main entrance was represented by a monumental solemn portal. In the upper part of the dome, there was usually a small round hole that served for ventilation of internal volume and natural lighting. Some dome had made in the form of small brick turrets. **[3]**

Often, the sardobas were constructed on the land trading paths as well as caravan-houses to meetthe need for water for humans and animals. Sardoba was filled with rain and thawed waters, sometimes waters from canals or streams, often they were constructed on the way of following the underground channels.

The Great Silk Road in some of its sections is obliged to existence exclusively to Sardoba. Sardoba was already known in the X century. ad. In dry steppes, semi-desert and desert areas of Central Asia, very often Sardoba was the only source of water. In some places, trading caravanways without a system of SARDOBA, located along the path, could not exist at all. In view of this, sardobas were regularly repaired, the pools were cleaned, and if necessary, they were guarded by armed detachments. According to the uncommitable custom, water from Sardoba has always been used for drinking only after boiling.

Architecture and construction of the Sardoba.

Sardoba had a very complex design both in engineering and architectural structure. Rich and diverse technology was applied for its construction developed and proven for centuries in practice. The construction of the Sardoba was an expensive structure and a place for its construction was chosen very carefully. Sardoba was usually placed in the lowland, where the natural clay surface was flocked by melting and rainwater. Often, without disturbing the waterproof layer, the extended shallow channels were dug, the network of which was discharged all the collected precious water in Hauz under the dome of the Sardoba. Sardoba - Hauz is usually a semicontulus-shaped capacity, in-depth to the ground up to 3-5 meters. In the plan - this is a circle with a diameter of 12 - 15 meters. The thickness of the wall was - up to 1.5 meters.

In the daytime the dome with the turret was an excellent landmark in the desert. At night, the lights could be lit in the turret - the lights - the oil lamp as a beacon for moving at night caravans and trails. The gallery of the pool with water lined up the gallery. They rested on the gallery, ate food, spent the night, have worried about the day heat. The whole structure was covered with a hemispherical dome, which protected the water from evaporation and gave a saving shadow during the daytime, because the desert traveled most often at night, when a merciless scorching sun went beyond the horizon.

For the construction of the Hauz, the gallery and domes, the material was specifically and thoroughly selected from special clay, weathered and burned brick on fire. The formulation of clay and its components, the technology of dressing was often a secret of professional masters. (Pic. 1) The construction of the Sardoba lasted 5 - 7 years under the supervision of the master.Master was both an architect, and engineer, and builder, and a technical leader of construction.

The water tank (Hauz) is a hemispheric shape container with a 3-5 m. Its walls were lined with a special waterproof brick with high thermal insulation properties. One building required 400 to 600 thousand bricks. A special clay for them was mined in the lower reaches of Amudarya, ancient times, and appreciated its heat-resistant, waterproof, thermal insulating properties. Its composition was dependent on local geographical and climatic conditions and included in certain proportions of sand, lime, egg protein, clay, goat wool and ash. The thickness of Sardoba walls could reach 2 meters.Immediately, mixture for molding was not allowed, it was kept for a long time. The molded brick was "fried" up to the year in the sun. And if the finished brick was not cracked and did not change the form, it was sent to the fire. After the firing again bricks were sorted out strictly according to their sound, form and other qualities. Only carefully selected brick was recognized as suitable and was filed for construction. The masonry solution was kneaded on water with the addition of sheep milk on camel wool. Thus, the bottom and walls of the Hauz, the circular gallery and the dome were steady and extremely durable. Just a few people worked over it. It was not advisable to hurry on such objects, realizing that hasty is the enemy of quality. But it was about the life of the city, which depended on the reliability of the storage of water.

People did not have direct access to the minimization water pollution. In terms of ventilation Hauz is completely closed in relation to the external environment. To maintain hygiene, the walls were deceived by a special salt solution, which forms an insulating layer on the aqueous surface. Water has never dug from the surface, but only from the depth of the tank. Surdoba's condition was regularly controlled. In addition, it was cleaned every year.

The ventilation system was an important element of the sardoba. It helped to avoid stagnation of air, helping to keep water clean, transparent and cold. In the arid areas of Iran, the Sardoba was often equipped with wind towers. For example, such salts in large quantities are found in Yazd.

Sardoba generally was the only source of drinking water of travelers and passing caravans. For the winter and spring, the sardobascould collect more than 20 thousand cubic meters of water in the desert. According to historical data, there were 44 sardobas in Maverannahr. Of these, in the Karshi steppe -29, in the steppes of Mirzochul - from 3 to 6, in the vicinity of Fergana and Tashkent - 3 and in Karmana- one sardoba. The sardobas in Bukhara, Karaulbazar and other cities and villages are preserved, one of which is located in the Navoi Oasis, on the Great Silk Road, which goes through Rabati Malik to the city of Karmana.

Picture 2. Semi-underground Sardoba has a caravanserai.

Sardoba offered a traveler to drink water from a unique reservoir near the city in which wonderful masters lived, able to accumulate water where it seems to be almost impossible to do it. In Navoi region, 339 historical monuments were registered, of which 38 are protected by the state. Sardoba is one of them.

Sardoba - a hydraulic architectural structure of domestic purpose in some areas of Turkey, Iran and Central Asia; dug to the ground and covered with a stone arch pool - for the collection, storage and use of fresh drinking water. The arch or ghumbaz above the pool prevented a significant evaporation of water, to a certain extent, protected from dust and sandy storms, created a permanent shadow. Water in such storages remained cold in the most sophisticated period of the year. If the gallery was located around the Hauz, then the sardoba served as a place of rest and sleep in the shadow under the vaults of the dome. In the cities and villages sardobas were located on large squares and in the Palaces of rulers.

For a long time Abdullah from the Sheibanid dynasty ruled the country on behalf of the Father - Khan Iskanderkhan (1560-1583). After his death, Shabanid Abdullah was officially proclaimed Khan and became known in Uzbek history as Sheibanid Abdullakhan II (1583-1598). The widespread construction of the SARDOBAS were carried out during his reign.

The boundaries of the state significantly expanded, the economy stabilized, the conditions were created for the development of agriculture, crafts, internal and foreign trade. The construction of numerous caravanserais and sardobas throughout the territory areconnected with his name.

A wide trade with Russia has developed, primarily cotton fabrics. The developed road network of the Bukhara Khanate is described by Russian military engineers. **[4]** The network of commercial roads, taking the most remote areas of the country, joined the cities subject to him with the shopping centers of Afghanistan, India and Iran in the south, rich cities in the Valley of Syrdarya in thenorth, nomads of Kazakh steppes and Siberia. These were both permanent trading roads and many of their seasonal branches.

Great work was carried out under Abdullakhan II on the improvement of commercial roads. The state guaranteed the safety of the caravan movement throughout the country. Trade caravans belonging to the feudal tip usually consisted of several hundred camels. A lot of foreign merchants - Persians, Arabs and Turks went to Samarkand and Bukhara. In Bukhara, there was a special quarter of the money-changers and Hindu-merchants. The markets of Bukhara and Samarkand were also visited by Europeans. **[5]**

Trade routes could not exist without sardoba - permanent storage facilities for fresh drinking water. A. Burns, during a trip in the middle of the XIX century, recorded a folk legend that Abdullahan, having performed the Hajj to Mecca, returned from there with the conviction that he was not pleasing to Allah. Hoping to earn his favor, he began building caravanserais and sardobas in all parts of his domains. According to one document, during his reign, 400 sardobas were rebuilt and restored, according to another - 1000. **[6]** Usually, sardobas were built on the places of halts, and rabats or caravanserais - on the places of overnight stays. Some rabats had their own sardoba.

REFERENCES:

1. Khanykov NV. Description of the Bukhara Khanate, St. Petersburg; 1843.

2. Vambury A. The history of bohara or transoxania from ancient times to the present, t. I-II, St. Petersburg; 1873.

3. Narshahi M. The story of Bukhara. Translated from Persian. In: Lokshin N, Bartold VV. Tashkent; 1897.

4. Sukhareva OA. Bukhara 19 - early 20 century. (LateFodal city and its population). Moscow; 1966.

5. Pugachenkova GA, Mankovskaya LYu, Dolinskaya VG. Architecture and art of Central Asia XIV - XVII centuries. In KN. "The history of the peoples of the USSR". Vol. 3. Moscow: Fine art; 1974.

6. Deason PM, Vitkevich V. Notes on Bukhara Khanate (reports). Moscow: science, GRVL; 1983.

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THE ROLE OF MARKET LAWS IN THE SUSTAINABLE FUNCTIONING OF A MARKET ECONOMY

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ABSTRACT

This article discusses the importance of market laws in the sustainable functioning of a market economy. The author explains the essence of the law of supply and demand. It has been analyzed that modern market laws should be based on free competition. The science of economic theory is the science of the development of production relations, the subject of which is production relations. When the demand for a good falls, the price will fall, and this will means that at the prevailing market price this product will be in excess. Firms will be forced to cut prices to get rid of surpluses.

KEYWORDS: *Market, Economy, Supply And Demand, Business, Price*

INTRODUCTION

Economic theory is one of the oldest sciences. He has always attracted the attention of scholars and intellectuals. This can be explained by the fact that the study of economic theory has taken place in all periods - from Aristotle and Xenophon to the present day. to realize the objective necessity of knowing the driving forces of economic activity and the laws of economic management. The first stage in the formation and development of the science of economic theory is the emergence of mercantilism. **[1]**

The essence of the doctrine of mercantilists is a definition of the source of wealth (their service was the first to comment on this). They are the source of wealth by studying the conditions of the oasis period, the factors of gaining wealth in the realm of circulation, and wealth itself is expressed in money. A new stage in the development of political economy is seen in the example of physiocrats, who emerged as defenders of the interests of large landowners. The main representative and organizer of this direction is François Kennedy. According to his teachings, the only source of wealth is farming. **[2]**

The science of economics was further developed at a later stage in the works of A. Smith and D. Ricardo. A. Smith entered the history of economic thought as the founder of classical political economy. From the second half of the nineteenth century, marginalism began to emerge and take shape. Its founders are Austrian economists representatives of the school were Karl Menger, Von Vizer, Bem Bavek, and others, who developed theories of ‘added commodity profit, added labor or resource productivity’. The theory of marginalism is widely used in the analysis of the relationship and interaction between the demand for a particular product and its price. **[3]**

The development of economic thought in Central Asia is associated with the names of Farobi, Ibn Sina, Beruni, Yusuf Khas Rajib, Alisher Navoi and other world-renowned thinkers. In their works, economic ideas were of great importance, though not yet separated from the philosophical and the whole set of social knowledge. In the views of Farobi and Ibn Sina, man the doctrine of needs is central. **[4]**

Economic theory is the study of the laws and patterns of development of human society in the search for the most effective ways to use limited resources in order to fully meet the unlimited needs of people. The science of economic theory is the science of the development of production relations, the subject of which is production relations. Industrial relations are relations that occur objectively between people in the process of production, distribution, exchange and consumption of vital goods. **[5]**

Economic theory includes microeconomics (the behavior of individual economic entities) and macroeconomics (the behavior and functioning of the entire national economic system). It also includes the meso-economy (separate from the national economy) human systems or sectors of the economy) and super macroeconomics (the movement of the world economy). The main task of economic theory is not just to interpret economic events, but to show their interdependence and interdependence, that is, to shed light on the system of economic events, processes and laws. At the same time it differs from other exact economic sciences. **[6]**

Supply refers to the desire of producers to produce and sell certain goods and services for a certain price. Firms will produce only those goods and services, the income from which will not only cover costs, but also make a profit. No one will produce goods and services only because people need them. Owners of capital it is of little concern. The quantity supplied is the amount of a good that offered for sale at a certain price for a certain time. **[7]**

For example, we can say that the value of the offer product X at price Y is 1000 units. of this product (product) per week. The law of supply says: between price and quantity proposals there is a direct relationship. The law of supply shows that producers want produce and offer for sale a greater number of product at a higher price than they would like to do it at low price. **[8]**

As with the law of demand, let's represent the law of supply in a graphical representation. The plotting technique is the same as described above, but, of course, quantitative data and the relationships that arise between them are different. **[9]**

The shape of the supply curve S is determined by the desire firms to maximize profits. This assumption helps to understand why the supply curve slopes upward from left to right, i.e. firms are willing to offer more product at higher prices. **[10]**

The supply curve S shows how much and at what price producers can sell in the market. The curve rises because the higher the price, the more firms are able to produce and sell product. The higher price allows existing firms to expand output in a short period of time time by attracting additional capital, labor or overtime, and in the long run time - at the expense of production itself. higher price can also attract to the market new firms that have high production costs and whose products at low prices is unprofitable. **[11]**

A change in supply, like a change in demand, depends from the price. But the quantity supplied is greater at higher prices and less at low prices. And the quantity demanded is greater at low A, the quantity demanded is greater at low prices and less at high prices. If the price of a given commodity increases, then its production becomes more profitable. Growing profits will stimulate the growth of production and attract to this industry other firms. **[12]**

When the demand for a good falls, the price will fall, and this will means that at the prevailing market price this product will be in excess. Firms will be forced to cut prices to get rid of surpluses. At reduced prices production will become less profitable, so the firm will reduce the output of this product and its supply will decrease. The fall in price may cause less efficient firms to will be forced to leave the industry. The fundamental property of the law of supply is this: as prices rise, so does the quantity supplied. Conversely, as prices fall, supply decreases. Price is the main determinant of supply any product. However, there are other (we will tentatively call their non-price) determinants, or factors influencing the size of the offer. If one of the non-price determinants in reality undergoes changes, the position of the curve offers will change. **[13]**

Non-price determinants of supply include:

1) Resource prices; 2) production technology; 3) taxes and grants; 4) prices for other goods; 5) waiting for change prices; 6) the number of sellers in the market. Let's consider these questions in more detail.

Prices for resources. The firm's supply is based on production costs. Here the following pattern operates: a decrease in resource prices reduces production costs and increases supply, i.e. moves supply curve to the right (S2). Conversely, an increase in the price of inputs will increase the cost of production and will shorten supply, i.e., shift the supply curve to the left (Sj).

Technology. Advances in technology mean that the discovery of new knowledge allows more efficient production unit of production, i.e. with a lower cost of resources. taxes and grants. Businesses treat most taxes as costs of production. Therefore, raising taxes on, say, sales or property increases the cost of production and reduces supply. On the contrary, subsidies are considered a “tax in reverse”. When the state subsidizes the production of some good, it actually reduces costs and increases its supply. **[14]**

Prices for other goods. Changes in the prices of other goods can also shift the supply curve of a product. A decrease in the price of wheat may encourage a farmer to grow and sell more corn for each possible prices. Conversely, an increase in the price of wheat may force farmers to reduce production and supply of corn. A sporting goods firm may cut the supply of basketballs when the price of footballs rises.

Expectations of changes in the price of a product in the future can also affect the manufacturer's willingness to supply product to market now. For example, the expectation of a significant increase in the price of a car firm's products can induce firms to increase production capacity and thus increase supply. **[15]**

The greater the number of sellers (suppliers), the greater the market supply. As more firms enter the industry, the supply curve will shift to the right (S2). The fewer firms in an industry, the more less is the market supply. It means that As firms exit the industry, the supply curve will move to the left (Sj). The difference between a change in a sentence and a change supply is the same as the difference between a change in demand and a change in quantity demanded. **[16]**

REFERENCES:

1. Abdurahmon K, Abdulazizovich KU. Some Issues of Improving Securities Accounting. In Conference Zon. 2021. pp. 129-132.
2. Kamolov AA, Raximov MSHU. Efficient Attraction of Investments in the Economy. Theory and practice of modern science, 2018;(1):762-765.
3. Kamolov AA, Aliyev ARU. Market: Essence and Functions. Theory and Practice of Modern Science, 2018;(1):768-770.
4. Kamolov AA, Ismoilov AIU. Main Properties of International Economic Integration. Theory and practice of modern science, 2018;(1):765-768.
5. Zokhidov I. Educational and edifying roles of the physics extracurricular activities. Scientific Bulletin of Namangan State University, 2019;1(2):319-322.
6. Ortikovich UA, Obidjonovich ZI. Study of constant and alternating current in a school physics course. Oriental renaissance: Innovative, educational, natural and social sciences, 2021;1(3):433-436.
7. Babaeva NM. The securities market as a supplier of investment resources for the development of corporate enterprises. Innovative economy: prospects for development and improvement, 2017;4(22).
8. Babayeva NM. Economic education as a necessary factor to ensure comprehensive youth development in Uzbekistan. In modern approaches to the transformation of the concepts of state regulation and management in socio-economic systems. 2015. pp. 13-16.
9. Babayeva N. On the Issue of Effective Modeling of the Investment Portfolio of Insurance Companies. Journal of Contemporary Issues in Business and Government 2021;27(3):1-9.
10. Babaeva NM, Radjabova GW. Consumer behavior: its models and motives of influence. In topical issues of the development of modern society. 2014. pp. 85-88.
11. Kuzmetov AR, Abdinazarov KhH. Seasonal succession of the qualitative composition of zooplankton in the reservoirs of Uzbekistan. The Way of Science, 2017;(3);27-29.
12. Mirabdullaev IM, Abdurahimova AN, Abdinazarov HH. Determinant of copepods form order of Calanoida (Crustacea, Copepoda) in fauna of Uzbekistan. Zoological Research during, 2021;20:144-146.
13. Karimova Vasila V. The Analysis of Lexical-Semantic Variants of Kinship (Wife, Stepmother) Expression Means in Female Gender. International Journal of Progressive Sciences and Technologies, 2021;24(1);71-72.
14. Rasulova ShKh, Karimova VV. On the onomasiological aspect of the study of female kinship terms in the Uzbek and Tajik languages. Bulletin of the Bokhtar State University named after Nosir Khusrav. Humanities and Economics Series. 2020;1-1(71):75-78.
15. Vakhobovna KV. The Lexical Plan Suppletivism in Turkic Languages. International Journal on Integrated Education, 2020;3(12):184-185.
16. Karimova V. Brief history of researching terms of kinship in uzbek and english languages. Scientific bulletin of namangan state university, 2019;1(12):156-162.

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COGNITIVE LINGUISTICS AS AN INTERDISCIPLINARY STUDY

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ABSTRACT

Before analyzing certain orientations presented by the mentioned disciplines, we will present some reflections on the nature of the acquisition of a language. Linguistic knowledge covers different aspects of phonological, morphological, syntactic, lexical, semantic and pragmatic nature that any human being acquires under normal physical, psychological and social conditions. All this is justified first by the indisputable fact of the acquisition of the native language.

KEYWORDS: *Native Language, Multidisciplinary Research, Linguistic Relativism, Grammatic Categories.*

INTRODUCTION

We can recognize that the acquisition of the native language is a universal cognitive process, inherent to the human condition. The ability of language, materialized in the acquisition of native language, is a complex and specialized skill, which develops spontaneously in the child, without conscious effort and without formal instruction, and which is qualitatively equal to all individuals. How is linguistic knowledge achieved? What is its nature? What functions of the brain operate to carry out this knowledge? From the 70th of the XX century, multidisciplinary research, combining procedures taken from linguistics, psychology, sociology, philosophy and biology, begins to study the complex process of acquisition and learning of language capacity.

The thesis of linguistic relativism (also known as the Sapir-Whorf thesis) in its strictest version proposes that our view of the world is shaped by the structure of our language, or in other words, by the different grammatical categories and constructions (nominal classifiers, casual paradigms, tense and verbal aspect, number, etc.). In this way, according to the theory of linguistic relativism, our worldview is fundamentally constructed unconsciously according to our linguistic behavior. Whorf's well-known claim that language determines thought has often been rejected on the pretext that there is no clear evidence that linguistic structures actually influence the categorization habits of speakers. In recent decades there have been numerous studies that have tried to validate the hypothesis of linguistic relativism and many of them constitute valuable contributions to semantic research **[1, p.143].** Of all, it is worth mentioning here two that seem especially suitable for the purposes of this work: the behavior of Korean and English children in relation to the manipulation of objects studied by Choi and Bowerman and the intercultural study of the category of grammatical number in Yucatec by Lucy **[2, p.100].**

One of the research that has had the greatest echo in the last decade is that carried out by Choi and Bowerman with Korean and English children of about twenty months. At this age, which is when children begin to speak, both language groups responded differently to experiments in which they were asked to compare and group actions such as the following:

Lucy for her research on the phenomenon of linguistic relativism chose as linguistic relativism the grammatical number, making inquiries in two genetically and typologically as different languages as Yucatec and English. In Spanish, there are many different ways to mark the grammatical category of number: Juan de Dios Luque Durán **[3, p.49]**

1) Morphological flexion (- s / - es)

2) Ordinal modifiers (first, second, tersero, etc.)

3) Cardinal modifiers (two, four, six, etc.)

4) Determinants (indeterminate article one (one), etc.)

5) Verbal concordance (suffix o, as / es, a / e of 3rd person of the present singular, pronominal forms me, te, se, nos, os, se)

There are some differences, as well as coincidences, in this respect with the Yucatecan:

1) In Yucatec, a plural suffix (-ó'ob) is commonly used for both nouns and pronouns and verb complements. As in many other languages of the world, this suffix is not mandatory and its use depends on the decision of the speaker depending on the existence or not of ambiguity **[4, p.51].**

2) In Yucatec, as in English, there is the possibility of using a modifier lexeme as a number marker, with the difference that in Yucatec said numeral modifier appears attached to a morpheme that works as a numeral classifier. This numeral classifier sets characteristics of nouns such as ' one/two / three dimensions’, ‘pair’, ‘part of a whole’, etc.and sets types of measures. There are about one hundred different classifiers of this type in Yucatec. There is also a group of quantifiers that mark notions of the type 'few’, 'other', etc.

However, the mechanisms of number marking in Yucatec are limited and are only used exhaustively with animated entities or with objects of the scope of possession of the same, so there is not the same importance or the same exhaustiveness when marking the number in English and in Yucatec. There is, in short, a kind of indifference when it comes to expressing the number in Yucatec when we compare it with other languages. From a point of view centered on linguistic relativism, the conclusion that can be reached is that English and Yucatecan, at least as far as the expression of plurality is concerned, construct the same reality in a different way. To corroborate this statement, Lucy used different drawings that represented different tasks; people working with different objects (trees, animals, constructions, etc.), different also in the number of elements that appeared **[5, p.496].**

According to the various theories presented in the processing of foreign languages, different models and teaching methods have been produced that have influenced, from different perspectives, in highlighting qualitative aspects that form the teaching-learning process. Specialists stress that you cannot create a single method that is generally valid. In each of the teaching systems, there are positive and useful elements. At present, teaching-learning methods attempt to cover all aspects of the complex process of linguistic activity and foreign language learning.

The idea of an anthropocentric language can now be considered universally accepted: for many linguistic constructions, the representation of man acts as a natural reference point.

This scientific paradigm, which was formed at the turn of the Millennium, established new challenges in the study of language, requires new techniques to describe it, new approaches to analyze its units, categories and rules. The idea of anthropocentricity of language is key in moderna linguistics. Today, the objective of linguistic analysis can no longer be considered simply the identification of the different characteristics of the linguistic system.

REFERENCES:

1. Blanco M. Actitudes lingüisticas en la primera mitad del siglo XIX en la Argentina. Cuadernos del Sur, 1985. pp. 131-149.
2. Blanco M. La lengua como conflicto: prescripción y estandarización en la historia del espacol de la Argentina. Políticas lingbisticas. Norma e identidad, 2001. pp. 99-110.
3. Censabella M. Las lenguas indígenas de la Argentina. Una mirada actual.1999. 147 p.
4. Censabella M. La revitalizacion de las lenguas y la educacion bilingbe intercultural. Actas del V encuentro de lenguas aborígenes y ex tranjeras, Universidad Nacional de Salta, 2005. pp. 56-78.
5. Duran JDL. Aspectos universales y particulares del lexicode las lenguas del mundo. Granada, 2001. pp. 496-498.

THE HARMONY OF CONCEPTS IN KAZUO ISHIGURO'S THE BURIED GIANT

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ABSTRACT

This article is based on the fictional genre of the British novelist, screenwriter, musician, short-story writer; moreover Nobel Laureate Kazuo Ishiguro's novel "The Buried Giant" and provides information about the literary heritage of the writer and his place and creative work in Japanese literature. Kazuo Ishiguro's fictions and creative life are analyzed. In particular, the genre of the work, the lexical units and events in the novel are analyzed and commented on. The novel also contains comments on the lives of the heroes, their lifestyle, life experiences, places of residence, social environment.

KEYWORDS: *Fiction, Novel, Work, Concept, Story, Conceptosphere, Longing, Suffering, Kindness, Loyalty;*

INTRODUCTION

Fantasy is the tool of the storyteller. It is a way of talking about things that are not literally true and cannot. It is a way of concretizing metaphors, and it becomes a myth in one direction and an allegory in the other. **[1]**

In modern literature, Kazuo Ishiguro is plays an important role in the field of science fiction. This is because his work is described in the same way, both in terms of quality and in his novels, because of his careful and precise approach to language and character, and due to the variety of themes in the novel. In The Buried Giant, he depicts England 1,500 years ago. This novel by Kazuo Ishiguro is written in a fantastic way and considered as a novel rich in a number of supernatural events.

The Buried Giant is about an elderly couple who move from one village to another. This dates back to the 6th and 7th centuries, when Britain and the Saxons fought a bloody war in England. The British ruled the west and the eighties controlled the east of England. You can see that other supernatural characters come from heroes.

The protagonists of the novel are an elderly couple Axle and Beatrice. They lived on a hill that belonged to the British, and the tribe treated them badly. Axle and Beatrice love each other deeply and take care of each other as best they can. Beatrice insists that she is ill and suffering from the pain in her side, which is not serious enough to be treated. Their memories will be insecure, their names, faces, and even events will be forgotten. But all the problems with memory and event were not only theirs, but all the people in their society, even the neighboring villages, the British and the Saxons, were facing the same difficulties. But there was also a district covered with mist[1] where people stole their children and the memories associated with them. Memories were important to them, and they were needed to understand who they were. The elderly couple decides to go there, and the following are their sentences:

"As Beatrice says: "If that's how you've remembered it, Axl, let it be the way it was. With this mist upon us, any memory's a precious thing and we'd best hold tight to it"[2. p.46.]**.**

Main body

The concept of the concept sphere is an ordered set of concepts related to a particular people. The concept sphere of each nation reflects a certain set of concepts that form the basis of the national mentality and have a bright national identity. It is known that the national concept reflects the national mentality, the science and the culture of the nation in general. Language is an integral part of the cultural concept sphere " **[3. p.11.].**

In the general concept sphere of Kazuo Ishiguro, there is a system of artistic concepts that can be represented as a contour map. Associative components in the form of figurative metaphorical units or precedent connections play an important role in defining the semantics of an artistic concept. Therefore, in each novel analysis, the separation of leading concepts without neglecting the functions of all artistic concepts determines the effectiveness of the analysis; as such "chains" create a figurative communicative system.

Their versatility in the artistic content of novels ensures that personal authorship concepts rise to the level of artistic concepts. It is, on the one hand, an expression of the author's thinking, on the other hand, a product of a system with its own laws, which the author cannot influence.

"The author's concept is an image embodied or imagined in the author's mind as a result of the writer's conceptualization of life scenes by elevating them to a basic level, i.e. as a value with cultural significance in the author's mind and ultimately of personal value to the author is an event"[3]

Kazuo Ishiguro's work is based on a variety of artistic concepts that are inextricably linked, such as 'longing', 'suffering', 'kindness' and 'loyalty'. Any work of art created in a developed national language enriches and expands its conceptual field. This is also reflected in the work of Kazuo Ishiguro, a Western and Eastern writer.

The main concepts in the work of Kazuo Ishiguro ("longing", "suffering", "kindness", "loyalty") are distinguished by the fact that his second-period novel is a feature that unites the plot structure which is based on the criterion of axiological priority.

It is well known that the conceptual worldview[4] of personal authorship represents a set of personal authorial conceptual landscapes that are illuminated through the individual stylistic features of the writer. However, the personal conceptual landscape is formed on two levels: the conceptual level and the individual speech level. The conceptual level emerges, as the leader of these two levels. Because, the uniqueness of the poetic landscape the worlds cannot be fully expressed by the forms of language alone.

On the concept of longing

Scenes with the concept of "longing" in the author's work are represented from the beginning to the end of the work. The novel is based on the concept of longing.

1. Almost all the events in the novel are perfectly covered. A mother's love for her child is so strong that even though she cannot remember her son's appearance or voice, she feels things about her child. In this scene, the writer expresses the strength of emotion. The mother rushes to look for her son, saying, "He is our body and our blood, we must be together."

"He's our son," Beatrice said. "So I can feel things about him, even if I don't remember clearly. And I know he longs for us to leave this place and be living with him under his protection."[2. P.20.]

2. In addition, people have a sense of longing for their homeland, and miss their villages wherever they go.

Their versatility in the artistic content of the novel allows the concept of personal authorship to rise to the level of an artistic concept. It is, on the one hand, an expression of the author's thinking and, another, a product of a system with its own laws, which the author cannot influence.

The concept of suffering

As we read the novel, it is evident that we can come across scenes that consist of different emotions. The writer ha so skillfully described scenes related to the concept of "suffering" that the person reading this novel will also suffer undoubtedly. A few scenes can be taken as an example:

1. The protogonists of the novel go to ruined house during their journey to survive themselves from the storm and rain. There they meet a boatman and an old woman. They have lived all their lives in solitude, remembering their past and suffering from that ruin. Although, when they live together, there is always enmity between the old man and the boatman: **"The old woman said: "Do I think this a charming way to spend my fading days? I'd rather be far from here, in the company**[5] **of my own husband, and it's because of this boatman I'm now parted from him." [2. p.26]** Moreover, they live a meaningless life in the dark painfully, because their problems have no end.
2. As well as, examples of scenes in which the concept of "suffering" exists, the grief of an elderly couple in the time while finding their child.

The concept of kindness

At the same time, the author introduces various scenes to the reader through the mother's dream. For example, the appearance of the child; According to the dream, the child is constantly looking for his parents by the well, while paying attention to the son's appearance, she sees and remembers the child's strong, handsome body, but she cannot remember his face, eye color, cheeks. . As mentioned above, the author describes the mother's love for her child.

"I thought I dreamt about him last night," Beatrice said. "Standing by a well, and turning, just a little to one side, and calling to someone. What came before or after's gone now."[2. p.22]

"A strong, handsome face, that much I remember. But the color of his eyes, the turn of his cheek, I've no memory of them."[2. p.22.]

The concept of loyalty

In The Buried Giant, the author creates a complete psychophysiological and mental complex of the national concept of "loyalty" based on his personal outlook. Initially, the concept allows you to express the maximum content of the concepts that become the artistic image that is included in it. Through the concept, the most important elements of the composition of artistic thinking are combined from the concept to the artistic image. Thus, it is impossible to carry out the analysis of a literary text without a comprehensive study of the elements that make up the basic concepts.

In the novel, the concept of "loyalty" is reflected in the main scenes. In the novel, we can find this concept in different places.

1. Loyalty to the child: Although they have risen from memory, they set out in search of their beloved with devotion, despite various difficulties.

2. Loyalty to one's village, place of residence: On the way, Axl emphasizes his love, longing and devotion to his village:

"Even so, I'll miss this place, Axl. This is small chamber of ours and this village. No light thing to leave a place you've known all your life. "[2, p.20.]

3. Loyalty to Companions: The protagonists show their loyalty by helping each other until they reach their destination.

The study of the "text conceptual atmosphere" in any novel allows you to fill in the field of analysis of the work under study, to see the dynamic development of concepts, to determine the dominance of any of them in the discourse, to analyze the cognitive layer of the concept. SH.S. Safarov thinks about the importance of studying the personal factors in the discourse: "The focus of pragmalinguistics on the study of the personal factor is a timely action: in the interaction and discursive activity of the individual in the cognitive network, non-abstract linguistic-cognitive discourse. It is expedient to evaluate it as a product of activity, that is, to study it as a product of specific individual activity" **[4].**

Conceptual analysis of a literary text brings the fields of linguistics and literature closely together. This approach takes the most important aspects of linguistic and literary analysis into account and allows for a complete understanding of the content of the literary text. Cognitive analysis allows us to consider the artistic concept in terms of context and communicative situation, which provides a sufficient basis for the identification of its semantic features and verbalization features.

Literary text is studied in terms of "cognition of meaning" because it expresses complex modeled content. All the parts that make up the concept of works of art are considered to be logically grounded and conceptual significance. The conceptual atmosphere of a literary text is determined by the interrelationships of its constituent elements, as well as by conceptual analysis.

As a means of conceptual analysis of the literary text, the artistic concept that directly leads the group is selected. The analysis of a concept that has its final development in fiction (in terms of the category of literary criticism) allows us to draw conclusions about its significance, explore the diversity of concepts from the simple meaning of the concept to the figurative system of the novel, from metaphor to plot structure. [**5]**

CONCLUSION

I.R. Galperin's monograph "The text as an object of linguistic research" focuses on conceptual information about the content, the main segment of which can be considered as a concept." In this type of information, the entropy of the aesthetic-cognitive plan is removed[8]. Thus, the concepts of "longing", "suffering", "kindness", and "loyalty" were identified and analyzed as key elements of the conceptosphere of Kazuo Ishiguro's work and, in turn, as "potential units of translation". N. V. According to Alexandrovich, "conceptual analysis of a literary text allows the translator to enter the cognitive and emotional" layers "of the text; as a result, the most alternative means of translation are selected." **[6]**

The Buried Giant is a book of melancholy, and the district through which it breathes is also a melancholy. The tones of the story are dreamy and dimensional. The play features scenes such as adventures, sword fights, and betrayals, battles with armies, tricks and killing animals. They are immaculate, clear, sometimes poetically described. Enemies will be killed, but the dead will never win. The novel is an interesting work that captivates the reader. Basically, the old couple's experiences, adventures, and enduring hardships throughout their lives bring a person into that world on their own. Axl and Beatrice, gentle and caring, kind, just want to survive, reach out to their son and be together. They had to remember their past, but they were afraid of what those memories might lead to.

Until the last chapter, Ishiguro does not tell secrets, does not answer riddles, and spontaneously asks himself: "Who are Axl and Beatrice? What happened to his son? Where are they going? And, if they truly remember who they are, will they be able to love each other the same way? They Can be answered at the end of the work.

In addition, The Buried Giant does what important books do: it is remembered long after it is read, refusing to leave and forcing it to turn over and over again. Reading a second time, it is easier to understand his characters and events and motives in the third, but he still defends his secrets and his world. **[7]**

Ishiguro is not of all afraid to deal with huge, personal topics, nor to use myths, history, and fantasy as a means to do so.

The issues facing its protagonists are buried and unresolved in the past. Thus, Ishiguro concludes many of his novels with a melancholy resignation.

In 2017, Ishiguro won the Nobel Prize in Literature for exposing the abyss beneath our sense of imaginary connection in his novels with immense emotional power. In response to the award, Ishiguro told The New York Times:

"It's a great honor, basically, it means I'm following in the footsteps of the greatest authors I've ever lived with, and so it's a huge compliment. The world is full of very volatile moments, and I hope that all the Nobel Prizes will become a force that can change the world for the better today.

If I am part of some kind of climate this year and contribute to some kind of positive atmosphere at a very uncertain time, it makes me very excited. ” **[8]**

REFERENCES:

1. Halperin. Text as an object of linguistic research. Moscow: Nauka, 1981. 139p.
2. Amanullayeva KM. Badiiy asar konseptosferasi va asosiy konseptlarning tarjimada qayta yaratilishi. Samarqand. 2020.
3. Aleksandrovich NV. The Conceptosphere of a Work of Art and the Means of Its Objectification in Translation (based on S. Fitzgerald's novel "The Great Gatsby" and its translations into Russian). Moscow: Flinta, 2010. p.19.
4. Safarov ShS. Pragmalinguistics. Tashkent: National Encyclopedia of Uzbekistan, 2008. p.139.
5. Alefirenko NF, The problem of concept verbalization: A theoretical study. Volgograd: Change, 2003. p.68.
6. Sherzodovich AS. The role of online teaching and innovative methods. Science and education, 2020;1(3):524-528.
7. Aslonov ShSh. Computational Linguistics and Philology: Problems and Solutions. Humanitarian treatise, 2020;(84):17-19.
8. Ling Yeh. Norūweinomori' no Watanabe no ai no yukue - san-shakankei no kōzukara mite. 2009. 161p.

TRANSMISSION SYSTEM OFPARALLEL LATHE MACHINE TOOLS

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ABSTRACT

The tailstock that allows machining long and concentric components, as well as drilling, reaming and threading. More precise measurements can be obtained with more careful work and more rigorous procedures by personnel competent in skill and ability. It is the conventional machine tool widely used to produce flat and also cylindrical surfaces, in the manufacture of gears, cylindrical straight teeth, helical, hypoid, dovetail, in dies it is used to manufacture punches of different shapes and cutting dies and inlay.

KEYWORDS: *Precise, Gears, Cylindrical, Helical, Hypoid, Dovetail*

INTRODUCTION

The machine tools are basically constituted of the following elements: The bench or frame in which the guides of the work table are located (main carriage in the case of the lathe), which facilitates the cutting and advance movements; the precision of the work depends on the maintenance care of the bench. **[1]**

These machines are composed of: a). Transmission system, which facilitates the cutting movement, of the advances, for turning and facing work, also facilitates the operation of the Norton Mechanism for threading the threads of different shapes.

In these machines the precision range to be obtained is as follows:

Range of precision in machining by chip removal	
Machine tool	Precision to be obtained
Planer	0.1 mm
Milling machine	0.05 mm.
I turn parallel	0.02 mm
Flat grinder	0.005 mm
Universal grinding machine	0.02 mm

More precise measurements can be obtained with more careful work and more rigorous procedures by personnel competent in skill and ability. The advantage is that its costs are more comfortable, while its manufacturing times are longer, unlike that unconventional machine tools use less time to do the same work, in addition to carrying out work on even tempered material, but their costs they are taller. **[2]**

They are made up of the bench, which is the most important part of the lathe on which the main carriage that carries the transverse carriage and the auxiliary carriage rest, requires special care on the part of the operator placed in it. The precision of the components to be produced lies. **[3]**

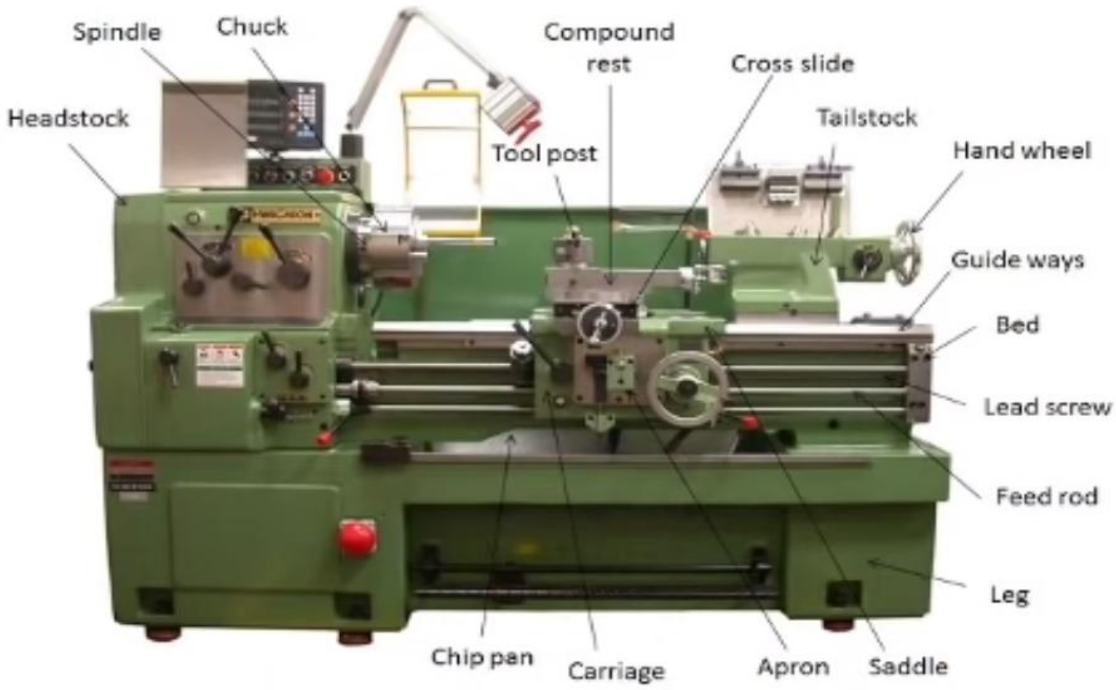

Illustration 1. Mechanical parallel lathe

The gearbox, which allows to obtain various angular speeds in the main spindle, the feedbox that generates different feeds for rough or fine machining, the threading bar that will allow to obtain the feed rate to make threads in combination with the advance box.

The tailstock that allows machining long and concentric components, as well as drilling, reaming and threading.

The console is made of gray cast iron that has been aged to make it more resistant to wear, they are hardened by induction tempering. Some machines are made of stealing cast iron which makes them more resistant to wear and tear and resistant to greater stress. **[4]**

The main operations carried out on the parallel lathe shown in the graph are: a) Facing, b)Conical, c) Shape turning, d) Profiling, e) Chamfering, f) Parting, g) Filleting, h) Turning Internal, i)Drilling, reaming, j) Knurling.

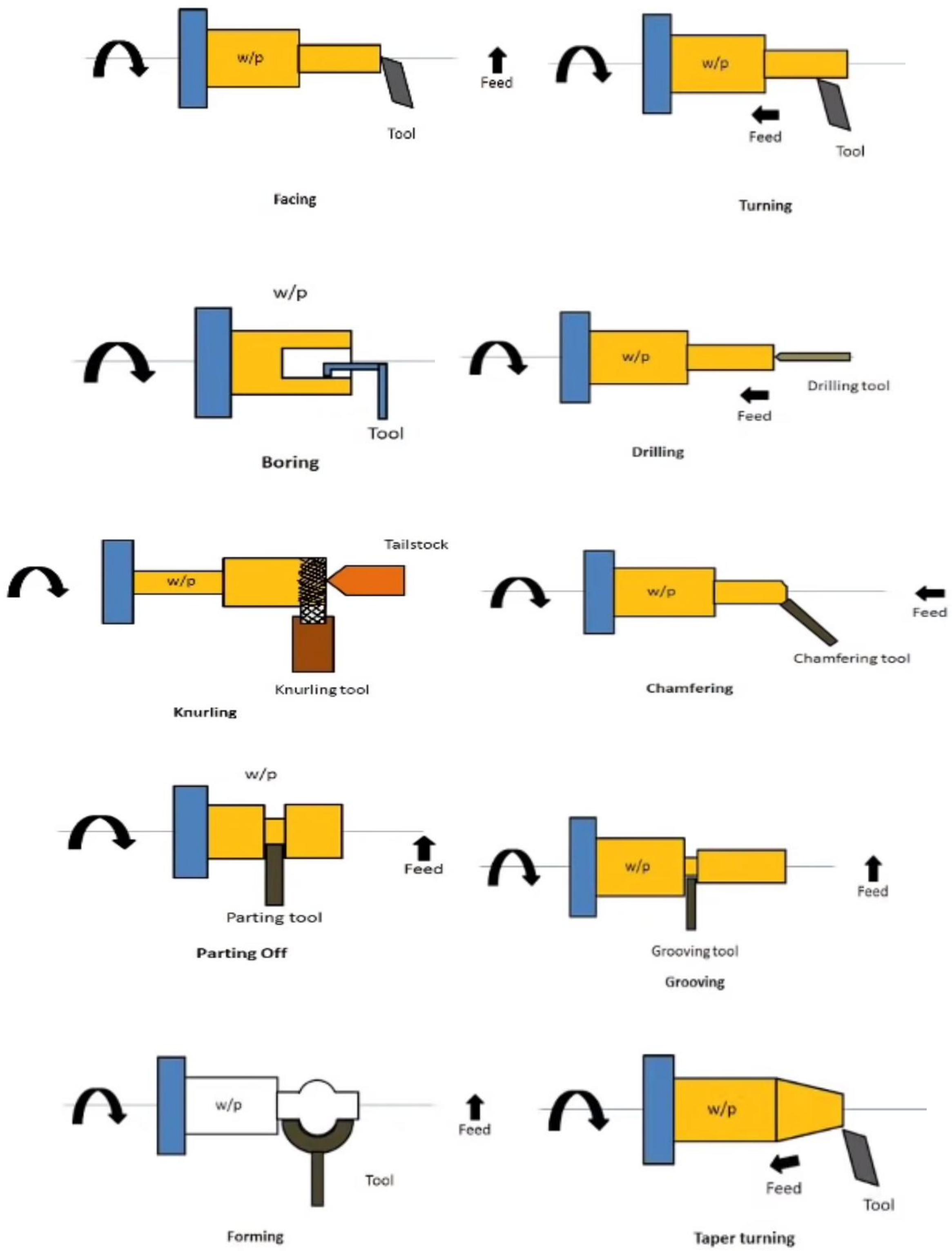
w/p
Feed
Tool
Facing
w/p
Feed
Tool
Turning
w/p
Tool
Boring
w/p
Drilling tool
Feed
Drilling
Tailstock
w/p
Knurling tool
Knurling
w/p
Feed
Chamfering tool
Chamfering
w/p
Feed
Parting tool
Parting Off
w/p
Feed
Grooving tool
Grooving
w/p
Feed
Tool
Forming
w/p
Feed
Tool
Taper turning

Illustration 2. Operations on the lathe.

The universal milling machine. It is the conventional machine tool widely used to produce flat and also cylindrical surfaces, in the manufacture of gears, cylindrical straight teeth, helical, hypoid, dovetail, in dies it is used to manufacture punches of different shapes and cutting dies and inlay. It is made up of the console on which the other parts rest, such as the main carriage whose displacement is vertical (Z axis) on which the longitudinal carriage (X axis) are mounted and the transverse movement (Y) occurs on the bench. **[5]**

REFERENCES

1. Xusanjonov AS, Otaboev NI. Improving of Steerability of Automobiles With Rotation of X-Type of His Rear Wheels Relatively of Front Wheels. Scientific-technical journal, 2018;22(2):131-133.

2. Xodjayev S, Xusanjonov A, Botirov B. Transport Vositalari Dvigatellarida Dimetilefir Yoqilg’isidan Foydalanish. Scientific progress, 2021;2(1):1531-1535.

3. Xusanjonov A, Qobulov M, Ismadiyorov A. Avtomobil Shovqiniga Sabab Bo'luvchi Manbalarni Tadqiq Etish. Academic research in educational sciences, 2021;2(3):634-640.

4. Khusanjonov ASO, Nosirjonov SIO. Theoretical foundations of the acceleration slip regulation system. ACADEMICIA: An International Multidisciplinary Research Journal, 2021;11(9): 618-623.

5. Khusanjonov A, Makhammadjon Q, Gholibjon J. Opportunities to Improve Efficiency And Other Engine Performance At Low Loads. JournalNX - A Multidisciplinary Peer Reviewed Journal, 2021; 153–159.

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DIGITAL GEOGRAPHY-RURAL LITERACY AND INTERNET USAGE AMONG RURAL MEN AND WOMEN IN INDIA VIA NATIONAL FAMILY HEALTH SURVEY-5 (2019-2021)

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ABSTRACT

NFHS-5 survey for the first time includes the study of internet usage in India. Since the digital has altered all possible ways of human life with the internet as its fulcrum, its analysis in various forms is contemporary and relevant. But, geographical studies are less observed and studies on rural areas are further limited in nature. The current attempt is an analysis of the geographic distribution of internet services usage in India on the basis of gender and literacy in the rural scenario. It further diversifies theanalysis in these units through the Empowered Action Group (EAG) states and Non Empowered Action Group (Non-EAG) states and Union Territories classification of the Census of India. An all-India examination is insightful in examining the trends in digital geographies in the rural landscape of the country. The 2019-21 period of National Family Health Survey-5(NFHS-5) data makes the study contemporary as well as relevant.

KEYWORDS: *Internet, India, Gender, Literacy, Rural*

INTRODUCTION

The internet is observed to usher in a newer aspects to the world and in creating a newer one as wellwhile rapidly becoming a household name since its inception and life without the internet is unimaginable with the digital resources creating altered realities in space and time while creating newer patterns (Brunn, 1998; Dodge, 1999) **[1,2].** The geographies of the internet are called cyber geographies and involve the various dimensions of studying the internet through a geographical perspective (Dodge, 1999, Robine & Salamatian, 2014) **[2,3].** The geographies of the internet are, however, less done by geographers and more by data scientists (Kitchin & Dodge,n.d.) **[4]**; particularly in the lightof the fact that rural internet connectivity is difficult to achieve (James, 2010) **[5].** The current study is an attempt to bridge this kind of gap in literature. It attempts to observe the internet usage in the rural areas of the country on the basis of the recent NFHS-5 data and then diversifies to observe the geographical dimensions of this distribution on the basis of gender and the respective literacy rate of these groups. The NFHS is a huge survey initiative of the Ministry of Health and Family Welfare and Government of India (MOHFW) since 1992-93 with the International Institute for Population Sciences (IIPS) as the nodal agency to conduct it (India G. O., n.d.) **[6].**

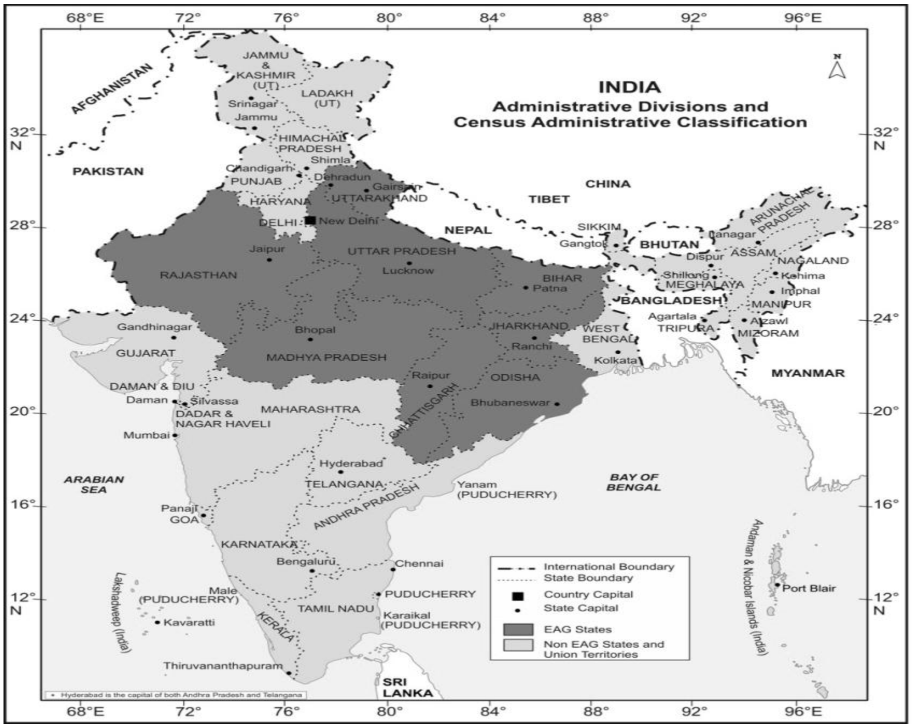
The focus is to highlight the variations of internet usage among men and women in the rural areas of the country through this data. Further, this aspect is examined on the basis of development level in the states wherein, the Census of India 2011 classification of Indian states as EAG and Non EAG states and Union territories is attempted. Studies have also indicated that by the year 2025, rural India will have more internet users than urban India with an increasing internet adoption rate as observed in the country (WARC, 2020; Today.In, 2021; IANS, 2021) **[7,8,9].** Further, gender gap is significantly visible in internet usage in India and the world (Fallows, 2005; OECD, 2018; ITU, 2021) **[10,11,12].** The digital gender gap is an observed gender divide and more than two thirds of nations experience it (OECD, 2018) **[11].**

The digital also creates geography (Ash, Kitchin, & Leszczynski, 2015) **[13]** and the social aspect is multi-dimensional and more relevant (Alibrandi & Baker, 2008) **[14].** The internet is highlighted to create immense and fresh opportunities for users (Owen, 2019) **[15**] and a group specific study brings out specific relevant characteristics of behavior (Dobler, 2003) **[16].** Reversely, the use of internet is also taken as an indicator of literacy itself (Birru, et al., 2004; Sinha, 2012) **[17,18].**This needs attention (OECD, 2018) **[11].** All these points make convincing case as presented in the current study.

The concept of literacy has particularly evolved in the 21st century from basic reading and writing skills to contemporary aspects of literacy, in which media literacy is a separate component. It is also important to mention in this regard that the traditional definition of literacy as reading and writing skills, has evolved and has acquired other dimensions (van Deursen & van Djik, 2014) **[19].** Literacy as a concept in this regard relates to two broad concerns- literacy on skills related to the internet and literacy on information on the internet (Kim & Yang, 2015) **[20].** The socio- demographic factors have a significant say in even the basic access to digital resources (Zickuhr & Madden, 2012; van Deursen & Helsper, 2015; Morueta, Gomez, & Gomez, 2018) **[21, 22, 23].** In the light of all these aspects, the study becomes relevant and the analysis adds to literature.

Study Area-The study area is India. It comprises of Indian States and Union Territories (UTs). The NFHS surveys these administrative units for data collection. The present examination of NFHS data for the category of for the states and UTs of the country tends to observe the category of men and women in the age group of 15-49 years who have ever used the internet through the data collected by NFHS-5 through primary survey. The NFHS covers all states and Union Territories and the results of 2019-2021 survey for these administrative units is taken for the study. The analysis is supplemented using the Census classification of Indian States into Empowered Action Groups (EAG) and non-EAG states and UTs. The study area is depicted in Figure 1. The basis of this classification is the high growth of population in these states as compared to the country. EAG states are- Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, and Uttar Pradesh- states which lag behind in the demographic transition and also have a higher percentage of rural population as compared to the non EAG states and Union Territories (UTs)(India o. G., 2011; Home Affairs, 2011) **[24, 25].** Besides this, the data is segregated on the basis of EAG and Non EAG states and UT's category to check the differentials in the category (Home Affairs, 2011) **[25].**

FIGURE 1. STUDY AREA



Source- Author, 2022

These are the states which are below all India average in the demographic transition and also have a higher percentage of rural population as compared to the non EAG states and UT's (Home Affairs, 2011) **[25].** Chandigarh is excluded from the analysis as data for rural areas is not available in the survey.

Database and Methodology-The present examination is based upon NFHS-5 Survey conducted and conducted from 2019-2021 respectively. The survey is described as a national, multi round, large-scale survey which is conducted on data on a sample of households across the country. The MOHFW has given the responsibility to conduct this survey at the all India level to the International Institute for Population Sciences, Mumbai. Further, it is implemented by a group of survey organizations and Population Research Centres which are selected after a rigorous process of selection (NFHS, 2021) **[26].** NFHS-5 fieldwork for India was conducted in two phases from January to April by 17 Field Agencies with data collected from 636,699 households, 724,115 women, and 101,839 men(NFHS, 2021) **[26].** This data pertains to vast information collected on demography, health parameters, social dimensions, technology usage, maternal and child health, gender based violence and tobacco usage to mention broadly (NFHS, 2021) **[26].**

The current study is based on the category of 'Characteristics of Adults' (15-49 years), studying the indicators of – Women who have ever used the internet and Men who have ever used the internet; expressed in percentage. Information on rural literacy rate respectively for men and women is also taken from NFHS-5 data. Data for both these categories is provided separately for urban and rural scenarios for states and UTs in the survey sheets by NFHS. The aim is to analyse the geographical distribution of the percentage of men and women in rural areas who have ever used the internet and find its correlation with respective male and female rural literacy levels of

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the respective administrative units. The methodology involves the an initial analysis of the descriptive statistics of internet usage in the country. It is then extended to examine the gender aspect of internet usage in the rural context followed by calculating the correlation of respective literacy rates with this usage. The methodology has been divided into the following categories:

a. Descriptive Statistics of rural literacy rate among men and women and Internet usage of men and women respectively for the states and UTs is attempted first with a specific analysis of same statistics for EAG and Non EAG states and UTs category.

b. Calculating the correlation between rural literacy rates and internet usage on the basis of gender respectively for the study area. The same analysis is conducted for EAG and Non EAG states and UTs category.

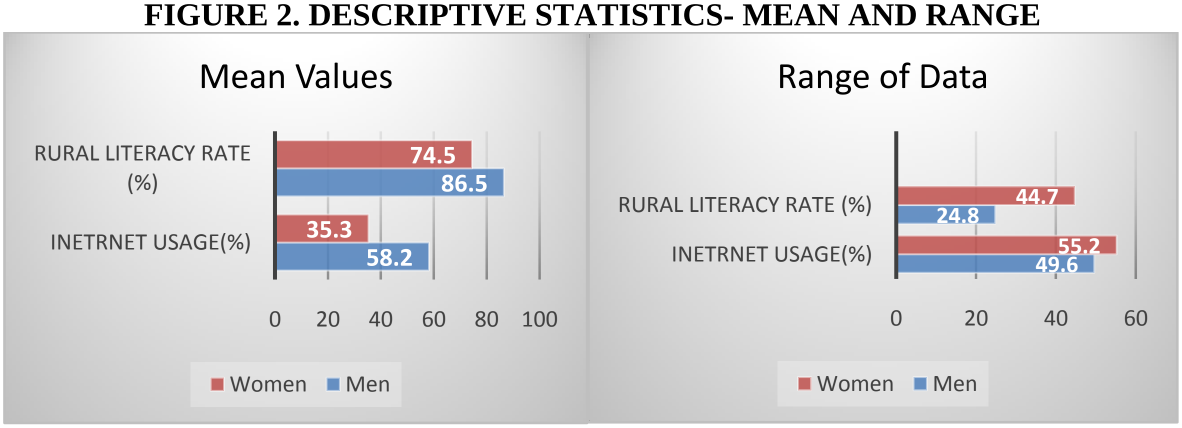
c. One Way Analysis of Variance (ANOVA) is calculated to observe the statistical difference in the means of literacy rates and internet usage categories respectively.

d. The results are tabulated and plotted as required.

RESULTS AND DISCUSSIONS

The analysis has been initiated through descriptive statistics and the mean value of data for all categories is calculated. This is followed by the calculation of range of data for all categories to observe the differentials. As can be observed from Figure 2, mean internet usage among rural men is quite high than women using internet in these areas. Rural literacy rate is also higher among men.

FIGURE 2. DESCRIPTIVE STATISTICS- MEAN AND RANGE



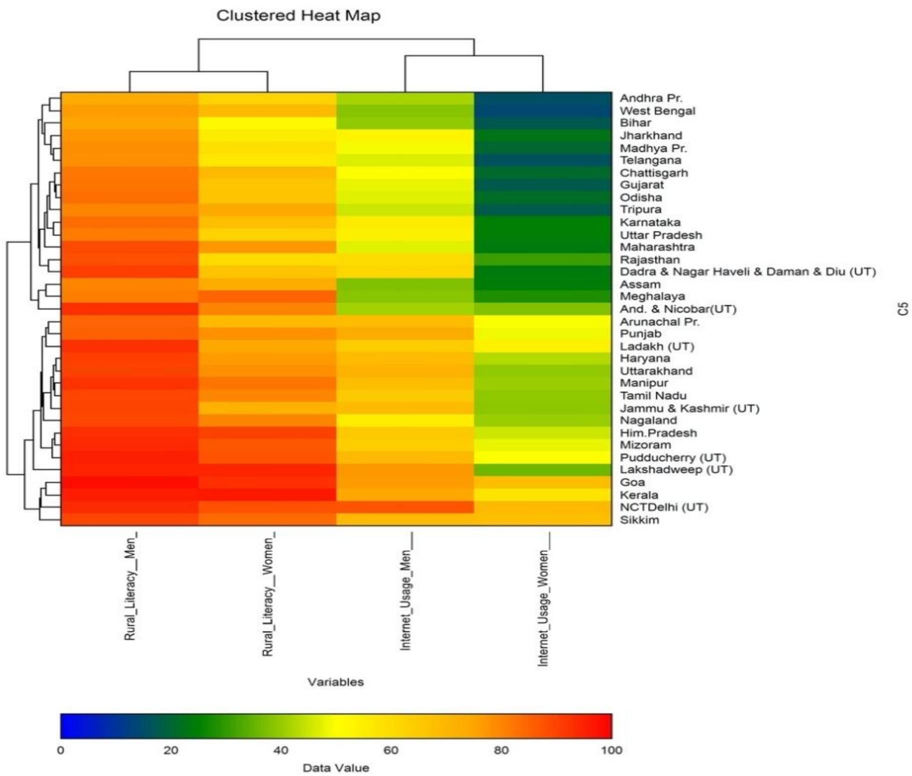
Source- Author, 2022 (NFHS, 2021)

The data range also indicates that while there is a higher gap in rural literacy rate in women, there is also a higher gap in internet usage among women. However, for rural men, there is a comparatively lower gap in literacy range but a higher range in internet usage; even higher than rural women. The gap between the two parameters is more among rural men than rural women. This can be a probable indicator of internet usage availability and its geographic unavailability in rural areas.

This also highlights more variability among rural women in accessing the internet and also education. Thus, both access and availability of internet services and literacy are important considerations in this regard. Extending the analysis to observe the correlation between internet usage and respective literacy rates at the geographic scale, Hierarchical Clustering using the

Group Average method was attempted. This method yields clusters in which the distance between them is identified on the basis of average values of two clusters (Statistics.com, 2022) **[27].** Four clusters were targeted for creation and the observations are recorded in Figure 3.

FIGURE 3. GEOGRAPHICAL ANALYSIS- CLUSTERING FOR RURAL INTERNET USAGE AND RURAL LITERACY RATES

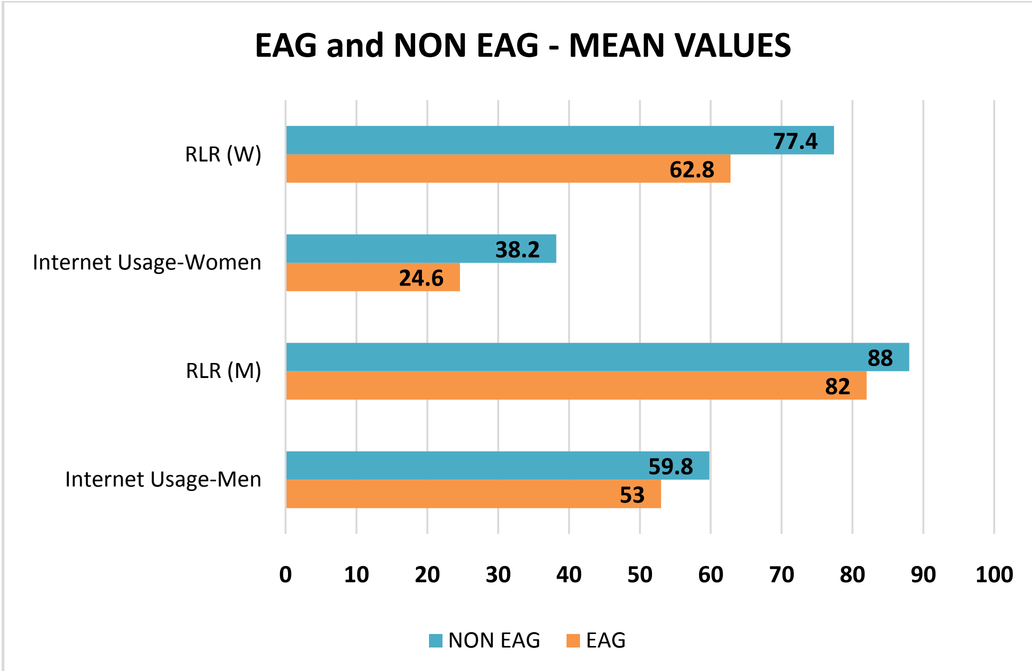


Source- Author, 2022

The dendrogam indicates that with a higher literacy levels in both men and women there is a higher internet usage. The state of Sikkim denotes the highest values in all categories, followed by NCT of Delhi. However, no clear geographic pattern is observed in this distribution.

However, high variance was observed for internet usage among both men and women in rural India at 176.9 and 260.6 respectively which is an indicator of more spreading of data from the mean (Good & Hardin, 2003) **[28].** It is also an indicator of more heterogeneity in the data which also indicates that there is quite a dissimilarity in the geographic spread of data. It can be forwarded that the availability of internet services is not uniform in nature in rural areas across the country. More variance has been observed for internet usage among rural women and also literacy rates among women. Extending this examination to the level of development and observations on literacy and internet usage, it is evident that while literacy rates are much higher for both categories of men and women, internet usage is much lower. This is a probable indicator of either unavailability or restricted availability of these services in these regions as well. Besides, it can be forwarded that a regional patterning does not clearly exist for these categories. The details have been plotted in Figure 4.

FIGURE 4. EAG AND NON EAG STATES AND UTs-DESCRIPTIVE STATISTICS



(Data is in %) Source- Author, 2022

The rural literacy rate among adult women, RLR (W) and rural literacy rate among adult men, RLR (M) is lower than EAG states as compared to the Non EAG states and UTs. Similarly, internet usage is low in both the categories for EAG states which is an indicator of level of development and internet usage and literacy as well. Observations on correlation between literacy and internet usage have been attempted next respectively for both rural men and women categories through the Karl Pearson's Correlation Coefficient. Results indicate that in both cases there is a strong positive correlation between literacy and internet usage.

TABLE 1.1. INTERNET USAGE AND RURAL LITERACY RATES (RLR) - EAG AND NON EAG STATES AND UTS

EAG STATES				
	Internet Usage Men (%)	**RLR-M**	**Internet Usage Women(%)**	**RLR-W**
Bihar	39.4	74.9	17	51.6
Chattisgarh	50.4	82	20.8	69.1
Jharkhand	53.2	77.4	22.7	55.6
Madhya Pradesh	49.3	78.7	20.1	59.2
Odisha	47.2	83.4	21.3	66.7
Rajasthan	59.4	88	30.8	59.9
Uttar Pradesh	54.2	81.2	24.5	62.4
Uttarakhand	71.2	90.1	39.4	78

TABLE 1.2

NON EAG STATES AND UTs				
	Internet Usage Men(%)	**RLR-M**	**Internet Usage Women(%)**	**RLR-W**
Andhra Pradesh	41.5	73.2	15.4	62
Arunachal Pradesh	68.5	84.5	49.6	69
Assam	37.8	79.9	24.4	73.2
Goa	76.6	98	68.3	92.9
Gujarat	48	82.6	17.5	65.8
Haryana	68.8	90.6	42.8	76.7
Himachal Pradesh	65.1	93	45.2	90.2
Karnataka	55.6	83.6	24.8	67.7
Kerala	74.2	95.8	57.5	96.3
Maharashtra	47.2	88.6	23.7	76.9
Manipur	68.2	92.3	40.4	82.3
Meghalaya	38.5	80.9	28	84.9
Mizoram	63.9	94	48	87
Nagaland	55.2	89.3	40.3	79.8
West Bengal	38.3	76.2	14	69.2
And. & Nicobar(UT)	41.1	92.7	37.9	79.9
Dadra & Nagar Haveli & Daman & Diu (UT)	61.3	90.6	23.8	66.8
NCTDelhi (UT)	87.4	93.5	69.2	87.8
Jammu & Kashmir (UT)	68.8	89.9	38.9	71.6
Ladakh (UT)	64.3	92.8	54	74
Lakshadweep (UT)	77	94.5	36	94.6
Pudducherry (UT)	69.4	95.5	50.4	87.4
Punjab	73	85.5	48.8	78
Sikkim	69.5	89.4	68.1	83.8
Tamil Nadu	64.9	89.6	39.2	79.6
Telangana	46.7	78.4	15.8	56.6
Tripura	45.2	80	17.7	74.1

Source- Compiled by Author, from NFHS- 5 , (NFHS, 2021)

TABLE 2. KARL PEARSON'S CORRELATION COEFFICIENT

	Internet Usage Among Rural Men and Rural Literacy Rate Among Men	Internet Usage Among Rural Women and Rural Literacy Rate Among Women
	0.76	0.72
EAG States	0.91	0.67
Non EAG States and UTs	0.74	0.64

Source- Author, 2022

Correlation analysis is also done for categories of EAG states and Non EAG states and UTs. Calculations indicate that in EAG states the value of Karl Pearson's correlation coefficient is very high at 0.91. However, for women in the same category, this value is comparatively lower at 0.67. For Non EAG states and UTs, positive correlation was observed in both the categories and was higher in rural men. Except the category of rural literacy rate and internet usage among men, all categories were with a similar range of correlation.

In EAG states, Uttarakhand has the highest percentage of internet usage with 71.2% and Bihar had the least percentage of internet usage among rural men at 74.9%. Odisha has the maximum range of literacy and internet usage for rural men. For rural women category, Uttarakhand has the highest rate of internet usage at 39.4% and literacy rate as well in both the categories for rural men at 74.9%. Bihar has the lowest rate in both categories for rural women. Bihar has the lowest internet usage among rural women at 17% and literacy at 51.6%. ANOVA analysis indicates that there is a statistical significance in the mean values of both the groups and that only chance cannot be attributed to this difference. It can be concluded that there does exist a significant correlation between literacy rates and internet usage among rural men and women.

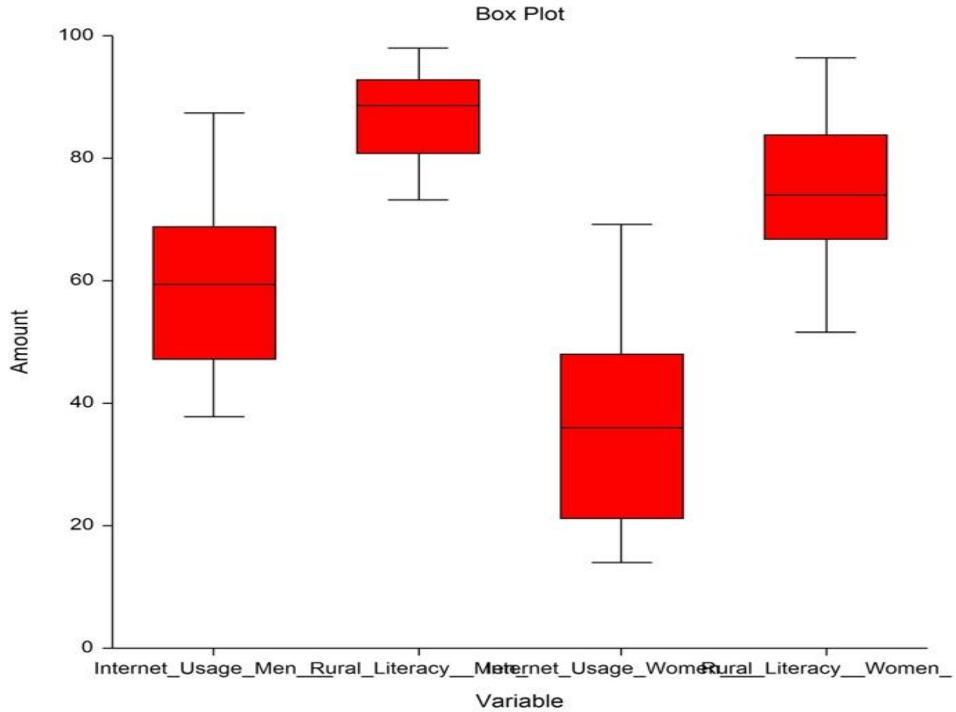
TABLE 3. ANOVA TABLE AND F- TEST

F-Ratio	Probability Level	Reject Equal Means (alpha=0.05)
42.2	0.00	Yes

Source- Author, 2022

More data is below the median value for both the categories as is visible in Figure 5. The box plot of internet usage among rural men is shorter that the box plot showing internet usage among rural women. This indicates that there is a statistically significant difference in the means of the groups. The long upper whiskers in both the cases there is more variation in the most positive quartile group. Similarly, rural literacy is higher among men but the range is higher in women than men.

FIGURE 5. BOX PLOT ANALYSIS OF LITERCAY RATES AND INTERNET USAGE IN RURAL INDIA



(Data is in %) Source- Author, 2022

This is an indicator of the differences in education level in women as compared to men. Outliers are also more in literacy among women Thus, it can be concluded that there is a clear difference between internet usage among rural men and women and literacy has a positive bearing on the usage in both the categories. More variations are observed for women which can be a probable indicator of accessibility constraints to the internet. Further, no clear geographic patterning is observed in this distribution.

REFERENCES-

1. Brunn SD. The Internet as 'the new world' of and for geography: speed, structures, volumes, humility and civility. Geo Journal, 1998;45(1): 5-15.

2. Dodge M. The Geographies of Cyberspace. Centre for Advanced Spatial Analysis working paper. May 1999. Retrieved 2022, from https://discovery.ucl.ac.uk/id/eprint/266/1/cyberspace.pdf

3. Robin J, Salamatian K. Envisioning Cyber-geography. Hérodote, 2014;152-153(1-2);123-139.

4. Kitchin R, Dodge M. Cybergeography. Retrieved 2022, from https://kitchin.org/wp-content/uploads/2019/04/Cybergeography-2008.pdf

5. James J. Mechanisms of access to the Internet in rural areas of developing countries. Telematics and Informatics, 2010; 27(4): 370-376.

6. India GO. (n.d.). National Family Health Survey, India. Retrieved 2022, from http://rchiips.org: http://rchiips.org/nfhs/about.shtml

7. WARC. Internet usage in rural India overtakes urban areas. May 2020. Retrieved 2022, from https://www.warc.com: https://www.warc.com/newsandopinion/news/internet-usage-in-rural-india-overtakes-urban-areas/43588

8. BussinessToday.In By 2025, there'll be more internet users in rural India than urban areas: report. June 2021. Retrieved 2022, from https://www.businesstoday.in/latest/economy-politics/story/by-2025-there-will-be-more-internet-users-in-rural-india-than-urban-areas-report-298066-2021-06-03

9. IANS. India's active Internet population to hit 900 million by 2025: Report June 2021. Retrieved 2022, from https://www.business-standard.com: https://www.business-standard.com/article/technology/india-s-active-internet-population-to-hit-900-million-by-2025-report-121060300444_1.html

10. Fallows D. How Women and Men Use the Internet. Dec 2005. Retrieved 2022, from https://www.pewresearch.org: https://www.pewresearch.org/internet/2005/12/28/how-women-and-men-use-the-internet/

11. OECD. Bridging the Digital Gender Divide. 2018. Retrieved 2022, from https://www.oecd.org: https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf

12. ITU. Bridging the gender divide. July 2021. Retrieved 2022, from https://www.itu.int: https://www.itu.int/en/mediacentre/backgrounders/Pages/bridging-the-gender-divide.aspx

13. Ash J, Kitchin R, Leszczynski A. Digital turn, digital geographies? Progress in Human Geography, 2016;42(1).

14. Alibrandi M, Baker T. A Social History of GIS in Education, 1985-2007. In: Milson AJ, & Alibrandi M. (Eds). Digital Geography: Geospatial Technologies in the Social Studies Classroom. Charlotte: Information Age Publishing, Inc. 2008. pp. 3-38.

15. Owen J. Has the internet helped or hindered literacy skills? (2019, June). Retrieved 2022, from https://edtechnology.co.uk/: https://edtechnology.co.uk/comments/has-the-internet-helped-or-hindered-literacy-skills/

16. Dobler ES. Reading on the internet: The link between literacy and Technology. Journal of Adolescent & Adult Literacy, 2003;47(1):80-85.

17. Birru MS, Monaco VM, Charles L, Drew H, Njie V, Bierria T, Detlefsen E, Steinman RA. Internet usage by low-literacy adults seeking health information: an observational analysis. J Med Internet Res. 2004 Sep 3;6(3):e25.

18. Sinha MK. Internet literacy skills and internet usage patterns to access e-resources by Assam university library users: an evaluative study. (2012, January). Retrieved 2022, from https://www.researchgate.net/publication/264423472_Internet_literacy_skills_and_internet_usage_patterns_to_access_e-resources_by_Assam_university_library_users_an_evaluative_study

19. Van Deursen AA, van Djik JG. Modelling traditional literacy, internet skills and internet usage: An empirical study. Interacting With Computers. Oxford University Press, 2014.

20. Kim EM, Yang S. Internet literacy and digital natives' civic engagement: Internet skill literacy or Internet information literacy? Journal of Youth Studies, 2015;19(4): 438-456.

21. Zickuhr K, Madden M. Older adults and internet use (2012, June). Retrieved 2022, from https://www.sainetz.at/dokumente/studien/Older_adults_and_internet_use_2012.pdf

22. Van Deursen AJ, Helsper EJ. A nuanced understanding of Internet use and non-use among the elderly. European Journal of Communication, 2015; 30(2):171-187.

23. Morueta RT, Gomez JI, Gomez AH. The socio-demographic divide in Internet usage moderated by digital literacy support. Technology in Society, 2018;55: 47-55.

24. India OG. Census of India (2011). Provisional Population total. Retrieved 2022, from https://censusindia.gov.in: https://censusindia.gov.in/2011-prov-results/paper2/data_files/india/paper2_1.pdf

25. Home Affairs MO. (2011). Retrieved 2022, from https://censusindia.gov.in: https://censusindia.gov.in/2011-prov results/paper2vol2/data_files/Meghalaya/CHAPTER_IV.pdf.

26. NFHS. National Family Health Survey 2019-20. (2021). Retrieved 2021, from http://rchiips.org: http://rchiips.org/NFHS/NFHS5/pdf/NFHS%20data%20quality%20assurance.pdf

27. Statistics.com. Average Group Linkage (2022). Retrieved 2022, from https://www.statistics.com/glossary/average-group-linkage/

28. Good PI, Hardin JW. Common Errors in Statistics and How to Avoid Them. Wiley. 2003.

IMPROVING THE SOCIAL ACTIVITY OF STUDENTS ON THE BASIS OF PEDAGOGICAL NEOLOGY IS A SOCIO-PEDAGOGICAL NECESSITY

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ABSTRACT

The article discusses the need for social activity of students on the basis of pedagogical neology. The development of creative social activity among young students is one of the most important tasks of the National Project "Education". The social activity of young people is one of the significant components of the social development of students who are able to fully live in a new democratic society and be the most useful for it. The considered phenomenon of social activity in a detailed form allows specialists to understand and outline the right vectors for creating pedagogical conditions for the development of creative social activity of students.

KEYWORDS: *Students, Social Activity, Value Orientations, Pedagogical Neology, Initiative, Responsibility, Readiness For Action.*

INTRODUCTION

In the conditions of modernization of education, the training of specialists who are able to quickly respond to ongoing changes, build their own educational trajectory and professional activities in accordance with the requirements of modern society, and also overcome life's difficulties by activating internal reserves and personal potential is of particular relevance.

The formation of a socially active personality is, in fact, the response of the education system to the radical changes taking place in the spheres of material and spiritual production, in the labor market, in professional structures, and in the field of social communications. **[1]**

Active research aimed at constructing a theory of pedagogical neology has been carried out since the 1930s. 20th century I. Schumpeter and G. Menshveli introduced the term “innovation” into scientific circulation, which they considered the embodiment of a scientific discovery in a new technology or product. Since that moment, the concept of "innovation" and the associated terms "innovative process", "innovative potential" and others have acquired the status of general scientific categories of a high level of generalization and have enriched the conceptual systems of many sciences. **[2]**

The term "pedagogical neology" and the corresponding direction of scientific research appeared in Western Europe and the USA as early as the mid-1960s. In new studies of innovative processes in education, a number of problems of a theoretical and methodological nature are put forward related to innovations and the creative activity of a teacher (criteria for evaluating the new, traditions and innovations, the specifics of the innovation cycle, the attitude of the teacher to innovations, etc.). The German scientists W. Sombartai and W. Metscherlich, as well as the Austrian economist J. Schumpeter, are considered the founders.

Considering the system of basic concepts of pedagogical innovation, we highlight the block of creating something new in pedagogy. Here we consider such categories as new in pedagogy, classification of pedagogical innovations, conditions for creating a new one, criteria for novelty, a measure of the readiness of a new one for its development and use, traditions and innovation, stages of creating a new one in pedagogy, creators of a new one. In fact, this is the development of a categorical field of the theory of the new in pedagogy; these concepts are studied by pedagogical neology. **[3]**

Pedagogical neology - the doctrine of perception and evaluation, interpretation of the new in pedagogy (by scientists, practitioners and the general public); the doctrine of the application of pedagogical innovations in the educational process. There are two possible approaches to these issues: normative and “life”. The first one means the construction from the analysis of real processes of generation of new schemes, rules, algorithms that indicate the “correct” path for the birth of innovation. Often it is identified with the introduction of scientific ideas into practice, and its logic is presented in the simplest possible way: the birth of a scientific idea, its formalization in a methodological form, direct transfer by the efforts of researchers with the consent of the school into practice.

One of the problems of pedagogical neology is the typology of the new and the innovators. The problem of creating and implementing innovations requires the study of issues that are not studied or studied to a small extent in our pedagogy: the dependence of the spread of innovations on the characteristics of the environment, the patterns of perception of innovations by teachers, the technology of innovative training, the removal of psychological barriers, etc. Another aspect of the problem of innovation is to adapt innovations to new conditions. It is connected with the fact that in the activities of a teacher it is often necessary to transfer technologies, the content of training and education from other industries or those concepts that were developed in the past. Often the teacher carries out a mechanical transfer, which leads to the loss of the meaning of innovation in terms of ignoring the specifics of the education system, its history and traditions. **[4]**

Innovation is the materialized idea of a possible increase in efficiency. We define it as such a content of possible changes in the pedagogical reality, which leads (when the pedagogical community masters innovations and implements them) to a previously unknown state, not previously encountered in this form in the history of education, a result that develops the theory and practice of training and education. To determine the object and subject of pedagogical neology, it is necessary to determine the specific area of reality, the description and explanation of which this science is engaged in.

V.S. Lazarev proposes to consider the innovative process, conditions, methods and results of its implementation as an object of pedagogical neology; the subject of pedagogical neology is the relationship between the effectiveness of innovation processes and the factors that determine it, as well as ways to influence these factors in order to increase the effectiveness of changes. To determine the object and subject of pedagogical neology, in this case, an innovative process is chosen, which is based on innovative activity. The innovation process is understood as “the process of development of education through the creation, dissemination and development of innovations", and innovation activity is defined as "a purposeful transformation of the practice of educational activity through the creation, dissemination and development of new educational systems or some of their components". **[5]**

A.V. Khutorskoy believes that "the object of pedagogical neology cannot be limited only to the innovation process, since it includes other processes and phenomena characteristic of innovation. For example, from the point of view of synergetics, the processes of emergence and development of the new arise in the course of their external introduction, not only in the form of innovations, but also as a product of the transition of the system from one position to another in a non-equilibrium state. Such factors, when considered in detail, oblige us to make adjustments to the formulations of the concepts of the object and subject of pedagogical innovation proposed above.

IN AND. Zagvyazinsky believes that pedagogical innovation is a system or element of the pedagogical system that allows you to effectively solve the tasks set (and sometimes set the tasks themselves more accurately) that meet the progressive trends in the development of society. The author defines innovative processes in education as "the processes of emergence, development, penetration into the wide practice of pedagogical innovations. The subject, the bearer of this process is, first of all, the teacher-innovator.

Researchers V.S. Lazarev, B.P. Martirosyan believe that in their meaning innovation and innovation are identical concepts. They can be defined, and this is the case in many cases, as the process of introducing innovation into the educational system. But then there will be difficulties in breeding the concepts of "innovation" and "innovation process", "innovation" and "innovation process". Therefore, it is necessary to separate the understanding of the process and its result. The authors consider innovation (innovation) as an introduced (mastered) innovation. If an innovation is a potentially possible change, then an innovation (innovation) is a realized change that has become real from a possible one. With this understanding, innovation is innovation, but only possible. At the same time, an innovation is an innovation, but included in the corresponding educational system. They exist in different spaces. Innovation is at the same time on the outer border of many educational systems, it seems to offer itself to them. Innovation exists within specific educational systems that have mastered the innovation. They understand the process of transition from innovation to innovation as a process of implementation, as an innovation process, but not all, but only part of it. In order for an innovation to be included in the mass practice of education, it must be disseminated. Distribution (diffusion) of innovations is the third component of the innovation process. **[6]**

Innovative activity at the height of its constructive possibilities is called upon to be carried out in the dynamics of the collision and mutual enrichment of various "open" positions, capable of self-criticism and at the same time at the risk of taking on free responsibility. Dialogism, polyphony act as the structure-forming beginnings of the teacher's innovative activity. Readiness for constructive communication, an unbiased attitude to counter-argumentation, an attitude towards recognizing a rational moment in a different position, and so on. act, therefore, not only as ethical principles, but also as necessary conditions for the implementation of activities. The intensification of innovative processes in pedagogy is associated both with the social order and the means available in theoretical research and innovative experience that can ensure its implementation, and with significant changes in the sphere of consciousness of the pedagogical community as a whole. **[7]**

Pedagogical neology is a classification of pedagogical innovations according to the degree of their novelty. Novelty is the main result of the creative process and painstaking work and the main criterion for evaluating pedagogical research. Neology solves the following tasks:

1. Reveals the essence, specifics and sources of the emergence of the new in pedagogy.

2. Develops typologies of the new in pedagogy.

3. Determines the criteria and degree of novelty.

4. Identifies favorable conditions for the formation, development and approval of the new in pedagogy, both domestic and foreign.

5. Reveals the connections of neology with other sciences and areas.

6. Determines the role of pedagogical neology among other pedagogical studies.

One of the most common and important pedagogical conditions for the formation of social activity of a modern specialist is the socio-pedagogical competence of teachers of an educational institution, which is a component of his professional competence. Socio-pedagogical competence, as a complex integrative education, includes a set of systematized knowledge, skills, personal qualities, attitudes and beliefs that allow a specialist to freely navigate in a dynamically changing society, in the environment of his professional activity, making the most of his capabilities, adapting to the demands of society .

The next pedagogical condition is the use by teachers of an educational institution in their practical activities of the potential of the social environment as an additional pedagogical means of forming the social activity of students.

This condition includes both the socio-pedagogical competence of teachers and the representation of a high level of social activity in the structure of the personality of employees of an educational institution.

Teachers in the process of forming the social activity of students act as special agents of socialization, since I aim to neutralize the negative factors of socialization, while solving the problems of social education. The teacher must assess the social activity of a particular student through the prism of the structure of his social experience, and social experience through the potential for its development by the individual.

The teacher, acting as the subject of the process of forming the social activity of students, therefore, must have knowledge of diagnosing and activating the resources available to students for the implementation of educational and extracurricular activities, as well as knowledge of their own capabilities and the ability to transform personal resources into effective support programs.

A necessary pedagogical condition for the formation of social activity is the involvement of students in multifunctional socially-oriented extracurricular activities.

An important feature of extracurricular activities is its clearly defined educational and socio-pedagogical orientation, i.e. reliance on the social environment in achieving pedagogical goals. Extracurricular activities

is aimed at the purposeful use of the possibilities of the social environment as an additional pedagogical means of influencing the student's personality, providing conditions for effective social education, creative self-realization, the formation of activity and successful social development of the individual. **[8]**

The organization of extracurricular activities should be carried out in three interrelated processes: organization of social experience associated with the formation of the social and educational space of an educational institution and aimed at the active development of its students; education of students, the social and educational aspect of which is systematic social education, social and pedagogical education, stimulation of self-education; individual assistance aimed at developing the ability to make effective decisions that are adequate to specific personal-environmental situations.

The process of forming a socially active personality of a student involves determining and taking into account the potential of extracurricular activities of an educational institution. This activity is implemented in the following areas: disclosure, development and use of the social abilities of students and teachers; formation of individual practical knowledge, abilities, skills necessary to perform a specific professional work activity; active consumption of social experience, culture. It provides more intensive socialization of students, proximity to the professional environment, social relations, leading to the deep development of professional and personal qualities of the future specialist.

One of the pedagogical conditions can also be the provision of a phased formation of students' social activity in extracurricular activities. Gradual inclusion of students in extracurricular activities is carried out on the basis of taking into account the goals of vocational education, upbringing and personality formation of a future specialist, citizen, free personality, and implies a focus on the formation of structural signs of social activity: cognitive, evaluative-emotional, worldview, behavioral.

At the cognitive stage, the process of forming students' knowledge about social reality is carried out, giving information about the features of social communication, ways of interacting with the social environment, and forms of manifestation of activity. At this stage, it is necessary to organize the process of forming students' independence and stability of judgments about social norms that regulate people's relationships, the formation of skills to give a meaningful description of social, moral values and analyze how they can manifest themselves in behavior. Social, moral knowledge becomes for the individual the basis for solving educational, professional and, most importantly, life tasks.

The evaluative-emotional stage consists in the formation of a personal attitude to the manifestation of social activity. At this stage, the formation of value judgments and emotional attitudes of students to the phenomena of social reality, individual actions and deeds is organized, the essence of a subjective attitude to activity is observed.

The perception and internalization of social norms, values, as well as the development of one's own relations, values are impossible only on the cognitive

level and suggest the active role of emotions in this process. Personal emotions reflect the surrounding world in the form of a direct biased experience of the life meaning of phenomena and situations, the significance of one's behavior in a particular social activity. They are inextricably linked with the most important qualities of the personality, its moral content, the nature of the motivational sphere, aesthetic and moral value orientations.

The ideological stage involves the formation of a holistic view of social activity among students as a necessary quality of a person, due to the emergence of an internal readiness to be guided by the given principles and norms of behavior.

The worldview of a socially active person reveals her life position, program of behavior and actions, which is a necessary condition for determining the level of social activity. This stage should be characterized by the presence of such signs as: systemic beliefs of the individual, in which the functions of the emotional and rational components are observed; a wide range of students' beliefs, when a whole system of beliefs arises related to their future position as members of society, which for the most part is due to the profession they receive; manifestation of beliefs in the personal characteristics of students (responsibility, respect for another person, tolerance, etc.).

The behavioral stage is aimed at the formation of sustainable socially active behavior that manifests itself in any situation and is based on the emerging conscious skills and habits. An indicator of social activity at this stage is the orientation of the student's actions towards socially approved norms, values, judgments, beliefs, as well as the stability and independence of lines of behavior, the presence of a social position of the individual.

Taking certain actions, performing certain operations, the student shows his attitude to socially significant activities, other people and social groups, to himself, taking certain social positions. Indicators of the social activity of the individual at this stage can also be an active life and civic position; choice of moral patterns of behavior; active participation in the public affairs of an educational institution, a team; participation in student self-government; organizational and communication skills.

This pedagogical condition - ensuring the gradual formation of students' social activity - is focused on the selection of effective forms and methods of working with a person, depending on the level of formation of this quality in her.

The implementation of the presented conditions requires an increased level of social activity of the teaching staff of an educational institution, general cultural and special training of teachers. The end result of the organized activity for the formation of students' social activity is personal education, which includes a set of structural features (cognitive, emotional-value, worldview and behavioral), the qualities of a future specialist (humanistic, business and civil) and the social experience of the individual.

REFERENCES

1. Bakhtin MM. Aesthetics of verbal creativity. Moscow, 1979.

2. Lavrentiev GV. Humanitarianization of mathematical education: problems and prospects. Barnaul: Publishing House of AGU, 2001. 206p.

3. Lavrent'ev GV, Lavrent'eva NB. Pedagogical competence of a teacher as a condition for the introduction of educational innovations. Bulletin of the Altai Science. Barnaul. 2000;(1).

4. Mamurov BB. Mamanazarov AB. Conditions for the development of future teachers' skills in designing the educational process based on the acmeological approach. Available at: https://www.elibrary.ru/item.asp?id=37269472

5. Mamurov B. Development of project-based skills in the educational process for future teachers through acmeological consultation. Educational and Innovative Research. 2020;1(1).

6. Mamurov BB. Axiological Approach in Preparing Future Teachers To Design The Educational Process. Pedagogical Education and Science, 2015;(6):121-123.

7. Slastenin VA, Podymova LS. Pedagogy: innovative activity. Moscow: Master, 1997.

8. Yusufbekova RN. General foundations of pedagogical innovation. Experience in developing the theory of innovative processes in education. Moscow, 1991.

EFFECTIVENESS OF USING FOLKLORE MUSIC IN THE CHILDREN'S EDUCATION

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ABSTRACT

This article provides detailed information on the art of Uzbek children's folk music, its types, the process of formation and development and its role in children's lives. The article offers scientific and theoretical observations on the use of children's folk music in the education of primary school children's age and its practical effectiveness.

KEYWORDS: *Folklore, The Art Of Music, Traditions, Values, Researches, Music And Aesthetic Up-Bringing, Dance, Song, Children's Teams, Lapars, Creativity, Classical Music, Traditional Professional Music.*

INTRODUCTION

The musical culture of the Uzbek people has a long history. Throughout history, folk and classical music, traditional professional music, folk compositions, as well as folklore and amateur musical heritage have complemented each other in form and style. This musical heritage is still a part of our spiritual culture. Thanks to independence, the focus on our national and spiritual values, traditions, historically valuable and forgotten events, the process of their reform has become a priority. Attention to our national values, traditions and spiritual wealth has risen to the level of the state. From the first years of independence, a lot has been done to preserve and restore the spiritual wealth of our ancestors, including musical culture, as well as to keep pace with the times. In this regard, the main factor is the great spiritual wealth left to us by our ancestors. At present, as the President Sh.M.Mirziyoyev said: "Careful preservation and reproduction of the historical, cultural and intellectual heritage of the Uzbek people, as well as the upbringing of the younger generation in the spirit of universal and national traditions and values. We need to pay attention." **[1]**

That is clear from history that our musical culture, traditional songs, folk songs and dances, which are the main link of our spirituality, have always been recognized as spiritual food for the soul life of our people in the daily. People sought refuge in music in difficult times, and in times of joy, songs and music accompanied them. After all, in today's blessed days, in a time of self-realization, it is natural to rely on our national musical culture, which is part of our great spirituality, inherited from our ancestors, to address our folk music, our traditional songs. All this plays an important role in the upbringing of a harmoniously developed generation, in shaping the spiritual worldview of young people. Our traditional music and songs have always called people to faith, kindness and humanity. Even today, folk music remains a key factor in the formation of people's consciousness, as a tool in the education of a harmoniously developed generation, without losing its relevance.

The art of singing, music, dance, folklore performance is one of the ancient art forms of national music, which appeared and developed in close connection with the life and work of the people. In particular, the songs of our people in the traditional spirit are an immortal heritage, and today, as in all times, they meet all the educational requirements with an open mind. But at the same time, it is natural that not only the worship of history, but also the creation of songs in accordance with the spirit of today should be an important task for all professionals and artists engaged in music, which is a key factor in the development of our national ideology. Our country has started a completely new society, a new life and a new breath. Our people's hearts, minds and imaginations have changed. **[2]**

The issue of spirituality includes many factors, such as the history of the nation, moral and religious values, cultural heritage, traditions and customs, patriotism and humanism, the understanding of national identity, and, ultimately, the key to human identity serves as a criterion. The natural pursuit of material well-being should not interfere with the nation's need for spiritual and intellectual growth. Spirituality and enlightenment have always been the strongest feature of our people for centuries. Based on these principles, all areas of spirituality will need to define their own goals and objectives. In cultural life today there are shifts on this principle. It would not be a mistake to say that the minds of the creators are guided by these principles.

Musical culture is distinguished by its diversity. In particular, the rich musical heritage of the Uzbek people, whose deep roots go back to ancient times, has not fallen from our daily lives. It includes high samples of folk art, folklore performance, melody structure, content-rich instruments and songs, performance of epics and a series of complex performances of so-called maqom music. In addition, the works of folk composers, who have made significant contributions to the folk music culture at all times, also play an important role.

The purposefulness, pedagogically correct and effective process of upbringing in the cognition of a healthy young generation depends on its organization. Protecting the younger generation from the influence of alien, destructive ideas, preventing them from taking life lightly, forming in them good ideas and thoughts, building the characteristics of a socially active person. It is possible to raise the level of navigation to a higher level. To achieve these goals, music education, as mentioned above, is rich in many natural and effective opportunities.

In the education of music, the creative use of folk songs, educational tools consisting of the national worldviews of our ancestors in the education of healthy young people gives good results. The use of Uzbek folk songs, especially the targeted use of children's folklore, to instill in the hearts of the younger generation the ideas of our national ideology from an early age will ensure the guaranteed results.

“Folklore includes folk wisdom. The wise, creative Uzbek people have long believed in the power and charm of the artistic word in educating the younger generation. He created his most unique works with the miracle of words.[2] Children's folklore is formed as a whole system of songs and games, which are the result of the combination of the world of children with the world of adults. Children's folklore cultivates in children the best qualities - patriotism, love of work, trust in people, loyalty to friends. Both adults and children contributed equally to the creation of children's folklore. Adults have created poems to pamper children, and these genres, which have the characteristics of pampering, such as alla, aytim, applause, rubbing, curiosity, are expressed in the form of motherly folklore.

“Motherhood folklore is a concept in the broadest sense, with pampering leading the way in poetic examples. Based on this logic, a series of poetic works in motherly folklore can also be called motherly caressing poems with the intention of distinguishing them more clearly from the group of prose works”. **[3]**

In turn, the samples of pampering poetry are divided into groups according to the purpose of performance, place and age of the child. The songs of the first group are closely connected with the period of the child's cradle. That's why they are called lullabies. Gods, sayings, applause, have such qualities. Lullabies are sung until the child is three years old. "According to the socio-aesthetic value of Gods, in addition to putting a child to sleep, it also has an educational and aesthetic significance." **[4]**

The most prominent theme in lullabies is the description of the child and the mother's dreams. A mother describes her child in good words she knows and sings about her dreams:

Qo`ziboqqanqo`yetsin,

Topganimgato`yyetsin .

To`y-to`ylargaulansin,

Davlatboshinggao`rnashsin.

Alla-yo, alla.

The songs of the second group are performed from birth to the age of 10-11, but are not actually connected to the cradle, but are the result of maternal affection. These are love songs, consisting of pampering, rubbing, curiosity.

The applause is a caressing ritual, often performed in a variety of children's cradle ceremonies. When a baby is placed in a crib, bathed, when he takes his first step, when his hair is first removed, when incense is burned in the child's honor, there are applauses according to the content of all the rituals. Here are some suggestions on how to look or get an appointment for baby clothes:

San biryillik,

Man mingyillik,

Kiya-kiyato`zdiraylik,

Dugonalarimdanuzdiraylik.

Caresses: caresses are said when little ones are crying, screaming and crying, when they become restless, and are performed to lift the mood:

O, shugina, shiringina,

Munchagina, tunchagina

Kunchagina, shunchagina,

Yashnabturgankunchagina.

Cuddling and applauding words such as "Long live", "Balli", "Well done", "Thank you" also bring joy to the child.

Calming: in the mother's relationship with the child we can see traces of very ancient habits. This confirms that people, along with different forms of life and traditions, were in their time animistic, totemistic concepts. We observe these concepts in the actions of some older people. For example, when a mother puts a child in a cradle, she straightens the umbilical cord with her right hand, and then when laying the child down, she is careful: let the owners come in, let the grandparents come out. When he takes the child out of the cradle, he says, "Let him sleep in the cradle." Two things attract our attention: the first is the child who owns the cradle. Until they put the baby in the crib, this place is temporarily occupied by something else. When the owner comes, he has to vacate the place. The second is that sleep should be separated from the child and remain in the cradle. "A certain set of cradles also serves as a measure of the actions of mothers." **[5]** For example, when a mother takes off a child in a cradle, she raises a goose from her right wrist and says, "Grow up, grow up," and again lifts her left wrist and says, "Grow up, grow up" she says.Calmings also include compliments to calm the child:

Vuy-vuy, shuginanikimurdi,

Vuy-vuy, shuginagakim lab burdi.

Yig`lamaoppoqqinam,

Boshimdagiqalpoqqinam.

Tongue twisters and riddles. Rhetoric or word games are one of the types of Uzbek folklore, based on the frequent repetition of certain speech sounds or the complex placement of sounds in words and phrases. With the help of quick pronunciation, children practice fluent, clear pronunciation of sounds and words in their native language, the melody of sounds, the ability to feel and comprehend, identify and grasp the subtle meanings of words:

Qishdakishmishpishmasmish,

Pishsakishmishqishmasmish.

In the Uzbek folklore, tongue twistersand word games have existed since ancient times. In the works of such thinkers as Lutfi, AlisherNavoi, we can also find word games. Speaking about tuyugs (for line poem), A. Navoi, pointing out that its roots come from the genres of folk poetry, equates tuyugs with "yor-yor", "songs". Tajnis and iyham are defined as the art of words which have two or more meaning. Most pronunciation are based on very different phonemes, including consonants “Sh”, “L”, and “R”. For example: «Lola arralaydi, Soraallalaydi»With the help of quick pronunciations in the first category, it is known that children aged three or four can pronounce the sounds "*R", "Sh"* correctly or replace them with "*L*" and "*S*".

There is another set of tongue twisters, which, in addition to teaching the child to pronounce certain sounds correctly, are involved in gathering the child's imagination, to determine the logical emphasis of the sentence. For example: “*Birtup tut, birtuptutningtagidabirtupturp. Birtup tut birtupturpningtomiriniturtibturibdi, birtupturpbirtuptutningtomiriniturtibturibdi”*. It is obvious that in addition to the correct pronunciation of the words "tut", "turp" in the example, it is necessary to remember the correct repetition, the position of the sounds and their condition of the *tut* and *turp*. Rapid pronunciation not only helps to correct the distortion of certain speech sounds in the speech of young school-age children, but also strengthens the norms of literary pronunciation in children who speak correctly, as well as develops and emphasize a sense of musical rhythm.

There are no "auxiliary" words in the myths about the child's teeth, and folk tales are told orally, and some usual things are done: mothers roast wheat in a pot and sprinkle it on the baby, that is, they want their teeth to be as beautiful as wheat. The gathered children are treated to a roast of wheat. Sometimes this custom is explained by scattering wheat and saying "good luck". In cattle ranches, the babies are put on the horse at the time of ejaculationof teeth, and it is said that "the horse's teeth come out." If it is put on a sheep, a "sheep tooth" will appear.

Word games play a key role in the oral traditions of the Uzbek people, such as askiya(classic jokes), tuyuklar (4 line poems), kachirim, bahribayt (competition on telling poems by heart). From a very young age, children witness the mastery of the richness of the native language, which they hear from adults. At the same time, children are learning to understand several meanings of the same word. Later, they also make up word phrases like a word game. For example, children hear such word games from adults:

“Qizaribpishganolmadi,

Olmadannegaolmadi,

Olmaganixo`bbo`bdi,

Endikelsaolma, de” **[6]**

This is the culmination of classical literature, based on the popular quatrain tajnis. The child is not able to "weave" another version of it, but, depending on his strength, creates a word game consisting of two lines, not four:

Olmaxonolmaniol, ma!

Olmaniolmaxondanolma.

Here the word apple is used first in the sense of command, then denial. In the verses, the word game is also based on these two meanings, in which the child is required to be able to distinguish the meanings of these words. The interesting thing here is that the commands and denials in the verses are expressed in musical tones, in the rhythm corresponding to these tones, and this situation naturally has a strong influence on the musical and aesthetic upbringing of the child.

Children's songs: people decorated their work, all the events of life with songs. Among the riches of Uzbek folklore, a significant type of songs inherited from adults to children are labor songs:

Oqsholi, ko`ksholi,

Oqsholinioqlaylik,

Ko`ksholiniko`klaylik,

Niyozbekkasaqlaylik.

There are many legends, songs and fairy tales about water among the people. The best dreams of the Uzbek people are connected with water. Children are not left out of this national spirit. Their games and songs also have the theme of water and natural phenomena. One of them is about rain:

Yomg`iryog`aloq,

Echkisog`aloq,

Boyningo`g`lini

Qornidumaloq.

There are several variants of one song:

Yomg`iryog`aloq,

Yam-yashilo`tloq,

Endiekinlar,

Chiqararquloq.

In Bukhara region on the basis of Uzbek and Tajik languages: they say«Yomg`ir-yomg`ir bore-bore yoqqaningniko`ray». In Fergana little girls sing - «Yomg`iryog`, Sochim o`s!» In Surkhandarya there are this kind variant of the song:

Yomg`iryog`sin,

O`ralarto`lsin,

Sur xotin,

Sur xotingasuvkerak,

Qozonto`la un kerak.

At the same time, it is clearly stated that the rain brings "pot-pot flour". Don-un, un-non. The child needs bread. There are songs about snow also. In ancient times, snow was a symbol of poverty, hunger and destitution. Snowfall is understood to be an involuntary event, in which a person has no choice but to obey. Therefore, the "snow letters" began with the words: "My god who made it snow." The man left in the snow is portrayed as a helpless man. Old men and women are often mentioned. The proverb "Snow falls on the rest of the work" is a failure, indicates that the work is not going well. An example of a song:

Qoryog`adiguppillab,

Ammamkelarcho`kkalab,

Ko`rpacha soling yonimga,

Ammamkelsauyimga

With the arrival of spring, children start playing. The boys fly the kite in the sky. Girls wear leaves in their hair. The children rub the willow twigs by hand, gently peel the skin and make their own squirrels. The little ones ride the hives as a "little horse". Boychechakwould be sungas the first children's song. They sing this song aloud:

Boychechagimboylandi,

Qozonto`laayrondi,

Ayroningdanbermasang,

Qozonlaringvayrondi.

Qattiqyerdanqatalabchiqqanboychechak,

Yumshoqyerdanyuguribchiqqanboychechak.

Boychechaknitutdilar,

Tutyog`ochgaosdilar.

Qilichminanchopdilar,

Baxmalminanyopdilar.

In the ancient East, the mulberry tree was considered one of the sacred trees. According to the Uzbeks, the tree is considered to have an "owner", and care is taken to make a comb and a cradle for children to comb their hair. The flower is probably a symbolic sign among the people. Because he is portrayed as a human being. They "catch" him, "hang him on a mulberry tree", "run with a sword", "cover him with velvet". Ethnographic historians acknowledged that such works took place in ancient Egypt and Greece 2-3 thousand years ago.

The plantain is a creative symbol in the concept of children, it is a symbol of youth and enthusiasm. In one version written by Uzbek children, it is "rare" to cut a flower with a sword, hit it with a "balgon" and then run it with a sword. So he was also a "rebel." In the Uzbek people, if someone grew up on his own, "after all, he is a flower that has grown out of hard ground!" they say. All this indicates that the flower is a symbol of a hard worker.

In the spring, the song "Chittigul" was also sung. With this song, children dance with actions appropriate to the song. The melody and rhythm of the song are a measure of the game and lead it. And dance fills the content of the song, gives it movement. Children enjoy the game both spiritually and physically and aesthetically at the same time. Let's imagine the performance of the song. The girls pair up, clap their hands at the same time, turn around, fight again and sing. When they say ‘chittigulo-chittigul’, the girls stand face to face. The hands clap in a certain order to create a beautiful tone. When it is said, "Hay-yu, chittigul, hay-yuchittigul," the girls go around in the same position and dance.

Chittigul-o, chittigul,

Xay-.yu chitigul,

Chittigulgagulbosay,

Biryoniniyonbosay,

Hay-yuchittigul,

In summer, the song "The stork came, the summer is over" is sung more often. This song evokes joy in the child's heart from the heat of the day, the sprouting of crops, the arrival of birds, the overflowing of canals. Children have heard many tales and legends about storks from their parents. They imagine the stork as an ambassador for the summer. Hay-yuchittigul.

Laylakkeldi, yozbo`ldi,

Qanotiqog`ozbo`ldi,

Laylakboraditoqqa,

Quloklaridaxalqa.

Xalqasitushibqoldi.

O`tirdiyiglamoqqa.

Laylakkeldiilonqoch,

Bola chaqangolibqoch,

Yangito`ningkiyibqoch.

Eskito`ningtashlabqoch.

There is another aspect of the song that is typical of children's songs: the end of the song unexpectedly ends with the quartet "Snake Escape". First of all, the child hates the snake, because where there is a snake, he cannot bathe. Second, the stork eats the snake, so it must escape. Thirdly, in the summer, when the stork comes, the snake will shed its skin. This song is a reflection of the season. There are many variants of this song, and in the process of singing it, children get acquainted with many natural phenomena and laws that interest them, as well as aesthetic pleasure. This situation also represents an important integral feature of musical-aesthetic education.

"There is no break in children's lives from singing, dancing and games." **[7]** There are more perfect songs and more complex ones than the ones mentioned above. We can call them legendary songs, adventurous children's teams due to their characteristics. After all, they are full of children's enthusiasm and curiosity, impatience and mobility, as well as the productive imagination of their emotions. Songs sung by Uzbek children, such as «Osmondagi oy» (The Moon in the Sky), «Asakaningyo`lida» (On the Way to Asaka), and, are among the dialogic songs. Such songs are highly developed forms of children's ability of singing **[8]**

Children's folk songs, dances and games, which are examples of folk art, contain actions based on a certain musical-rhythmic sequence, symbolic ethnographic details, samples of musical-poetic folklore, elements of rhythm, melody and spectacle. is a syncretic phenomenon that integrates itself as a wholesphere. Children's games originated in ancient times as part of primitive rituals and ceremonies, which are one of the most ancient elements of the thinking of our ancestors. The first information about children's folklore is recorded in the work "Devonulugatitturk" by the famous Turkic scholar Mahmud Kashgari, who lived in the XI century. Children's interest in game selection and types of games, as well as children's folklore, have changed over the years. The spirit of patriotism is evident in today's musical-rhythmic games and children's folk songs. Such examples of folklore are a reflection of the knowledge and experience of the people over the years. **[9-11]**

REFERENCES

1. Mirziyoyev ShM. President of the Republic of Uzbekistan Sh.M. Mirziyoyev's speech at the opening ceremony of the International Conference of Maqom Art on September 6, 2018. Tashkent, 2018.
2. Law of the Republic of Uzbekistan "On Education". Tashkent, 2020. Available at: https://lex.uz/en/docs/5700831?type=print

3. Decree of the President of the Republic of Uzbekistan No. PF-4947 of February 7, 2017 "On the Action Strategy for further development of the Republic of Uzbekistan". "People's word", 2017 February 8. Available at: www.lex.uz.

4. Scientific-methodical brochure on the study of the state program for the implementation of the strategy of action in the "Year of dialogue with the people and the interests of man." Tashkent, "Spirituality"; 2017. 340p.

5. Jahongirov G. Uzbek children's folklore. Tashkent; 2005.

6. Kasimov N. Music folklore performance. Tashkent; 2000.

7. Razzokov X.Uzbek folk oral poetic creativity. Tashkent: "Teacher"; 1998.

8. Yuldasheva S, Sattorova G. Folklore and ethnographic ensembles. Tashkent: "Teacher"; 2007.

9. Alaviya M. Uzbek folk ceremonial songs. Tashkent; 1974.

10. Safarov O. Alla-yoalla. Tashkent: Cholpon; 2000.

11. Safarov O. Uzbek children's poetic folklore. Tashkent: FAN; 1983.

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TEXTBOOK FUNCTIONS IN THE DEVELOPMENT OF COGNITIVE INDEPENDENCE OF FUTURE MUSIC TEACHERS

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ABSTRACT

The article is devoted to the issues of competence of future music teachers, the composition of the necessary competencies, the features of their formation in the learning process, the specifics of the pedagogical activity of a teacher-musician. The pedagogical conditions necessary for the formation of professional competencies of music teachers are considered. Particular attention is paid to musical performance competence, which forms the basis of the special competences of a music teacher. The paper analyzes the general and special categories of competencies that music teachers need to possess. Since the specificity of the subject "Music" is associated with multifunctionality and an increased emotionally creative component, and require the development of special competencies related to musical performance, conducting and choral activities, as well as the need to organize special emotionally enriched, psychologically comfortable, dialogic relationships with students.

KEYWORDS: *Preparation Of Music Teachers, Generalized Teaching Methods, Musical Cognitive Activity*

INTRODUCTION

Modern society makes high demands on secondary school teachers, who are designed to provide a qualitatively new level of school education. Therefore, future school teachers should have the integrative qualities of a specialist - competence, which means a complex characteristic of the personality of a future teacher, combining the knowledge, skills and practical experience acquired in the learning process, as well as personal qualities that ensure readiness for successful and effective professional activity in a modern school. **[1]**

The competence of a future teacher in general and a music teacher in particular is determined by the composition of the necessary competencies considered as a result of professional education, which are enshrined in the state federal standards of higher education in the corresponding area of training. **[2]**

In order to achieve the educational results determined by the standard in the context of the modernization of the education system at all levels, it is necessary to use the most effective pedagogical technologies, methods and means that can provide high-quality training of specialists competent in all respects, capable of solving complex musical and pedagogical problems in a modern school. The effectiveness of the professional training of future music teachers is largely determined by the presence of pedagogical conditions, that is, a combination of pedagogical factors (informational, technological, personal) necessary for the formation of professional competencies of a musician teacher for successful and effective pedagogical activity in a modern school undergoing a period of modernization. The importance of determining the pedagogical conditions and principles of training future music teachers determines the relevance. **[3]**

The concept of specialist competence refers to the scope of his professional activity and is evaluated in terms of the success and efficiency of this activity.

The competence of a music teacher consists in his readiness to solve professional problems on the basis of the knowledge and skills acquired in the learning process, as well as the experience and personal qualities acquired.

The training of a future music teacher involves the creation of a specially organized educational space – an educational environment – the structure of which corresponds to the specifics of the direction of training, the composition and content of professional competencies. **[4]**

The specificity of the competence-based approach in education lies in the fact that the educational process is not limited only to the transfer of a certain set of knowledge and skills to students, it involves the comprehensive development of the personality of a future specialist, the cultivation of independence and initiative in him, the desire for self-education and creativity. **[5]**

Therefore, the results of training a future music teacher are his competencies: general cultural, general professional and professional, the composition of which is determined by the State Standard of Higher Education and the educational programs of educational institutions. According to the content of the competence of the future music teacher can be divided into two categories: general and special **[6].**

The general competencies are those required by all school teachers, regardless of the subject taught. The composition of general competencies is determined, in particular, by the professional standard "Teacher". The required general competencies include:

- Knowledge of theoretical disciplines- pedagogy, psychology, methods of teaching the subject, developmental physiology, etc.;
- Knowledge of modern pedagogical and educational technologies;
- Knowledge of curricula and textbooks;
- Knowledge of teaching aids, including teaching aids and classroom equipment;
- Knowledge of the rules of hygiene and safety of the educational environment;
- the ability to organize the educational process, evaluate and control its results;
- Ability to organize communication with students, their parents and colleagues;
- Ability to diagnose and resolve conflict situations**[4].**

These competencies are necessary for music teachers to the same extent as other subject teachers, however, the specifics of the subject and the peculiarities of its teaching, associated with multifunctionality and an increased emotional and creative component, require the development of special competencies related to musical performance, conductor and choral activities, as well as the need to build special emotionally rich, trusting, interactive relationships with students, without which the teaching of this subject is impossible.

In this regard, the training program for music teachers cannot be represented only by a set of individual special subjects, whether it be the history of music, conducting and choral or instrumental training, it should be an organized system of education and upbringing, focused on acquiring the competencies necessary for the upcoming musical pedagogical activity. Therefore, both the content and organizational components of the educational process must correspond to the specifics of music as a school subject that the graduate will teach after graduation.

The special competencies of a music teacher include:

- Ability to design and organize the pedagogical process of music education at school in accordance with the requirements of state standards;

- the ability to put into practice knowledge of the history, theory and methods of teaching the subject, as well as practical skills in musical performance and conducting and choral skills.

In practice, this means that a modern music teacher must have universal skills that allow him to accompany a musical instrument, conduct a choir, master vocals, pick notes by ear, and improvise. In the age of information technology, the traditional skills of a music teacher have been added to such as mastering a synthesizer, creating and editing tracks, recording phonograms, and creating arrangements using special computer programs. A music teacher should be an organizer and an active participant in school events that require musical accompaniment, understand modern musical technology and equipment.

Despite all the innovations associated with modern technologies, musical and performing skills remain the basis of the special competencies of a teacher-musician. It is musical performance competence that distinguishes a music teacher from all other school teachers. The profession of a music teacher combines the professional qualities of a teacher and a musician. Musical and performing activity is the main activity of a school music teacher, which means that his musical and performing competence is a defining function as part of professional competence.

A necessary condition for the formation of the competence of a music teacher is the integration of the taught disciplines into a single system so that the skills and abilities acquired by students in the classroom in vocal, conducting and choral skills, playing musical instruments, along with theoretical pedagogical, psychological and musical disciplines, constitute a complex necessary for the teacher. Competencies that he could apply in his future teaching activities **[1, p. 36].**

Since musical performance competence is a key component of the competence of a music teacher, as well as the most specific of all types of competence that distinguishes a musician teacher from all other school teachers, its formation requires special pedagogical conditions.

The formation of the leading competence of a music teacher from the point of view of a systematic approach is a purposeful externally controlled process of increasing the level of musical performance skills from the initial to the highest, which is determined by natural data, the degree of student involvement in the learning process, his motivation and personal characteristics.

For the most effective formation of this type of competence, a number of pedagogical conditions are necessary, among which the main and most specific in terms of the direction of training are:

1. Application of the principles of problem-based learning;

2. Organization of the educational process according to the type of dialogue;

3. Reflection and self-assessment;

4. Training on the principles of pedagogical facilitation.

The first condition is to use in the learning process mainly practical activities and technologies that are as close as possible to the upcoming future music teachers of pedagogical activity, in fact, the challenges and problems ahead. As teaching methods are used:

- setting problematic tasks related to mastering musical and performing skills;
- Creation of algorithms for solving typical musical and performing tasks;
- Simulation of situations typical for music lessons in high school.

The second condition is connected, first of all, with the specifics of musical performance activity, namely, several levels of interaction in the learning process, built on the principle of dialogue: "student - teacher", "performer - author", "performer - listener", "performer - accompanist. All these types of communication presuppose the ability and readiness of students for dialogue communication, which is necessary for the formation of musical and performing skills. **[7]**

The interactive nature of the interaction contributes to the emergence and verbalization of a complex of emotional experiences associated with the perception, analysis, performance of a musical work, that is, the quality necessary for teaching a subject at school. The ability to convey the thoughts and feelings of the author of a musical work and convey them to students is one of the key skills of a music teacher.

As teaching methods are used:

- Discussion of the work in a dialogue mode;
- Joint work of students;
- Support and discussion of emotional reactions;

- Non-judgmental nature of interaction

The third condition involves self-assessment by students of their activities and learning outcomes. Self-esteem and the desire for self-improvement is an integral part of the activity of a future music teacher, for whom a stop at the achieved level of musical performance should be tantamount to a loss of professional competence. A teacher-musician needs to constantly improve in professional skills, look for new methods, techniques and techniques, use the latest technologies, compare his performing art with the art of other performers and strive for excellence in the profession. All this involves constant rethinking of their activities, reflection and self-assessment.

Compliance with this condition is achieved through the use of the following pedagogical methods:

- Encouragement to selfassessment and use of mutual assessment of results;

 Creation in the educational process of situations involving reflection, self-assessment, argumentation of one's own position;

- Motivation for self-improvement through positive examples.

The fourth condition is based on an equivalent interaction between a teacher and a student, which implies professional growth and self-improvement in the process of training all subjects of the educational process. The teacher in this case acts as a coordinator of the process, stimulating and supporting the independent activity of students. The relationship between the teacher and the student in this case is built on a parity basis - as equal partners, they are looking for a solution to musical performance problems. In the educational process, a “success situation” is created and maintained, which stimulates all its participants to strive for new achievements.

Thus, the training of future music teachers in accordance with pedagogical principles - problematic, continuity, independence, reflection - subject to the pedagogical conditions described above, will ensure the training of modern competent specialists who are ready for the most effective musical and pedagogical activity in a modern school undergoing a period of modernization.

CONCLUSIONS

1. Professional training of a future music teacher should take place in an organized educational space, the structure of which corresponds to the specifics and content of his professional competencies.

2. The competencies of a music teacher are divided into general, necessary for all secondary school teachers, and special, specific to a given subject.

3. Among the set of special professional competencies of a music teacher, the key one is musical and performing competence, which reflects the specifics of the subject being taught and distinguishes the teacher-musician from other subject teachers.

4. The main pedagogical conditions for the formation of the key professional competence of a music teacher are: application of the principles of problem-based learning; organization of the educational process according to the type of dialogue; reflection and self-assessment; training on the principles of pedagogical facilitation.

REFERENCES

1. Dyurdina TN. Features of the formation of professional competence of the teacher of music in the process of implementation cii FGOS secondary vocational education.Bulletin of scientific conferences. 2017;6-1 (22):34 – 37.

2. Zimnyaya IA. Competency approach. What is it? (theoretical and methodological aspect. Higher education today: reforms, innovations, opyt. 2006;(8):20–26.

3. Kozyrevai VA. Competence approach in pedagogical education: collective monograph. St. Petersburg; 2005.

4. Yakovlev VS. Theoretical model formation of musical-performing competence-of-future-what-of-music-teachers. Teaching notes. Electronic scientific journal of the Kursk State University. 2010;2(14).

5. Yakovlev VS. Formation of musical and performing competence of the future music teacher in terms of level training at the university. Teaching notes. Electronic scientific journal of the Kursk State University. 2009;4(12).

6. YAkub AA. The specificity of the professional activity of a music teacher in modern society. International Journal of Experimental Education. 2019;(6):62–66.

7. Kurganova EA. Representations of students of pedagogical staff about tutor support of the educational process. Proceedings of the Institute of Pedagogy and Psychology of Education. 2019;(2):76 –81.

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PSYCHOLOGICAL ASPECTS OF PROFESSIONAL ORIENTATION OF STUDENTS

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ABSTRACT

This article researches the psychological aspects of the professional skills formation and knowledge in school-age children and the internal psychological characteristics of the teacher, the community and the adolescent who play a vital role in this process. The career choice process requires complex and far-sighted plans and the importance of developing the next generation. In addition to the system of measures for the training of teachers and special vocational training in the professional development of young people in the school is portrayed with specific explanations and experiences. Project systems for the organization of vocational education for students in grades 8-9-10 are analyzed.

KEYWORDS: *Motive, Professional Psychology, Labor Resources, Career Choice Criteria, Job Function, Technological Approach, Personal Development, Professional Perception, Thinking*

INTRODUCTION

Career guidance is preparing the younger generation to make career choices. By directing them to the profession, they should be considered as a scientific-practical system that creates a solid foundation for the formation of future professional decisions, career guidance for free and independent choice of profession. In directing each student to the profession take into account the individual characteristics and the need to fully provide labor resources in the interests of society. One of the most pressing issues today is the development of criteria for career choice of students.

In order to choose a profession, the student must have the ability to assess their capabilities, for example knowledge of relevant professions, having opportunities for these professions, plans for the future, awaring of information and news about emerging areas should be. Based on these requirements, according to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan decree of 466 of August 7, 2020 **[1]**, the organization of professional education of school graduates in the system of continuing education on the basis of their professional interests and abilities, involvement in the next type and stages of education was perceived as an important issue of correct and effective orientation to its preparatory areas. The document states that “vocational guidance in secondary schools is aimed at helping adolescents to choose a profession in accordance with their interests and aptitudes, interests and abilities, as well as to help them understand their professional identity and life. as a “consulting factor in the selection of the line” has been identified as a top priority.

Followings:

- Integration of the database of students with a high interest in vocational training and freelancing with the electronic database of employment of graduates of general secondary education, the creation of an information system for online monitoring;

- On the basis of the analysis of the professional orientation of students of general secondary education, students who can study in vocational schools after 9th grade in specific working professions career guidance among;

- 10th grade students from low-income families on the basis of lists approved by the Ministry of Neighborhood and Family Support in all governmental and non-governmental organizations that teach vocational and freelancing with the consent of their legal representative 'Issuance of documents (vouchers) covering winter expenses;

- Development and implementation of curricula and programs, internships, teaching aids for graduates in relevant professions;

- Development and introduction of effective forms of vocational guidance for students of general secondary education;

- Prioritization of vocational guidance for students of 10-11 grades of general secondary education on the basis of the (variable) curriculum in the field of elective sciences.

The formation of professional decisions of students means to convince students of the theoretical knowledge acquired in practice with the help of qualified professionals, to motivate them to the career, the qualities of professional culture (professional cognition, professional knowledge, professional is a process of consistent, systematic, continuous and purposeful pedagogical activity aimed at cultivating thinking, professional potential). Because the organization of students' professional orientation is a complex, long-term dialectical and psychological process, and its methodologically correct organization guarantees the success of achieving the intended goal. Effective use of available objective and subjective factors also helps students make the right career choices.

A new approach to the organization of career guidance among students, vitally, include the technological aspect. Students from thousands of professions should be able to take into account the existing professional qualities of students and enrich them, to make certain changes and innovations in the content of activities on the basis of a rational assessment of various situations in the chosen professional decision. Craftsmanship will be an important factor in the effectiveness of orientation.

The technological approach to the organization of vocational guidance is aimed at enhancening the theoretical and practical skills and abilities learned by learners, the organization of active career guidance and the development of professional decisions based on their professional abilities and skills. Psychologists and educators play an important role in this process. Because psychologically, a child's career choice depends on the child's character, his thinking and even his views.

Teachers, educators, educators, specialists, leaders who educate young people also have a psychological impact on students' career choices. They should not be educated but also, they have high human qualities.

No matter what profession or occupation a person is in, he is always in touch, it depends on the level, order, level of attitude, the degree to which he has mastered his culture. Vocational training is both a culture and an interaction in these processes. If a teacher wants to educate his students through a profession or a subject that he teaches, in order to teach him the culture of the profession, firstly, he must love his subject and know it well. Everyone must have mastered the culture of the profession. She or he loves her profession or science and tries to be cultured like his or her teacher. If a teacher does not like a science or their profession, if he is not cultured, if he is ignorant of the culture of the profession, then no matter how much he forces students, this science will have no educational effect on them. It doesn't make them civilized.

The role of parents and the community in career guidance in general secondary education

The unity of school, family, community and industry is a key principle in educating the younger generation in a new morality. The development and formation of professional interests in students, the increase of social attention to the professions of workers in industry, construction, agricultural services, the success of the conscious choice of life path bring together school, family, neighborhood and industry depends on the effective work done.

The basics of personal development begin in the family that students begin to get acquainted with certain professions in the family, especially the professions of their parents, brothers, sisters, cousins, which is crucial for the development of students' professional interests.

Many parents need advice on career guidance. They can get such help in the form of interviews, consultations and other activities from the school teaching staff, doctors, psychologists, business professionals. It is advisable for the school to organize and hold a parent conference in accordance with its planned activities. These conferences will be open to heads of human resources departments, regional staff, representatives of various professions, and educational institutions, as well as parents. They will talk about the knowledge and skills needed to be successful in the content of their profession, as well as where and how to take up the profession and how to be skilled in it; talk about the challenges young people face and recommendations for family conversations with students.

The great thinker Abu Ali Ibn Sino **[2]** states that the most important thing for human existence is a useful labor war. He believes that parents should teach their children a certain profession from an early age. Once a child has mastered the profession to a certain extent, he or she should be taught to use the profession, that is, to live an independent life through honest work. The thinker emphasizes that this work has two educational benefits for children:

1. After a child is able to live independently because of his profession and see his first interests, he becomes more attached to his profession, develops love for it and strives to improve it.

2. Once life is assigned to him, he develops a habit of his profession.

The process of getting used to the profession usually goes through three characteristic stages, each of which has very important features for educators. The first step in getting used to the profession is to get acquainted and understand your new role in the environment. It begins with the decision to take a specific qualification in the chosen profession and continues during the initial theoretical preparation for industrial education during the acquaintance with the training workshops and the institution.

Before carrying out vocational guidance in secondary and general education, we should consider the concept of "vocational guidance system", clarify the concepts that belong to it and are related to it. Let's look at the concept of "profession" first. A.A Jalolov used four approaches to define this term:

1) The environment in which a person performs the functions of a cocktail;

2) A community of people working in a specific field;

3) Preparation, as an example the ability of a person to perform certain labor functions with the help of all knowledge and skills;

4) The process of performing the functions of a professional a time-distributed division of labor.

The next concepts related to the concept of career guidance are "optant" and "optation" **[3].** That is, an option is a decision made to choose a career path, in which case the optant is the person who made that decision.

In order to better understand the meaning of the concept of career guidance, it is necessary to pay attention to another concept, namely, the process of choosing a profession that a person is inclined to. The process of realizing which profession is right for you is a continuous and multi-stage process of choosing a specific profession that a person is inclined to choose based on his or her personal career choices.

The main functions of value-semantic and spatial-temporal activities of adolescents in the process of career choice are self-development and ensuring the semantic and temporal prospects of career choice **[4].**

Such activity is associated with the development of the following personality traits.

-Meaningfulness of life - the future existence of goals in life that give meaning, direction and perspective of time, curiosity and emotional richness of life, satisfaction with self-awareness, a feature associated with the fact that in the future the young man will rely mainly on his own strength (Leontiev DA),

-Self-confidence in decision-making,

-Competence in time - the continuity of the past, present and future, ie the ability to see your life in general (Gozman L Ya, Croz MV)

-The accuracy of the choice is the direction, ie the system of stable dominant motives (Ginzburg MR). Flexibility in realizing one's values, the ability to respond quickly to changing circumstances **[5]**

-Creative implementation in practice

Thus, the analysis of the problem of psychological readiness of adolescents to make a conscious choice of future educational profile and profession in modern educational psychology leads to the following conclusions. **[6]**

The conclusion to be drawn that after a person has passed a certain stage of preparation, from the stage of transition to the next stage of high school, his interests, for himself in the future in this or that profession. Everyone will have to choose the right profession based on their employment plans. There are a number of methods that will help him to choose a profession, to get acquainted with the world of jobs and to get an idea of them. **[7]**

Theoretical and experimental studies have confirmed the significant impact of such a program on the effectiveness of the process of shaping the "readiness" of those young people to consciously choose their future educational profile. **[8]**

It shows the need to take into account the altering state of modern society and modern adolescents development and to make appropriate changes to improve career guidance programs. Teachers and psychologists need to be constantly vigilant and fully aware of the world of occupations, the modern labor market and the characteristics of adolescents. It should be noted that psychological work on professional counseling and career guidance can be effective only in conjunction with specially organized pedagogical work. **[9]**

However, the process of formulating personal characteristics that contribute to the readiness to choose an educational profile or profession is long, it begins in early childhood and in many respects depends on the upbringing of the child. If qualities such as self-confidence, awareness of decisions and behaviors, ability to plan and make choices, rather than external circumstances, are not formed in childhood, responsible actions in adolescence cannot be trusted. **[10]**

The study confirms the hypothesis that there is a link between the process of formation and the conscious career choice and the development of personal characteristics, as well as a positive impact on the formation of a specially developed psychological career guidance program.

REFERENCES

1. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 466 of August 7, 2020. Available at: https://cis-legislation.com/

2. Chernikova TV. Career Orientation for Senior Students: Curriculum Collection. Volgograd: Teacher; 2005. 120p.

3. Magzumov PT, Antonov AF. et al. Preparing Students for Job and Career Choices. Tashkent: "Teacher"; 1991. p.132

4. Pryajnikov NS. Fundamentals of organization and planning of career guidance work in school. Psychology and education. 2004;(4):85-94.

5. Revina LA. The impact of academic work; on shaping the readiness of adolescents to consciously choose a future profession. University Bulletin (Russian State University of Management). Moscow. 2007;9(35):103-104.

6. Rezapkina GV. Me and My Profession: A Professional Self-Determination Program for Adolescents. Moscow. 2000.

7. Rezapkina GV. Courses Career Choice. School psychologist. 2006;14(372):4-45.

8. Rubinstein CJI. Problems of General Psychology. Moscow. 1973, 423p.

9. Rubinstein C. Principles of Psychology and Ways of Development. Moscow. 1959.

10. Boltaboyev SA, Magdiyev OSH, Sattorov VN, Avazboyev OI. Training on labor and vocational education methods. A guide. 2002.

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SELF-EDUCATION OF ADOLESCENT SCHOOLCHILDREN AS A SOCIO-PEDAGOGICAL NECESSITY

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ABSTRACT

In modern conditions, the question of the need for self-education of students remains relevant. Today it is impossible to find a single sphere of human activity that is not associated with the generally recognized spiritual and material values of society as a whole and of each person. In this regard, the purpose of the article is to consider the need to build pedagogical systems for the actualization of the student's self-education, which are set by the emerging trends of humanization, differentiation of the environmental friendliness of social processes, elevating the function of education in the structure of educational processes and causing the need for a new reading of the concept of education as a synthesis of the processes of learning and learning, upbringing and self-education, development and self-development, maturation and socialization of the individual.

KEYWORDS: *Students, Self-Education, Actualization, Pedagogical Technology, Value Orientations.*

INTRODUCTION

“Water does not flow under a lying stone,” says the proverb. What is this phrase about: about nature, about man, or about the nature of human development? Most likely, folk wisdom gives us the secret of self-education: until the person himself wants to learn something new, learn something, acquire new personal qualities, cope with his shortcomings, until he puts his efforts into it, overcomes life's difficulties, will conquer his fears, complexes and laziness, will not learn to live in harmony with himself and the people around him, personality development will not occur. **[1]**

Consequently, the main source of self-education and self-development is the purposeful activity of the person himself - physical, intellectual, social, cognitive, spiritual, communicative, etc. That is, each person must be the subject of his life, set himself more and more goals of self-improvement and achieve them, overcoming various obstacles.

In modern society, children and adolescents are often accused of passivity, lack of initiative, social rigidity; adults note their excessive enthusiasm for gadgets, the Internet, social networks, avoiding real interpersonal communication and interaction in a virtual, illusory world. It is probably worth considering: “Why does the younger generation not strive to be active, to self-actualize their potentials in society and develop abilities in various activities?” Perhaps adults themselves are partly to blame for this - parents, teachers, those around them, who did not create the necessary conditions for the development of the child's personality, did not teach him constructive forms of cooperation, did not form the values of self-education and self-development, did not help overcome social difficulties in time. **[2]**

Each age stage of childhood is characterized by specific needs for self-knowledge, self-understanding, self-development and self-education; at each stage of ontogenesis, the development of the self-concept takes place, an integral system of interaction of the individual with adults and peers is formed; Each age period is characterized by specific difficulties and barriers to self-realization in society.

The program of self-education of adolescents is characterized by a strong-willed orientation. Self-education of will, determination, independence, etc. is determined by the peculiarities of the formation of the process of self-education in adolescence, is an integral feature of this age. At the same time, the moral orientation of self-education is determined by the level of the educational process. With insufficient effectiveness of the upbringing process, unfavorable external conditions and the situational nature of self-education in adolescence lead to a negative orientation of the self-education program. **[3]**

To manage the process of students' awareness of their personality, one should organize their activities, in which their positive qualities and shortcomings are most clearly manifested, use the pedagogical assessment of the students' personality, public opinion and criticism of the shortcomings of students by the team, include adolescents and young men in conflict situations that contribute to understanding students conflicts between their needs and their own strengths.

To manage the personal meaning of self-education activities, to organize children's awareness of the role of self-education in their lives, both direct and indirect perspectives should be used. The latter help not only to connect self-improvement with the issues of solving specific life tasks, and thereby increase interest in working on oneself, but also contribute to the establishment of certain boundaries in self-education, which makes it more specific in terms of tasks and time **[4, p. 218].**

The leading way to manage the passage of these stages is determined by the general logic of managing the formation of personality: the inclusion of the educated person in the system of relations set by teachers through the organization of his activities. This involves putting forward a pedagogical model of behavior to students, encouraging them to follow it, transforming it into a personal model of self-education. Several stages should be distinguished.

The first stage - preparatory - is characterized by the formation in the inner world of the personality of the necessary prerequisites for the emergence and positive resolution of the conflict contradiction between the old, negative, and new, positive, relationships. **[5]**

Management of this stage involves the creation of conditions conducive to the formation of a new experience of moral behavior, the experience of moral relations that hinder the manifestation of old negative inclinations and habits. The "difficult" one is informed about the patterns of moral behavior and organizes the student's activity, its personal meaning in accordance with the proposed model. It is obvious that at this stage the process of re-education merges with the process of education. Conflict and the destruction of shortcomings are only being prepared.

The preparatory stage is followed by the central conflict stage. Negative patterns of behavior are rejected by students, moral ones become personal. This stage determines the specifics of the management of the process of re-education.

Direct management of this stage involves the creation of conditions conducive to the aggravation of contradictions between new and old relations, the rejection of the latter.

The third, final, stage of self-education is characterized by the desire of the individual for moral self-education due to the assimilation of positive ideals, dissatisfaction with their shortcomings. At this stage, external influences on the re-educated student receive support in his efforts aimed at self-education. Given the student's desire for self-education, it is important to create favorable conditions for his work on himself, to help him choose effective, pedagogically appropriate ways and means of self-education. **[6]**

The fact that the self-education of the individual is not only a condition for the successful completion of the process of re-education, but is itself a consequence of its movement, emphasizes the particularly responsible role of organizing the first two stages of the process of re-education.

In understanding the concept of “self-development”, we proceed from the concept of “development”. In pedagogical science, “development” is defined as change, which is a transition from simple to complex, from lower to higher; a process in which the gradual accumulation of quantitative changes leads to the onset of qualitative changes. The concept of “development” here is given in relation to the growth of the human body and changes in its psyche. The above definition is more consistent with the philosophical definition: development is the highest type of movement, changes in matter and consciousness; transition from one qualitative state to another, from old to new. Development is characterized by a specific object, structure (mechanism), source, forms and direction.

The following functions of self-education should be singled out: accelerating the development of talents and abilities, improving the creative principle in a person; taking into account individual requests and personality traits; formation of the orientation of the personality, its self-awareness, the necessary volitional qualities; prevention of mistakes and failures in the process of working on oneself; ensuring constant enrichment of motivation through the formation of more mature ideals, socially significant goals of life, value orientations; organizing the exchange of experience in working on oneself in various areas of self-improvement. **[7]**

In the light of the humanization of education, "the humanization of educational relations, the recognition of the value of the child as a person, his rights to freedom, social protection as a person." The listed functions of self-education should be supplemented:

- Familiarization of educators and pupils with the values of humanitarian culture, their internalization, and on this basis the upbringing of spirituality and morality;

- Creation of conditions for the development of the student as a subject of culture and his own life-creation;

- assisting the student in the development of creative potential, inclinations, abilities, life self-determination, full self-realization of his individuality.

1. Theoretical analysis showed that the structure and dialectics of the process of self-education is complex, therefore, the preservation of its features and successful functioning is possible when the appropriate conditions are created. The process of updating self-education acquires the character of a pedagogical system if:

2. the scientific level of education in an educational institution is represented by social meanings and value orientations of culture, in which the priorities and needs of the individual act as a humanistic imperative;
3. the normative level of education is represented by goals, programs and evaluation mechanisms that embody the social meanings and values of a student-centered pedagogical process, which includes the actualization of the student's self-education as an effective mechanism;
4. the methodological level of actualization of the student's self-education is represented by a system of technologies and diagnostic tools that are subject to the psychological and pedagogical laws of the formation of the student as a subject of culture based on the activation of his self-education, self-development, self-actualization;
5. the empirical level of actualization of self-education is represented by the forms of organization of pedagogical activity aimed at creating the conditions for the formation of the student, based on the student's ability to show a practically transformative attitude to his own life, using the means of culture for this.
6. We see the main provisions of the process of updating the self-education of high school students in the following:
7. Value-semantic and methodological substantiation of the pedagogical system of actualization of the student's self-education. The need for the construction of pedagogical systems for the actualization of the student's self-education is set by the tendencies of humanization, differentiation and environmental friendliness of social processes, in which the priorities of the individual's needs in education act as a humanistic development imperative.
8. Conceptual model of the student's self-education actualization. It has been established that the recognition of the existence and dynamics of value orientations is important: a) to improve the content and forms of training professionals; b) to understand the mechanisms of self-determination and self-realization of all subjects of educational systems; c) to explain the psychological mechanism for choosing new meanings in the activities of a teacher in implementing the principles of student-centered pedagogy; d) to create optimal psychological conditions for the development of social, cultural, moral values by students.
9. The conceptual model contains a theoretical core that provides the possibility of modeling the pedagogical system of actualization of the student's physical self-education through its structural and functional organization: a) methodological foundations; b) regulatory grounds; c) main ideas; d) essential characteristics; e) psychological and pedagogical patterns; f) structural and functional invariant of pedagogical activity.
10. The principles underlying the theory and practice of updating the self-education of students. The following are chosen as the basic principles: a) the principle of development as the dominant principle of actualization of the student's self-education; b) the principle of integrity as the principle of interconnection, interdependence and synthesis of all processes included in the process of education of the student; c) the principle of subjectivity, which implies the dialectics of the processes of pedagogical influence and pedagogical interaction between teachers and students; d) the principle of self-efficacy as the principle of developing the individual originality of the subject of self-education.

Within the framework of the new methodology, all the main problems of education should also be studied from the standpoint of understanding the interests (needs) of a person, which are satisfied by education as a social institution. In the former paradigm, this level was determined unambiguously by the interests of society, in the new paradigm, by the interests of "man, society, state".

For the new methodology of education, the concretization of the understanding of the essence of a person becomes fundamental, since his interests in education are a priority, and self-education has acquired a clearly personal orientation. **[8]**

In this regard, education should be understood both as a special sphere of social life that creates external and internal conditions for the development of an individual in the process of mastering the values of culture, and as a synthesis of learning and teaching (individual cognitive activity), upbringing and self-education, development and self-development, socialization and growing up.

Psychological and pedagogical mechanisms for actualizing the student's self-education are associated with the following ideas:

a) About self-determination as a process and result of a person's choice of his own position, goals and means of self-realization in specific circumstances of social life;

b) about self-education as a process, as a result of which the student becomes aware of his own socially significant integral abilities, their adequate and active manifestation in educational and cognitive activity, in thinking and communication, in mastering the experience of culture, taking into account the requirements that apply to the student in the process of implementation general education programs;

c) on the actualization of self-education as a subject-subject interaction in the process of solving problematic situations of development, which has the form of accepted support and determines the process of self-education in the parameters of the "zone of proximal development".

The interaction of the teacher and the student is the key mechanism for the actualization of the student's self-education - a phenomenon mediated by the dynamics of "actualization" (activity on the side of the teacher) and "self-actualization" (activity on the side of the student) with the aim of becoming self-actualization as an independent and elevated process.

REFERENCES

1. Alekseev NA. Lichnostno- oriented learning: questions of theory and practice [Personally-oriented education: questions of theory and practice]. Tymen:TymSU; 1996. 216p.

2. Amonashvili ShA. Reflections on humane pedagogy [Reflections about human epedagogy]. Moscow: Shalva Amonashvilli Editing House; 1996. 496p.

3. Vygotskiy LS. Psikhologiya [Psychology]. Moscow: Eksmo-Press; 2000. 1008 p.

4. Gershunsky VS. Philosophy of education for the XXI century [Philosophy for education of XXI century]. Moscow: Russia Pedagogical Unity; 2002. 508 p.

5. Selivanovoy NL. Humanistic educational systems of yesterday and today (as described by authors and researchers) [Humane educational systems of yesterday and today (descriptions of their authors and researchers)]. Moscow: Rus-sia Pedagogical Unity; 1998.336 p.

6. Davydov VV. Theory of developmental learning [Theory of develop education]. Moscow:

Pedagogy; 1972. 182 p.

7. Selevko GK. Modern educational technologies [Modern education-a technologies]. Moscow: People Education; 1998. 256 p.
8. Serikov VV. Education Identity. Theory and practice of designing pedagogical systems [Education and person. Theory and practice of projecting pedagogical systems]. Moscow: Logos, 1999. 272p.

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LEGAL STATUS AND PRIVATE PROPERTY OF PRIVATE ENTERPRISES IN UZBEKISTAN

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ABSTRACT

The article provides a legal analysis of the legal status of private enterprises and the specifics of enterprises. The issue of state protection of private enterprises and the opportunities created for them have been studied. A private enterprise shall have separate property in its possession, may have property and personal-non-property rights on its own behalf and may exercise them, fulfill its obligations, be a plaintiff and a defendant in court. Currently, the most common type of legal entity in the organizational and legal form of a private enterprise are farms.

KEYWORDS: *Private Enterprise, Enterprise Charter, Charter, Business Entities, Plaintiff, Defendant, Entities, Charter Capital, Contract, Financial Resource, Investment.*

INTRODUCTION AND SIGNIFICANCE

As a result of economic and legal reforms in the Republic of Uzbekistan, the role of private enterprises is growing. A private enterprise is established by the owner; the owner transfers the property belonging to him and approves its charter.

The constituent document of a private enterprise is its charter. The charter of a private enterprise must contain the firm name of the enterprise, information on its location and postal address, list of main activities, surname, name, patronymic and place of residence of the owner, the amount of the charter capital.

A private enterprise acquires the status of a legal entity from the moment of its state registration.

METHODS AND LEVEL OF LEARNING

The Law of the Republic of Uzbekistan “On Private Enterprises” **[1]** adopted on December 11, 2003 established the legal status of a commercial legal entity in a new organizational and legal form.

Pursuant to Article 3 of this law, a commercial organization created and managed by a single individual owner is recognized as a private enterprise. Private enterprise is an organizational and legal form of business entities. A private enterprise shall have separate property in its possession, may have property and personal-non-property rights on its own behalf and may exercise them, fulfill its obligations, be a plaintiff and a defendant in court. A private enterprise is liable for its obligations with all its property. In case of insufficiency of the property of the enterprise, the owner of the private enterprise shall be subsidiary liable for the obligations of the private enterprise with the property belonging to him in accordance with the legislation.

RESULTS OF THE RESEARCH

The charter capital of a private enterprise is indivisible and is determined by the owner. Money, securities, other monetary-valued property or property rights or other rights granted to another person may be contributions to the charter capital of a private enterprise. The owner independently assesses the property he contributes to the charter capital of the private enterprise.

The owner of a private enterprise manages the enterprise as a manager, acts on behalf of the enterprise without a power of attorney, represents its interests, manages the funds and other property of the private enterprise, concludes contracts, including employment contracts, issues power of attorney, opens bank accounts, approves states, issues orders and gives instructions that are binding on all employees of the enterprise **[2].**

The owner of a private enterprise must form the charter capital and manage the enterprise independently.

In case of temporary absence of the owner of a private enterprise, a written decision shall be made to entrust the performance of management duties to another individual during this period.

A private enterprise carries out any activities in accordance with the legislation. Profits of a private enterprise are transferred to the ownership of the owner of the enterprise after payment of taxes and other mandatory payments and are not taxed.

The owner of a private enterprise has the right to sell, gift, bequeath or transfer the private enterprise as a complex of property to another person in a special way.

Currently, the most common type of legal entity in the organizational and legal form of a private enterprise are farms. The formation of farms in this organizational and legal form was originally defined by the Decree of the First President of the Republic of Uzbekistan PF-3226 of March 24, 2003 "On the most important directions of deepening reforms in agriculture." This was later consolidated in the new version of the Law on Farms, adopted on August 26, 2004 **[3].**

A farm is an independent economic entity engaged in the production of agricultural goods using leased land plots.

Based on the requirements of the rules (norms) established by the Law of the Republic of Uzbekistan "On Private Enterprises", the specific features of the enterprise can be considered as follows:

1. The condition that the owner of a private enterprise personally manage the enterprise as a manager;

2. The profits of a private enterprise shall be at the disposal of its owner after payment of taxes and other obligatory payments and shall not be subject to taxation;

3. It is very easy to register and liquidate an enterprise, lack of formal paperwork;

4. The owner of the enterprise has the opportunity to move completely freely.

5. The income of the entrepreneur comes directly from his productive activity in the field of business, which in turn encourages him to run an effective business;

6. Significant shortage of financial resources;

7. Insufficient capital of the entrepreneur to start a business; the difficulty of expanding the work he has begun;

8. The liability of a private enterprise is not limited, ie the entrepreneur risks himself with all his property, and in comparison with the shareholders, they risk only with the assets of the firm, and not with their own property;

9. The owner must be the head of the enterprise. This, in turn, creates problems for him to become an entrepreneur, limiting his ability to invest in other projects, as the management of a private enterprise takes up a certain period of his working life.

CONCLUSION

In conclusion, as stated in Articles 53-54 of the Constitution of the Republic of Uzbekistan, private property, like other forms of property, is inviolable and under state protection. **[4,5]**

The owner owns, uses, and disposes of the property at will.These rules serve as a legal basis, a guarantee for the further development and improvement of market relations.

REFERENCES

1. The Constitution of the Republic of Uzbekistan, Tashkent: “Uzbekistan”. 2018, Part 3, Chapter XII, Articles 53-54, pages 18-19. Available at: www.lex.uz.

2. Collection of the legislation of the Republic of Uzbekistan. Law of the Republic of Uzbekistan "On Private Enterprises", 2004, No. 3, Article 28. Available at: www.lex.uz.

3. Collection of the legislation of the Republic of Uzbekistan. 2003, No. 5-6, Article 46.

4. Collection of the legislation of the Republic of Uzbekistan. 2004, No. 40-41, Article 433.

5. Zokirov IB. “Civil law”, part 1, Tashkent; 2009. p.189.

INTEGRATED LEARNING IN THE STUDY OF CHEMISTRY COURSE

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ABSTRACT

The article defines integration and integrated learning, outlines the basic principles of integrated learning, methodological features of integrated lessons. The features of the structure of integrated lessons are explained, as well as the main purpose of integration.

KEYWORDS: *Integration, Interdisciplinary Connections, Intra-Subject Communication, Interrelation Of Phenomena, In-Depth Study, Formation Of Worldview*

INTRODUCTION

Integrated learning is one of the innovations of modern methodology. This technology boldly invades unshakable school curricula and connects seemingly incompatible subjects. Chemistry is no exception. As a result of the expansion of chemical research and the growth of chemical knowledge, new interdisciplinary fields of research have emerged. Chemistry interacts with a large number of disciplines, such as pharmacy, physics, ecology, geography and others. All these innovations are also deeply and interconnected covered by teachers in the study of chemistry **[1, p.77]**. The school subject "Chemistry" is integrated. It is connected with many other subjects and offers students knowledge of many fields of science, art, culture, as well as real everyday life. Integration in teaching involves, first of all, the essential development and deepening of interdisciplinary connections, which are analogous to the links between sciences, the transition from the coordination of teaching different subjects to their deep interaction.

Integration is a deep interpenetration, merging, as far as possible, generalized knowledge in a particular field in one educational material [**2, p.134].**

Integrated lessons give the student a fairly broad and vivid idea of the world in which he lives, about the relationship of phenomena and objects, about mutual assistance, about the existence of a diverse world of material and artistic culture.

The main emphasis is not so much on the assimilation of certain knowledge, as on the development of imaginative thinking. Integrated lessons also involve the mandatory development of creative activity of students. This allows you to use the content of all academic subjects, to attract information from various fields of science, culture, art, referring to the phenomena and events of the surrounding life.

The principles of integrated learning are designed to fully work towards achieving the main goal of integrated learning – the development of students' thinking.

1. Synthesized knowledge. A holistic, synthesized, systematized perception of the issues studied on a particular topic contributes to the development of breadth of thinking. The formulation of the problem investigated by integration methods develops purposefulness and activity of thinking.

2. Depth of study. Deeper insight into the essence of the topic under study contributes to the development of depth of thinking.

3. The relevance of the problem, or the practical significance of the problem. The mandatory implementation of the problem under consideration in some practical situation strengthens the practical orientation of learning, which develops critical thinking, the ability to compare theory with practice.

4. Alternative solutions. New approaches to a known situation, non-standard ways of solving a problem, the possibility of choosing a solution to this problem contribute to the development of flexibility of thinking, develop originality of thinking. Comparison of solutions develops activity, criticality, organization of thinking. Due to the desire to make a reasonable choice of actions, to find the shortest way to achieve the goal, purposefulness, rationality, economy of thinking develops.

5. Evidence of the decision. Evidence-based problem solving develops evidence-based thinking.

Methodological features of integrated lessons.

1. In an integrated lesson, blocks of knowledge of two or three different subjects are combined, so it is extremely important to correctly determine the main purpose of the integrated lesson. If the overall goal is defined, then only the information that is necessary for its implementation is taken from the content of the items.

2. Integration helps to relieve tension, overload, fatigue of students by switching them to a variety of activities during the lesson. When planning, careful determination of the optimal load by various types of student activities in the classroom is required.

3. When conducting an integrated lesson by teachers (leading different subjects), careful coordination of actions is required.

4. In the form of integrated lessons, it is advisable to conduct generalizing lessons, which will reveal the problems most important for two or more subjects, but an integrated lesson can be any lesson with its own structure, if knowledge, skills and results of analysis of the studied material by methods of other sciences, other academic subjects are involved in its implementation.

5. In an integrated lesson of several subjects, one is the leader. Most often, integrated lessons are paired and conducted by teachers together. Various integration of academic subjects is possible.

The structure of integrated lessons differs from regular lessons in the following features:

- Extreme clarity, compactness, of educational material;

- Logical interdependence, interconnectedness of the material of the integrated subjects at each stage of the lesson;

- Large informative capacity of the educational material used in the lesson.

In the form of integrated lessons, it is advisable to conduct generalizing lessons, which will reveal the problems most important for two or more subjects.

In high school, integrated lessons are an essential part of the system of interdisciplinary communication. The material of such lessons shows the unity of the processes taking place in the world around us, allows students to see the interdependence of various sciences.

The main goal of integration is to create a holistic view of the world around the student, the formation of his worldview. There are some opportunities in the integrated construction of the educational process that allow us to qualitatively solve the tasks of teaching and educating students:

1. The transition from intra-subject connections to intersubject ones allows the student to transfer methods of action from one object to another, which facilitates learning and forms an idea of the integrity of the world. At the same time, it should be remembered that such a transition is possible only if there is a certain knowledge base of intra-subject connections, otherwise the transfer may be superficial and mechanical.

2. An increase in the share of problematic situations in the structure of integration of subjects activates the mental activity of the student, makes him look for new ways of learning educational material, forms a research type of personality.

3. Integration leads to an increase in the share of generalizing knowledge, allowing students to simultaneously trace the entire process of performing actions from the goal to the result, to perceive each stage of work meaningfully.

4. Integration increases the informative capacity of the lesson.

5. Integration allows you to find new factors that confirm or deepen certain observations, conclusions of students when studying various subjects.

6. Integration is a means of motivating learning among students, helps to activate the educational and cognitive activity of students, helps to relieve overstrain and fatigue.

7. The integration of educational material contributes to the development of creative thinking of students, allows them to apply their knowledge in real conditions, is one of the essential factors of culture education, an important means of forming personal qualities aimed at a kind attitude to nature, to people, to life.

8. Integrated lessons differ from regular lessons in great informativeness and therefore require a clear organization of cognitive activity. Such lessons should be extremely clear, compact, thought out at all stages. Such lessons reduce the fatigue of the brain, create comfortable conditions for the student as a person, increase the success of learning, and avoid a situation when a particular subject falls into the category of not loved ones.

Any components of the pedagogical process can be integrated in the lesson: goals, principles, content, methods and means of teaching. When, for example, the content is taken, any of its components can be distinguished for integration in it: concepts, laws, principles, definitions, signs, phenomena, hypotheses, events, facts, ideas, problems, etc.

It is also possible to integrate such components of the content as intellectual and practical skills and abilities. These components from different disciplines combined in one lesson become system-forming, educational material is collected around them and brought into a new system.

When teaching chemistry, one of the forms of knowledge integration is the implementation of interdisciplinary connections with related disciplines - biology and physics. In recent years, interesting works have appeared on the integration of chemical knowledge and knowledge from the humanities - literature and fine arts. In foreign publications, attempts are being made to conduct integrated lessons on the material of chemistry and English **[3, p.93].**

Any language is a sign system, behind each sign of which there must be a concept, a form that serves to express the content, and does not make sense if it is not filled with content. The study of language as a form of information transmission allows for interdisciplinary integration, combining the form given by linguistic material with the subject content, in our case, chemical **[4, p.204].**

In this regard, we will give an example of an integrated, "chemistry - English" task.

TOPIC 2 [5, p.12]

I. Read and translate this text.

MENDELEYEV

Dmitry Ivanovich Mendeleyev, the greatest Russian scientist, the father of the Periodic Table of Elements, was born in Tobolsk in 1834 inthe family of director of the town gymnasium. He received a secondaryeducation at Tobolskgymnasium. At the age of 16 he finished school andwent to Petersburg where he entered the Pedagogical Institute and graduatedfrom it with gold medal in 1855.

After graduation Mendeleyev worked as a teacher for two years,first in Simferopol and Odessa gymnasiums. In 1859 Mendeleyev receivedhis Master's Degree and went abroad on two-year scientific commission.

In 1860 he took part in the World Chemical Congress inKarlsruhe, Germany.

When Mendeleyev returned to Russia he was elected professor ofthe Petersburg University, where he carried on scientific and pedagogicalactivities, for twenty years. His lectures on chemistry were always interestingand the students of that time listened to them with great interestand attention. Besides lectures Mendeleyev made a lot of experimentsand later analyzed them.

Mendeleyev described more than 60 elements and found that allthe elements could be divided into nine groups. Each of these groupsmay be divided into five rows. The elements of one group possess moreor less similar properties. In 1869 Mendeleyev published his PeriodicTable of Elements which began a new era in chemical thought.

Mendeleyev paid much attention to many other objects. He was thefirst to put forward the idea of studying the upper layers of the atmosphere.Mendeleyev always combined theory and practice. He gave agreat deal of attention throughout his life to the development of the industryin Russia. He wrote: “Science and industry – there lie mydreams!”

In 1893 Mendeleyev was appointed director of the Bureau ofWeights and Measures. He was elected member of many academiesabroad. He died in 1907.

II. Answer these questions.

1. How many elements did Mendeleyev describe?

2. When did Mendeleyev publish his Periodic Table?

3. When did Mendeleyev finish school?

4. Where was World Chemical Congress in 1860?

5. When did Mendeleyev receive Master degree?

III. Retell the text.

Integration today is a pattern of development of social systems. Culture and production, politics and economics – all spheres of social existence are permeated with integration processes. Pedagogy is no exception. Intensive work is being carried out here on the development of integrative programs, courses, technologies of education and training. Efforts are being made to integrate pedagogical concepts and pedagogical approaches [**6, p.323].**

REFERENCES

1. Garcia-Martinezand J, Serrano-Torregrosa E. Chemistry Education. Wiley-VCH Verlag GmbH & Co. KGaA. 2015.p77.

2. Alimova FA. Modern technologies in teaching chemistry. Tashkent, 2020.

3. Amanov RA. Methods of studying chemistry in secondary and higher schools in conditions of integration with the English language. journal "Continuing Education", Tashkent; 2020;(2).

4. Borunova EB. On the relationship of chemistry and a foreign language on the basis of interdisciplinary integration. BSU Electronic Library, 2010, Available at: https://elib.bsu.by/handle/123456789/228239

5. Zhilina LV. Methodological guidelines for preparing for the English language exam. Omsk, 2004.

6. Chapaev NK. Pedagogic Integration: Methodology, theory, technology. Ekaterinburg: Publishers of Russian State Vocational Pedagogical University; Kemerovo: Publishers of Kemerovo State Vocational Pedagogical College; 2005. p.325.

OPTIMIZING THE DESIGN OF THE ROOF OF A UNIVERSAL GYM

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ABSTRACT

The article proposes the design and comparison of traditional double-angle and low-metal-consumption profile trusses, which are widely used in roofing. It is noted that profiled trusses are double-angled, more efficient than trusses, their grids are attached directly to the strips without trusses, corrosion resistance due to their closed contours, and the priority of equal positioning inertia axes is high. As an example, 24 m. arched trusses were designed and compared.

KEYWORDS: *Roof-Covering, Truss, Interval, Base, Knot, Bar, Eccentricity, Bending Moment, Share Force, Axial Force, Angular, Profile.*

INTRODUCTION

Metal trusses of various structural forms are currently used in the design of building roofing. In this situation, the proposed farm should, first and foremost, have low metal consumption and labor costs. These metrics verify the design's cost-effectiveness. The precise choice of design scheme and cross-sectional forms is critical for optimizing and effectively designing steel usage in tomyopma farms. Farms of various types are now commonly employed in construction. Trapezoidal, parallel-striped, triangular, polygonal, and segmented trusses are examples. The type of cutting of the stems can be divided into: double-angled, single-angled, tubular, elongated, right-angled profile; according to the geometric structure of the grids: mortar, mortar and columnar, elongated mortar and columnar, cross-shaped, panel bracing; according to the type of cutting of the stems can be divided into: double-angled, single-angled, tubular, elongated, right-angled profile. **[1]**

The truss rods have a large shelf-curved cross-section and are double-angled, single-angled, tubular, curved, with a bent welded profile. Several varieties of roof trusses are originally compared in terms of design forms and cut types in the design of roof trusses. The best option is determined by comparing trapezoidal profile trusses to similar geometrically designed double-angle trusses in this scenario. **[2]**

The main part: Corrosion resistance, equal superiority over shafts, and the lack of painted surfaces distinguish bent welded profile trusses from other trusses. In comparison to other trusses, bending welded profiles make it easier to weld truss fences directly to the strips without trusses, as well as attach the progon and ties to the truss. Farms of this type are also slightly better than tubular farms. Right-angled profiles with the same cross-section as the pipe have a higher priority than pipe rods because their inertia radii are slightly bigger.The upper band of the trapezoidal trusses has a slope of $\frac{H}{L}=\frac{1}{8}:\frac{1}{10}$. For this type of farm, a slope like this is ideal. The adoption of a multi-cut type profile to conserve metal consumption in the design of low-consumption farms produces better outcomes than other farms (Figure 1.)

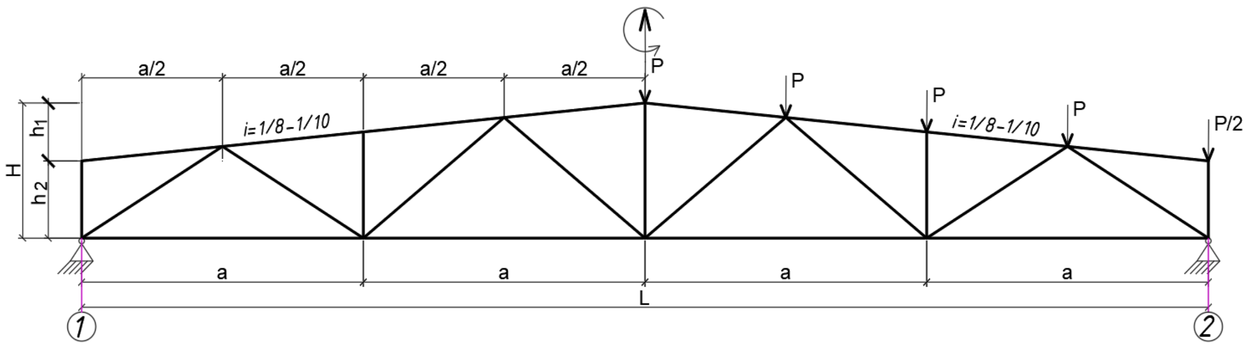

Figure 1. Calculation scheme of low metal consumption profile farm.

Variant1. The following elements must be included in the design of the profile farm. The farm is 24 meters tall, with a pitch of -6 meters. The material is low carbon C235 grade steel. (R_y=235 MPa). **[3]**

Normative and calculated spread loads respectively q^H=0,95 kH/m^2, q=1,18 kH/m^2.

Loads acting on the farm without roofing are transmitted through prongs laid in steps of d = 3.01m.

Solution. We determine the loads that have an impact on the farm. Table 1 shows the normative and design loads for roofing.

TABLE 1

№	Loads names	Normative load, $\kappa H/m^2$	Reliability coefficientsγ_m	Accounting load, $\kappa H/m^2$
1	SANDWICH panel Progon,	0,20	1,1	0,22
2	fasteners, farm	0,25	1,05	0,26
3	Snow	0,50	1,4	0,70
	Total	q_n= 0,95		q_o=1,18

Solution: Calculated and accumulated loads influencing the farm's top belt.

P=q·B·d=1.18·6·3.01=21.31 kH.

The geometric shape of the farm is created using the above recommendations.

High band slope;i=1/10=0.1; h_1=i·L/2=0,1·24/2=1.2 m.

H=2,8m; h_2=H-h_1=2.8-1.2=1.6 m

From the profile, we choose all of the farm's sections.

The farm's computation scheme is depicted in Figure 2.

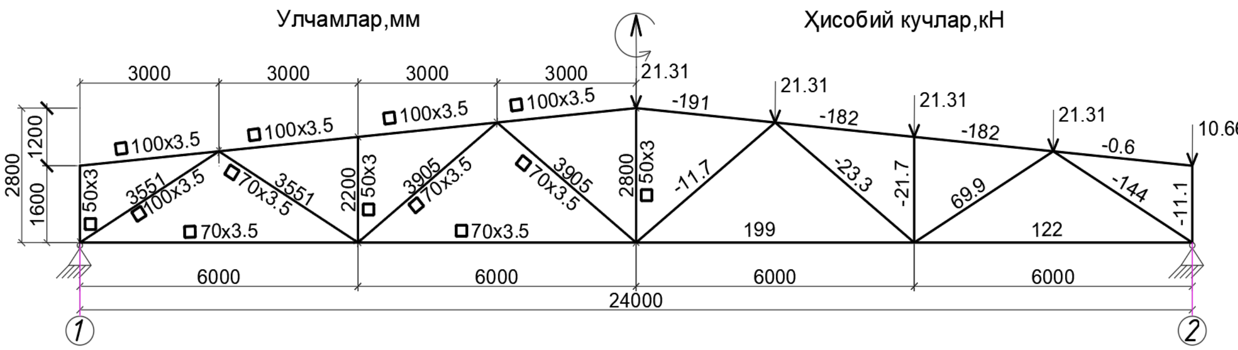

Figure 2. Farm calculation scheme.

We calculate the farm using the LIRA-CAPR program. The following figures illustrate the results of the computations, the bending moment, and longitudinal force diagrams.

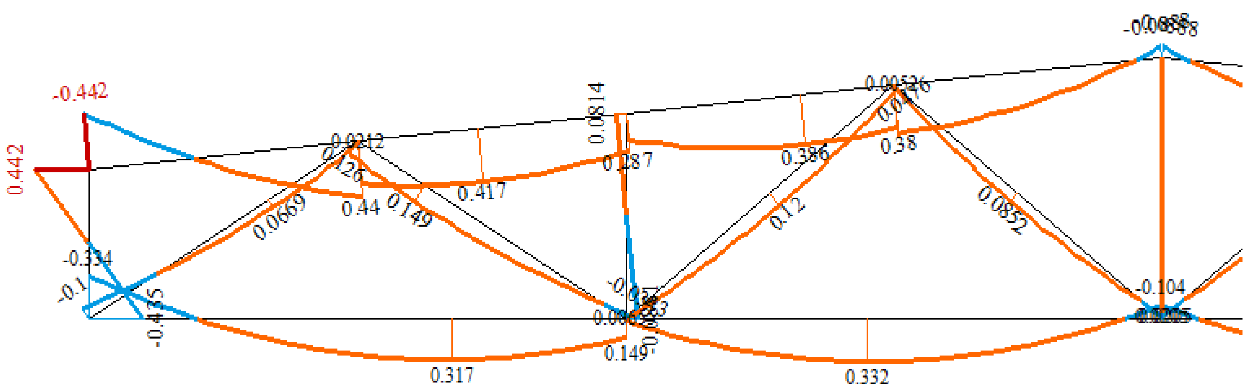

Figure 3. Bending moment diagram.

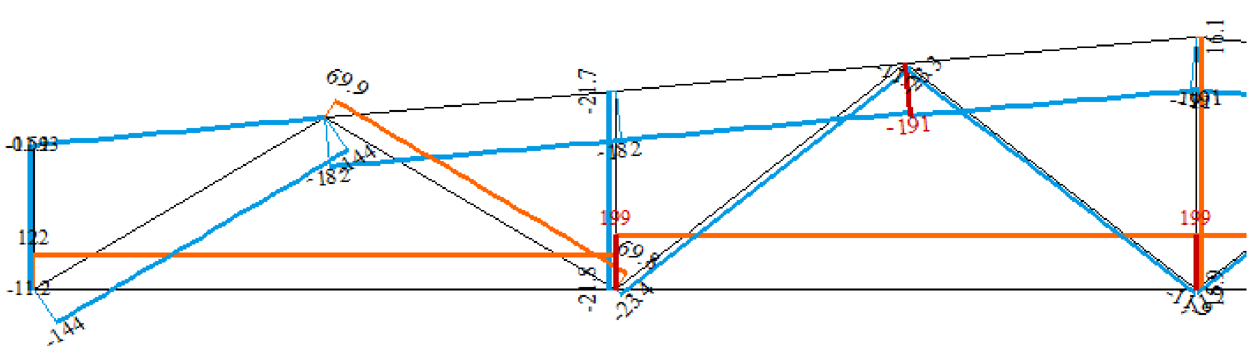

Figure 4. Longitudinal force diagram.

Variant 2.A double-angle truss with the exact same geometric shape was used as a comparative option, and the quantity of loads was taken as a profile truss.(figure 5.)

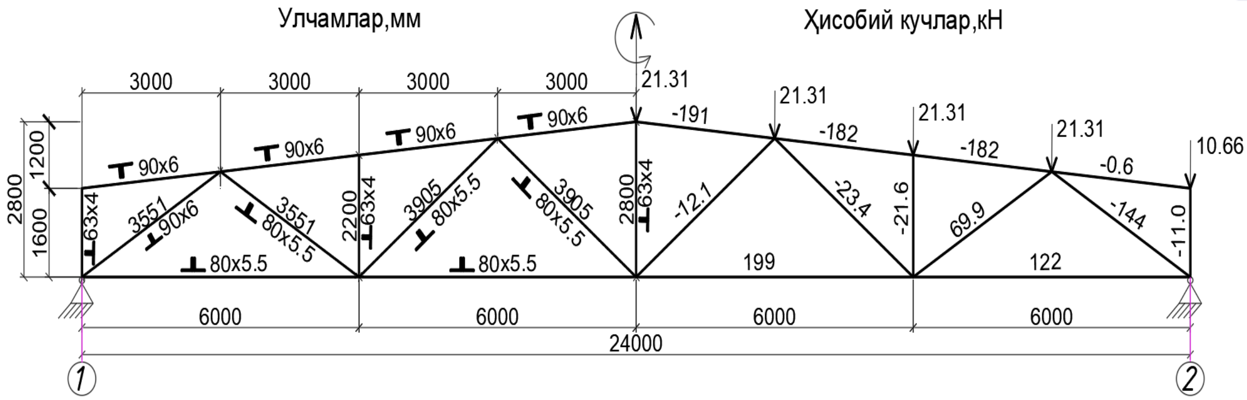

Figure 5. Double-angle farm calculation scheme.

Working drawings of the farms were created for both choices based on selected cross-sections of the farm pieces, and the quantity of steel consumed for each farm was calculated.Tensions on farm rods were determined using the LIRA-CAPR program. **[4]**

Table №2shows the results of the comparison.

TABLE №2:

Farm type	Number of rods	Number of nodes	Consumable Steel, kg.
Profile	17	14	785.5
Double angle	17	14	1280.3

CONCLUSION

Profiled trusses are bangular, economical in terms of steel consumption compared to trusses, corrugated trusses corrugated due to the closed contour, and truss is favored in a flat plane in the logical design of trusses used for roofing. Its design is also more convenient than that of double-angle farms. Metal usage is 39 % lower than on double-angle farms, which is a good thing. These farms are commonly used in the roofing of huge arching structures. It is cost-effective to cover the roofs of existing gyms with such farms. **[5]**

REFERENCES:

1. “Steel structures. Design standards” State Committee of the Republic of Uzbekistan architectural construction. Tashkent. 2013. p.171
2. Biryulev VV. Design of metal structures. Special course. Leningrad, Stroyizdat Publishers, 1990. p.171.
3. Sakhnovsky MM. Light metal structures of buildings and structures. Textbook, Kyiv. 1984.
4. Nilov AA, Permyavov VA. Steel structures of industrial buildings. Handbook, Kiev. 1986.
5. Kholmurodov RI, Asliev SA. “Metal Devices” manual. Tashkent; 1994. 179p.

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FORMATION OF PROFESSIONAL AND PEDAGOGICAL INTEREST OF FUTURE PRIMARY SCHOOL TEACHERS

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ABSTRACT

The article deals with the issue of developing the professional interest of students of a pedagogical university. This problem is of particular importance in the preparation of primary school teachers, since the foundations of the necessary knowledge, skills and abilities of students are laid precisely in the first years of their schooling. The effectiveness of his professional activity depends on the presence of a genuine, deep professional interest of a primary school teacher. The article traces the connection of professional interest with the concept of "professional and pedagogical orientation of the individual." In this regard, it is noted that professional interest can be considered as a complex personal formation that is part of the personality orientation. In this paper, an attempt is made to distinguish between the concepts of "professional pedagogical interest" and "interest in the teaching profession". The article draws attention to the fact that it is necessary to include future teachers in active activities as close as possible to professional ones, during which conditions are created conducive to the formation of a specific idea of a modern school, the functions of a teacher, the educational process, in addition, a positive emotional attitude is strengthened. for future teaching activities.

KEYWORDS: *Interest; Professional Interest; Pedagogical Orientation; Future Primary School Teachers; Pedagogical Activity; Cognitive Interest; Interest Structure*

INTRODUCTION

In the upbringing of the younger generation, the primary link of the general education school plays an important role, therefore, a special place in modern scientific research is occupied by the development of the professional interest of students of a pedagogical university. It is quite obvious that a competent, competent specialist must have a deep interest in their professional activities, the desire to acquire new knowledge in their chosen profession. An important task in preparing future teachers for practical activities is not only to provide them with fundamental knowledge, strong skills and abilities, but also to create conditions for the development of professional interest. The solution of this problem is of particular importance in the preparation of primary school teachers: the foundations of the necessary knowledge, skills and abilities of students are laid precisely in the first years of their schooling, a worldview is formed, an attitude to learning in general. The high efficiency of the professional and pedagogical activity of a primary school teacher is made possible if he has a genuine, deep professional interest. For our study, it is important to consider the concept of "interest" in the relationship of three aspects: philosophical, sociological, psychological and pedagogical. In philosophy, interest is considered as a category that reflects the real reason for social actions, accomplishments, events, behind the various motives of individuals, social groups, classes participating in these actions **[1, p. 29].** In sociology, interest is characterized as a manifestation of the inner essence of the subject and a reflection of the objective world, the totality of values of world culture, both material and spiritual, in the mind of this subject **[2, p. 29].** In the psychological and pedagogical literature, interest is interpreted as a complex psychological formation, characterized by a selective, emotionally saturated attitude of an individual to a certain object and phenomenon **[3, p. 126].**

Based on the above provisions, which formed the basis for the analysis of the key concept "professional interest of future primary school teachers", we practice it as a complex education in the structure of personality orientation, which characterizes a selective, positively emotional, active attitude towards the teaching profession, the pedagogical activity of a primary school teacher, the allocation this profession from a number of others, the need for a deep acquaintance with it, the manifestation of the will to master the chosen profession and the desire to act in this area. It is necessary to distinguish between the concepts of "professional pedagogical interest" and "interest in the teaching profession". Interest in a certain profession is a manifestation of interest in its external aspects. It is narrower in comparison with professional pedagogical interest, which is a broader concept that combines both interest in the teaching profession and interest in pedagogical activity. The formation of genuine professional and pedagogical interest out of interest in the profession of a teacher is connected, first of all, with the comprehension of the content of the pedagogical profession by the personality, with its active participation in pedagogical activity, since only in the conditions of a real pedagogical process in the primary grades are connections established and developed between students and students. future teachers, there is sympathy and love for children, volitional activity is realized, intellectual requests are satisfied in the field of mastering professional and pedagogical knowledge, skills and abilities.

After analyzing the concepts of "professional interest", "professional pedagogical interest", as well as the specifics of the activity of a primary school teacher, we identified the features of the professional interest of future primary school teachers. It includes a pronounced professional and pedagogical orientation: the presence of a positive emotional attitude both to the teaching profession in general and to the pedagogical activity of a primary school teacher in particular, as well as the need for it; a wide range of cognitive interests: the cognitive interests of an elementary school teacher cannot be concentrated in any one area of science, since he teaches various subjects; understanding of the unity of professional and socio-pedagogical functions of the chosen profession with the leading role of the latter. This is due to the peculiarities of the activity of a primary school teacher - the organization of favorable conditions for the comprehensive development of the student's personality, in which adaptation to completely new conditions for them at school takes priority. Based on scientific research on the problem we are studying, we found that the structure of professional interest includes a number of interrelated, interdependent components: intellectual, emotional-volitional and need-activity. The intellectual component is characterized by a deeper acquaintance of students with the content of their future professional activities. The emotional-volitional component presupposes the presence of a stable positive emotional attitude towards their chosen field of activity, the desire to overcome difficulties in the process of mastering the profession of interest. Need-activity is characterized by both the need for a certain activity and activity in mastering a profession.

The main goal of the teacher's activity at present is to achieve the planned results of primary general education: personal, meta-subject and subject. This goal is realized through the types of activities (functions) performed by the teacher:

Teaching (of all or most subjects in elementary school). Therefore, the primary school teacher is a subject teacher. However, it does not translate knowledge, skills, abilities and methods of action (as it was before), but ensures the achievement of the planned results (personal, meta-subject and subject) and forms the ability to learn, acting as an assistant, consultant, partner [**4, 5].** Consequently, the modern role of the primary school teacher is the teacher-adviser;

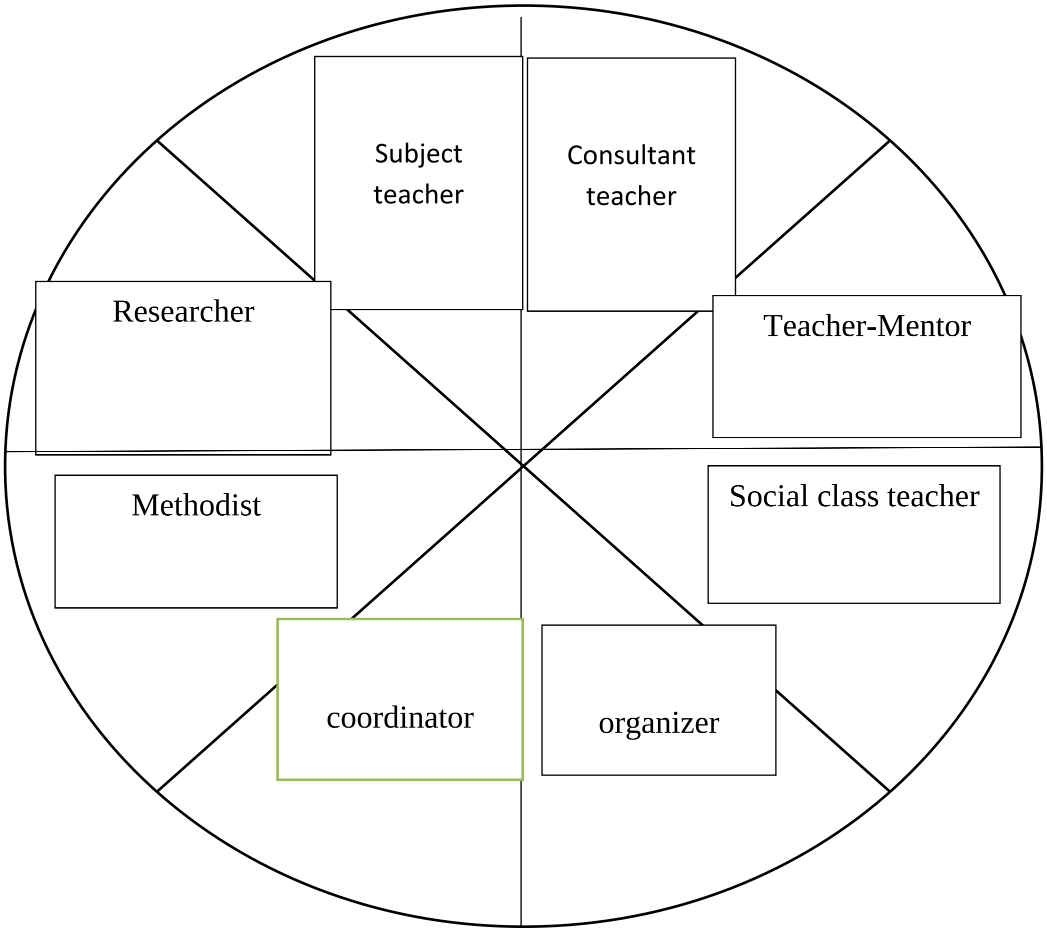
· Upbringing. In the process of work, the teacher carries out mental, moral, legal, labor, aesthetic and physical education, acting as an educator-mentor;

Class leadership. The teacher, in addition to the functions of teaching and education, acts as a class teacher: he ensures the unification of the efforts of all teachers working in this class, is responsible for the formation of a team of younger students. In addition, the primary school teacher interacts with the administration, teachers and other school employees, parents, educational and cultural institutions, etc. Therefore, the primary school teacher is a public figure;

Management. The teacher must be able to manage the student team and organize the class both in class and extracurricular activities. In particular, the teacher should ensure as much as possible the independent activity of students through the appropriate organization of the lesson (setting goals, problems, solving problems, conclusions, assessments are carried out by children; as well as individual and group tasks). Therefore, the primary school teacher is the coordinator and organizer;

Methodological work. According to the world standards of professional skills World Skills, the main requirement for a primary school teacher is the ability to learn **[5, 6].** This means that the teacher must systematically improve his professional activities (through self-education, introspection and analysis of pedagogical experience), as well as take care of improving the professional activities of other teachers (by providing methodological assistance, disseminating his own pedagogical experience, etc.). Therefore, the primary school teacher is a methodologist;
· Research work. The teacher can participate in research and project activities in the field of primary general education. Therefore, the primary school teacher is a researcher **[3].**

Thus, the model of professional and pedagogical activity of a primary school teacher looks like this:



Based on this model in the process of pedagogical design, the teacher will be able to more easily comprehend the directions of educational and mentoring work, it is easier to control the quality of the created scenarios, programs, that is, parts of the pedagogical project. **[7]**

Any project, be it a project of a holiday, a hike, a Day of Knowledge, a quiz, a theatrical performance of children, a sports olympiad or a library discussion, needs evaluation and self-assessment criteria.

Thanks to the model presented here, the teacher receives evaluation criteria and directions for assessing the success of any project.

The completeness of all facets of the teacher's activity is an ideal model for operational assessment and self-assessment. The same model can be used when we are developing a particular project: when implementing a project, the teacher sees himself in each of these roles at the planning and design stage. **[8]**

Since the formation of sustainable professional and pedagogical interests of students can be carried out only if they fully understand the importance and necessity of the chosen object, it seems important to include future teachers in active professional activities associated with positive experiences when, in the process of getting to know the object, students, relying on their own experience , must see the inextricable connection of the knowledge, skills and abilities they acquire with practice, be convinced of their educational and life significance, and realize the need for this activity. **[9]** This can be achieved by including future teachers in activities as close as possible to professional activities, during which conditions are created that are conducive to the formation of a specific idea of a modern school, the functions of a primary school teacher and the educational process as a whole. And what is especially important, future teachers acquire the first pedagogical experience, engaging in activities that are diverse in content and types, creatively applying the theoretical knowledge gained, polishing skills and abilities in practice. In addition, a positive emotional attitude to future pedagogical activity is noticeably strengthened, self-confidence increases. **[10,11]** Thus, the formation of the professional interest of future primary school teachers is a holistic pedagogical process, which is based on specially organized and consciously carried out activities aimed at developing a positive active attitude both to the teaching profession in general and to the pedagogical activity of a primary school teacher in particular.

REFERENCES

1. Dilova NG. The importance of collaborative learning in improving the effectiveness of primary education. International Scientific Review № 2(44). International Scientific Review of the Problems and Prospects of Modern Science and Education: XLII International Scientific and Practical Conference (Boston. USA - 26 February, 2018). Available at: https://scientific-conference.com/h/sborniki/pedagogicheskie-nauki2/987-importance1.html

2. Akramova GR, Bakhshulloeva ShA. Motivation as a factor in the success of educational activities of primary school students. https://internationalconference.ru/images/PDF/2020/60/motivatsiya-kak-faktor-.pdf

3. Akramova GR. Important aspects of developing critical thinking in primary school students in the context of digital education.. Nauchno-prakticheskaya conference. 2021. pp.41-43. https://interscience.uz/index.php/zamonaviy-fan-va-talim-tarbiya-m/article/view/191

4. Renatovna AS. Interpretation of lexical and semantic features of uzbek-tajik words in jamalkamal's poem “Uzbek language. ACADEMICIA: An International Multidisciplinary Research Journal. 2020;10:1434-1440.

5. Akramova GR. Modern approaches to the development of critical thinking of students. European Journal of Research and Reflection in Educational Sciences. 2019;7(11).

6. Akramova GR, Akramova SR. Developing critical thinking on elementary class pupils is the most important factor for preparing social relationship. Journal of Critical Reviews. 2020;7(17).

7. Dilova N, Saidova M. Formative Assessment of Students 'Knowledge as an Innovative Approach to Education. The American Journal of Social Science and Education Innovations, 2020;2(12); 190-196.

8. Salomat GL. The essence of the content of the concept of digital educational resources and its role in primary education. ACADEMICIA: An International Multidisciplinary Research Journal. 2020;10(5):1451-1456.

9. Nargiza GD. Innovative approach to education is a factor for developing new knowledge, competence and personal qualities. Asian Journal of Multidimensional Research (AJMR), 2021;10(1):148-153.

10. Mamurov BB. Basic requirements for the quality of higher pedagogical education. "Educational Sciences". Available at: https://cyberleninka.ru/article/n/osnovnye-trebovaniya-k-kachestvu-vysshego-pedagogicheskogo-obrazovaniya

11. Mamurov BB. Axiological Approach in Preparing Future Teachers for the Design of the Educational Process. Pedagogical Education and Science, 2015. 120p. Available at: http://www.manpo.ru/manpo/publications/ped_obraz/n2015_06.pdf#page=120.

THE ROLE AND IMPORTANCE OF PUZZLES IN THE DEVELOPMENT OF INTELLECTUAL ABILITIES OF PRIMARY SCHOOL STUDENTS

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ABSTRACT

The article states that the riddle, one of the genres of folklore, is a real being, connected with the existing life of people, an important tool in understanding the material and cultural life of the people, in which an object is hidden, it is thought that the psychological conditions that occur in a child through thinking nurture his thinking, realize his imagination, increase his vocabulary, and teach him to be observant.

KEYWORDS: *Folklore, Riddle, Intellectual Ability, Thinking, Ethical-Aesthetic Point Of View, Mood, Problem Situation*

INTRODUCTION

Folklore is an inexhaustible and cherished product of human society. Our ancestors used it effectively in raising their children. The great scholars once noted that folklore is an inexhaustible treasure, and repeatedly reminded of its consistent and regular use.

Folklore is the property of the people, not of individual writers. That is why every proverb, riddle and fairy tale is based on the life experiences of the people. Each proverb or parable, riddle or anecdote introduces children to life experiences as an example of folk pedagogy. It instills moral norms in them.

Getting acquainted with folklore in the primary school allows children to get initiated with the theory of literature in practice. This, in turn, makes it easier for them to master written materials.

The upbringing of children is a multifaceted field, and the importance of folklore in their psycho-physiological upbringing is incomparable. **[1]**

Riddles are one of the oldest and richest genres of folklore. Riddles usually reflect the customs, psyche, and moral and aesthetic views of a people. Several different features of the riddle are given in a secret, mysterious way, and there is a meaning that must be found at the root of each riddle, and “who ?”, “what?” The answer lies secretly. People look at these questions and try to find what they are hiding.

Children in particular are very interested in knowing the puzzle in the puzzle, and finding it.

The subject of puzzles consists of specific events and things that occur in everyday life in nature. Usually, an object or event that needs to be found is represented figuratively by comparison. For example, "A golden pile in the ground, it will be food for everyone" (carrots). The characteristic feature of this find is that the carrot is close in color to gold, the shape resembles a peg, it grows underground and can be eaten. In the puzzle "it has a short height with seven layers of robe"(Pak-pakanabo'yibor, yettiqavatto'nibor), symbols such as short (Pak-pakana), seven-layers of robe indicate that it is an onion. Symbols such as the round, the in the shape of small moon, and when you bite it there is the oil inside, indicates that it is a nut. **[2]**

Some puzzles can be created based on the following properties, depending on the function of the object, its movement, what it is made of or how it is made: "It's no arms, no legs, but protects the house" (Lock).

The riddles may be based on metaphors: "A piece of bread, is sufficient to the world" (Moon).

Sometimes a metaphor can say more than one thing: "One father, one mother, hundreds of thousands of children" (Sun, Moon, stars).

There are also a lot of riddles created by rhetoric: "A thousand pits in a pit" (thimble), "one inch itself, got thousand inches beard" (thread, needle).

Some riddles are based on the melody of the words:“ It's bottom and topcovered with the stone, but in the middle it got a head”(Turtle).

The riddles reflect the wisdom of the people. With their unique content and form of expression, they teach children to be alert, observant, and develop their thinking skills.

Riddles are taught in grades 1-4 in literacy, spelling and speech development classes. They are used as grammar exercise and analysis texts.

In elementary school, students enrich and improve their speech by reciting riddles orally in reading and speaking lessons. Finding the answer to a riddle develops students' thinking; they develop the ability to think logically and draw the right conclusions through comparison and comparison. As a result of reading the texts of the riddles, they acquire the skills of correct reading. In the process of working on the text of a riddle in reading lessons, they also gain a theoretical understanding of the genre of riddles. They will be able to correctly and easily find hidden signs, objects, events and happenings. In mother tongue classes, the teacher works according to the student's activity. **[3]**

Because students are curious to find out what is hidden in the puzzle. This forces them to think comprehensively, deeply and correctly.

Riddles have a great educational value. They, like other genres of folklore, reflect the traditions, psychology, moral and aesthetic views of the people. Puzzles broaden students' minds and teach them to think carefully, to be observant, and to think logically. Logical reasoning helps to develop a child's speech.

Analogies, contrasts, and metaphorical imagery are characteristic of riddles. It is a good idea to show the children the picture of the object itself or a picture so that the comparisons in the puzzles will be well remembered by the students. **[4]**

While recommending puzzles to children, care must be taken to ensure that they are relevant to the textbook and the topic being covered. For example, days 3-4 in 1st gradea riddle about vegetables can be suggested. In preparation for literacy, children are introduced to the book

"Alphabet", which gives an idea about the pictures in it. It would also be a good idea to suggest finding a riddle during a conversation about a picture of vegetables.

Riddles change with the development of socio-economic life of the people, express new meaning and content.

Students independently compare the given objects according to their color, shape, and taste. This ensures that the idea of objects is stored in the minds of children for a long time, develops in them the ability to consciously invent riddles, develops their vocabulary. Riddles explain the origin, creation of objects, their role in human life. **[5]**

The concept of a hidden object or event in a puzzle is firmly established in science and is based on the teacher's teaching style, close to scientific methods.

The educational nature of the puzzles is strong. In the discovery, a phenomenon in nature, a living being, is secretly embodied by analogy, comparison to something or its state and an event.

Logical exercises play an important role in the transformation of abstract concepts in the minds of students into concrete concepts, so that the teacher can use them appropriately.

Logical verbal exercises are conducted in 1st grade in the first half of the school year to improve speech. In the second half of the school year, however, these exercises become more complex, meaning that the puzzles are analyzed in writing after oral analysis.

Written puzzle analysis can be done in the following order:

1. Encourage students to copy the puzzle from the book.

2. Underline the words that represent the main characters in the puzzle and read them aloud.

3. Find a picture of a hidden object in the puzzle and paste it under the text of the riddle or write the answer to the riddle.

From what has been said, it is clear that the study of riddles means knowing the riddle and what is hidden in it.

Cognition is a complex dialectical process. In order to know the riddle and the object hidden in it, it is necessary to understand and imagine them. Therefore, students do a lot of work in the process of learning the riddle.

For example, the teacher writes and explains the text of the riddle on the board, and the students copy it into their notebooks.

This is the first version of the written analysis. In the second option, the teacher writes the text of the puzzle on the board while introducing it to the students, or hang a puzzle display in a place where students can see it.

Once students have found the answer to the riddle, it will be determined how accurate it is. Below the text of the riddle is written his answer. When using both methods, the teacher not only finds the answer to the riddle and writes it down, but also conducts exercises for expressive reading through the text of the riddle.

When reading a riddle expressively, it is important to pay attention to its content.

Reading a riddle can take place in the following stages: a) expressive reading of the riddle by the teacher; b) have a short conversation to find out if the students fully understand the riddle they have read and how much they remember it; (c) recall certain words or phrases that may be mispronounced; g) analysis of the content of the puzzle; d) re-reading. For example, re-reading a key word to determine a sentence;e) explain that the riddles belong to the people, remind them of the purpose of its creation.

The expressive reading system of riddles applies not only to reading and speaking lessons, but also to grammar and spelling lessons. Because when a grammar exercise is performed, the student goes through the process of reading the text of the exercise, whether it is written or oral.

As students read the riddle, they will also learn how to read poetry and prose.

The teacher uses puzzles to teach students the meaning of human organs, learning tools, machines, fruits and plants, household appliances, animals, the moon, the sun, the stars, and etc.

In general, puzzles are one of the great forms of folk oral art used to develop children’s ability to relax or think.

Because the puzzles are so compact, rhyming inside and out, and vital, children will quickly recognize them and memorize them.

Riddles play an important role in broadening children's horizons, developing their intellect, and developing their sense of observation and sensitivity.

Grammar, spelling and speech development classes do not take much time to study riddles. This is not the main purpose of grammar lessons.

Examples from textbooks and exercises include Uzbek folk riddles.

Learning riddles in native language classes is different from learning riddles in reading classes. This is because grammar analysis is more important in native language lessons than in content analysis.

Incorporating puzzles into native language classes will help students relax in class. It gives them an aesthetic pleasure.

There is also a situation in the classroom where students get tired of reading, writing, and sometimes grammatical analysis. As a result, students become passive. Riddles help prevent such situations that occur in the classroom.

In general, the study of folklore in the primary grades requires teaching based on the best didactic principles. Properly selected and explained, puzzles studied in a variety of forms are of great value as material that inculcates the norms of education and upbringing in students.

REFERENCES

1. Sulaymonovich SF, Maqsudovna IS. Types of Lexical Meanings. Journal of critical reviews, 2020;7(6):481-484.

2. Makhsudovna IS. Bukhara. State unit. Samarkand, 2017. 44p.

3. Ruzieva MË. Semiotic analysis of words and phrases in Turkish folklore. Education and Innovative Research. 2020;1(1).

4. Khalilova RR. Improving the speech culture of the future teacher as a pedagogical problem. Bulletin of Pedagogy and Psychology of Southern Siberia, 2015;(1):23-30.

5. Khalilova RR. Pragmatic principles of Internet communications. Innovative approaches in modern science: Sat. Art. Based on the materials of the LXXXIX International Scientific and Practical Conference "Innovative Approaches in Modern Science". No. 5(89). Moscow; 2021.

INTEGRAL CALCULATION METHODS

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ABSTRACT

This article discusses methods for calculating integrals. The article discusses in detail the methods for solving integrals of various types. For each method, there are examples of solutions with step-by-step comments. The considered solution algorithm can be applied to any type of integral.

KEYWORDS: *Method of changing of variable, method of integration by parts, geometric meaning of a definite integral.*

INTRODUCTION

While writing this article, the authors was guided by the following outdated article: the article should be understandable and useful for university students, the authors would like it to be useful for teachers as well.

There is a need to master the method of calculating integrals. In this regard, in many universities throughout the country, within the framework of disciplines, separate topics and problems are studied that can be attributed to integral calculations. However, there is still no complete, systematized based on a general methodology. **[1-5]**

The purpose of the article is to improve methods for calculating by solving problems.

Scientific novelty lies in the fact that it contains the problem of improving university education based on methods for calculating integrals. **[6]**

I. <u>Direct integration method</u>

With the help of identity transformations of the integrand, the integral is reduced to an integral, to which the basic integrations are applicable and possible, the table of integrals can be used. **[7]**

II. Differential injection

In the formulas of the indefinite integral, the value dx means that the differential of the variable x is taken. You can use some of the properties of the differential in order to complicate the expression under the differential sign, thereby simplifying the determination of the integral itself. **[8]**

For this the formula is used

$$y'(x)dx = dy(x)$$

If the required function $y(x)$ is absent, sometimes it can be formed by algebraic transformations. **[9]**

III. Integration by change of variable

Let $x = \varphi(t)$, where the function $\varphi(t)$ has a continuous derivative $\varphi'(t)$, and there is a one-to-one correspondence between the variables x and t.

Then the equality

$$\int f(x)dx = \int f\big(\varphi(t)\big)\varphi'(t)dt$$

A certain integral depends on the variable of integration, therefore, if the change of variable is performed, then it is imperative to return to the original integration. **[10]**

Integration by parts

Integration by parts is called integration by the formula

$$\int udv = u \cdot v - \int vdu$$

When finding the function v from its differential dv, one can take any value of the constant of integration C, since it is not included in the final result. Therefore, for convenience, we will take $C = 0$. The use of the formula for integration by parts is advisable in cases, where differentiation simplifies one of the factors, while integration does not complicate the other. **[11,12,13]**

For example. Calculate the integral

$$\int x^7 e^{x^4} dx$$

Solution

Let's take

$x^4 = t$

$4x^3 dx = dt$

$dx = \dfrac{dt}{4x^3}$

$u = t$

$du = dt$

$dv = e^t dt$

$v = e^t$

$$\int x^7 e^{x^4} dx = \int x^7 \cdot e^t \cdot \frac{dt}{4x^3} = \frac{1}{4}\int x^4 \cdot e^t \cdot dt = \frac{1}{4}\int t \cdot e^t \cdot dt =$$

$$= \frac{1}{4} t \cdot e^t - \frac{1}{4}\int e^t dt = \frac{1}{4} te^t - \frac{1}{4} e^t + C = \frac{1}{4} x^4 e^{x^4} - \frac{1}{4} e^{x^4} + C =$$

$$= \frac{1}{4} e^{x^4}(x^4 - 1) + C$$

Now we present methods for solving integrals of different types.

I. Indefinite integral

1. Calculate the integral

$$\int \frac{(x^2+12)dx}{(x\sin x + 4\cos x)^2}$$

Solution

$$x\sin x + 4\cos x = \sqrt{x^2+16}\cos(x - \mathrm{arctg}\frac{x}{4})$$

Let's make substitutions

$$x - \mathrm{arctg}\frac{x}{4} = t$$

$$\left(1 - \frac{1}{1+\frac{x^2}{16}} \cdot \frac{1}{4}\right) dx = dt$$

$$dx = \frac{x^2+16}{x^2+12} dt$$

$$\int \frac{(x^2+12)dx}{(x\sin x + 4\cos x)^2} = \int \frac{(x^2+12)dx}{(x^2+16)\cos^2 t} = \int \frac{x^2+12}{x^2+16} \cdot \frac{x^2+16}{x^2+12} \cdot \frac{dx}{\cos^2 t} =$$

$$= \int \frac{dx}{\cos^2 t} = \mathrm{tg}\, t + C = \mathrm{tg}(x - \mathrm{arctg}\frac{x}{4}) + C = \frac{\mathrm{tg}\, x - \frac{x}{4}}{1 + \frac{x}{4}\mathrm{tg}\, x} + C =$$

$$= \frac{4\sin x - x\cos x}{4\cos x + x\sin x} + C$$

2. Calculate the integral

$$\int \frac{x^2 dx}{(x\sin x + \cos x)^2}$$

Solution

1-way

$$x\sin x+\cos x=\sqrt{x^2+1}\cos(x-\operatorname{arctg}\frac{x}{4})$$

$$x-\operatorname{arctg}x=t$$

$$dt=\left(1-\frac{1}{1+x^2}\right)dx=\frac{x^2}{1+x^2}dx$$

$$dx=\frac{1+x^2}{x^2}dt$$

$$\int\frac{(x^2+12)dx}{(x\sin x+4\cos x)^2}=\int\frac{x^2}{1+x^2}\cdot\frac{1}{\cos^2 t}\cdot\frac{1+x^2}{x^2}dt=\int\frac{dx}{\cos^2 t}=\operatorname{tg}t+C=$$

$$=\operatorname{tg}(x-\operatorname{arctg}x)+C=\frac{\operatorname{tg}x-x}{1+x\operatorname{tg}x}+C=\frac{\sin x-x\cos x}{\cos x+x\sin x}+C$$

2-way

$$u=\frac{x}{\cos x}$$

$$du=\frac{\cos x+x\sin x}{\cos^2 x}dx$$

$$v=-\frac{1}{x\sin x+\cos x}$$

Notice, that

$$(x\sin x+\cos x)'=x\cos x$$

Multiplying both the numerator and denominator under the integral function by $\cos x$ we get the following integral **[14]**

$$\int\frac{x}{\cos x}\cdot\frac{x\cos x\cdot dx}{(x\sin x+\cos x)^2}=$$

$$=-\frac{x}{\cos x\,(x\sin x+\cos x)}+\int\frac{\cos x+x\sin x}{\cos^2 x}\cdot\frac{1}{\cos x+x\sin x}dx=$$

$$=-\frac{x}{\cos x\,(x\sin x+\cos x)}+\int\frac{dx}{\cos^2 x}=$$

$$=-\frac{x}{\cos x\,(x\sin x+\cos x)}+\frac{\sin x}{\cos x}+C=$$

$$=\frac{-x+x\sin^2 x+\sin x\cos x}{\cos x\,(x\sin x+\cos x)}+C=$$

$$=\frac{-x+x(1-\cos^2 x)+\sin x\cos x}{\cos x\,(x\sin x+\cos x)}+C=$$

$$=\frac{-x+x-x\cos^2 x+\sin x\cos x}{\cos x\,(x\sin x+\cos x)}+C=\frac{-x\cos^2 x+\sin x\cos x}{\cos x\,(x\sin x+\cos x)}+C=$$

$$=\frac{\sin x-x\cos x}{x\sin x+\cos x}+C$$

3. Calculate the integral

$$\int (2x^2+1)e^{x^2}dx$$

Solution

$u=x$

$du=dx$

$dv=2xe^{x^2}dx$

$v=e^{x^2}$

$$\int (2x^2+1)e^{x^2}dx=\int 2x^2e^{x^2}dx+\int e^{x^2}dx=\int x\cdot 2xe^{x^2}dx+\int e^{x^2}dx=$$

$$=xe^{x^2}-\int e^{x^2}dx+\int e^{x^2}dx=xe^{x^2}+C$$

4. Calculate the integral

$$\int\frac{dx}{x^6+1}$$

Solution

$$\int\frac{dx}{x^6+1}=\int\frac{dx}{(x^2)^3+1}=\int\frac{dx}{(x^2+1)(x^4-x^2+1)}=$$

$$=\int\frac{x^2+1-x^2}{(x^2+1)(x^4-x^2+1)}dx=\int\frac{1}{x^4-x^2+1}dx-\int\frac{x^2dx}{(x^3)^2+1}=$$

$$=\frac{1}{2}\int\frac{(x^2+1)-(x^2-1)}{x^4-x^2+1}dx-\frac{1}{3}\int\frac{d(x^3)}{(x^3)^2+1}=$$

$$=\frac{1}{2}\int\frac{x^2+1}{x^4-x^2+1}dx-\frac{1}{2}\int\frac{x^2+1}{x^4-x^2+1}dx-\frac{1}{3}\operatorname{arctg}x^3+C,=$$

$$=\frac{1}{2}\int\frac{1+\frac{1}{x^2}}{x^2+\frac{1}{x^2}-1}dx-\frac{1}{2}\int\frac{1-\frac{1}{x^2}}{x^2+\frac{1}{x^2}-1}dx-\frac{1}{3}\operatorname{arctg}x^3+C,=$$

$$=\frac{1}{2}\int\frac{d(x-\frac{1}{x})}{(x-\frac{1}{x})^2+1}-\frac{1}{2}\int\frac{d\left(x+\frac{1}{x}\right)}{\left(x+\frac{1}{x}\right)^2-\left(\sqrt{3}\right)^2}-\frac{1}{3}\operatorname{arctg}x^3+C,=$$

$$= \frac{1}{2}\operatorname{arctg}(x - \frac{1}{x}) - 2\sqrt{3}\ln\left|\frac{x + \frac{1}{x} - \sqrt{3}}{x + \frac{1}{x} + \sqrt{3}}\right| - \frac{1}{3}\operatorname{arctg} x^3 + C$$

5. Calculate the integral

$$\int \frac{xe^{2x}}{(1+2x)^2}dx$$

Solution

$u = xe^{2x}$

$du = (e^{2x} + 2xe^{2x})dx = e^{2x}(1+2x)dx$

$dv = \frac{1}{(1+2x)^2}dx$

$v = -\frac{1}{2(1+2x)}$

$$\int xe^{2x} \cdot \frac{1}{(1+2x)^2}dx = -\frac{xe^{2x}}{2(1+2x)} + \frac{1}{2}\int \frac{e^{2x}(1+2x)}{1+2x}dx =$$

$$= \frac{-xe^{2x}}{2(1+2x)} + \frac{1}{2}\int e^{2x}dx = \frac{-xe^{2x}}{2(1+2x)} + \frac{1}{4}e^{2x} + C =$$

$$= \frac{-2xe^{2x} + e^{2x}(1+2x)}{4(1+2x)} + C = \frac{-2xe^{2x} + e^{2x} + 2xe^{2x}}{4(1+2x)} + C = \frac{e^{2x}}{4(1+2x)} + C$$

6. Calculate the integral

$$\int \cos(\ln x)\, dx$$

Solution

$$\int \cos(\ln x)\, dx = \int e^t \cdot \cos t\, dt = e^t \cdot \sin t - \int e^t \cdot \sin t\, dt =$$

$$= e^t \sin t + e^t \cos t - \int e^t \cos t\, dt$$

From here

$$2\int e^t \cdot \cos t\, dt = e^t(\sin t + \cos t)$$

$$\int e^t \cdot \cos t\, dt = \frac{e^t}{2}(\sin t + \cos t) + C$$

$$\int \cos(\ln x)\, dx = \frac{x}{2}(\sin(\ln x) + \cos(\ln x)) + C$$

II. Definite integral

7. Calculate the integral

$$\int_0^{\frac{\pi}{2}} \frac{\sin x\,dx}{\sin x + \cos x}$$

Solution

$t = \dfrac{\pi}{2} - x$

$dt = -dx$

$t = 0, x = \frac{\pi}{2}$

$t = \frac{\pi}{2}, x = 0$

$$I = \int_0^{\frac{\pi}{2}} \frac{\sin x}{\sin x + \cos x} dx = \int_0^{\frac{\pi}{2}} \frac{\sin x\,dx}{\sin x + \sin(\frac{\pi}{2} - x)} = -\int_{\frac{\pi}{2}}^0 \frac{\cos t \cdot dt}{\cos t + \sin t} =$$

$$= \int_0^{\frac{\pi}{2}} \frac{\cos x\,dx}{\sin x + \cos x}$$

$$2I = \int_0^{\frac{\pi}{2}} \frac{\sin x\,dx}{\sin x + \cos x} + \int_0^{\frac{\pi}{2}} \frac{\cos x\,dx}{\sin x + \cos x} = \int_0^{\frac{\pi}{2}} dx = \frac{\pi}{2}$$

$I = \dfrac{\pi}{4}$

Means

$$\int_0^{\frac{\pi}{2}} \frac{\sin x\,dx}{\sin x + \cos x} = \frac{\pi}{4}$$

8. Prove that if the function $f(x)$ is even, then

$\int_{-a}^{a} \frac{f(x)}{A^x+1} dx = \int_0^a f(x)dx$ (*)

Solution

Change the variable by the formula $x = -t$, then

$$I = \int_{-a}^{a} \frac{f(x)}{A^x + 1} dx = -\int_{a}^{-a} \frac{f(-t)}{A^{-t} + 1} dt = \int_{-a}^{a} \frac{A^t f(t)}{A^t + 1} dt$$

Therefore

$$2I = \int_{-a}^{a} \frac{f(x)}{A^x + 1} dx + \int_{-a}^{a} \frac{A^x f(x)}{A^x + 1} dx = \int_{-a}^{a} f(x)dx = 2\int_0^a f(x)dx$$

Whence the equality being proved follows.

9. Calculate the integral

$$\int_{-1}^{1} \frac{x^4}{2^{\sin x}+1} dx$$

Solution

By formula (*), we have

$$\int_{-1}^{1} \frac{x^4}{2^{\sin x}+1} dx = \int_{0}^{1} x^4 dx = \left.\frac{x^5}{5}\right|_0^1 = \frac{1}{5}$$

Lemma-1

$$\int_a^b \frac{f(x)}{f(b+a-x)+f(x)} dx = \frac{b-a}{2}$$

Evidence

$t = b + a - x$

$x = b, t = a$

$x = a, t = b$

$dt = -dx$

$$I = \int_a^b \frac{f(x)}{f(b+a-x)+f(x)} dx = -\int_a^b \frac{f(b+a-t)}{f(t)+f(b+a-t)} dt =$$

$$= \int_a^b \frac{f(b+a-x)}{f(x)+f(b+a-x)} dx$$

$$2I = \int_a^b \frac{f(x)dx}{f(b+a-x)+f(x)} + \int_a^b \frac{f(b+a-x)}{f(x)+f(b+a-x)} dx = \int_a^b dx = b-a$$

$$I = \frac{b-a}{2}$$

10. Calculate the integral

$$\int_2^6 \frac{\sqrt{x}dx}{\sqrt{8-x}+\sqrt{x}}$$

Solution

By Lemma-1, we have

$$\int_2^6 \frac{\sqrt{x}dx}{\sqrt{8-x}+\sqrt{x}} = \int_2^6 \frac{\sqrt{x}}{\sqrt{6+2-x}+\sqrt{x}} dx = \frac{6-2}{2} = 2$$

III. Improper integral

11. Calculate the integral

$$\int_0^\infty \frac{dx}{(1+x^{2021})(1+x^2)}$$

Solution

$x=\frac{1}{t}$

$dx=-\frac{dt}{t^2}$

$x=\infty,\ t=0$

$x=0,\ t=\infty$

$$I=\int_0^\infty \frac{dx}{(1+x^{2021})(1+x^2)}=-\int_\infty^0 \frac{\frac{dt}{t^2}}{\left(1+\frac{1}{t^{2021}}\right)\left(1+\frac{1}{t^2}\right)}=$$

$$=\int_0^\infty \frac{t^{2021}dt}{(1+t^{2021})(1+t^2)}=\int_0^\infty \frac{x^{2021}dx}{(1+x^{2021})(1+x^2)}$$

$$2I=\int_0^\infty \frac{1}{(1+x^{2021})(1+x^2)}dx+\int_0^\infty \frac{x^{2021}dx}{(1+x^{2021})(1+x^2)}=$$

$$=\int_0^\infty \frac{(1+x^{2021})dx}{(1+x^{2021})(1+x^2)}=\int_0^\infty \frac{dx}{1+x^2}=\operatorname{arctg} x\big|_0^\infty=\frac{\pi}{2}$$

$I=\frac{\pi}{4}$

12. Calculate the integral

$$\int_0^{\frac{\pi}{2}} \frac{dx}{1+(\operatorname{tg} x)^{2021}}$$

Solution

Let

$t=\operatorname{tg} x$

$x=\operatorname{arctg} t$

$dx=\frac{dt}{1+t^2}$

$$\int_0^{\frac{\pi}{2}} \frac{dx}{1+(\operatorname{tg} x)^{2021}}=\int_0^\infty \frac{\frac{dt}{1+t^2}}{1+t^{2021}}=\int_0^\infty \frac{dt}{(1+t^{2021})(1+t^2)}$$

According to the previous problem, we get that this integral is equal to $\frac{\pi}{4}$.

Lemma-2

$$\int_0^\infty f(x)dx = \int_0^\infty \frac{f(\frac{1}{x})}{x^2}dx$$

Evidence

Let

$x = \frac{1}{t}$

$dx = -\frac{dt}{t^2}$

$x \to \infty,\ t \to 0$

$x \to 0,\ t \to \infty$

Then

$$\int_0^\infty f(x)dx = -\int_\infty^0 \frac{f\left(\frac{1}{t}\right)}{t^2}dt = \int_0^\infty \frac{f(\frac{1}{x})}{x^2}dx$$

13. Calculate the integral

$$\int_0^\infty \frac{\ln(\frac{x^{13}+1}{x^5+1})}{(1+x^2)\ln x}dx$$

Solution

$$I = \int_0^\infty \frac{\ln(\frac{x^{13}+1}{x^5+1})}{(1+x^2)\ln x}dx = \int_0^\infty \frac{\ln(x^{13}+1) - \ln(x^5+1)}{(1+x^2)\ln x}dx$$

Applying Lemma-2, we get

$$\int_0^\infty \frac{\ln(x^{13}+1) - \ln(x^5+1)}{(1+x^2)\ln x}dx = \int_0^\infty \frac{\ln(\frac{1}{x^{13}}+1) - \ln(\frac{1}{x^5}+1)}{x^2(1+\frac{1}{x^2})\ln(\frac{1}{x})}dx =$$

$$= \int_0^\infty \frac{\ln(x^{13}+1) - \ln x^{13} - \ln(x^5+1) + \ln x^5}{(1+x^2)(-\ln x)}dx =$$

$$= -\int_0^\infty \frac{\ln(x^{13}+1) - \ln(x^5+1) - 8\ln x}{(1+x^2)\ln x}dx = 8\int_0^\infty \frac{\ln x\, dx}{(1+x^2)\ln x} - I$$

$$2I = 8\int_0^\infty \frac{dx}{1+x^2} = 8\mathrm{arctg}\, x|_0^\infty = 8 \cdot \frac{\pi}{2} = 4\pi$$

$I = 2\pi$

14. Calculate the integral

$$\int_0^{\infty} \frac{\sin x}{x} dx$$

Solution

Let

$I(t) = \int_0^{\infty} \frac{\sin x}{x} e^{-tx} dx$

$I(0) = \int_0^{\infty} \frac{\sin x}{x} dx$

$u = \sin x$

$du = \cos x \, dx$

$v = -\frac{1}{t} e^{-tx}$

$u_{\prime} = \cos x$

$du_{\prime} = -\sin x \, dx$

$v_{\prime} = -\frac{1}{t} e^{-tx}$

$I(t)' = \frac{d}{dt}(\int_0^{\infty} \frac{\sin x}{x} e^{-tx})dx = \int_0^{\infty} \frac{\sin x}{x} \cdot (-x)e^{-tx} dx = -\int_0^{\infty} \sin x \, e^{-tx} dx =$

$= \sin x \cdot \frac{e^{-tx}}{t}\Big|_0^{\infty} - \frac{1}{t}\int_0^{\infty} \cos x \, e^{-tx} dx =$

$= 0 + \frac{1}{t^2} \cos x \, e^{-tx}\Big|_0^{\infty} - \frac{1}{t^2}\int_0^{\infty} \sin x \, e^{-tx} dx = -\frac{1}{t^2} - \frac{1}{t^2} I'(t)$

$I'(t) = -\frac{1}{t^2} - \frac{1}{t^2} I'(t)$

$I'(t) \cdot \left(1 + \frac{1}{t^2}\right) = -\frac{1}{t^2}$

$I'(t) \cdot \left(\frac{1 + t^2}{t^2}\right) = -\frac{1}{t^2}$

$I'(t) = -\frac{1}{1 + t^2}$

$I(t) = -\operatorname{arctg} t + C$

$I(t \to \infty) = 0$

$I(t \to \infty) = -\operatorname{arctg}(\infty) + C = -\frac{\pi}{2} + C = 0$

$C = \frac{\pi}{2}$

$I(t) = -\operatorname{arctg} t + \frac{\pi}{2}$

$I(0) = \int_0^{\infty} \frac{\sin x}{x} dx = \frac{\pi}{2}$

15. Calculate the integral

$$\int_0^{\frac{\pi}{2}} \ln(\cos x)\, dx$$

Solution

Let's make the following substitution

$x = \frac{\pi}{2} - t$

$t = \frac{\pi}{2} - x$

$dx = -dt$

$$\int_0^{\frac{\pi}{2}} \ln(\cos x)\, dx = \int_{\frac{\pi}{2}}^{0} \ln\left(\cos\left(\frac{\pi}{2} - t\right)\right)(-dt) = \int_0^{\frac{\pi}{2}} \ln(\sin x)\, dx = I$$

$$2I = \int_0^{\frac{\pi}{2}} (\ln(\cos x) + \ln(\sin x))dx = \int_0^{\frac{\pi}{2}} \ln(\sin x \cdot \cos x)\, dx =$$

$$= \int_0^{\frac{\pi}{2}} \ln(\frac{1}{2}\sin 2x)\, dx = \int_0^{\frac{\pi}{2}} (\ln\frac{1}{2} + \ln(\sin 2x))dx =$$

$$= -\int_0^{\frac{\pi}{2}} \ln 2\, dx + \int_0^{\frac{\pi}{2}} \ln(\sin 2x)\, dx = -\frac{\pi}{2}\ln 2 + \frac{1}{2}\int_0^{\frac{\pi}{2}} \ln(\sin t)\, dt =$$

$$= -\frac{\pi}{2}\ln 2 + \frac{1}{2}\left(\int_0^{\frac{\pi}{2}} \ln(\sin t)\, dt + \int_{\frac{\pi}{2}}^{\pi} \ln(\sin t)\, dt\right) =$$

$$= -\frac{\pi}{2}\ln 2 + \frac{1}{2}I + \frac{1}{2}\int_{\frac{\pi}{2}}^{\pi} \ln(\sin t)\, dt = -\frac{\pi}{2}\ln 2 + \frac{1}{2}I + \frac{1}{2}\int_0^{\frac{\pi}{2}} \ln\left(\sin(u + \frac{\pi}{2})\right) du$$

$$= -\frac{\pi}{2}\ln 2 + \frac{1}{2}I + \frac{1}{2}\int_0^{\frac{\pi}{2}} \ln(\cos u)\, du = -\frac{\pi}{2}\ln 2 + \frac{1}{2}I + \frac{1}{2}I = -\frac{\pi}{2}\ln 2 + I$$

$2I = -\frac{\pi}{2}\ln 2 + I$

$I = -\frac{\pi}{2}\ln 2$

16. Calculate the integral

$$\int_0^{\infty} \operatorname{arctg}^2(\frac{1}{x})dx$$

Solution

By Lemma-2, we obtain the following equality

$$\int_0^{\infty} \operatorname{arctg}^2(\frac{1}{x})dx = \int_0^{\infty} \frac{\operatorname{arctg}^2(x)}{x^2}dx$$

Integrate the right-hand side of the equality by parts

$$u = \operatorname{arctg}^2 x$$

$$du = 2\operatorname{arctg} x \cdot \frac{dx}{1+x^2}$$

$$dv = \frac{1}{x^2}dx$$

$$v = -\frac{1}{x}$$

$$t = \operatorname{arctg} x$$

$$x = \operatorname{tg} t$$

$$dt = \frac{dx}{1+x^2}$$

$$u = t$$

$$du = dt$$

$$dv = \cot t\, dt$$

$$v = \ln(\sin x)$$

$$\int_0^{\infty} \frac{\operatorname{arctg}^2(x)}{x^2}dx = -\frac{\operatorname{arctg}^2(x)}{x}\bigg|_0^{\infty} + \int_0^{\infty} \frac{2\operatorname{arctg}(x)}{x(x^2+1)}dx = 0 + \int_0^{\infty} \frac{2\operatorname{arctg}(x)}{x(x^2+1)}dx$$

$$= 2\int_0^{\frac{\pi}{2}} \frac{t}{\operatorname{tg} t}dt = 2\int_0^{\frac{\pi}{2}} t\cot t\, dt = 2\left(t\ln(\sin t)|_0^{\frac{\pi}{2}} - \int_0^{\frac{\pi}{2}} \ln(\sin t)\, dt\right) =$$

$$= 0 - 2\int_0^{\frac{\pi}{2}} \ln(\sin t)\, dt$$

We know from the previous problem that the integral is

$$\int_0^{\frac{\pi}{2}} \ln(\sin t)\, dt = -\frac{\pi}{2}\ln 2$$

Therefore

$$-2\int_0^{\frac{\pi}{2}}\ln(\sin t)\,dt = -2\cdot\left(-\frac{\pi}{2}\right)\ln 2 = \pi\ln 2$$

17. Calculate the integral

$$\int_{-\infty}^{\infty}\frac{\cos(3x)}{x^2+4}dx$$

Solution

$$\int_{-\infty}^{\infty}\frac{\cos(3x)}{x^2+4}dx = 2\int_0^{\infty}\frac{\cos(tx)}{x^2+4}dx$$

$$I(t) = 2\int_0^{\infty}\frac{\cos(tx)}{x^2+4}dx$$

$$I(0) = \frac{\pi}{2}$$

$$u = tx$$

$$x = \frac{u}{t}$$

$$dx = \frac{du}{t}$$

$$I'(t) = -2\int_0^{\infty}\frac{x\sin(tx)}{x^2+4}dx = -2\int_0^{\infty}\frac{x^2\sin(tx)}{x(x^2+4)}dx =$$

$$= -2\int_0^{\infty}\frac{(x^2+4-4)\sin(tx)}{x(x^2+4)}dx = -2\int_0^{\infty}\frac{\sin(tx)}{x}dx + 8\int_0^{\infty}\frac{\sin(tx)}{x(x^2+4)}dx =$$

$$= -2\int_0^{\infty}\frac{\sin u}{u}du + 8\int_0^{\infty}\frac{\sin(tx)}{x(x^2+4)}dx = -2\cdot\frac{\pi}{2} + 8\int_0^{\infty}\frac{\sin(tx)}{x(x^2+4)}dx =$$

$$= -\pi + 8\int_0^{\infty}\frac{\sin(tx)}{x(x^2+4)}dx$$

Means

$$I'(t) = -\pi + 8\int_0^{\infty}\frac{\sin(tx)}{x(x^2+4)}dx$$

$$I''(t) = 8\int_0^{\infty}\frac{x\cos(tx)}{x(x^2+4)}dx = 8\int_0^{\infty}\frac{\cos(tx)}{x^2+4}dx = 4I(t)$$

We have obtained a homogeneous differential equation of the second order.

$$I''(t) = 4I(t)$$

$$I''(t) - 4I(t) = 0$$

Make up a characteristic equation

$k^2 - 4 = 0$

$k_1 = 2,\ k_2 = -2$

General solution equation is equal

$I(t) = c_1 e^{2t} + c_2 e^{-2t}$

$I(0) = c_1 + c_2 = \frac{\pi}{2}$

$I'(t) = 2c_1 e^{2t} - 2c_2 e^{-2t}$

$I'(t) = 2c_1 - 2c_2 = -\pi$

$c_1 = 0,\ c_2 = \frac{\pi}{2}$

$I(t) = \frac{\pi}{2} e^{-2t}$

$I(3) = \int_{-\infty}^{\infty} \frac{\cos(3x)}{x^2 + 4} dx = \frac{\pi}{2} e^{-6} = \frac{\pi}{2e^6}$

18. Calculate the integral

$$\int_0^{\infty} \frac{1}{1 + x^4} dx$$

Solution

1-way

By Lemma-2, we obtain the following equality

$I = \int_0^{\infty} \frac{1}{1 + x^4} dx = \int_0^{\infty} \frac{x^2}{1 + x^4} dx = \int_0^{\infty} \frac{x^2 dx}{1 + 2x^2 \cos(2\alpha) + x^4}$

Where $\alpha = {}^{\pi}/_{4}$

Adding this integral with the last integral we get

$2I = \int_0^{\infty} \frac{1 + x^2}{1 + 2x^2 \cos(2\alpha) + x^4} dx$

$I = \frac{1}{2} \int_0^{\infty} \frac{1 + x^2}{1 + 2x^2 \cos(2\alpha) + x^4} dx$

Knowing that the integrand function is an even function, that is

$\int_{-a}^{a} f(x) dx = 2 \int_0^{a} f(x) dx$

We get that

$$I = \frac{1}{4}\int_{-\infty}^{\infty}\frac{1+x^2}{1+2x^2\cos(2\alpha)+x^4}\,dx$$

Knowing that

$$\cos(2\alpha) = 1 - 2\sin^2(\alpha)$$

$$x^4 + 2x^2\cos(2\alpha) + 1 = x^4 + 2x^2(1 - 2\sin^2(\alpha)) + 1 =$$

$$= x^4 + 2x^2 + 1 - 4x^2\sin^2(\alpha) = (x^2+1)^2 - (2x\sin\alpha)^2 =$$

$$= (x^2 - 2x\sin\alpha + 1)(x^2 + 2x\sin\alpha + 1)$$

Since the function $f(x) = -2x\sin\alpha$ is odd, it follows that the function

$$g(x) = -\frac{2x\sin(\alpha)}{(x^2 - 2x\sin\alpha + 1)(x^2 + 2x\sin\alpha + 1)}$$

Then

$$\int_{-\infty}^{\infty} g(x)dx = \int_{-\infty}^{\infty}\frac{-2x\sin(\alpha)\,dx}{(x^2 - 2x\sin\alpha + 1)(x^2 + 2x\sin\alpha + 1)} = 0$$

$$I = \frac{1}{4}\int_{-\infty}^{\infty}\frac{(1+x^2)dx}{(x^2 - 2x\sin\alpha + 1)(x^2 + 2x\sin\alpha + 1)} +$$

$$+\frac{1}{4}\int_{-\infty}^{\infty}\frac{-2x\sin(\alpha)\,dx}{(x^2 - 2x\sin\alpha + 1)(x^2 + 2x\sin\alpha + 1)} =$$

$$= \frac{1}{4}\int_{-\infty}^{\infty}\frac{x^2 - 2x\sin(\alpha) + 1}{(x^2 - 2x\sin\alpha + 1)(x^2 + 2x\sin\alpha + 1)}\,dx = \frac{1}{4}\int_{-\infty}^{\infty}\frac{dx}{(x^2 + 2x\sin\alpha + 1)}$$

$$= \frac{1}{4}\int_{-\infty}^{\infty}\frac{dx}{(x+\sin\alpha)^2 + 1 - \sin^2(\alpha)} = \frac{1}{4}\int_{-\infty}^{\infty}\frac{dx}{(x+\sin\alpha)^2 + \cos^2(\alpha)} =$$

$$= \frac{1}{4\cos\alpha}\operatorname{arctg}\frac{x+\sin\alpha}{\cos\alpha}\Big|_{-\infty}^{\infty} = \frac{1}{4\cos\alpha}\left(\frac{\pi}{2} - \left(-\frac{\pi}{2}\right)\right) = \frac{\pi}{4\cos\alpha} = \frac{\pi}{4\cos\frac{\pi}{4}} =$$

$$= \frac{\pi}{4\cdot\frac{\sqrt{2}}{2}} = \frac{\pi}{2\sqrt{2}} = \frac{\sqrt{2}\pi}{4}$$

2-way

$$I = \int_0^{\infty}\frac{1}{x^4+1}\,dx = \int_0^{\infty}\frac{x^2}{1+x^4}\,dx = \int_0^{\infty}\frac{(x^2+1-1)dx}{1+x^4} = \int_0^{\infty}\frac{x^2+1}{1+x^4}\,dx -$$

$$-\int_0^{\infty}\frac{dx}{1+x^4} = \int_0^{\infty}\frac{x^2+1}{1+x^4}\,dx - I$$

$$2I = \int_0^\infty \frac{x^2+1}{1+x^4}dx$$

Let’s make substitutions

$$t = x - \frac{1}{x}$$

$$dt = \left(1 + \frac{1}{x^2}\right)dx$$

$$x \to \infty,\ t \to \infty$$

$$x \to 0,\ t \to -\infty$$

$$I = \frac{1}{2}\int_0^\infty \frac{x^2+1}{1+x^4}dx = \frac{1}{2}\int_0^\infty \frac{\frac{1}{x^2}+1}{\frac{1}{x^2}+x^2}dx = \frac{1}{2}\int_0^\infty \frac{d(x-\frac{1}{x})}{(x-\frac{1}{x})^2+2} = \frac{1}{2}\int_{-\infty}^\infty \frac{dt}{t^2+2} =$$

$$= \frac{1}{2}\int_{-\infty}^\infty \frac{dt}{t^2+(\sqrt{2})^2} = \frac{1}{2\sqrt{2}}\operatorname{arctg}\frac{t}{\sqrt{2}}\Big|_{-\infty}^{\infty} = \frac{1}{2\sqrt{2}}\left(\frac{\pi}{2} - \left(-\frac{\pi}{2}\right)\right) = \frac{\pi}{2\sqrt{2}} = \frac{\sqrt{2}\pi}{4}$$

19. Calculate the integral

$$\int_{-\infty}^\infty \frac{\sin^2(x)}{x^2}dx$$

Solution

$$I = \int_{-\infty}^\infty \frac{\sin^2(x)}{x^2}dx = 2\int_0^\infty \frac{\sin^2(x)}{x^2}dx$$

$$I(t) = \int_0^\infty \frac{\sin^2(tx)}{x^2}dx$$

$$I(t) = \frac{\pi}{2}$$

Let’s make substitutions

$$u = 2tx$$

$$dx = \frac{du}{2t}$$

$$x = \frac{u}{2t}$$

$$I'(t) = \frac{d}{dt}\left(\int_0^\infty \frac{\sin^2(tx)}{x^2}dx\right) = \int_0^\infty \frac{1}{x^2}2x\sin(tx)\cos(tx)\,dx = \int_0^\infty \frac{\sin(2tx)}{x}dx$$

$$= \int_0^\infty \frac{\sin u}{\frac{u}{2t}}\cdot\frac{du}{2t} = \int_0^\infty \frac{\sin u}{u}du = \frac{\pi}{2}$$

(See example 14)

$$I'(t) = \frac{\pi}{2}$$

$$I(t) = \frac{\pi}{2}t + C$$

$$I(1) = \frac{\pi}{2}\cdot 1 + C = \frac{\pi}{2}$$

$$C = 0$$

$$I(t) = \frac{\pi}{2}t$$

$$I(1) = \frac{\pi}{2}$$

$$I = \int_{-\infty}^{\infty} \frac{\sin^2(x)}{x^2}\,dx = 2\int_0^{\infty} \frac{\sin^2(x)}{x^2}\,dx = 2\cdot\frac{\pi}{2} = \pi$$

IV. Definite integral applications

One of the important applications of the definite integral is its use when finding the areas of plane figures. Here are some examples. **[15]**

1.Prove that

$$1 + \frac{1}{2} + \frac{1}{3} + \cdots + \frac{1}{n-1} > \ln n, \quad n \in N$$

Solution

$$1 + \frac{1}{2} + \frac{1}{3} + \cdots + \frac{1}{n-1}$$

The sum is the sum of the areas if all $n - 1$ quadrangles shown in (Fig.1). Since this sum is the area of the entire stepped figure in (Fig.1), it is strictly greater than

$$\int_1^n \frac{dx}{x}$$

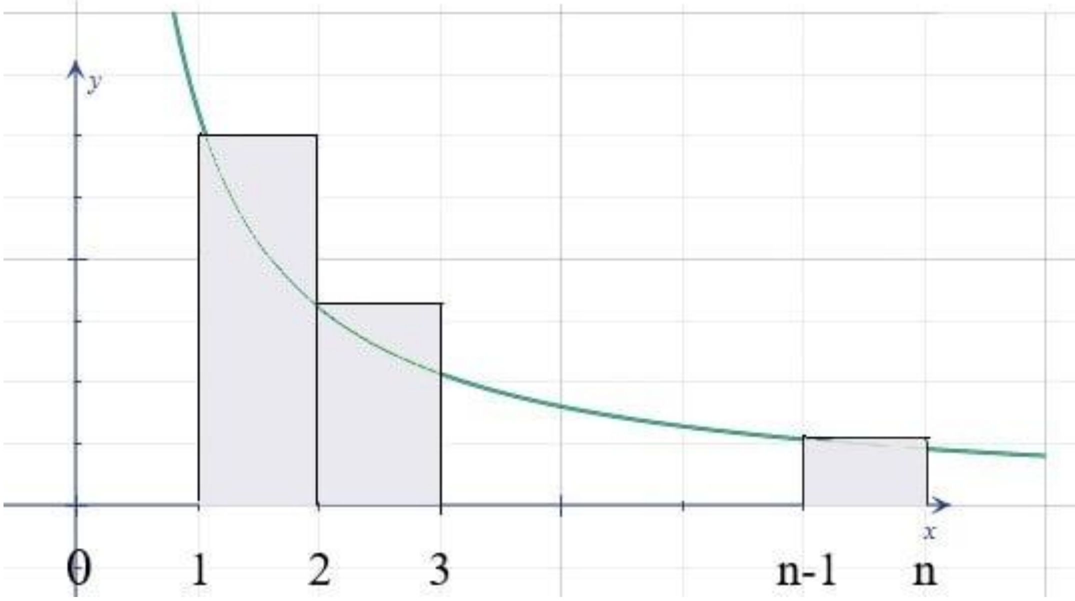

Fig.1

In this way

$$1+\frac{1}{2}+\frac{1}{3}+\cdots+\frac{1}{n-1}>\int_1^n \frac{dx}{x}=\ln n$$

As required to prove.

2. Prove inequality

$$n!<n^{n+0,5}e^{-n+1},\ n\in N$$

Solution

Points of the graph of the function $y=\ln x$ with the same abscissas in (Fig.2). Then the area of the curved trapezoid is $A_1B_nA_n$, i.e. $\int_1^n \ln x\ dx$, greater than the sum of the areas of triangle $A_1B_2A_2$ and trapezoids $A_2B_2B_3A_3$, …, $A_{n-1}B_{n-1}B_nA_n$. So

$$\frac{\ln 2}{2}+\frac{\ln 2+\ln 3}{2}+\cdots+\frac{\ln(n-1)+\ln n}{2}<\int_1^n \ln x\ dx$$

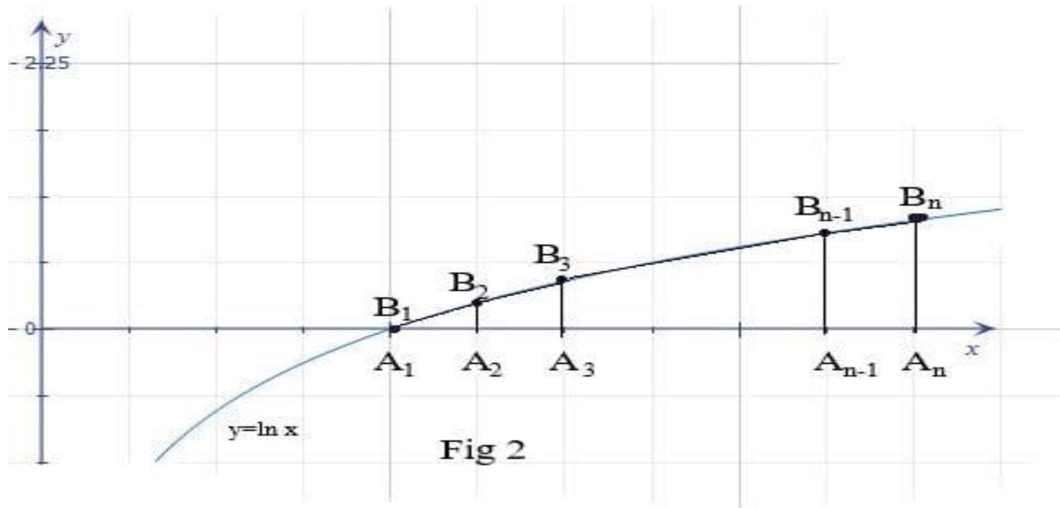

Fig.2

Integrating by parts, we get

$$\int_1^n \ln x \, dx = x \ln x|_1^n - \int_1^n dx = n \ln n - n + 1$$

Hence,

$$\ln 1 + \ln 2 + \cdots + \ln(n-1) + \frac{1}{2}\ln n < n \ln n - n + 1$$

Whence

$\ln n! < (n + 0{,}5)\ln n - n + 1$ or $\ln n! < \ln(n^{n+0{,}5} e^{-n+1})$

And thus inequality

$n! < n^{n+0{,}5} e^{-n+1}$ is proved

3. Prove that

$$\sum_{n=1}^{100} \frac{1}{n\sqrt{n}} \leq 1{,}8 n \in N$$

Solution

Consider the function $f(x) = \frac{1}{x\sqrt{x}}$, $x \geq 1$. Since the function $f(x)$ is decreasing on the interval under consideration, the following inequalities hold

$\frac{1}{2\sqrt{2}} \leq \frac{1}{x\sqrt{x}}$ at $1 \leq x \leq 2$

$\frac{1}{3\sqrt{3}} \leq \frac{1}{x\sqrt{x}}$ at $2 \leq x \leq 3$

…

$\frac{1}{100\sqrt{100}} \leq \frac{1}{x\sqrt{x}}$ at $99 \leq x \leq 100$

Integrating these inequalities, we obtain

$$\frac{1}{2\sqrt{2}} \leq \int_1^2 \frac{1}{x\sqrt{x}}\,dx$$

$$\frac{1}{3\sqrt{3}} \leq \int_2^3 \frac{1}{x\sqrt{x}}\,dx$$

…

$$\frac{1}{100\sqrt{100}} \leq \int_{99}^{100} \frac{1}{x\sqrt{x}}\,dx$$

Adding the resulting inequalities, we find

$$\frac{1}{2\sqrt{2}} + \frac{1}{3\sqrt{3}} + \cdots + \frac{1}{100\sqrt{100}} \leq \int_1^2 \frac{dx}{x\sqrt{x}} + \int_2^3 \frac{dx}{x\sqrt{x}} + \cdots + \int_{99}^{100} \frac{dx}{x\sqrt{x}} =$$

$$= \int_1^{100} \frac{1}{x\sqrt{x}}\,dx = -\frac{2}{\sqrt{x}}\bigg|_1^{100} = -\frac{2}{10} + 2 = 1{,}8$$

Whence the proved inequality follows.

REFERENCES

1. Antonov NS. Integrative function of training. Modern problems methods of teaching mathematics. Moscow: Education 1985. pp. 25-38
2. Arnold VI. Math and mathematical education in the modern world. Mathematics education. 1977;(2):109-112.
3. Babansky YK. Optimization of learning process. Moscow: 1977.
4. Vasilevky AB. Methods for solving problems. Moscow: “High school”; 1974. 238 p.
5. Genkin GZ. Geometric solutions of algebraic tasks. Mathematics at school. 2001;(7):61-66.
6. Ginguls EG. The development of mathematical abilities of students. Mathematics at school. 1990;(1):14-17.
7. Gordina SV. Methodological basis of the integration of mathematics education the diss. of the candidate ped. science. saransk, 2002. 169p.
8. Dalinger VA. Geometry helps algebra. Mathematics at school. 1996;(4):29-34.
9. Daniluk AY. The theory of the integration of education. Rostov: Publisher Rostov. Ped. 2000. 440 p.
10. Dvoyakovsky PG. About the geometric solution of algebraic tasks. Mathematics at school, 1980;(30):33-35.

11. Osanov AA. The use of the principle of integration in the formation of a holistic view of the world. integration of education

12. Saranzev GV. The methology of teaching methods mathematics. Saransk, 2001. 144 p.

13. Kurlyanchik L, Senderov V. Quantun task. Kvant. 1992;(9):29-31.

14. Demidovich BP. Collection of problems and exercises on mathematical analysis. Moscow 1977, 528 p.

15. Melnikov VV et al. Problems in mathematics" Beginnings of analysis. Moscow; 1990, 608p.

CHARACTERISTIC OF THE DEVELOPMENT OF THE COMPETENCE OF INDEPENDENT THINKING OF STUDENTS IN THE PROCESS OF LEARNING IN THE SOCIAL AND HUMANITARIAN SCIENCES

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ABSTRACT

This article highlights the specifics of the development the competence of students' independent thinking in teaching the social sciences and humanities, their role in the educational process and their importance in the mature of students. The definitions of the concept of independent thinking by various psychologists and educators are analyzed. The main aspects that must be taken into account when developing the competence of independent thinking of a student, and the features of choosing methods for developing independent thinking, are described.

KEYWORDS: *Social Sciences And Humanities, Independent Thinking, Succession, Continuity, Human Maturity, Independence Of Thought, Thinking, Understanding.*

INTRODUCTION

Today, when the development of independent mental competence of students in the educational process is seen as a socio-pedagogical necessity, even a simple thought of each student shows that over time it can become the basis for great discoveries.After all, one of the main problems of modern pedagogy is the inclusion in educational materials of a certain degree of student orientation towards independent work in the learning process, continuity, perception, comprehension and self-acceptance of content based on continuity. It is important to structure such an independent thought process, the effective use of development factors.

Numerous scientific studies have been carried out in our country on the development of independent thinking of students like N. Alavutdinova (Teaching independent thinking in the lessons of the native language), L. Grash (The place and role of exercises in teaching independent thinking), M. Zainiddinova (Development of independent thinking), V.Karimova **[1],** R.Sunnatova, Z.Nishonova **[2],** K.Kendzhabaeva (Psychological features of independent thinking), S.Novoselova (Teaching independent thinking from an early age), Sh.Nurullayeva (Teaching independent thinking in primary school classes), M.Saidov (Development of thinking in the lessons of the native language), B. Khodzhaev (Teaching independent thinking in the lessons of history), K. Khusanbaeva (Teaching independent thinking in the lessons of literature).

The above scientists tried to explain the concept of independent thinking, its place and role in the formation of personality.Psychologists and educators expressed their views on this issue at different levels and scales, depending on the goals.

Each of the scientists-teachers who conducted research on the orientation of students to independent thinking approached and described it in their own way.For example, according to Z. Nishonova: "Independent thinking as a quality of a person is one of the important factors in achieving high rates of individual and collective success in any activity" **[3].**

According to A. Erkaev: "Independent thinking is a product and reflection of the opportunities and freedoms created by society" [**4].**

Psychologists V. Karimova and R. Sunnatova said about thought: "A feeling that arises as a result of the impact of the events of the objective world on a person's consciousness is called a "thought".On the basis of thought, the human eye will be able to see the mysterious sides of a thing that are not directly perceived, which are not in front of his eyes, but what is, is related to the inner nature of the being itself." **[1].**

Based on her observations, K. Khusanbaeva characterized independent thinking as follows: it is a mental activity aimed at solving "Independent thinking is a person's mental activity to independently solve a problem in accordance with clearly set goals and objectives, based on their knowledge and life experience, using various methods, methods and means at the level of their intellectual capabilities." **[5,6].**

Sh. Nurullayeva in her study on the orientation of students to independent thinking in the lessons of their native language in elementary school, tried to describe independent thinking as follows.According to her: "Independent thinking is a mental activity that is carried out as a result of the unity of the human senses and mental activity using such types of intellectual activity as independent analysis, generalization, inductive and deductive reasoning, comparison, clarification." **[7; 8].**

Independent thinking with its effectiveness, relevance, universality leads students to perfection, lays a solid foundation for understanding society and natural phenomena.

Independence of thinking is manifested in the initiative, perseverance and criticality of the mind.The initiative of the mind means that a person sets himself a new problem, a clear goal, a clear task, personally looking for methods and means in the implementation, refinement, search for a solution, mental stress, the introduction of additional signs and symptoms.The perseverance of the mind is expressed in the quick solution of problems, in the selection and precise application of the most appropriate new methods and means, in the liberation from old methods, and in other mental processes.

Criticism of the mind is important for the ability to compare one's own and others' opinions, whether these opinions are true or not, and to give a comprehensive assessment of the opinions, discussions and problem situations that have arisen.If criticism is based on important features, criteria of the essence of the problem, such criticism is called objective criticism.If the critique of consciousness deviates from subjective (personal) delusions towards subjectivism in general, then it is called subjective criticism.If the criticism of human thinking is carried out rationally, fairly and effectively, then both mental and moral qualities can be developed in such a person.

The independence of thought is inextricably linked with its productivity.Such an idea is called productive when theoretical and practical problems are solved on the basis of ideas, recommendations, recommendations related to a particular area.The criterion for measuring the productivity of thinking is a reasonable assessment of the volume and quality of mental activity carried out over a certain period of time.

Even when thinking about simple things, one can discover a general law from the realities of everyday life, if not limited to their external features, but strive to reveal the essence of events in depth.It is clear that the discovery by human thinking of possibilities not yet explored and not fully utilized by human independent thinking serves to accelerate the development of science and technology.

Human maturity consists of physical, moral and mental stages, and independent thinking is the culmination of the human ladder of maturity.At the present stage of humanity, mental maturity can be achieved gradually, gradually, in exchange for patterns of tension of the nervous system, mental tension, emotional seriousness, stable volitional behavior, continuous activity, devotion.The young generation of our country, with the good intentions of becoming a perfect person, should carefully study independent thinking and creative pursuits in order to assimilate the spirituality and values created by our ancestors and ensure future development.

Similar processes inherent in the education system are clearly reflected in the organizational aspect and content of teaching the social sciences and the humanities.It is known that general secondary education is distinguished by the subject and object of the social sciences and the humanities. At the same time, its educational purpose and mission is unique.

The social and humanitarian sciences are educational sciences aimed at creating a holistic picture of the planet on which humanity lives, that is, the Earth, an important component of human culture, the upbringing of culture.

The development of students' cognitive abilities, as in all academic disciplines, is a priority in the teaching of social sciences and the humanities.Indeed, in updating the content of education, the main attention is paid to the full mobilization of its developing potential of the student, opportunities for educational purposes.However, despite the presence of positive research and experiments on the problem of teaching the student independent knowledge, the power of his thinking, the deepening of his mental abilities, one cannot be satisfied with the results of their extensive practice.So why? It is known that, according to the State Educational Standard (SES), students are able to: describe a certain number of terms, as well as events and processes; they can determine the scale, scope, spatial position, show, explain the essence; practical demonstration of a number of training skills and abilities; most importantly, he must be able to understand how quantitative and qualitative changes can occur over time.

The market economy requires the student to begin to satisfy their own material needs, to solve most of life's problems on their own.Such new social relations form a new consciousness in the personality of the student, and their neglect reduces the effectiveness of education.You can revive interest in the school if you organize the educational process based on the activity of students.

In the process of teaching the social sciences and the humanities, the competence of the student's independent thinking on given topics is reflected in the process of the logical connection of the given words.Historical terms, on the other hand, in their fullness require the reader to pay more attention in the process.

Along with the priority of theoretical knowledge in developmental education, the role of various didactic tools and methods in the formation of educational skills and competencies is also important.Therefore, in the lessons typical for developmental education, special attention is paid to assignments, practical work, didactic exercises and games aimed at developing learning skills and competencies aimed at gaining knowledge independently in relation to lectures.In particular, such aspects, characteristic of the social and human sciences, determine their content.

Another important condition for developmental learning is that the teacher and students have a holistic and conscious vision of the learning process.To do this, the content and structure of each lesson is pre-modeled, and students become familiar with its model as they learn a new topic.Then independent learning of students will be conscious and therefore interesting. During the lesson (in the classroom), students should be guided and guided by the teacher so that students feel that they are the determining factor in the process.

In the development of independent thinking competence of students, it is important to develop the skills of analysis, observation, comparison.

According to psychologist Ergash Goziev, “the more a person practices comparison in personal activities, including in the educational process, the more effective the ability to think, the more effective thinking will be.” **[9].**

Indeed, upon closer examination of the process of comparison, it turns out that it is directly related to the perception of something and an event as an integral part of the thought process.People who are deprived of the ability to feel cannot compare. In the process of comparison, the memory of both the student and the teacher is enriched with new information. The speech of an informed person leaves a pleasant impression on any interlocutor.

Comprehension is a special result of mental activity. From a physiological point of view, understanding is the result of the appearance of the corresponding temporal nerve connections in the cerebral cortex.I.P. Pavlov said that “... the ability to apply theoretical knowledge in practice is an comprehension.” **[10].**

The extent to which a person understands an event is often reflected in his or her ability to discover the causes of that event, as well as to see what the outcome of that event will be.For example, to understand the operation of a mechanism, it is necessary to know its structure and working principle; to understand historical events, it is necessary to reveal its cause and effect; in knowing the student’s behavior, it is important to determine what compelled him or her to perform the appropriate behavior.How well a person understands a field is mainly measured by his or her ability to use his or her existing knowledge in that field. For example, if a student not only correctly describes the rules of grammar, the laws of physics or chemistry, but also writes competently, solves problems temporarily, conducts experiments, it shows that he understands life examples correctly.

The ability of the reader to express the content of the text in his own words, to show the main idea of the text is an indicator of how well the reader understands the material.

By teaching students to interpret events, to express ideas in their own words, to distinguish the most important, they are given the opportunity to learn reality in a comprehensive and in-depth way.

Independent thinking as an individual competence is an important factor in ensuring a high level of success in any activity, individually and in a team.The formation of independence is not only a pedagogical, but also a social task. Independence is inextricably linked with the responsibility of a person for his actions. A person can be held accountable for actions in which he knowingly participates.

According to the famous writer Chingiz Aitmatov, young people who have not developed the ability to think independently will become, in the language of the famous writer Chingiz Aitmatov, “mankurts.” It is young people who have not developed independent thinking who become victims of religious extremism and Islamic fundamentalism, fall into various sects, such as Wahhabism, Hizb ut-Tahrir, and the Muslim Brotherhood. If we can develop independent thinking in our youth, how many young people will we turn away from this path.

The importance of independence also lies in the fact that this quality helps a person to be resilient and resilient, allowing a person to adapt to intense emotional situations in a market economy, to strong mental and emotional stress in various areas and activities.

In pedagogy, independence of thinking is studied as the activation of independent work of students in various disciplines. In philosophy and sociology, the main idea is the social nature of human thinking, the dependence of human thinking on its environment.Until recently, in psychology and didactics, independent thinking was considered as the solution of learning problems by the student without any help.Many scientists who dealt with this problem point out that a successful solution to this problem, firstly, will ensure high quality education for students and, secondly, will bring up a creatively thinking young generation. But researchers who recognize these two goals study student independence not as an individual trait, but only as a method and principle of teaching.

The problem of independent thinking should be studied not only from the point of view of solving the educational problems of students at school, but also from the point of view of the problems that life poses for them. With this approach, they are required not only mental independence, but also freedom of choice, moral responsibility and endurance, will and dedication, and so on.

The following socio-pedagogical and psychological factors underlie the development of independent thinking of a student:

1. A person’s experience in critically evaluating one’s own and “someone else’s” opinions, the ability to understand the opinion of another person, understand the logic of his opinion, compare the interlocutor’s opinion with his own opinion and come to a certain conclusion.

2. External and internal agreement of a person with the content of thought. Belief in the idea "blindly" and "rationally". These two qualitative indicators of persuasion, depending on their combination, make up each type of thinking. The quantitative measurement of a person's confidence in the content of an opinion determines the level of confidence in the correctness of the opinion.

A person's belief in an opinion depends on:

a) an objectively justified opinion;

b) the logic of the idea;

c) imitation of the opinion of influential people;

d) levels of self-esteem.

During the development of thought, it is possible to observe changes in the interdependence between these components.

3. The ability to "feel" contradictions. The process of acquiring a personal opinion cannot be carried out without revealing contradictions in the content of knowledge, without revealing various relationships between the studied events, phenomena, concepts.It is well known that dialectical and logical contradictions are different. Unlike dialectical contradictions, logical contradictions arise as a result of distortion of established logical axioms and correct conclusions. (For example, errors in generalization, failure to distinguish random from legitimate events). In dialectical contradictions, the whole is divided into opposite parts, each of which is studied separately, and the original whole is reconstructed.

4. Correlation between theoretical and practical generalizations in thinking. All three of the above indicators of independent thinking are associated with the analytical and synthetic ability of the individual, expressed in the ability to draw general conclusions based on the analysis of facts and conditions of the problem (practical conclusions) and vice versa (theoretical generalizations).

In our opinion, when a person acquires an independent mind in the process of communication, he relies not only on practical, but also on theoretical generalization. Because he needs a general conclusion to discuss his own opinion and the opinion of his opponent. According to practical (empirical) generalizations in thinking, the predominance of theoretical generalizations indicates a high degree of independence of the individual's thinking.

5. Arbitrary control of mental functions is manifested in attention. Attention is associated with different types of thinking through specific characteristics: switching attention, volume, selective properties.

6. The level of development of the mental initiative, the features that encourage a person to think, is one of the important signs of an individual's independent thinking. In this case, a person, on his own initiative, without external influences, has a desire to discuss the problem with peers, teachers, prepares his own answers to defend his opinion, needs to substantiate his views and prove them.

In our point of view, the above indicators characterize the general structure of independent thinking as a personality trait.

The development of thinking allows you to evaluate the perceived events and events of life, develop faith in the “reason” instead of “blind” faith in the content of thought. The development of thought and belief is an important factor in the cognitive process, the emergence of thought creates a student's need for deeper knowledge, which in turn activates all the student's forces, ensures the unity of motives, will and mental actions. , i.e. unity of incentive and executive.

This makes it possible to determine the socio-pedagogical and psychological factors in the development of a student's independent mental competence. After all, a great role in this is played by the preparation of the student psychologically, so as not to encounter any obstacles in the course of his thinking, the creation of a social environment. Pedagogical factors that are implemented in the educational process should be prepared for this in terms of content. The means available to the student are linked to an efficient system and form the basis for the development of independent thinking.

REFERENCES

1. Karimova V, Sunnatova R. Methodical instructions on the organization of lessons on independent thinking. Tashkent: Sharq, 2000. 193p.

2. Nishonova Z. Psychological bases of development of independent creative thinking: abstracts from Psychol. sciences doctorate ... discertation. Tashkent, 2005. 38p.

3. Nishonova Z. Independent creative thinking and personality traits. Tashkent: “Xalq ta’limi”; 2001;(4):38-42.

4. Erkaev A. Criteria of freedom of thought. Tafakkur, 2006;(1):12-19.

5. Husanboeva Q. Fundamentals of teaching independent thinking in literary education. Tashkent: O’zinkomcentr, 2003. 103 p.

6. Husanboeva Q. Independent thinking is a factor of spiritual perfection. “Ma’rifat”, 18 April, 1998.

7. Nurullaeva Sh. Methods of teaching students to think independently in primary school mother tongue classes. Ph.D.in Ped. Sciences. Tashkent; 2007. 148 p.

8. G'oziev E. The growth of students' thinking in the learning process (Teacher's Guide). Tashkent: O’qituvchi. 1980. 88 p.

9. G'oziev E, Ikromov J. The impact of independent thinking on perfection. Ж. Xalq ta’limi. 2001;(4):31-37.

10. Musaev JP. Technology of modeling educational materials focused on independent thinking. “Maktabvahayot” Magazine; 2008;7-8;11-12.

THE IMAGE OF HUMAN AND ANIMALS IN THE STORIES OF NORMURAD NORKOBILOV

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ABSTRACT

This article describes the interpretation of the image of animals and humans in the animalistic stories of the writer Normurad Norkobilov, the relationship between them, the figurative embodiment of animals. In his works, human characteristics are revealed through the image of animals.

KEYWORDS: *Nature, Human, Nationality, Animal, Plant, Animalist*

INTRODUCTION

We know that humanity is a tool of art. The writers convey the realities of life to readers through artistic depictions of people, their spiritual experiences, and their characters. But there are some works that reveal the essence of the work, not the human factor, but nature and animals, which are an integral part of it. Let's talk about the concept of animals, which is written about animals. Animalistics (Latin animal - animal) - the depiction of animals in fine arts. An artist and sculptor working in this field is called an animalist. The fauna, which is a wonderful product of nature - aquatic, terrestrial, birds - has long been of interest to human, and the animal world has always been important to human. Primitive humanin primitive art depicted hunting scenes, the movement and condition of animals in different conditions. Animalistics has been developed in Turkestan, including Uzbekistan, for a long time. The first animal images (rock paintings, pottery, sculptures) were created in the primitive period and later in society (Neolithic, Eneolithic, Bronze Age. images of oxen, goats, snakes and others on gold objects). See also Scythian culture, Scythian art. In the surviving murals (see Dalvarzintepa, Afrosiab murals, Soil Castle murals), there are also images of animals in applied decorative arts (fabrics, jewelry, cloth, etc.). After the Arab conquest, the Animalistic genre became depressed and was replaced by more intricate, Islamic motifs. Animalism is not only reflected in ancient murals and spool objects, but also in fiction. **[1]**

Images of animals can be found in the literature of all periods. There are many creators of animalism in world literature and in Uzbek literature. For example, Ernest Seton-Thompson's "Red Neck" (the image of sparrows), Orasio Kiroga's "Anaconda" and Chingiz Aitmatov's works are the leading figures in world literature. In Uzbek literature, the story "Poetry and Durroj" from Gulkhani's "Zarbulmasal" and Alisher Navoi's "Khamsa" epic "Hayrat ul-abror", as well as Gafur Gulom, Pirimkul Kadyrov, Shukur Kholmirzaev, Sunnatulla Anorbaev , In the stories of Power Wisdoms, socio-spiritual, psychological problems are explored through the image of humans and animals. Another of our writers who wrote such stories is Normurad Norkobilov. Normurad Norkobilov often refers to the theme of the animal world, in addition to works that mainly reflect the psyche of people. Writer, why are you shaking your pen in this direction? "If I say I love animals, it's too much," he said. You know, nature breathes and lives in unity. This is the iron law. But we humans often ignore this law and call ourselves “kings. No "king" can live without the environment around them. Without that environment, it's just a sweet soul. So we don't feel the flora or the fauna. It is as if they exist without us, and as if they will never be harmed, and if they are harmed, there will be no loss. We continue to unknowingly disrupt natural unity. Imagine that there is no flora or fauna in the world, and humans alone in the desert. So what's wrong with her? That's awful to think about! Is it because the attitude of the fireplace to the neighboring world is different, the first reason is that the second reason is that I have been looking at the animal world with love since childhood. I understand this world to a greater or lesser extent, and I know without hesitation that every creature, whatever its type, has a unique heart. Kamina is interested in the same "heart". That's what I've tried to portray in my work. " **[2]**

In Normurad Norkobilov's stories, special attention is paid to the fact that human beings have such qualities as lust, dignity, enmity, hatred, fear, and compassion. The connection between animals and the fact that human values are valued in relationships also increases the author's interest in his work. **[3]**

Normurad Norkobilov's stories such as "Black Sheep", "Pakhmoq", "Changalzor iti", "Ovul aralagan wolf", "Oq neck" reflect the relationship between human and nature. In the story "White Neck", the author, based on the specific rules of life, describes the minor conflict between good and evil, and the victory of good in this conflict between Karim Podachi and the White Neck. describes the relationship. This story is taken from the author's own life. Normurad Norkobilov had a dog nicknamed White Neck. He started watching dogs from the White Neck. Through this story, the author shows the connection between human beings and the animal kingdom. In the story, the author shares his interesting and surprising observations about dogs in the form of the White Neck. The unique characteristics of dogs, their lifestyles, habits, relationships with other animals, their interest in natural phenomena, which we do not understand, are beautifully described. He cited the example of the White Neck as an example of the fact that human emotions such as anger, hatred, joy, and loyalty are not alien to animals. In his stories, the author describes animals as if he had lived with them all his life. **[4]**

Almost all of Normurad Norkobilov's stories about animals are based on his own observations. We see this in the example of the author's story "Cotton". The writer recalls: “In our village there was a hunter named Khurram aka. I was following thishumanin a tail. So I was beaten a lot by my parents. I was eight years old at the time. Because of my love for nature and animals, I was not left behind by the Khurram hunter, even if I was beaten. Thanks to him, I got deeper into nature, and that's where my love for nature and animals came from. He used to shoot sparrows, pigeons, foxes, wolves, bears, gazelles, and he would shoot. Hurram the hunter was nowhere to work, he was lazy. He was always listening to his wife. I saw cotton in those days. Khurram hunter was told that if he caught a bear and took it to the zoo, he would be paid by a novvos. That is why Khurram hunter and I followed Pakhmoq. Cotton was very deceptive to us. We followed it for half a year and we couldn't catch it. "

Through the story of Pakhmoq, we see that life is full of difficulties and trials, and that such difficulties do not bypass not only people but also all beings, including animals. Pakhmak's struggle for survival is described in different ways in the writer's pen. It is not in vain that the highest and the worst of all beings are called human beings. Poor Pakhmoq shuddered at the smell, the smell of a human being, and tried to escape. The writer must be able to convince the reader when writing a work. **[5]** However, Normurad Norkobilov's critical gaze did not ignore any of the bear's movements. That's why the story is so moving and convincing.

Speaking about the works of Normurad Norkobilov, Professor Kazakboy Yuldashev said: “The writer is not just an animal lover. He tries to fully reveal the characteristics of the people around the animals by writing about unusual animals, their mysterious habits, and strange lifestyles. ” The writer refers to real reality in his stories. Based on what he has seen and experienced, he conveys them to the reader without exaggeration, as in real life. We will see it again through Pakhmoq.

The uniqueness of Normurad Norkobilov as a creator is that he is not alien to the environment depicted in his works. In his works, the writer did not deviate from the values and traditions of the place where he grew up. That is why the writer always tries to approach the village from the standpoint of the villagers, whether it is about rural life or about the mountains. He narrates the events in the language of these people. These people tell the story in their own language, they look at it with their own eyes, and they draw their own conclusions. In short, the writer has a deep respect for nationality, or rather, the customs and traditions of the place where he was born and raised. **[6]**

The concept of national character is a very broad concept that complements the universal character and at the same time reflects its specific features. The author does not have a story that does not describe the landscape and wildlife. The naming of his works also testifies to this.

While reading the author's works, the reader feels the magic of grass, mountains and rocks, and has a direct conversation with animals. Normurad Norkobilov studied nature in depth. He lovingly depicts the hills, trees, and animals in his works, proving that he has studied the physiological properties of each. In his works, the author distinguishes people through the relationship between dogs and wolves, and sometimes encourages people to follow their example. The main idea of Normurad Norkobilov's works is to encourage students to be vigilant.

REFERENCES

1. The National Encyclopedia of Uzbekistan. The first volume. Tashkent; 2000.

2. The Heart's Eye Newspaper.1998.-№35 (136). 2-b

3. Norkobilov N. Face to face (stories). Tashkent: Chulpon, 1993. pp. 43-103.

4. Norkobilov N. Cotton (stories and narratives). Tashkent: Teacher; 1997.

5. Comrade K. Keyword. Tashkent: New Century Generation; 2006. p.37

6. Ashupova Sh. Features of the genre of animalism in English-speaking Western literature and Uzbek literature (on the example of E. Seton-Thompson and N. Norkobilov). Dissertation work. Tashkent; 2019. pp.12-13

EDUCATIONAL TASKS THAT DEVELOP CONVERSATIONAL SKILLS IN TEACHING THE NATIVE LANGUAGE

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ABSTRACT

The article describes the main means of communication in the process of teaching the native language, the system, methods and means of forming speech (conversational) skills from conversational skills, the type, classification and description of educational tasks. It identified and classified the skills of presenting and distributing text through speech among students of the general secondary education system by the types of educational tasks that most importantly form the skills of literary pronunciation.

KEYWORDS: *Speaking, Speaking, Speaking, Speaking Skills, Training Tasks, Exercises, Pronunciation Exercises, Classification Of Training Tasks, Text, Stress, Syllable*

INTRODUCTION

In the world experience, the methodology of language teaching is gradually improving. In particular, the methods used in teaching international languages are often justified. In particular, an approach aimed at developing specific speaking skills in teaching English as a second language is proving to be proven in today's experiments. In this case, the requirement for speaking skills is to some extent suitable for teaching Uzbek as the state language, but is not suitable for mother tongue education. **[1]**

"The tradition of teaching students only grammar in their mother tongue classes at school still continues. The goals and means of teaching a foreign language and mother tongue are in a sense different from each other. An Uzbek student learns to speak in the family. Some even come to school learning to read and write. Elementary classes teach reading and writing and move on to the upper class. Now he doesn't have to learn grammar too much. An Uzbek child does not speak on the basis of grammar. Even a four-year-old child can use a noun, adjective, possessive, participle, or even a compound sentence in his speech, even if he does not know it. From the 5th grade onwards, students should be taught literary pronunciation, spelling, logical thinking, and the ability to express their thoughts fluently and effectively in a variety of forms. It is necessary to increase the vocabulary by constantly memorizing various exemplary texts". **[2]**

Indeed, in order for students to develop speaking skills, they need to have the necessary vocabulary, and the exercise process must be well organized. O' Usmanova attributes the difficulties in resolving the issue to dialects. The researcher notes that the problem of pronunciation is not studied in the Uzbek language, and in this regard, based on the valuable ideas of the scientist FK Kamolov and Professor SI Ibragimov, who were the first to work on defining the norms of literary pronunciation.

In this regard, the following views of H. Nematov are still important for the teaching of the mother tongue: So, choosing the most necessary knowledge of the native language is one of the main issues.

The main criterion for choosing knowledge of the native language is its usefulness and level of practical application. We understand the useful knowledge of the mother tongue as knowledge that serves to form children's skills of writing, creative thinking, correct and fluent expression of ideas in oral and written forms in accordance with the conditions of speech, educating and developing them in the spirit of high human qualities. **[3]**

We observe that the issue of literary pronunciation and its norms has been studied in detail in the languages of the developed countries of the world [English, French, etc.]. In this regard, phonetic exercises are effectively used in the world experience, including in English. That is why the current basic textbooks and manuals provide detailed information about the process of formation of each speech sound. Textbooks and manuals published for higher and general secondary schools do not have special diagrams (pictures) showing the pronunciation of sounds. The speech of today's students, students, and even some older intellectuals, especially teachers, proves that the correct pronunciation of some sounds typical of the Uzbek language cannot be sufficiently taught with simple, traditional exercises.

According to Khamroev **[4, 5],** one of the problems is the teaching of the mother tongue in secondary schools. Literary pronunciation is a sign of civilization. In the system of secondary education, from the 5th grade onwards, speech sounds, which are the main unit of pronunciation, are systematically taught in the Phonetics department. According to the requirements of the department of "Phonetics", along with the sounds of speech, students are required to learn the correct pronunciation and spelling rules.

There are specific requirements for the development of students' speaking skills, the mechanism of implementation. They can be classified and described as follows:

I. Phonetic exercises

1. Thorough teaching of the specific sound system of the Uzbek language

2. Special teaching of specific sounds of the Uzbek language, such as O', q, g', h, i, through oxylographic images

3. After separate pronunciation exercises of the sound, organize pronunciation exercises on the words in which these sounds are involved.

4. Work on word accents.

5. Joint reading exercise.

II. Lexical exercises.

1. Distinguish the pronunciation of homonymous words

2. Distinguish paronym words in pronunciation

3. Use synonyms

4. Exercise to use a phrase instead of a word

5. Exercise to replace figurative expressions with words.

III. Syntactic exercises

1. An exercise in choosing another sentence that gives the same meaning instead of a sentence

2. Exercise to replace keywords

3. Exercise to replace auxiliary words

4. Oral translation of quotations into mastery sentences

5. Speaking exercise using simple sentences

IV. Text work exercises

1. Expressive reading exercise

2. Exercise to briefly describe the content of the text

3. Exercise to express the content of the text in one sentence

4. Exercise to present the content of the text

5. Exercise to promote the content of the text

6. Exercise to memorize the text

These exercise processes, first of all, develop students' literary pronunciation skills, increase vocabulary, and prepare them for speaking, presentation, and advocacy. The main task of the lesson, which develops the student's speaking skills, is an exercise. Assignments and questions help to evaluate the results achieved, organize the process, and develop thinking skills.

The content of assignments for working on the text should be pragmatic in nature, otherwise it will have no practical significance and will weaken the reader's attention. Every prospective speaker should, first of all, work on problems with pronunciation in his speech, practice non-stop. Otherwise, any well-thought-out speech can lose its effectiveness.

The conclusion is that the main part of the training for general secondary education graduates on the formation of speaking skills (speaking skills in mother tongue education) should consist of exercises. Also, the exercise processes should be systematic, one complementing the other. The system of speech therapy we offer is useful not only in the training of general secondary school students, but also in the training of future teachers of mother tongue and literature.

REFERENCES:

1. Usmonova G. Pronunciation culture. Tashkent: Fan, 1976. 3p.

2. Ghulomov A, Nematov H. The content of mother tongue education. Methodical manual for teachers. Tashkent: Teacher. 1996. p.9.

3. Bonk NA, Kotiy GA, Lukyanova NA. Textbook of the English language. Moscow: Dekont; 1999. p. 7.

4. Khamroev G. Effective methods of teaching the mother tongue. Methodical manual. Tashkent. Bayoz; 2018. 197 p.

5. Khamroev G. Improving the scientific and methodological support of teaching materials on phonetics in the system of general secondary education. Ph.D. in pedagogy. Samarkand. 2019. 147 p.

CHEMICAL COMPOSITION OF SOME FOOD ADDITIVES

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ABSTRACT

The article provides information about the types, chemical composition and some of the harmful properties of food additives. Some of them can cause gastrointestinal problems, skin rashes, high blood pressure, and carcinogenic effects. The use of the most harmful compounds in the food industry is prohibited. This substance is used in the food industry as a preservative to prevent the growth of fungi and microorganisms. Standard values for SO3have not yet been developed. Increasing its concentration poses a danger to human health.

KEYWORDS: *Food Additives, Dyes, Preservatives, Antioxidants, Stabilizers.*

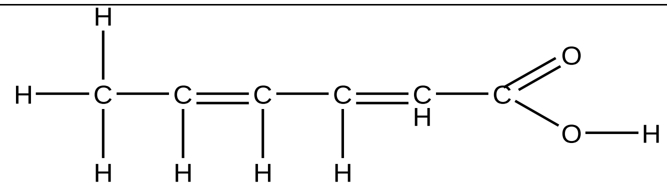
INTRODUCTION

Food additives are known to be approved for use and are added to consumer products. But some of them are toxic. That is why people need to know about the properties of nutritional supplements to prevent their health. Harmful substances can cause various diseases in the human body. For example, it increases the risk of allergies and can lead to chronic diseases. Some of them can cause gastrointestinal problems, skin rashes, high blood pressure, and carcinogenic effects. The use of the most harmful compounds in the food industry is prohibited **[1,2].** Reducing the intake of harmful food additives means preventing the development of various diseases. Foodadditivesaredividedintothefollowingclasses:

E100- E199	***Dyes***	E200-E299	***preservatives***
E300-E399	***Antioxidants***	E500-E599	***Emulsifiers, pH regulators***
E400-E499	***Stabilizer***	E700-E799	***Antibiotics***
E600-E699	***Odorandtasteenhancers***	E900-E999	***blowingagents***
E800-E899	***stockislands***	E1000-E1999	***Biocatalysts***

The following are the technical names and chemical formulas of some food additive preservatives:

TABLE 1 CHEMICAL FORMULAS OF SOME NUTRITIONAL SUPPLEMENTS

Chemical name	Index	Formula
Sorbicacid	E 200	
Sodiumsorbate	E 201	
Potassiumsorbate	E 202	
Calciumsorbate	E 203	
Sodiumbenzoate	E 211	
Sodiumnitrite	E 250	

Aceticacid	E 260	

The following table provides information on the effects of some nutritional supplements on the body:

TABLE 2 DANGEROUS FOOD ADDITIVES

Verydangerous	E123, E510, E513, E527
Dangerous	E102, E201, E400, E503, E110, E220, E401, E620, E120, E222, E402, E636, E124, E223, E403, E637, E127, E224, E404, E129, E228, E405, E155, E233, E501, E180,E242, E502
Carcinogenicsubstances	E131, E316, E283, E142, E219, E310, E153, E230, E954, E210, E240, E212, E249, E213, E280, E214, E281, E215, E282
Substances that strongly affect the stomach	E338, E463, E339, E465, E340, E466, E341, E343, E450, E461, E462
Substances that cause skin diseases	E151, E907, E160, E951, E231, E1105, E232, E239, E311, E312, E320
Substances that inhibit the intestinal microflora	E154, E633, E626, E634, E627, E635, E628, E629, E630, E631, E632
Substances that affect blood pressure	E154, E250, E252

Food manufacturers are required to list the food additives used in a given product on its packaging. Before buying, it is advisable for the consumer to study the composition of the product. The following are some of the features of the E220 food supplement.

E220 - sulfur dioxide SO_3 or sulfuric anhydride is contained in 99% of wine products, has an unpleasant odor. This substance is used in the food industry as a preservative to prevent the growth of fungi and microorganisms. Standard values for SO_3have not yet been developed. Increasing its concentration poses a danger to human health. Symptoms of E220 poisoning include headache, cough, sore throat, nausea and vomiting. The high content of E220 in wine destroys B vitamins and leads to allergic diseases of the skin, hair and nails, and causes disorders of the digestive system. E220 is used in the processing of almost all dried fruits **[3,4].**

We studied a number of food preservative additives used in the preparation of some drinks. For this, homemade juices, compotes and fermented milk products were chosen. By adding preservatives in various amounts to these products, we studied their organoleptic properties for several days, and the data obtained were entered in the table **[5].**

The following table shows the effect of some food preservatives on food. We prepared apricot juice in a natural way and recorded in the table the effect on it of different concentrations of citric acid. The same experimental samples were carried out at a temperature of 20^0 C.

TABLE 3 THE RESULTS OF EXPERIMENTS CARRIED OUT WITH CITRIC ACID

1 day					
№	Samples	Organoleptic indicators			
		Smell	Taste	Coloring	Turbidity
1	Natural juice	Hasn't changed	Hasn't changed	Hasn't changed	Hasn't changed
2	1 sample	Hasn't changed	Hasn't changed	Hasn't changed	Hasn't changed
3	2 sample	Hasn't changed	Hasn't changed	Hasn't changed	Hasn't changed
2day					
1	Natural juice	Has changed	The taste of fermentation	Has changed	There is clouding
2	1 sample	Hasn't changed	Hasn't changed	Hasn't changed	Hasn't changed
3	2 sample	Hasn't changed	Hasn't changed	Hasn't changed	Hasn't changed
3day					
1	Natural juice	There was a pungent odor	Came to an unusable state	muddy	Became cloudy
2	1 sample	Has changed	The taste of fermentation	Has changed	A white film appeared on the surface
3	2 sample	Hasn't changed	Hasn't changed	Hasn't changed	Hasn't changed
4day					
1	Natural juice	There was a pungent odor	Came to an unusable state	muddy	Became cloudy
2	1 sample	There was a pungent odor	Came to an unusable state	muddy	A white film appeared on the surface
3	2 sample	Has changed	The taste of fermentation	Has changed	clouding

Note: 1 is sample. Addition of 1% citric acid solution; Sample 2. 5% citric acid solution is added.

The results of the experiment showed that substances with preservative properties in various concentrations had a significant effect on food products. **[6]**

In conclusion, it should be noted that the greater the content of food additives (preservatives) in drinks, the longer their shelf life. However, increasing the concentration of food additives can adversely affect the human body. Therefore, the amount of food additives in food should be strictly controlled in the amounts specified in the technical specifications.

REFERENCES

1. Nutritional supplements Available at: https// ru. Wikipedia org.wiki.

2. Sarafanova LA. Food additives. St. Petersburg: Giord; 1997. p. 22-30.

3. Serov YuA. Dangerous food E-additives. Moscow, 2001. pp. 8-11.

4. Sobirova RA, Abrorov OA, Inoyatova FX, Aripov AN. Biologik kimyo.T. Yangi asr avlodi. 2006.

5. Askarov IR, Khasanova DT. Ayrim ozik-ovkat qo'shilmalarining kimyoviy tarkibi. Ilmiy habarnoma, ADU. Andijon, 2010;(3):71-72.

6. Askarov IR, Khasanova DT. Ozuqaviy qo'shilmalarning pivoni certificatlashdagi roli. Ilmiy habarnoma, ADU. Andijon, 2017;(3):26-28.

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METHODOLOGY OF TEACHING INFORMATICS

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ABSTRACT

Global analysis of the Australian national and state computing curriculum in a comprehensive study of the digital technology curriculum. The results of the calculations were presented in 1960 as a separate science, focusing on how this technology worked, because at that time the effectiveness of any technology was studied. The concept of nature (programming, information, network and communication systems) began to be used for the study of software applications, eventuaily for simple computer literacy, as these programs help students to learn independently.

KEYWORDS: *Computer Science, Continuing Education System, Traditional Education, Modern Education, Factors Of Interactive Education..*

INTRODUCTION

The continuous development and introduction of information and communication technologies in various fields will undoubtedly lead to the development of society. Methodology of teaching computer science is a science that studies computer science as a subject and the laws of the process of teaching computer science to students of different ages.

The methodology of teaching computer science as a science was formed in the second half of the twentieth century, and in Uzbekistan since 1985. The main factor was the introduction of the subject "Fundamentals of Computer Science and Engineering" in secondary schools.

In teaching such subjects, educational institutions require professors to study, research and work on themselves. In addition, the effectiveness of any lesson is measured by its outcome, ie the level of knowledge, skills and abilities formed in students, but this result also depends in many respects on the training of the teacher and the technology he uses. In this article, we review the analysis on the example of Australia.

A comprehensive analysis of the Australian national and state computing curriculum on a global scale will be helpful in the full study of the digital technology curriculum. This includes a review of 21st Century Digital Literacy and Skills. It is a social study of the growth of intellectual computing concepts in the design and formulation of its plans in the current international market of the Australian computing curriculum. Irregularities and errors in expressions are discussed by teachers and program developers **[1].**

Introduction of digital technologies in the curriculum. The process of introducing digital technologies into the curriculum is one of the most important steps in the education system in Australia. The results of the calculations were presented in 1960 as a separate science, focusing on how this technology worked, because at that time the effectiveness of any technology was studied. In the 1970s, some educators (e.g., Peypert, 1980) saw that this technology had the potential to shed light on a new way of looking at the world and a new way of thinking. However, in the 1980s, the benefits of computers began to shift from the introduction of wireless applications in several school disciplines, including text processing, data distribution, digital slide shows, and educational research such as WEB-page design with the advent of the Internet (Love, 2011). The concept of nature (programming, information, network and communication systems) began to be used for the study of software applications, eventuaily for simple computer literacy, as these programs help students to learn independently. led to a decline in interest (Grant, Malloy & Murphy, 2009), resulting in a decline in interest in IT research in the 1990s due to a loss of confidence in employment in information technology (Garrett, 2004).

In the 1990s, there was a renewed interest in the study of ICT (information and communication technology) and software applications, and the ICT curriculum began to deepen and receive serious attention. To achieve this goal, a number of industries and qualified specialists were involved. In Europe, these studies were first implemented in the systems of the International Society for Educational Technology (ICLI) (ECDL, 1997) and NETS (National Education Standards for Students) in the United States (Roblyer, 2000). Several states in Australia have developed their own education standards and norms, abandoned the traditional education and knowledge system, and worked to establish a higher order of thinking using “literacy” themed technologies. **[2]**

In 2008, all Australian states agreed on requirements for students. The Melbourne Declaration (Barr i dr Ài, 2008) identified the need for ICT in all areas of education, developed the level of knowledge required for creative and productive users, including 8 trainings with the LET system, including "information and communication technologies (ICT)" field is marked.

When the subjects in the field of ICT were not taken into account in primary schools, the process of studying the subject of computer technology in the primary grades of secondary school was introduced. Sometimes the main focus of the educational process was on typing, sometimes multimedia, WEB-sites, image editing and filmmaking, sometimes robotics and programming. In the main stages of education (K-10), the educational directions of teachers focused only on computational techniques.

These are mainly research and event-oriented, taught in the senior courses of students at relevant universities and vocational education institutions. However, due to the lack of a clear direction of the curriculum, there was not enough work to attract students to this field, only students who were interested in calculations were trained in the field of ICT (Wynne, 1980).

Another factor was the lack of use of ICT in the network as an educational science and among academics, such as mathematics and geography. Many fields of education have been used by practitioners and scholars, who have contributed to the professional development of teachers, developed curricula through higher education institutions, and introduced them into school education. There are several examples of ICT scholars and professionals actively opposing the introduction of computer education in schools. Although it is difficult to know the reason for the lack of support in the field of ICT (Tedre, 2011), research in computer science, digital creation, multimedia and business-oriented work in several humanities has been conducted (Shakelford i dr iskusstvennogo intellekta. 2006).

According to several scholars and experts, the demands due to the schoolbased will prevent further research. However, the lack of support and assistance to conduct research using computers at school can be cited as the main reason. With the exception of subjects that require knowledge at the school level in order to receive education in higher education institutions, it has been shown that there is a catatal difference in school science programs relative to the level at which ICT is used in practice. A number of changes have been made due to the fact that knowledge between Phase 2-3 requirements has been declining by the year 2000, but there is a growing need to increase the efficiency and productivity of the application of the ICT sector in the education system. **[3]**

CONCLUSION

In the organization of the modern educational process, the national program is given attention in many countries. It focuses on the discovery of new educational technologies and concepts in higher education. The development of our students and our society in the age of technology is largely dependent on computer teachers.

REFERENCES

1. Henderson M, Romeo G. Teaching and Digital technologies big issues and critical questions. Australia: Cambridge University Press; 2015. 354p.

2. Wayne W. Computers as Components, Principles of Embedded Computing System Design. 2nd Edition, Morgan Kaufmann, USA; 2008.

3. Henderson M, Romeo G. Teaching and Digital technologies big issues and critical questions. Australia: Cambridge University Press; 2015. pp.15-16.

A STUDY OF MODERN METHODS OF TEACHING ENGLISH

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ABSTRACT

The ability to use information technology and modern teaching methods helps to quickly understand new material.1 By combining different methods, a teacher is able to solve specific curricula. In this regard, teachers and students should get acquainted with modern methods of teaching foreign languages. As a result, they develop the skills to choose the most effective ways to achieve their goals. Using a variety of teaching and learning methods can be effective.

KEYWORDS: *English, Modern, Innovation, Method, Teacher.*

INTRODUCTION

Today, foreign language skills are becoming an integral part of vocational education. Due to the high level of cooperation with foreign partners in various fields, the demand for language learning is high. In modern society, foreign languages are becoming an important part of vocational education. Such knowledge is first acquired by people in schools, colleges, high schools, and later in institutes, training courses, or by familiarizing themselves with basic information sets that help them learn a foreign language independently. Today, there are many collections of study materials for people with different levels of language skills. Success in achieving this goal depends on the practical methods and skills of teachers. **[1]**

As time goes on, there is more and more innovation in every field. There are many different styles of language teaching. When it comes to teaching English, the learner's ability and level, depending on their age, gives good results in a step-by-step way. Students are divided into groups based on elementary education, intermediate education, and advanced education. A special program will be developed by the teacher for each stage.

Pronunciation is important at the beginning. According to Harmer, the first requirement for those who know their native language during the conversation is pronunciation. At the beginning of the learning process, the teacher should focus on the student's pronunciation. Although grammar and vocabulary are important, it is useless if the speaker mispronounces them. Native speakers can also understand speech with grammatical errors if the speaker pronounces the words correctly. Therefore, in teaching, the main focus is on pronunciation. In this case, the use of different audios of native speakers gives good results. The teacher should teach the correct pronunciation of letters and words during the lesson. There is also a strong emphasis on oral and reading skills in the early stages. If we look at the types of speech activities of foreign language teaching, it is necessary to perform the following tasks in their teaching: **[2]**

a) Establish a reading mechanism;

(b) Improving oral reading techniques;

c) Teach them to understand what they are reading.

In the early stages, the emphasis is on reading aloud. Reading texts are also simpler and easier to read. However, it should be noted that although the work in the early stages is mainly focused on the development of oral skills, it does not solve the problem of developing oral communication in English. She is only preparing to work on a real speech. In addition, reading words beautifully and fluently increases a student's love of learning the language.

Question-answer exercises are used to strengthen the student's speech, improve memory, and repeat the results. New words from the text are memorized. Questions and answers develop the ability to repeat those words in memory and to use them in speech. In addition, a variety of games in the classroom will increase the student's interest in learning the language and increase the speed of learning. In the Hot Ball game, students form a circle and say one of the new words to each other on the ball. Participants do not repeat each other's words, are expelled from the game if they repeat or stop speaking. That's the way to play. **[3]**

In the middle stage, grammar is taught in more depth than in the first stage, and students are given knowledge, exercises and tests based on the rules of grammar.

Computer and phone language learning programs are also great for elementary and middle school language learning. Examples include Talk (English speaking practice), Daily English, Learn English (English master), How to speak real English. These programs are designed to include all sections of reading, listening, and testing.

Recording new words on a phone dictaphone is another great way to repeat in your spare time. In addition, showing more English subtitles and cartoons is an effective way to teach the language.

Homework can be used to prepare additional text topics using the press, periodicals, media, and the Internet. Students will be interested to learn about interesting research and scientific discoveries.

In conclusion, modern language teaching is aimed at shaping a more cultured individual who has the skills to self-analyze and systematize new knowledge. Innovative methods are an integral part of modernizing the entire system. In this way, teachers can become acquainted with the most advanced approaches and then combine them and use them in their work to achieve significant growth in the education system. Many organizations are moving to a new level, using multimedia capabilities to send and receive information. The use of computers and other devices determines the success of the whole educational process. **[4]**

Adequate attention should be paid to the development of speaking skills and social resilience in training. In addition, the success of any lesson in education depends in many ways on the proper organization of the lesson. The lesson should be based on the creative collaboration of teacher and student. Only then will students be able to think independently and develop their will.

REFERENCES:

1. Passov EI. Obshchitelnыy metod obucheniya inostrannogo razgovora. Moscow; 1985. p.10.

2. Johnson KE. The Sociocultural Turn and Its Challenges for Second Language Teacher Education. TESOL Quarterly, London; 2006. 235p.

3. Norov I, Ismoyil A. The Role of Modernity in the Formation of the Uzbek Language as the State Language. Journal NX, 2021;6(06):773-775.

4. Norov I. Methods of Teaching Phonetics in Other Language Groups. Online Scientific Journal of Sustainability and Management Studies, 2021;1(5):306-309.

BIOPHYSICS OF SHORT SYSTEMS

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ABSTRACT

This article discusses the molecular mechanisms of contraction, muscle mechanics, muscle mechanics, and the theoretical aspects of cell mobility. The sarcomere is the main motor structure of the muscle and comprises thick and thin fibers. Fine fibers comprise actin protein and thick fibers of myosin protein. The myosin molecule has functional parts - "hinges". The heads of the transverse bridges move like a paddle, moving the actin filaments into the myosin space. The amplitude of the bridge movements is 20 nm, the frequency is 5-50 oscillations per second. The diameter of the transverse tube is 50 nm. In the muscle fibers of vertebrates, these tubes approach the myofibrils in the area of the discs.

KEYWORDS: *Cell, Organism, Mechanical, Energy, Pigment, Muscle, Contraction, Animal, Actin, Myosin.*

INTRODUCTION

Molecular mechanisms of contraction. Muscle mechanics.

Cells and organisms move and do mechanical work. We carried this work out under isothermal and isobaric conditions, in which heat and chemical energy serve as a source of energy.

Within the fibers of the transverse skeletal muscle are many myofibrils. They are 1-2 mm in diameter and comprise sarcomeres. They bound each sarcomere by a Z-sphere. The length of the sarcomeres is 2.0 µm. The inner part of the myofibrils is called the sarcoplasm, which contains mitochondria and the endoplasmic reticulum. The sarcomere is the main motor structure of the muscle and comprises thick and thin fibers. Fine fibers comprise actin protein and thick fibers of myosin protein. The myosin molecule has functional parts - "hinges". One part of this molecule is in the body of the thick fiber and the other part is on its outer side. In severe myositis, there are active and action-binding centers. When a muscle fiber is activated, Ca ++ binds to the control complex of thin fibers, and as a result, the active center of these fibers opens and the bridges of myosin connect with these active centers. The bridges of the thick fiber structure do not change and connect with the active centers of the thin fiber. At rest, the bridges perpendicular to the thick fiber bend at a certain angle during contraction. As the bridges bend, the thin fiber shifts. In contraction, the thick and thin fibers move relative to each other. **[1]**

Muscle mechanics

All sarcomeres have transverse bridges that connect the myosin filaments to the action filaments. When muscle fibers contract, the myosin and actin filaments do not shorten, the actin filaments slide between the myosin filaments, resulting in the discs shortening, and the length of the discs not changing. **[2]**

Myosin filaments branch off to form multiple heads, each comprising about 150 myosin molecules. These heads are tufts of myosin filaments that bind them to action filaments. The heads of the transverse bridges move like a paddle, moving the actin filaments into the myosin space. The amplitude of the bridge movements is 20 nm, the frequency is 5-50 oscillations per second. Although the bridges move asynchronously, the gravitational force that results from being too much is kept constant during contraction. **[3]**

At rest, we enrich the bridge with energy, but cannot bind to the actin filament, which is interrupted by the tropomyosin filament bound to the troponin protein between them. When a muscle is activated, we form free Ca ++ ions in its myoplasm. Troponin binds to calcium, changes its conformation, and pushes the tropomyosin thread, allowing the diurnal bridges to bind to the action threads. As a result of the coupling, the conformation of the bridge changes abruptly, its head is bent, and the action strip is pushed 20 nm. The energy expended for this action is released due to the macroregion phosphate bond in the phosphorylated actomyosin. Actomyosin, which has ATF-aza activity, promotes the breakdown of macroergic phosphates. **[4]**

The actin and myosin then separate from the tropomyosin troponin due to a decrease in the amount of Ca ++ around the filaments and again become a barrier between the transverse bridge and the actin filament. Myosin is phosphorylated by ATF. ATF is a substance needed not only to enrich myosin into energy but also to temporarily separate the strands from each other. This separation allows the muscle to relax and stretch. **[5]**

Ca ++ ions required for contraction are stored in the sarcoplasmic reticulum at rest in the muscle. In this case, the permeability of the reticulum membrane to calcium is low, a small amount of ions released into the myoplasm is pumped by a calcium pump into the sarcoplasmic reticulum, where it maintains a high concentration of calcium. The concentration of calcium ions in the sarcoplasmic reticulum cavity is higher than in the sarcoplasm, and the activation of the sarcoplasmic reticulum membrane leads to the opening of calcium channels in it and the release of calcium around actin and myosin filaments according to the concentration gradient. For reticular membrane activation, the excitation generated in the outer membrane of the muscle fiber must propagate through the T-system to the sarcoplasmic reticulum membrane. The T-system is the part of the outer membrane that sinks into the sarcomere. The diameter of the transverse tube is 50 nm. In the muscle fibers of vertebrates, these tubes approach the myofibrils in the area of the discs. **[6]**

Perpendicular to transverse tubes, elongated tubes are located parallel to myofibrils. The two ends of the elongated tubes widen to form cisterns. The transverse tube and the cisterns on both sides are joined in threes.

The impulse to reach the muscle fiber through the nerve fiber creates motion potential in the outer membrane, which potentially propagates through the diaphragm, activates the cistern membrane, and causes calcium ions to exit, actin and myosin to multiply around the fibers and activate the contraction mechanism. **[7]**

The processes that lead to muscle contraction are exposure, formation of the action potential, its transfer into myofibrils, the release of calcium ions and diffusion around actin and myosin filaments, sliding of actin filaments between myosin filaments and shortening of the sarcomere, activation of calcium channels, and activation of calcium channels. **[8]**

The length of the sarcomere of a loose muscle fiber is 3.6 μm, and 2.0 - 2.2 μm when the fiber is shortened.

Muscle-free forms of cell motility

In non-cellular forms of cell motility, actin and myosin protein enter the cell structure and regulate their movement - the amoebic movement of platelets, leukocytes, fibroblasts, and similar cells; as well as intracellular movements, such as chromosome proliferation, endocytosis, exocytosis, all micro-level movements, and microvilli. **[9]** Unlike muscle cells, these cells have a relatively low amount of myosin, some contain only action protein, and inactive cells, such as platelets, actin makes up 20-30% of the total cytoplasmic protein. Some note that tubulin protein is also involved in muscle movement.

REFERENCES

1. Rubin AB. Biophysics. Textbook in 2 books. Moscow: Higher school; 2004.

2. Kosimov MM, Gagelgans AI Biophysics. Text of reports. Tashkent; 2000.

3. Vladimirov Yu et al. Biophysics. Textbook. Moscow: Medicine; 1983.

4. Kostyuk et al. Biophysics. Textbook. Kyiv: Higher School; 1989.

5. Volkenstein MV. Biophysics. Tutorial. Moscow: Nauka; 1983.

6. Konev SV, Volotovsky ID. Photobiology. Minsk. BGU; 1979.

7. Yarmonenko SP. Radiobiology of man and animals. M.: Higher School; 1988.

8. Tarusov BN, Antonov VF et al. Biophysics. Textbook. Publishing house Higher school. Moscow; 1968.

9. Remizov AN. Medical and biological physics. Textbook. Ibn Sina. Tashkent; 1992.

STUDY OF THE EFFECT OF THE SPINDLE SPEED ON THE PROPERTIES FOR THE BAKED SIRO YARN, WHICH MADE FROM COTTON AND POLYESTER FIBRES

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ABSTRACT

In this article, it has been determined experimentally the effect of the spindle speed on the properties of the spun yarn "Siro" which produced by the comparative break strength to the experimental results. When the mathematical equations were tested using the Fisher and Student criteria, their index were considered significant. The possibility of mathematical analysis of the equation based on indicators was determined by experimental results. In order to do this, yarns with numbers 20 and 29 tex were produced in 5 different spindle speeds from 9000 to 13000 min -1. The results determined that when the spindle speed was 9000 min -1, the quality of the baked Siro yarns was improved and the fluff elaborate, and thus it became stronger more. According *to the results of the analysis, the speed of spinning was one of the main factors that could be changed in the producing of baked Siro yarn. More clearly if ring-spin machine choose spindle speed correctly Siro yarn's strengthen will improve, asperity from structural circumstance will be normal and configuration of yarn will be improved.*

KEYWORDS: *Baked Siro Yarn, Cotton, Polyester Fibres, Spindle Speed, Manufactured Product.*

INTRODUCTION

The 70% of spun yarn's volume correspond to the ring spinning method in the world's scope. The properties of the yarn directly affect the properties of the finished product obtained from it. A priority indicator of the properties of spun yarn is elongation during stretching and break strength. Therefore, almost all international and national normative documents define the quality category depending on the breaking strength of the yarn.

Resolution of the president of the Republic of Uzbekistan dated February 12, 2019 No PK-4186 " On measures to further deepen the reform of the textile and sewing-knitting industry and expand its export potential" and allocation of soft loans from commercial banks to sew-knitwear enterprises exporting at least 80% of finished products in 2019-2021 **[1].** Target parameters for the production and export of textile, sew-knitwear, leather-footwear and fur products with high added value based on market demand on the basis of deep processing of raw materials for 2020-2025 have developed. According to this increasing production size of textile and sew-knitwear by 3.5 times, yarn reel by 2,7 times and painted and mixed type of yarn reel by 2,6 times, and increase finished yarn fabric by 3 times, and also, increasing export of textile and sew knitwear productions by 3,3 times depending on resolution which confirmed by the President of the Republic of Uzbekistan dated September 16,2019 No PK-4553 **[2].**

Provision of high and stable growth rates in the textile and sew-knitwear industry of the Republic, involvement and acquisition of foreign direct investment, production and export of competitive products, systematic work on further deepening the structural reorganization aimed at creating new high-tech jobs through the implementation of strategically important projects of modernization of enterprises, the introduction of an advanced "cluster model" is being done.

One of the most problematic processes in the production of cotton fiber is the production of baked yarn, and in our country, several works are being done to improve and apply the ways and technologies of baking yarn. These baked yarns being used in the producing of textile sew knitwear and attorney productions. Although the production of yarn by the "Siro" method in textile enterprises was established 70 years ago, it is not used in domestic enterprises. This is due to the fact that no special ring spinning machines are used for the baked yarn production machine, and the replacement elements, wrapping and balloon forming device are not selected correctly. The production of "Siro" yarn allows to improve the quality of woven and knitted fabrics, reduce weaving breaks, the amount of fluff in the yarn and the abrasion of the fabric. By slightly changing the parameters of the ring-spinning machine, the connection of the 2 rollers to a separate crushing cylinder is achieved by the same elongation and twisting of each cylinder **[3].** The siro spinning method was discovered in the textile industry laboratory in 1975-1976 in collaboration with the Commonwealth Scientific and Industrial Research Organization (CSIRO) of the Australian Scientific and Industrial Research Center [3]. Currently, scientists around the world are conducting new research on this method. Subramaniam and Natarajan conducted research on the effect for the spacing between twisted punches on twists. The increase in the number of gaps and twists between the yarns led to an increase in the coefficient of friction for all types of yarns **[4].** According to research conducted by Chu and Cheng, Siro compared spun yarn and re-spinning yarn experimentally. It was found that the abrasion resistance of the spun yarn, the degree of fluff, the strength of the yarn and the uniformity of the twists on the surface of the yarn are better than those of the baked yarn **[5].** Typically, this method is designed for long cotton fiber, in which long cotton fiber is produced into thick and medium-density yarns **[6,7].** Medium-fiber cotton fiber is grown in our country, In order to make efficient use of existing local raw materials and create a new range of yarn, the number of changes have been made in this process. The parameters of the existing spinning machine used in production were changed and a new type of wick adjustment knobwas created **[8,9,10] .**The created wick adjustment knobwas installed on the Zinser-350 ring-spinning machine, which is available in the laboratory of the department "Spinning Technology" under TTESI. In order to determine the effect of the spindle speed on the cotton and polyester fibers spun on the ring-spinning machine, the experiments will be performed in two repetitions, a total of 10 experiments using random numbers, based on randomized experiments. **[11,12,13].**Taking into account the need to change the operating parameters of the machine to conduct experiments on the basis of this plan, a working plan is created and we take the values of the speed of the machine as following:

$n_1 = 9000\,мин^{-1}, n_2 = 10000\,мин^{-1}, n_3 = 11000\,мин^{-1},$

$n_4 = 12000\,мин^{-1}\ ,\ n_5 = 13000\,мин^{-1}$

The experiments are performed in two iterations, i.e. a randomized experiment is conducted using a total 10 experiments using random numbers. Based on this plan, a working plan is drawn up, taking into account the need to change the operating parameters of the machine accordingly for the experiment. Experiments are conducted on the basis of the matrix. Tables 1 and 2 are completed by setting as encode incoming parameter with $\boldsymbol{x_u}$ and outgoing parameter like the relative break force with $\boldsymbol{Y_{uv}}$.

Sequence number У	Incoming parameter		Outgoing parameter indicators			
	natural X_u=n*1 0^3	code x_y	$\boldsymbol{Y_{uv}}$, cH Iterations		Media l, $\overline{R}_u$,s	Dispersion , $S_u^2\{y\}$
			1	2		
1	9	-2	20,3	20,5	20,4	0,02
2	10	-1	19,3	19,2	19,25	0,05
3	11	0	19,6	19,8	19,7	0,02
4	12	1	20,1	20,2	20,15	0,05
5	13	2	19,4	19,7	19,55	0,045
∑					99,05	0,185

1-table

$$\overline{Y}_u = \frac{\sum\{\overline{Y}_u\}}{N} = \frac{99,05}{5} = 19,81$$

It is known from experiments that there are two types of deformations in nature, which are divided into types such as elastic and plastic. Yarns derived from natural and chemical fibers have mainly elastic deformation, when the yarns are subjected with a certain tensile force F (cN), a state of elongation is observed in them. The selected sorted cotton fiber was made in the ratio of 70% and polyester fiber in the ratio of 30%. We can also see in the example of the strip "Siro" with a texture of 19.6, spun from the sorting fibers, observed in the laboratory on the Statimat device. The results of the graphical analysis show that the elongation of the yarn is 6.8% when the maximum tensile strength reaches 389.8 sN. 1-figure

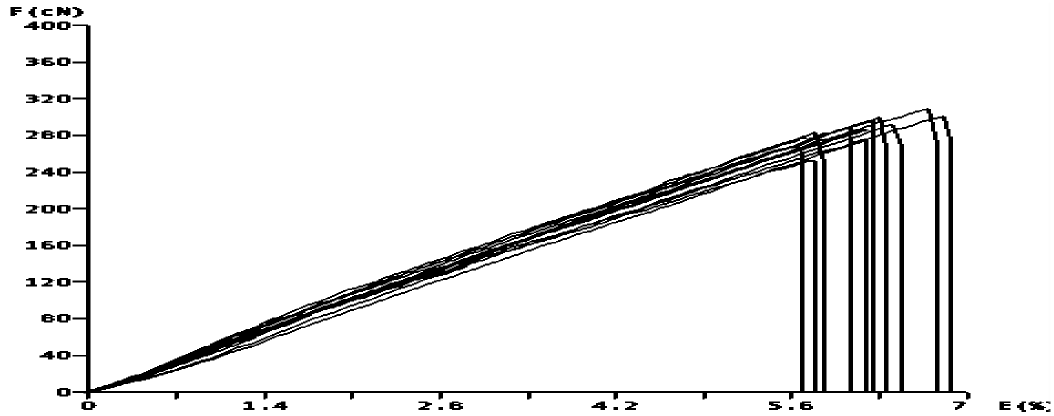

Figure 1. Graph of elongation of the "Siro" thread under the influence of force

If the elastic deformation in the manufactured product is the effect of external force stopped , and take into account to the product returns to its primer state, 19.6 Tex "Siro" yarn, which is made of cooked in a ratio of 70/30% cotton and polyester fibers, is also shown to have a high degree of elastic deformation property.

2-TABLE BREAKING STRENGTH INDICATORS

U	$x_u = n_t * 10^3$	$x_u - \bar{x}$	$(x_u - \overline{x})^2$	$\overline{Y}_u$	$(x_u - \bar{x}) \cdot \overline{Y}_u$
1	9	-2	4	20,4	-40,8
2	10	-1	1	19,25	-19,25
3	11	0	0	19,7	0
4	12	1	1	20,15	20,15
5	13	2	4	19,55	39,1
$\sum$			10	99,05	-0,8

$Y_f = a_0 + a_1 x \ or\ Y_f = d_0 + d_1(x - \bar{x}) note{::} Y_f = a_0 + a_1 x$

we use the equation when working with encoded values.

here: $\bar{x} = \frac{1}{N}\sum_{u=1}^{N} x_u \quad (N = 5)$

$$d_0 = \frac{1}{N}\sum_{u=1}^{N} y_u = \frac{99{,}05}{5} = 19{,}81;\ d_1 = \frac{\sum_{u=1}^{N}(x_u - \bar{x})\overline{y_u}}{\sum_{u=1}^{n}(x_u - \bar{x})^2} = -\frac{0{,}8}{10} = -0{,}08$$

$$Y_f = a_0 + a_1 x = 19{,}81 + [(-0{,}08)(x - 11)] = 20{,}69 - 0{,}08x$$

$$Y_f = 20{,}69 - 0{,}08x; x - considered\ as\ a\ factor.$$

We determine the calculated sizes of the output parameter. To do this, we obtain the numerical values of the output parameter by substituting the experimental values of the variable into the equation Y = 20.69–0.08x. The effect of the input parameter that is velocities on the relative breaking force of the output parameter is shown in the graph in Figure 2. Based on the results obtained, we complete. Table 3

$$Y_{f1} = 20{,}69 - 0{,}08 * 9 = 19{,}97$$

$$Y_{f2} = 20{,}69 - 0{,}08 * 10 = 19{,}89$$

$$Y_{f3} = 20{,}69 - 0{,}08 * 11 = 19{,}81$$

$$Y_{f4} = 20{,}69 - 0{,}08 * 12 = 19{,}73$$

$$Y_{f5} = 20{,}69 - 0{,}08 * 13 = 19{,}65$$

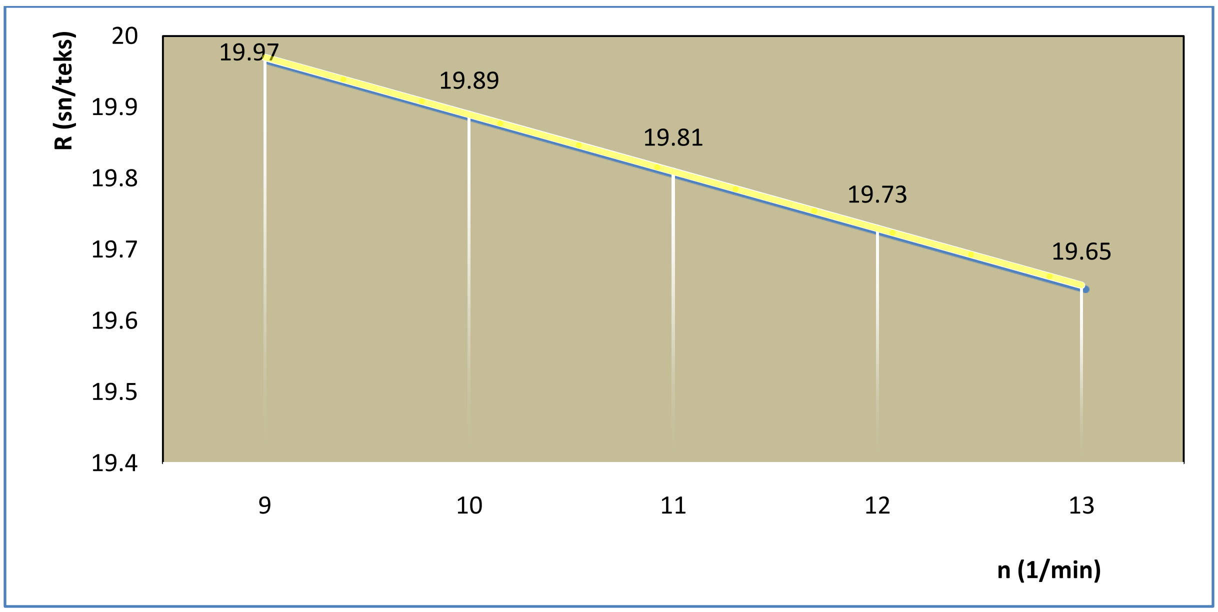

Figure 2. Graph of the effect of an input parameter on an output parameter

As can be seen from the graph, the input parameter of the yarn at 10,000 rpm for the production of spun yarn "Siro" shows the speed, the output parameter has a high effect on the relative tensile strength.

TABLE 3 COMPUTATIONAL VALUES OF THE OUTPUT PARAMETER

U	Y_{fu}	$\overline{Y}_u$	$\overline{Y}_u - Y_{ru}$	$(\overline{Y}_u - Y_{ru})^2$
1	19,97	20,4	0,43	0,1849
2	19,89	19,25	-0,64	0,4096
3	19,81	19,7	-0,11	0,0121
4	19,73	20,15	0,42	0,1764
5	19,65	19,55	-0,1	0,01
∑	99,05			0,793

We check the adequacy of the equation. To do this, we calculate the variances using the sizes in Table 3.

Fisher's criterion (where the formula is chosen depending on whether the fraction is greater or less than the value)

$F_r = \frac{S^2_{(2)}\{y\}}{S^2_{(1)}\{y\}}$ ёки $F_r = \frac{S^2_{(1)}\{y\}}{S^2_{(2)}\{y\}}$

$S^2_{(1)}\{y\}$ −mean variance or repetition variance.

$S^2_{(2)}\{y\}$ −the experimental values of the variance show the distribution of $\overline{Y}_u$ relative to the straight line $\overline{Y}_u = f(x)$

$$S^2_{(2)}\{y\} = \frac{m}{N-2}\sum_{u=1}^{N}\left(\overline{Y}_u - Y_{ru}\right)^2 = \frac{2}{5-2}\cdot 0{,}793 = 0{,}5286$$

$S^2_{(1)}\{y\} = \frac{1}{N}\sum_{u=1}^{N} S^2_U\{y\} = \frac{1}{5}\cdot 0{,}185 = 0{,}37;\ S^2_{(1)}\{y\} = 0{,}37$

We calculate the Fisher criterion as follows.

$F_r = \frac{S^2_{(2)}\{y\}}{S^2_{(1)}\{y\}} = \frac{0{,}5286}{0{,}37} = 1{,}428;\ F_r > 1$we do not have to find its inverse value because it is.

We determine the tabular value of the Fisher criterion:

$$F_{ж} = \{p = 0{,}95;\quad f\{S^2_{(1)}\} = 5;\ f\{S^2_{(2)}\} = 3\ \}, i.e$$

$$f\{S^2_{(1)}\} = N(m-1) = 5$$

$F_{ж} = \{p = 0{,}95;\quad f\{S^2_{(1)}\} = 5;\ f\{S^2_{(2)}\} = 3\ \} = 5{,}41$equal.

So we have $F_{хис}$=1,428;$F_{жад}$=5,41;$F_{жад}$>$F_{хис}$=5,41 >1,428

The equation is considered as an adequate because the calculated value of the Fisher criterion is smaller than its tabular value.

We determine the significance of regression coefficients. The Student Criterion is used for this. The calculated value of Y is determined as follows.

$$t_R\{d_i\} = \frac{|d_i|}{S\{d_i\}}$$

d_i −the mean square deviation value of the regression coefficient

d_0 and d_1 the following formulas are used to determine the variances of the regression coefficients.

$$S^2\{d_0\} = \frac{S^2\{y\}}{m * N} = \frac{S^2\{\bar{y}\}}{N}$$

$$S^2\{d_1\} = \frac{S^2\{y\}}{m * \sum_{u=1}^{N}(x_u - \overline{x})^2} = \frac{S^2\{\bar{y}\}}{\sum_{u=1}^{N}(x_u - \overline{x})^2}$$

$S^2\{y\}$the random variable is the sum of the variances of Y and is determined as follows.

$$S^2\{y\} = \frac{(m-1)N * S^2_{(1)}\{y\} + (N-2)S^2_{(2)}\{y\}}{mN-2}$$

Here :$(f)S^2\{y\}$ −the degree of freedom is its value.

Equal to $\left\{S^2_{(1)}\right\} = N(m-1)$.

Ina working puzzle

$$S^2\{y\} = \frac{(2-1) * 5 * 0{,}37 + (5-2) * 0{,}5286}{2 * 5 - 2} = 0{,}04294$$

$d_0$and$d_1$the variances of the regression coefficients are found.

$$S^2\{d_0\} = \frac{S^2\{y\}}{m * N} = \frac{0{,}4294}{2 * 5} = 0{,}04294;$$

so

S$\{d_0\}$ =$\sqrt{0{,}04294} = 0{,}020722$

$S^2\{d_1\} = \frac{S^2\{y\}}{m * \sum_{u=1}^{N}(x_u - \overline{x})^2} = \frac{0{,}4294}{2*10} = 0{,}02147$; in this case

S$\{d_1\}$=$\sqrt{0{,}02147} = 0{,}01465$

$equal\ to\ F_{жс} = \{p = 0{,}95; \quad f = N - 2 = 3\} = 3{,}18.$

The estimated value of the student criterion t_r:

$t_r\{d_0\} = \frac{19{,}81}{0.20722} = 95{,}6; \quad t_r\{d_1\} = \frac{0{,}08}{0{,}014{,}65} = 5{,}46$

We compare the calculated values of both criteria to 95.46 and 5.46 with the tabular values of the criterion to 3.18, i.e.

$$t_r\{d_0\} = 95{,}46 > t_j\{d_0\} = 3{,}18$$

$$t_r\{d_1\} = 5{,}46 > t_j\{d_1\} = 3{,}18$$

Regression coefficients are important because they are.

CONCLUSION

It has been determined experimentally the effect of the spindle speed on the properties of the spun yarn “Siro” which produced by the comparable break strength to the experimental results. When the constructed mathematical equations were examined using Fisher and Student criteria, their performance was considered significant. The possibility of mathematical analysis of the equation based on the indicators was determined on the basis of experimental results. According to the results of the analysis, the speed of spinning was one of the main factors that could be changed in the producing of baked Siro yarn. More clearly if ring-spin machine choose spindle speed correctly Siroyarn’s strengthen will improve, asperity from structural circumstance will be normal and configuration of yarn will be improved.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan No. PK-4186 of February 12, 2019 "On measures to further deepen the reform of the textile and clothing industry and expand its export potential." Available at: https://cis-legislation.com/
2. Resolution of the President of the Republic of Uzbekistan No. PK-4453 of September 16, 2019 "On measures to further develop the light industry and stimulate the production of finished products." Available at: https://cis-legislation.com/
3. Tulaganova M, Isaqulov V, Murodov T, Yarashov S. Manufacture of" Siro "yarn from cotton and melange cotton fibers. состоявшейся 5 декабря. 2020. Penza.
4. Subramaniam V, Natarajan KS. Frictional properties of siro spun yarns. Textile Research Journal, 2000;60(4):234-239.
5. Chu SP, Cheng SKP. Siro-spun vs two-ply. Textile Asia, 2005;26(5):48-57.
6. Isakulov VT, Burnashev RZ, Technology of new types of yarn production GKNT. Tashkent; 2001.
7. Onarboev BO, Dzhuraev AD, Tulaganova MT, Isakulov VT. Improving the sealing protection of equipment in spinning machines. International journal of advanced research in Science engineering and technology. 2019;6(6):9571-9576.
8. Ruziboev NN, Isaqulov VT. Comparative analysis of the properties of siro yarn spinned by natural and chemical fibers. ACADEMICIA: An International Multidisciplinary Research Journal, 2021;11(4):1819-1826.
9. Ruziboev NN, Isaqulov VT. Technology of mixed fiber yarn production by "Siro" method. International scientific-practical conference "Development trends in the textile industry: problems and solutions. Termez. 2021-23-April.
10. Ruziboev NN, Isaqulov VT. Investigation of Factors Influencing the Properties of Spun Siro Strip. International Journal of Advanced Research in Science, Engineering and Technology. 2020;7(9):14864-14867.
11. Xalimaxan A, Eshanqulovich GA, Nasimjonovna NN, Davronovna AX. Patent UZIAP04347. A method of producing bicomponent yarn from mixed fibers. 2008.
12. Ruzibaev NN, Yarashov SN, Isakulov VT. Physical and mechanical properties of yarn spun from natural fibers. Cotton ginning, textile, light industry, printing in the context of integration of science, education, production Current problems of innovative production technologies and their solutions. Tashkent; 2020.
13. Ruziboev NN, Isakulov VT, Yarashov SN, Ruziboev RN. Republican online scientific-practical conference "Physical and mechanical properties of natural and chemical fibers Siro spun yarns" Innovative approaches to the further development of the textile and clothing industry and training. Namangan; 2020.

ANXIETY AND DEPRESSION: COMPARATIVE STUDY BETWEEN WORKING AND NON-WORKING MOTHERS

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ABSTRACT

Now a day the mothers are not only restricted their involvement on domestic chores, procreation of children and their nurturing with family care and attention. A significant number of mothers are working and they are maintaining their dual of as employee and household keeper with financial assistance to their families. The working mothers are mostly in anxiety and depression regarding their method of child care as they are absentees for a long time. The present study had been conducted to find out the differences in degree of felt depression and anxiety pattern of working & non-working mothers. A total of 60 mothers (30 working mothers , 30 non-working mothers) were studied. The result showed that that there were significant differences in degree of depression & both anxiety of working mothers' group. But no significant difference was noticed in case of anxiety & depression pattern of non-working mothers' group.

KEYWORDS: *Mother, Anxiety, Depression, Child Care, Household Work.*

INTRODUCTION

The term woman is usually reserved for an adult, with the term girl being the usual term for a female child or adolescent. However, the term woman is also sometimes used to identify a female human, regardless of age. Womanhood is the period in a female's life after her transition from childhood to adolescence, generally after crossing the age of 18 years. But the motherhood determines as a manifestation of human form the cosmic wonder of creation. Mother is a woman who has conceived, given birth to, or raised a child in the role of a parent (Apter, T., 1985) **[1].** Because of the complexity and differences of mothers' social, cultural, and religious definitions and roles, it is challenging to define a mother to suit a universally accepted definition. The masculine equivalent is a father.

The Role of women in the society is constantly questioned and for centuries women have struggled to find their place in a world that is predominantly male oriented. Literature provides a porthole into the lives, thoughts and actions of women during certain periods of time in a fictitious form, yet often truthful in many ways. Woman has a great part to play in the progress of our country, as the mental and physical contact of women with life is much more lasting and comprehensive than that of men (Bernard, J., 1971) **[2].** In the apron string of women is hidden the revolutionary energy, which can establish paradise on this earth. Woman is the magnificent creation of god, a multi faceted personality with the power of benevolence, adjustability, integrity and tolerance (Ghadially, Rehana, 1998) [3]. She is companion of man, gifted with equal mental faculty, a protector and provider, the embodiment of love and affection. The role specified to women in a society is a measuring bar and it is a true index of its civilization and cultural attainment. First of all it is clear that a woman's place, just like a man's is in the home. Women have started to reach the highest places and to occupy the scariest and most exciting positions of power within society. At the same time, they have continued to stay home and have children. It is really a matter of individual choice. Women's place should not be in the home because they have much more to offer society. Women got the reputation of being house-bound creatures through no fault of their own: they were repressed on every level. They were forced to wear certain dress codes, their education was severely curtailed and they were simply traded off in strategic marriages of convenience. Woman now believes a successful career is the key to financial and social life. Obviously the lives women live today are much different than they were before. Today, there are several roles women may choose to fulfill/carry out (Hoffman, L.W., 1986) **[4].**

Today most of mothers are working. They are expanding their lives to include a career; they must also maintain their traditional roles at home. This combination of housework and career-work is the reason why working mothers today have more stress than working fathers (Hoffman, L.W. 1986). **[4].**

Mothers may work in an office from nine to five or whatever may be, but their work does not end at the office. After working an eight-hour or more a day, a mother will come home to take care of her children, husband, and house. Women remain the primary caretaker and housekeeper of a family, and are also the primary caregiver for the elderly. All of this makes for a very demanding schedule. This is not only true for mothers of school-aged children, as it have been for two decades, but it is also true for mothers of infants less than one-year-old. The pace with which maternal employment rates have increased to this point, however, is so rapid that many people fail to realize its prevalence (Rapaport, R and Rapaport, R. N., 1972) **[5].**

Furthermore, attempts to understand its effects often ignore the fact that this change is part of a whole complex of social changes. Both employed mothers and homemakers today live in a very different environment than their counterparts forty or even twenty years ago.

Nearly three-quarters of all mothers are in the labor force. Even among mothers with very young children, more than sixty percent are in the labor force (Rachel Hamman. (2006) **[6].**

Anxiety & Stress symptoms affect over mostly in women especially in working mothers day by day. An increasing number of women are faced with the task of juggling the roles of mother-wife-employee. Working mother experienced high level of stress as compared to un-employed moms.'(Arieti, S., 1964) **[7].** Work-family-spillover' may also occur due to having juggle multiple roles, & may result when the pressures from work have an effect on one's attitude & behavior within the family.

According to Postpartum support International, up to 10% women develop an anxiety disorder & stress. Anxiety & stress is just as detrimental to the health of the new mom, her baby, & their budding relationship. Anxiety is a natural response to a perceived or imagined threat. Stress is the emotional and physical strain caused as a result of our response to what happens around us. Stress can affect anyone—kids, teenagers, adults and the elderly. At one point or the other, everybody goes through stress—be it relationship demands, work, household chores, children's school, education, financial situations, etc. It is an inborn instinct which helps you deal with everyday difficulties. But, if it goes on for too long, it can harm physical as well as psychological health making it difficult to handle day-to-day living. Secondly the cause of anxiety is the loss of job. It can be devastating, putting unemployed workers at risk for physical illness, depression, effecting heart etc. Until the transition is made to a new position, stress is chronic. The working mothers had better mental health and reported less depression than the non-working mothers. The most frequently reported source of stress for working mothers was not having enough time to do everything, whereas for non-working mothers lack of social life was a major stressor (Beck, A.T; Ward, C.H: Mendelson, M; Mock, J.E. & Erbaugh, J.K.(1961) **[8].**

On the other part depression is one of the most prevalent psychological disorders caused by several factors, including interpersonal relationships between individuals and the reactions and emotions of each individual expressed directly and discreetly to each other. An overwhelming 91% of working moms suffered some symptoms of depression. While many people are familiar with postpartum depression in the months after giving birth a lot of women are experiencing depressions (Maurice B. Mittelmark. (2009) **[9].**

There are so many benefits of working mothers that it seems to be a mistake to be a stay at home mom! But every woman must weigh her own pros and cons of getting a job outside the home. The factors such as financial situation, children's age, work availability, partner support, work passion and health all play a role in the decision to be working mom or stay-at-home moth (Kessler, R.C & MacRae, J.A. (1982) **[10].** Many simply feel that being a homemaker fails to utilize the full range of their capabilities. Working moms feel like they're using all their gifts, talents, and abilities in a more useful capacity than stay at home moms. Intellectual stimulation, problem solving, and handling challenges increase feelings of self-esteem and self-confidence. Working moms have their own income, which offers independence, freedom, and security. Moms with careers can make their own decisions about money and purchases; they know how their money is spent. There's a sense of satisfaction in being a working mom, as well as the economic ability to take care of them if the marriage or husband's health fails. Furthermore the employment has positive or neutral effects on women’s health. Comparing working mothers with non-working mothers on measures of mental health, self-esteem, and mother role satisfaction have positive effects (Field, S., 1964) **[11].** The working mothers had better mental health and reported less depression than the non-working mothers. The most frequently reported source of stress for working mothers was not having enough time to do everything, whereas for non-working mothers lack of social life was a major stressor (Johan. H. Anderson., 2009) **[12].**

Mainstream moms tend to be more insular and value family in traditional ways. Unique moms have more liberal views, are more likely to give their children original names, and put more value on “giving back.” (Field, S., 1964) **[11].**

Traditional moms are more apt to approve of alternative educational approaches (teacher merit pay, home schooling) to maintain student standards, but are less likely to care for contemporary content (such as Harry Potter). Progressive moms are more prolific readers and more likely to support affirmative action programs.

Rule bending behavior in moms has little correlation to either childhood experience or parenting philosophy. In other words, just because a mom was a little on the wild side growing up doesn’t mean she’s more permissive or uninvolved as a parent (Field, S., 1964) **[11]**

Working moms have been found to promote more independence in their children. A working mom is not able to solve every problem or issue due to their absence, so their children tend to become more autonomous and better problem solvers. Encouraging this independence has been found to have a more negative impact on boys than girls. For boys, this independence tends to increase the influence of their peer groups. In girls it has a more positive effect because traditionally girls are given less encouragement to be independent. It is also found that working moms spend less time with their preschoolers than non-working moms. Conversely, research has also found that the quality of time spent can sometimes be higher with working moms since they feel they need to compensate for the missed hours during the day, even though the activities chosen by working moms for their children were found to be less educational. Children attending daycare or alternate child care are found to be less compliant and more assertive with their playmates. Now, this is not always a negative aspect, although it can easily become one if not kept under watch. The daycare environment is also found to have a major effect on your child's outcome, but in the long term is not as important as the home environment. It is also proven that although daycare can have a large, positive impact on your child's cognitive and social development, one on one discipline and instruction at home is far more important. (………)

The boredom and lack of satisfaction experienced by many stay-at-home mothers are troubling enough when their children are young, but the problem becomes acute as the kids get older. Wrapped up in their own lives, teenagers assert their independence; husbands are busy with their careers. At this stage in life, stay-at-home moms may find the empty nest traumatic indeed, whereas working mothers with rewarding careers have ample opportunities for positive reinforcement outside the home.

Sure, it’s a logistical challenge to manage job responsibilities along with household tasks, especially while your children are young. But working women derive a wide range of intellectual, creative and social as well as monetary benefits from their jobs. You’d never know it from all the cultural propaganda that encourages women to sacrifice their careers, but the truth is that multiple roles in life are good for women’s psychological health.

Working Women Are Healthier As a working mother, you never have enough time, you often feel as if you can’t do your best at home or on the job, and you have so many other responsibilities that taking care of yourself often gets relegated to the bottom of the to-do list. It’s hard not to envy those stay-at-home moms who seem to have time to work out and take a regular yoga class -- and it seems logical to assume that full-time homemakers, having unloaded the demands of the labor force, would be healthier than all of us frazzled working moms (Hoffman, L.W., 1986) **[4].**

Surprisingly, however, the opposite turns out to be the case. Studies show that working women have lower blood pressure, lower cholesterol levels, and lower weight -- health benefits that prove long-lasting. A longitudinal survey conducted over 28 years found that by age 54, women who combine multiple roles as employees, parents, and partners were significantly less likely to report ill health than women whose lives did not include all three roles. Homemakers were the most likely to say that their health was poor.

Most telling of all, the research was even designed to determine the role of cause and effect: Did women's multi-tasking actually produce good health, or were healthy individuals simply able to accomplish more? The findings suggested that good health was the result, rather than the cause, of combining work with family life (Hoffman, L.W., 1986) [4].

In the present context, there is an ample need to study particularly in conservative socio-cultural Bengali family context, the effect of working condition of women in comparison with non-working condition. The employment typically has positive psychological consequences for women either as a primary source of well-being or as a buffer against stress and thus it can be said that due to paid work it helps to reduce anxiety, depression in life whereas, working mothers experience greater work related stress than non-working mothers and thus stress helps to increase anxiety. At this juncture the present study aims to find out the differences in degree of felt depression and anxiety pattern of working & non-working mothers.

Method :

For the purpose of the study a total of 60 mothers (30 working mothers , 30 non-working mothers) were randomly selected from Southern part of Kolkata who were residents of new urban colonies(the housing complexes have been developed to provide shelter of the people with ownership or rental basis) of Kolkata considering age, marital status, educational level, family pattern and interestingly all of them was from Hindu- Bengali family. In the present study data was collected by administrating the questionnaires - Information blank, State-trait Anxiety Inventory (STAI) by Speilberger et al 1970 and Beck Depression Inventory(BDI) by Beck, Word, Mendel son & Erbaugh 1961.

Result:

Result shows the difference label of anxiety between both mothers.

TABLE :1 REPRESENTING THE BAR CHART OF STATE ANXIETY FOR WORKING AND NON-WORKING MOTHERS

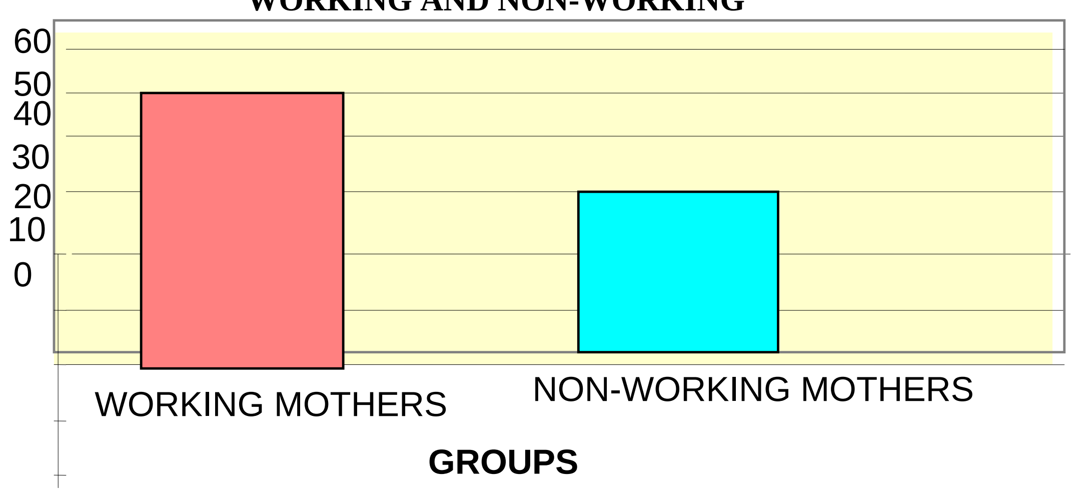


TABLE: 2 REPRESENTING THE BAR CHART OF TRAIT ANXIETY FOR WORKING AND NON-WORKING MOTHERS

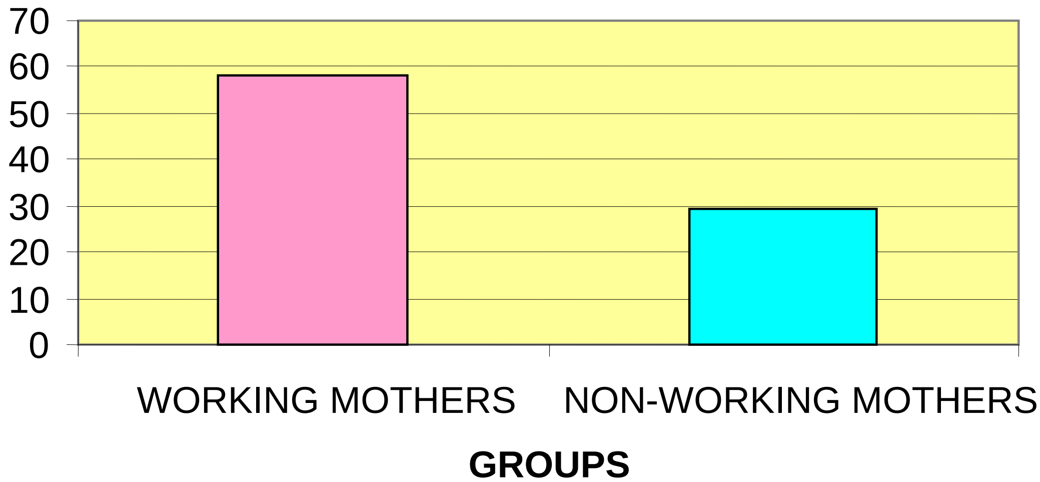


TABLE: 3- SHOWING THE MEANS, STANDARD DEVIATIONS, AND t-VALUES OF WORKING AND NON-WORKING MOTHERS WITH RESPECT TO THE VARIABLE - STATE ANXIETY

	Working mothers	**Non-working mothe**
Mean	49.90	29.03
Standard deviation	8.00	5.93
t-value		11.48

***significant at 0.05 level**

**** significant at 0.01 level**

Table 3 represents higher mean magnitude on the part of working mothers with reference to state anxiety. It indicates that there exists a significant difference among the two groups.

TABLE : 4- SHOWING THE MEANS, STANDARD DEVIATIONS, AND t-VALUES OF WORKING AND NON-WORKING MOTHERS WITH RESPECT TO THE VARIABLE - TRAIT ANXIETY

	Working mothers	**Non-working mothers**
Mean	58.10	29.27
Standard deviation	7.99	4.23
t-value		17.39

*****significant at 0.05 level

** Significant at 0.01 level

The table 4 represents higher mean magnitude on the part of working mothers with reference to trait anxiety. It indicates that there exists a significant difference among the two groups.

DISCUSSION

The study analyzed the depression levels of mothers. The majority of working mothers observed to mildly or seriously anxious & depress. The study had been brought out the significant features within its periphery. The overall obtained results showed that some significant differences were observed between the selected variable.

Anxiety- State & Trait:

So far as state-trait anxiety is concerned working mothers showed higher level [statistically not significant in case of state anxiety t-value 11.48** but statistically significant in case of trait anxiety t-value 17.39**, table 3 & 4] than their counterpart. This may be due to the fact that working mothers had to deal with harder reality. Thus greater exposures to hardness of reality tend to increase the amount of situational anxiety in the working mothers.

On the other hand, non-working mothers are concerned with their domestic field only. So they had less scope to deal with external stressful situation. Their single role creates less pressure in their life and situation and hence state anxiety is less prominent in them than that in the case of employed mothers. This finding is also supported by the study of Hoffman 1986); Kessler & MacRae (1982).

It was also observed from our study that in general, state & trait both anxieties were more prominent in case of working mothers than in that of the mothers who stayed at home(non-working). That might be due to the facts that employed mothers expressed greater feeling of inadequacy & exhibit higher levels of guilt and anxiety about their roles (Feld, 1963). The working mothers have multiple responsibilities and job related stress, they were more anxious than non-working mothers. Work overload thus created stressful situation & anxiety.

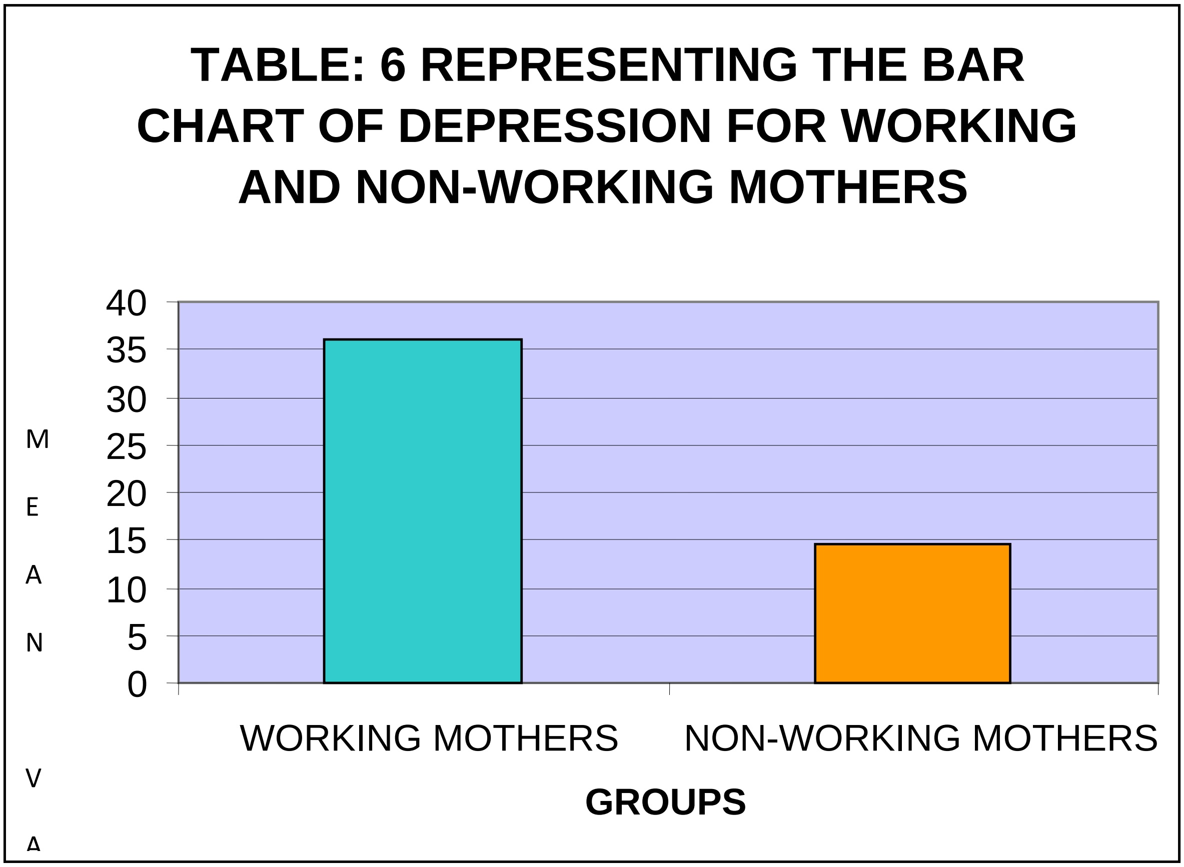
TABLE : 5 - SHOWING THE MEANS, STANDARD DEVIATIONS, AND t-VALUES OF WORKING AND NON-WORKING MOTHERS WITH RESPECT TO THE VARIABLE – DEPRESSION

	Working mothers	**Non-working mothe**
Mean	36.13	14.57
Standard deviation	5.92	6.72
t-value		13.19

*significant at 0.05 level

** significant at 0.01 level

Table 5 represents higher mean magnitude on the part of working mothers with reference to depression. It indicates that there exists a significant difference among the two groups.



Depression

In the study it was observed that degree of depression was also higher in case of working mothers than their counterparts and this difference was significant (t value 13.19*, table 5). The finding might be ascribed to the fact that working mothers generally involved in many works simultaneously & they had some time for making friends and enjoy leisure time (Rapaport and Rapaport,1972), yet the feeling of getting bored was less experienced by working mothers than non-working ones. Besides these working mothers could not give much time to their family and children, so they developed some guilt feeling. That was the main cause of the higher level of depression among the working mothers than non-working. Stressful life events were the prime cause of depression; For an urban working woman, balancing the job as well as the household could also result in depression. On the other hand, non-working mothers usually bore the major responsibilities for house-work & child-care. Their attentions were constantly engaged by their children and by household tasks (Apter, 1985). But the working mothers could not share this family bonding. This lack of sharing couldn't increase feeling of depression in working mothers. Bernard (1971 a) found that family roles might reduce a women's involvement in the labour force, lower her career commitment, stress her into a traditional career & reduce attainment & thus working mothers encountered distinctly the feeling of depression in their lives.

SUMMARY AND CONCLUSION:

The study was conducted to know the effect of working conditions of mothers along with the dimensions of certain psychosocial variables like anxiety & depression in comparison with non-working conditions.

For this purpose at first two groups were selected – a group of working mothers and a group of non-working mothers. The total number of sample selected were 60 with age range of 35 to 45 years and this sample was divided equally on the basis of working group & non-working group (i.e., 30 working mothers and 30 non-working mothers). They were selected on the basis of information blank. A number of tools were administered to assess the above mentioned selected variables. For collecting necessary information about the respondents and their family a specially designed information schedule was used. Beside this, State-Trait Anxiety Inventory(STAI) by Speilberger et al 1970 & Beck Depression Inventory(BDI) by Beck,Word,Mendelson & Erbaugh 1961 were used for our research purpose.

The data were scored according to the scoring key supplied with each test and then the data were statistically analyzed. The selected mothers were basically from the nuclear families which were settled in the new urban housing at the southern part of Kolkata. The working mothers were various post holders in different government & non- government organizations. Non-working mothers were only housewives/homemakers.

Summarily, it can be said that there were significant differences in degree of depression & both anxiety of working mothers' group. But no significant difference was noticed in case of anxiety & depression pattern of non-working mothers' group.

REFERENCES

1. Apter T. Wives women don't have wives. Professional success & motherhood, The Macmillon Press Ltd; 1985.

2. Bernard J. Women and the public Interest- an Essay on Politics & Protest. Chicago: Aidile. 1971.

3. Rehana G. Women in Indian Society, New Delhi: Sage Publication; 1998.

4. Hoffman LW. "Work family & the children." In psychology & work, In: Pallak MS, Perloss RO (Eds), Washington D.C: American psychological Assn. (Ch 9,15,17). 1986. pp.169- 220

5. Rpaport R, Rapaport RN. The duel carrier family: A variant pattern & social change. Inc. Safilios- Rothschild (Ed.). Toward a sociology of women. Lexington, Mass: Xerox. 1972.

6. Hamman R. Bye-Bye Boardroom. Bureau of labor statistics. 2006. Article source: www.blog.timesunion .com.

7. Arieti S. Anxiety anxilated states. American handbook of Psychiatrist. The foundations of psychiatry, Vol. 1, second edition, basic books, Inc. Publishers, New York; 1964.

8. Beck AT, Ward CH, Mendelson M, Mock JE, Erbaugh JK. Arch Inventory for measuring, Depression. Archives of general psychiatry. 1961;4:561-571.

9. Mittelmark MB. Work life and mental well being of single and non-single working mothers in Scandinavia. Scand J Public Health, 2009;37(6):562-568.

10. Kessler RC, MacRae JA. The asset of Wives' employment on the mental health of married men and women. American journal of sociology, 1982;47:216-226

11. Field S. Feeling of Adjustment. In: Nye FI, Hoffman LW (Eds). The employed mothers in America. Chicago: Rand Nc Nally; 1964. pp 331-352.

12. Anderson JH. Impact of work, health and health beliefs on new episodes of pain-related and general absence-taking in non-working & working moms. Scand J Publication, 2009;37(6):569-576.

ACHIEVING THE LATEST TREATMENTS FOR HEMOPHILIA

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ABSTRACT

These article analysis innovative methods of the treatment of haemophilia A and B is the replacement therapy by preparations obtained from plasma of donors, or by recombinant DNA technology. Among the major shortcomings of unmodified drugs VIII and IX factors should be allocated between the low time circulation of the drug in the body of the patient and the delivery of antibodies (inhibitors) to a protein preparation that significantly reduces their effectiveness. The improvement of the efficiency and safety of recombinant preparations is achieved by removing B-domain of factor VIII molecule, pegylation or development of preparations of fusion proteins (fusion molecules of the preparation to the albumin or Fc-fragment of IgG).

KEYWORDS: *Hemophilia; Recombinant Factor VIII; Recombinant Factor IX; Pegylated Proteins; Monoclonal Antibody Preparations; Preparations Based Fusion Proteins; Aptamer; Antisense Oligonucleotides.*

INTRODUCTION

Hemophilia is a hereditary disease of the blood coagulation system resulting from a deficiency of blood coagulation factor VIII (FVIII) - hemophilia A, or blood coagulation factor IX (FIX) - hemophilia B. Hemophilia is inherited in an X-linked recessive inheritance pattern. Approximately 70% of patients have a positive family history of the disease. Hemophilia is caused by mutations in the gene encoding FVIII (Xq28) or the gene encoding FIX (Xq27). In 30-35% of cases, sporadic mutations are possible without a family history of the disease. The prevalence of hemophilia in the general population is estimated at 1:10,000. Hemophilia A (HA) is more common than hemophilia B (HB) and accounts for 80-85% of the total number of cases. The vast majority of patients with hemophilia are men. There are isolated cases of hemophilia in women when the gene is inherited simultaneously from the father (with hemophilia) and from the mother (carrier of the gene), or in a woman with a gene mutation on one chromosome, when the gene on the other chromosome is inactive (Shereshevsky-Turner disease, etc.). Some women who carry mutations in the FVIII or FIX genes may also experience clinical manifestations of hemophilia **[1].**

Diagnosis of hemophilia begins with the identification of a history of hemorrhagic syndrome in the patient and family members. When collecting an anamnesis of the disease and a family history of the patient, it is recommended to find out the presence of manifestations of the hemorrhagic syndrome: complaints of easily appearing ecchymosis and hematoma in early childhood; the occurrence of spontaneous bleeding (especially in the joints, muscles and soft tissues); prolonged bleeding after trauma or surgery **[2].** Family history data in approximately 2/3 of patients contain indications of hemorrhagic manifestations in close relatives on the maternal side (in men, less often in women). Personal history data may contain information about the patient's hemorrhagic manifestations. When collecting an anamnesis of the disease, it is necessary to pay attention to the presence of hemorrhagic manifestations in the neonatal period in the form of cephalohematomas, intracranial hemorrhages, bleeding and prolonged healing of the umbilical wound; in infants - ecchymosis not associated with significant trauma, soft tissue hematomas after minor bruises or spontaneous. Some children may not bleed during the first year of life until the child begins to walk **[3].** It is important to pay attention to the discrepancy between the severity of hemorrhagic manifestations of the severity of the previous injury, recurrence of bleeding after the initial stop, not associated with repeated trauma, massive and (or) multiple hematomas, systemic hemorrhagic manifestations (manifestations of different localization), "spontaneous hemorrhagic manifestations". In mild hemophilia, there may be no bleeding until the first injury or surgery. The collection of complaints and anamnesis will determine the scope of the patient's examination. When conducting a physical examination, it is recommended to pay attention to the presence of skin hemorrhagic syndrome of varying severity in the form of multiple ecchymosis and hematomas, which are possible in severe and moderate hemophilia **[4].** It is highly likely to reveal signs of joint damage in the form of deformity, edema and local increase in skin temperature (acute hemarthrosis) and / or signs of impaired mobility, range of motion of the joints, hypotrophy of the muscles of the limb on the side of the affected joint, gait disturbance (deforming arthropathy).

Updated information on innovative methods of hemophilia a treatment

This phase I/IIa, open-label (non-placebo controlled) clinical trial enrolls 16 previously treated male patients (aged 18 to 65 years) with severe hemophilia A (FVIII activity <1%). Participants received a single intravenous injection of BIVV001 at a dose of 25 IU/kg (lower dose group) or 65 IU/kg (higher dose group). The injection was followed by a washout period (time to clear the drug from the body) of at least 3 days, after which patients again received a single intravenous injection of BIVV001 at the same dose of 25 IU/kg or 65 IU/kg. For up to 28 days after a single dose of BIVV001, no FVIII inhibitors were found and no hypersensitivity or anaphylactic events were reported. The geometric mean half-life of BIVV001 is 3-4 times longer than the half-life of rFVIII (37.6 hours compared to 9.1 hours in the lower dose group; and 42.5 compared to 13.2 hours in the higher dose group). high dose). After administration of BIVV001 in the high dose group, mean FVIII levels were maintained in the normal range (≥51%) for 4 days; and amounted to 17% on the 7th day. This allows us to talk about a possible break of one week between treatment episodes.

In phase I of this study, a single intravenous injection of BIVV001 provided sustained levels of FVIII activity with a half-life of up to 4 times longer than the half-life of standard rFVIII. Such an increase may indicate replacement therapy with a new class of factor VIII with an interval of one week between injections. Within 28 days after administration, no information was received about any problems with the safety of the drug.

Cross-sectional studies of drugs with an extended half-life The pharmacokinetics (PK) of Jivi® and Elocta® were compared in a crossover study across two treatments. Patients with severe hemophilia aged 18-65 years of age were randomized to receive a single intravenous dose of Jivi® at 60 IU/kg followed by FVIIIFc (Elocta®) 60 IU/kg - or vice versa - with a washout period between doses of ≥7 days. FVIII activity was measured using a one-step assay. The area under the curve (AUC) of Jivi® was significantly greater than that of Elocta®, corresponding to a median time to release of 1 IU/dL approximately 13 hours longer for Jivi® using a population pharmacokinetic (PK) model. A second study with a similar methodology compared Jivi® with Adynovate® at 50 IU/kg. Another additional component in this study was batch-dependent differences in dose. As a result, reported median doses actually administered were 54.3 IU/kg for Jivi® and 61.4 IU/kg for Adynovate®. Based on a population PK model, the median time to reach 1 IU/dL was 16 hours longer for Jivi® than for Adynovate®. Both studies were funded by Bayer.

Ingenza announces progress towards low cost FVIII In a press release, Ingenza announced significant progress in developing a process to produce low-cost rFVIII as a feedstock for ProFactor Pharma Ltd (PFP). Ingenza is now finalizing the manufacturing cycle and is releasing material for preclinical toxicity studies that PFP has scheduled in 2020 ahead of clinical studies in 2021.

Scientists from the University of Colorado (WFH virtual summit (abstract MED-PP-010 (616)) surveyed PsHA who received Hemlibra® at the university's Hemophilia and Thrombosis Center for >1 month. The survey was part of a quality-of-service improvement effort to identify challenges in the provision of treatment and for close monitoring of adverse events or unexpected complications shortly after drug licensure 5-10 minute telephone questionnaires were administered as scripted Questions were asked about adverse events, bleeding, physical activity, pain medication use and travel Questions were answered by adults or legal representatives of pediatric patients There were 69 eligible patients as of September 1, 2019. The study included 47 patients aged 6 months to 79 years (mean age 18.3 years, median age 13.1 years) who were taking " Hemlibru®" for 1.2 - 40.5 months (average duration 9.4 months, median 6.6 months). Patients associated the use of Hemlibra® with improved joint health (23/29, 79%), decreased intake painkillers (13/20, 65%), fewer absences from work/school (23/33, 70%) and increased physical activity (26/47, 55%). Several LsHAs have reported missed Hemlibra® doses, which may be indicative of inaccurate adherence to the treatment regimen.

Gene therapy

FDA Delays Licensing of ROCTAVIAN® (valoctocogene roxaparvovec = valoctocogene roxaparvovec) until complete data on the cohort of patients in the 3rd phase of the clinical trial The FDA (USA) on August 18 issued a full response letter (CRL) to the company BioMarin, requesting additional information for a thorough evaluation of BioMarin's ROCTAVIAN® gene therapy for hemophilia A. In this letter, the FDA requested that BioMarin provide 2 years of safety and efficacy data for all 134 patients in a phase III study (GENER8-1, NCT03370913). Having received a request from the EMA (by the end of November 2020 to provide full data for 12 months on all participants in the III phase of the study), BioMarin announced on October 5th that it was withdrawing its application to the EMA for the issuance of state registration. BioMarin plans to submit a new marketing authorization application in the second quarter of 2021. The aforementioned request for additional data is most likely related to the duration of FVIII expression. During the Phase I/II studies, FVIII activity levels dropped from a mean of 64.3 IU/dl (one year after high-dose treatment) to a mean of 24.2 IU/dl (four years after treatment): i.e. the fall was 63%.

Updates at 4 years (6e13 vg/kg cohort) and 3 years (4e13 vg/kg cohort) indicate that all patients are still not on FVIII prophylaxis after receiving a single dose of valoctocogen roxaparvovec. The pooled mean HCH remains <1 in both cohorts and below baseline levels prior to treatment. In year 4, the mean HCH in the 6e13 vg/kg cohort was 1.3, and the mean HCH in year 3 in the 4e13 vg/kg cohort was 0.5. Over the past year, 6 (out of 7) patients in the 6e13 vg/kg cohort and 5 (out of 6) patients in the 4e13 vg/kg cohort had no spontaneous bleeding. At the end of year 4 after infusion of valoctocogen roxaparvovec, the mean FVIII activity in all patients in the 6e13 vg/kg cohort was 24.2 IU/dL by chromogenic substrate testing and 35.4 IU/dL by the one-step clotting method. **[5]**

Treatment

The main principle of hemophilia treatment is specific replacement therapy with clotting factor concentrates. Purified, virus-inactivated preparations made from human donated plasma (FVIII concentrate, FIX concentrate, FVIII concentrate + von Willebrand factor, anti-inhibitor coagulant complex [AICC]) or recombinant clotting factor concentrates (Octocog alfa, Moroctocog alfa, Nonacog alfa, Eptacog alfa) should be used. (activated), Simoctocog alfa, Turoctocog alfa). At present, there is no reason to prefer plasma (von Willebrand factor or not) or recombinant coagulation factors to each other. Since frequent changes in the trade names of FVIII and FIX preparations can lead to an increased risk of the appearance of an inhibitor, it is desirable to create conditions for long-term (for many years) use of one type of INN preparation by a patient. It is recommended to give preference to the drug that, with equal effectiveness, is best tolerated by the patient, has the best pharmacokinetic individual indicators and is most convenient to use, based on specific conditions **[6, 7, 8].** A change in INN in a particular patient in the absence of registered adverse effects on the administration of the drug used and a satisfactory clinical response to therapy is possible after 100 exposure days of administration of blood clotting factor concentrates. Coagulation factor concentrates are administered intravenously. Most often, a bolus infusion is used at the rate recommended by the manufacturer. In rare cases, it is possible to use continuous infusion if the attending physician has similar experience. Modern therapy for hemophilia is based on the principle of "home treatment". Mandatory conditions for conducting "home treatment" are: the patient has hemostatic drugs (the drug is located in the same place as the patient), the decision to use the hemostatic drug is made by the patient or his relatives in accordance with the recommendations of the hematologist, the patient and / or his relatives are trained in the rules of storage and drug use. The use of crude preparations - blood components (fresh frozen plasma or cryoprecipitate) - is recommended only in exceptional cases and should not be a permanent practice. There are two types of specific therapy - treatment upon the occurrence of bleeding (on demand) and prophylactic therapy.

REFERENCES:

1. Mannucci PM. AIDS, hepatitis and hemophilia in the 1980s: memoirs from an insider. J. Thromb. Haemost. 2003;1(10):2065–9.
2. Ettingshausen CE, Kreuz W. Recombinant vs. plasma-derived products, especially those with intact VWF, regarding inhibitor development. Haemophilia. 2006;12(6):102–6.
3. Wight J, Paisley S. The epidemiology of inhibitors in haemophilia A: a systematic review. Haemophilia. 2003;9(4):418–35.
4. Chalmers EA, Brown SA, Keeling D. Early factor VIII exposure and subsequent inhibitor development in children with severe haemophilia A. Haemophilia. 2007;13(2):149–55.
5. Agostini D, Rosset C, Botton MR, Kappel DB, Vieira IA, Gorziza RP, Salzano FM, Bandinelli E. Immune system polymorphisms and factor VIII inhibitor formation in Brazilian haemophilia A severe patients. Haemophilia. 2012 Nov;18(6):e416-8.
6. Srivastava A, Brewer AK, Mauser-Bunschoten EP, Key NS, Kitchen S, Llinas A, et al. Guidelines for the management of hemophilia. Haemophilia. 2013;19(1):e1–47.
7. Madasheva AG, Makhmudova AD. Biochemical parameters in patients with hemophilia with muscle pathologies before and after treatment. Young Scientists Forum, 2021;(4):233-238.
8. Madasheva AG, Zhuraeva MZ. Biochemical indicators and complex treatment of patients with psoriasis with therapeutic plasmapheresis. Achievements of science and education, 2019;10(51):78-82.

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THE ROLE OF DESIGNING AND CHOOSING MATERIALS IN TEACHING EFFECTIVE PRONUNCIATION

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ABSTRACT

The present paper aims at showing the importance of material design and chooses to teach foreign language students pronunciation in ELT. Pronunciation teaching materials ought to be designed and choose based on modern pronunciation learning task types (awareness-raising tasks, rhyme and verse, ear training.

KEYWORDS: *Pronunciation Teaching Materials, ELT, Foreign Language Students, Modern Pronunciation Task, Rhyme And Verse, Awareness Raising Task, Ear Training.*

INTRODUCTION

This paper discusses how teaching materials design takes essential role inteaching effective pronunciation. Considering the challenges and gains in the process of teaching and learning how to design choose ELT pronunciation materials, we try to select appropriate techniques on current issue. Pronunciation materials are regarded to take paramount roles to shape and enhance the quality of pronunciation teaching and learning.

Teaching materials play a central role in teaching and learning and as Garton and Graves admit that "Materials are fundamental to language learning and teaching, but materials cannot be viewed independently of their users" **[1].** As any kind of teaching materials should help in drawing the pupil's attention and meet their needs. In general, two important characteristic of teaching materials that imply their relevance in choosing. They are fundamental parts of language learning and teaching and they are dependent on their users.

One of the suggested principles is the integration of pronunciation teaching tasks with the other skills of the English language skills. Therefore, Levis and Sonsaat claimthat:" **[2]** this principle echoes that pronunciation should not be taught in a decontextualized way since it is a part of other language skills, such as spelling and listening. Additionally, Hinkel states that teaching pronunciation must be taught contextually and integrated with speaking and integrated with speaking for the sake of providing communicative purposes and realistic language learning goals ". **[3]** This fact implies that pronunciation teaching materials should be designed based on those aforementioned views (e.g. pronunciation for communicative purposes and realistic oriented goals). **[4]**

Besides, a number of investigations have documented pronunciation teaching materials, Tergujeff has offered more specific types of pronunciation teaching materials. She classifies pronunciation teaching materials into 8 types, namely (1) phonetic training,(2) reading aloud,(3) listening and repeat, (4)rules and instruction,(6) awareness-raising activities, (7) spelling and dictation and (8) ear training . **[5-12]**

To conclude, this article has emphasized the significance of materials design on pronunciation in language teaching. Though there are a number of principles offered by several scientists and selected by us in which learners should be the centre of teaching. However, materials often control the teaching since teachers and learners tent to rely on them. Materials that are appropriate for a particular class need to have an underlying instructional principles, approach method and teachers which suit the student's and their needs. Although this article offers valuable findings, the limitations of this study may include some deficiency of data, time constraints and surface structure analysis. Therefore, the finding cannot generalized. Due to these limitations, the future article will delve the enlargement (amplification) of sufficient collection of techniques (more detailed observation), integrated communicative study and technology based-tasks.

REFERENCE:

1. Allwright RL. What do we want teaching materials for? ELT Journal 1981;36(1):5–18.

2. Hinkel E. Current perspectives on teaching the four skills. TESOL Quarterly, 2006;40(1):109–131.

3. John L, Sinem S. (2016). Pronunciation Materials. In: Azarnoosh M, Zeraatpishe M, Faravani A, Kargozari HR (eds.). Critical New Literacies: Issues in Materials Development. Rotterdam: Sense Publishers. 2016. pp. 109-119

4. Grant L. Creating pronunciation-based ESL materials for publication. In: Byrd P. (Ed.), Material writer's guide. Boston, MA: Heinle & Heinle. 1995. pp. 118–120

5. Gorsuch GJ. Testing textbook theories and tests: The case of suprasegmentals in a pronunciation textbook. System, 2021;29:119-136.

6. Elina T. Pronunciation teaching materials in Finnish EFL textbooks. In A. Henderson (ed). English Pronunciation: Issues and Practices. 2010.

7. Aslonov S, Ruzimurodova Z. THE Use of Acronyms and Initialisms in Bussines English. Студенческий вестник, 2020;(12-5):34-35.

8. Sherzodovich AS. The role of online teaching and innovative methods. Science and education, 2020;1(3):524-528.

9. Akhmedzhanova N, Aslonov Sh. Semantic types of predicates and phase articulation of the verbal action. Internauka, 2020;(12-1):27-29.

10. Aslonov SS. The Role of Phonostylistics in Teaching English Stylistics. Internauka, 2020;(16-4):57-59.

11. Ruzimurodova Z, Aslonov S. What To Teach To The Students? To Teach Standard English Or World Englishes?. In The Young Explorer: Challenges and Prospects. 2020. pp. 367-369.

12. Aslonov ShSh. Computer Linguistics and Philology: Problems and Solutions. Humanitarian Treatise, 2020;(84):17-19.

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THE IMPORTANCE OF PALLIATIVE CARE IN PATIENTS WITH SEVERE AND CHRONIC FORMS OF TUBERCULOSIS

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ABSTRACT

Palliative care is an approach aimed at improving the quality of life of patients and their families who have problems with life-threatening illness. The aim of the study was to determine the need for palliative care in patients with severe and chronic forms of tuberculosis. This study involved 43 patients with severe or moderate TB. We used the HADS scale to help determine the level of anxiety and depression in patients, the Charlson scale to determine the degree of comorbidity in patients under long-term follow-up, and the Visual Analog Scale (VAS) to assess chronic pain. In summary, treatment of patients with severe and chronic forms of tuberculosis requires palliative care, including medical and psychological interventions.

KEYWORDS: *Palliative Care, Severe And Chronic Forms Of Tuberculosis, Patients, Scale.*

INTRODUCTION

According to the World Health Organization (WHO), palliative care is an approach aimed at improving the quality of life of patients (adults and children) and their families with life-threatening illness-related problems. It alleviates and alleviates patients 'suffering through early diagnosis, proper assessment and treatment of pain, as well as resolving physical, mental or psychosocial problems **[1,2].** The prevalence of multidrug-resistant tuberculosis (MDR-TB) and broad-drug resistant tuberculosis (XDR-TB) forms the basis for the WHO's declaration of palliative care in phthisiology. In December 2010, at a meeting of international experts on tuberculosis control, a declaration on palliative care for patients with tuberculosis was adopted. It states that "patients with MDR-TV / XDR-TV should receive palliative care in case of ineffective results, despite the fact that they receive twice the full course of controlled chemotherapy" **[3,4,5].** This postulate was later supplemented with "or two refusals of treatment". The emergence of new drugs such as bedaquiline and delamanid, as well as the adoption of the END TB strategy, have confused TB physicians and undermined the palliative care options previously widely discussed internationally **[6,7,8,9].**

An increase in the number of patients with MDR-TV / XDR-TV, insufficient adherence to treatment, limited range of anti-tuberculosis drugs, co-occurrence of tuberculosis and HIV infection - all this leads to the development of incurable forms of tuberculosis **[10,11,12].** In some patients, even the tuberculosis process cannot be surgically removed. In such cases, prescribing anti-tuberculosis drugs for chemotherapy is not only ineffective, but leads to the development of total stagnation in all anti-tuberculosis drugs. In this regard, in 2012, the international community of phthisiologists adopted a declaration on the provision of palliative care. It states that “palliative care should be provided to patients with MDR-TV / XDR-TV. The main criterion for the transfer of patients to palliative care is that the course of treatment prescribed to them does not give a positive result twice, or the course of treatment is interrupted "**[13].**

Purpose. To determine the need for palliative care in patients with severe and chronic forms of tuberculosis.

Materials and inspection methods. In this study, in 2021, 43 patients with severe or moderate conditions were treated in the treatment departments of the Samarkand Regional TB Dispensary. Such patients did not participate in the study because their condition was severe and difficult to communicate with patients with tuberculous meningitis. A.S., which helps determine the level of anxiety and depression in patients. Zygmond and R.P. We used the HADS scale developed by Snaith, the Charlson scale to determine the degree of comorbidity in patients under long-term follow-up, and the Visual Analog Scale (VAS) to assess chronic pain.

The results of the investigation and their discussion. The mean age of the patients was 42.1 ± 3.4. The incidence of clinical forms of tuberculosis is as follows: fibrous-hollow tuberculosis in 27 (62.7%) patients, diffuse tuberculosis in 12 (27.9%) patients (including generalized form), and caseous in 4 (9.4%) patients. zotiljam was observed. HIV infection was detected in 9 (20.9%) patients. All patients underwent chemotherapy with primary and reserve medications. Antiretroviral therapy was also given to 7 patients.

Shortness of breath, as well as signs of respiratory failure, were observed as the leading clinical symptom in 29 (67.4%) patients. Pain syndrome was reported in 15 patients, and 7 (16.3%) patients reported that the syndrome predominated in them. Dull pain was observed in 4 patients, burning pain in 2 patients, acute pain in 2 patients, puncture pain in 6 patients and pressure pain in 1 patient. 2 patients were diagnosed with persistent pain and 13 patients with recurrent pain. As pain-enhancing factors, patients reported: physical activity (4), changes in body position (3), deep breathing and coughing (9), fever (1), and taking anti-tuberculosis medications (2). . The following factors were noted as pain relievers: lying on your back (5), taking painkillers (6), and taking cough suppressants (8). Two patients reported that no remedy relieved the pain.

All patients needed symptomatic medications and treatment of comorbidities. During the last hospitalization, patients received sputum transplant agents (41 (95.3%) patients), hepatoprotectants (37 (86%) patients), proton pump blockers (34 (79.1%)) in addition to TB treatment. patients), nonsteroidal anti-inflammatory drugs (24 (55.8%) patients), antiemetics (19 (44.1%)), antispasmodics (17 (39.5%)), antihistamines (16 (37.2%), bronchodilators and broad-spectrum antibiotics (15 (34.8%)), antidiarrheal drugs (12 (27.9%)) and laxatives (11 (27.9%)).), hemostatics (10 (23.2%)), diuretics (10 (20.9%)), glucocorticoids (9 (20.9)%)).

Almost all patients (41 (95.3%)) asked, “Do you need help from a psychologist?” they answered in the negative. According to the HADS scale, which helps to determine the level of anxiety and depression, significant anxiety was detected in 14 (32.5%) patients and depression in 18 (41.8%) patients. The mean on the depression scale was 15 ± 7.8. In 28% of cases, patients were found to suffer from both anxiety and depression. Several patients reported that they did not have relatives to care for them. In addition, it was found that the attitude of medical staff to patients was high (average 4.75 points). **[14]**

From the above, it can be seen that patients with severe and chronic forms of tuberculosis often need the help of several specialists. The following is a clinical example:

Patient K., 43 years old, group II disability on tuberculosis. Diagnosis: Inflammatory stage of fibrous-hollow tuberculosis of the upper and middle part of the right lung, tuberculosis rod (ST) +, chronic pleural empyema with bronchopleural effusion, isoniazid, rifampicin, streptomycin, ethambutol, kanamycin, protionamide , resistance to capreomycin and levofloxacin; Type 1 diabetes mellitus, severe course, period of decompensation; chronic viral hepatitis C; HIV infection. Charlson’s comorbidity index is 7 points. Clinical anxiety and depression cases were identified on the HADS scale. In such cases, the treatment of the patient requires the assistance of several specialists, such as a phthisiologist, infectious disease specialist, endocrinologist, chest surgeon, psychotherapist. **[15]**

CONCLUSION

Patients with severe forms of tuberculosis need the help of several specialists at the same time, ie therapist, infectious disease specialist, cardiologist, endocrinologist, surgeon, neurologist, due to the existing comorbidities in them. Such patients will also need the help of a psychotherapist as anxiety and depression are clearly developed. In summary, treatment of patients with severe and chronic forms of tuberculosis requires palliative care, including medical and psychological interventions.

REFERENCES:

1. Abduhakimov BA. The importance of dental care for patients with pulmonary tuberculosis. Academic Research in Educational Sciences. 2022;3(1):258-262.

2. Mamatova NT. Psychological characteristics of adolescents with respiratory tuberculosis. Journal of Biomedicine and Practice, 2020;5(5):135-140.

3. Adjablaeva DN. Active identification of tuberculosis in children and adolescent. Youth and medical science in the XXI century. 2014.

4. Senthilingam M, Pietersen EMc, Nerney R, Te Riele J, Sedres P, Wilson R, Dheda K. Lifestyle, attitudes and needs of uncured XDR-TB patients living in the communities of South Africa: a qualitative study. Trop Med Int Health., 2015;20(9):1155-1161.

5. Abduhakimov BA. the emotional state of TB patients and their family members. Innovations in Pedagogy and Psychology 2021;4 (1).

6. Abduhakimov BA. Peculiarities of the course of pulmonary tuberculosis in children in combination with clay invasion. Journal of cardiorespiratory research. 2021;2(1):74-77.

7. Bitalabeho F, Dara M, Jaramillo E, Milani B, Raviglione M. Declaration on palliative care and MDR / XDR-TB INT Int J Tuberc Ling Dis, 2012;16(6):712–713.

8. Aksenova VA, Klevno NI, Kavtarashvili SM. The focus of tuberculosis infection and its significance in the development of tuberculosis in children. Tuberculosis and lung diseases. 2015;(1):19-24.

9. Mamatova NT. Experience in the use of short-term courses of treatment in patients with multidrug-resistant tuberculosis in the Samarkand region. Bulletin of the Research Institute of Tuberculosis, 2020; 106-107.

10. Ataxanovna KS, Toirjonovna MN, Urinovich KK, Nazarovich SG, Murodullayevich BU. The Effectiveness of Short-Term Treatment Regimens in the Treatment of Drug-Resistant Forms of Tuberculosis. European Journal of Molecular & Clinical Medicine, 2020;7(3): 5236-5240.

11. Dheda K, Migliori GB. The global rise of extensively drug-resistant tuberculosis: is the time to bring back sanatoria now overdue? Lancet. 2012 Feb 25;379(9817):773-5.

12. HPCA. Guidelines for providing palliative care to patients with tuberculosis. Hospice Palliative Care Association; South Africa, 2011. pp.1-141.

13. Abduhakimov BA. Effects of anti-tuberculosis treatment on the functional status of the thyroid gland. Journal of cardiorespiratory research. 2020;3(1):24-27.

14. Ashurov AA, Abduhakimov BA. Peculiarities of the course of pulmonary tuberculosis in children in combination with helminthosis. Journal of cardiorespiratory research. 2021;2(3): 69-72.

15. Novikov GA, Vaisman MA, Rudoy SV, Podkopaev DV. Palliative care for patients with chronic pain. Palliative medicine and rehabilitation. Scientific and practical journal. 2019;(2):5-12.

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USING MODERN TEACHING METHODS IN THE EDUCATION SYSTEM

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ABSTRACT

The purpose of modern education is the development of the child's personality, the identification of his creative abilities, the preservation of physical and mental health. There are a lot of positive trends in modern education: there is a variability of pedagogical approaches to teaching schoolchildren; teachers have freedom for creative search, author's schools are being created; foreign experience is actively used.

KEYWORDS: *Modern Education, Education System, Modern Methods, Education Quality, Innovation, Game Technologies.*

INTRODUCTION

The application of modern educational technologies is at the forefront. Traditional ways of teaching are gradually becoming a thing of the past before our eyes. Active teaching methods come out in the first place, which provide students with the opportunity to actively participate in the educational process themselves. The problem of personal activity in learning is one of the most relevant both in psychological, pedagogical science and in educational practice. **[1]**

The success of the educational process largely depends on the teaching methods used. Teaching methods are orderly ways of interrelated activities of teachers and students aimed at achieving educational goals.

Teaching methods perform many functions. The main ones are educational, motivational, developmental, educational, organizational, which means that with the help of methods teachers not only teach, but also solve motivation issues, carry out educational influences, influence the organization of the educational process. **[2]**

A method can be not only a way of activity, but also a way of organizing activities, that is, a meta-method. Teaching methods consist of techniques - separate one-time actions. The objective and subjective parts are clearly visible in the method. Where the teacher makes specific changes to the method, his creativity manifests itself. **[3]**

Active teaching methods are a system of methods that ensure the activity and diversity of students' mental and practical activities in the process of mastering educational material. On practical orientation, game action and the creative nature of learning, interactivity, various communications, dialogue and polylogue, the use of students' knowledge and experience, the group form of organizing their work, the involvement of all sensory organs in the process, an activity-based approach to learning, movement and reflection. Confucius said, "Tell me and I'll forget, show me and I'll remember, let me do it and I'll understand." Research by scientists has shown that a person remembers only 10% of what he reads, 20% of what he hears, 30% of what he sees; 50-70% is remembered when participating in group discussions, 80% - when independently detecting and formulating problems. And only when the student is directly involved in real activities, in the independent formulation of problems, development and decision-making, formulation of conclusions and forecasts, he remembers and assimilates the material by 90%. For younger students, the real activity is a game. In a rapidly developing world, it is unacceptable to use your time and energy by only 5-10%. **[4]**

A very good reason why it is important to use in training is related to the process of increasing the amount of information and the amount of knowledge. It is impossible to indefinitely increase the duration of training. The solution to this contradiction must be sought in the way of changing the receipt of information during training. Active teaching methods allow, through new forms, analysis, generalization, to improve the efficiency of assimilation of new material and increase its volume. **[5]**

The development of methods is based on a serious psychological and methodological basis. This explains the effectiveness of the process and learning outcomes using active learning methods. Studying the motivation of learning, scientists were convinced that the value of motivation for successful study is higher than the value of the student's intelligence. Positive motivation can play the role of the most important subject in learning. Of course, it's harder to play in the senior class than in the junior class. But there are ample opportunities here, too. For example, you can abandon the frequent use of presentations made by schoolchildren. They can be replaced with a costumed report with props and musical accompaniment. Such a mini-performance. Of course, it is necessary to prepare and carefully select the topics of the report. But, as practice shows, this form of work is very popular. The material presented in this form is remembered better. **[6]**

Teamwork, joint research activities, defending one's position and tolerant attitude to other people's opinions, taking responsibility for oneself and the team form the personality qualities, moral attitudes and value orientations of a small person. **[7]**

Simultaneously with teaching and upbringing, in the educational process it allows students to form and develop soft or universal skills. These are the ability to make decisions and the ability to solve problems, communication skills and qualities, the ability to clearly formulate messages and clearly set tasks, the ability to listen and take into account different points of view and opinions of other people, leadership skills and qualities, the ability to work in a team. In modern life, this is necessary to achieve success in professional and social activities, and to ensure harmony in life. **[8]**

Analysis of educational material in the form of a game, the ability to move and talk during the lesson, creativity in preparation, competition, excitement, a share of independence in the lesson, responsibility for how correctly and accessible you presented the material - all this makes it possible to develop students' motivation, interest and desire to learn. The learning process ceases to be boring and imposed on the child, it becomes a part of the student's life. And organic and desirable. **[9]**

The transfer of some of the powers to children to master the educational program, recognition of their role in achieving the success of learning, changes the attitude of students to the teacher and to teaching in general in a positive way. This helps to create a favorable climate in the classroom. We should never forget that children do not hear us, they look at us. If the teacher himself is bored in class, then what can you expect from the students. Therefore, it is no less important to increase the interest and motivation of the teacher from the use, which give room for creativity and development of the potential of the teacher. He can use his creative potential more actively by developing and implementing author's game methods, mastering existing active methods and technology of their application. **[10]**

Active teaching methods include: Problematic situations, learning through activity, group and pair work, business games, dramatization, theatricalization, creative game "Dialogue",

"Brainstorming", "Round table", discussion, project method, methods of surprise, admiration, confidence, success, dialogue, method of heuristic questions, game design, simulation training, thinking games (OMI), discussion and others.

The most acceptable methods of active learning in primary school is success.

Active teaching methods are a set of methods and techniques that cause qualitative and quantitative changes occurring in thought processes due to age and under the influence of the environment, as well as specially organized educational and training influences and the child's own experience.

Active methods perform a guiding, enriching, systematizing role in the mental development of children, contribute to the active comprehension of knowledge. Active learning technology is learning that corresponds to the strengths and capabilities of schoolchildren. **[11]**

Modern didactics faces the problem of humanization of learning, a fundamental rethinking of the role of teachers and students in the educational process, the need to create conditions for the organization of educational cooperation in teacher -student interaction. Educational cooperation can develop with a certain organization of training, when the formulation of educational tasks requires the search for new ways of action.The inability to act on a ready - made model creates the need to interact with adults. **[12]**

By entering into new relationships with the teacher and with each other, children gradually become subjects of educational activity, acquiring the most important skill - the ability to learn independently. In addition, they are distinguished by good orientation in situations requiring new ways of action, the ability to discuss, reason, prove, the presence of creative, critical, independent thought, the manifestation of personal traits, beliefs and positions. Working in small groups, pairs, has a great influence on the formation of a children's team, educational motivation and arbitrary acceptance of an educational task in any subject area. **[13]**

The framework assumes the use of active and interactive methods as more effective and efficient, including:

Case method. The situation is set (real or as close to reality as possible). Students should investigate the situation, offer options for its resolution, choose the best possible solutions.

The project method involves an independent analysis of a given situation and the ability to find a solution to the problem. The project method combines research, search, creative methods and teaching techniques. **[14]**

Problem method - involves the formulation of a problem (a problematic situation, a problematic issue) and the search for solutions to this problem through the analysis of similar situations (issues, phenomena).

The method of developing critical thinking through reading and writing is a method aimed at developing critical (independent, creative, logical) thinking.

Heuristic method - combines a variety of game techniques in the form of contests, business and role-playing games, competitions, research.

The research method has something in common with the problem method of teaching. Only here the teacher formulates the problem himself. The task of the students is to organize research work on the study of the problem. **[15]**

The method of modular training – the content of training is distributed in didactic blocks-modules. The size of each module is determined by the topic, learning objectives, profile differentiation of students, their choice.

We offer you to get acquainted with a group of interesting author's methods that can be used both in elementary school and at other stages of education.

The activity of the class in the lesson is led not only by the teacher, but also by the student, thinking out loud and leading the whole class. Commented management begins from the first day of school, from the first steps (writing elements of letters, numbers, pronouncing words, solving the simplest examples, tasks). A clear rhythm, a brief description, argumentation of elements when commenting ensure the availability of the task by each student of the class. The term "lead" entered the lesson instead of the traditional and very scary for little ones "answer". **[16]**

Another important factor of the method of advanced learning is the teacher's use of reference schemes. The scheme is the support of the student's thought, his practical activity, the connecting link between the teacher and the student. Reference schemes are conclusions drawn in the form of tables, cards, a typesetting canvas, a drawing, a drawing, which are born at the moment of explanation. The reference schemes differ from the traditional visualization, being the supports of thought, action. Another aspect of the method of advanced learning is the implementation of the principle of prospective learning. The material for advanced training is taken from the textbook, and additional micro-exercises are used, which concretize and develop the topic. **[17]**

The study of difficult topics is carried out in three stages sequentially, from simple to complex with all the necessary transitions, and ends with the development of the skill of practical action. So, at the first stage there is an acquaintance with new concepts, the disclosure of the topic. Evidence-based speech develops on the basis of reference schemes, various exercises are performed using commented management. At this stage, as a rule, strong students are active. At the second stage, the concepts are clarified and the material on the topic is summarized. Children are guided by the generalization scheme, master the achievements, successfully cope with tasks that are offered as independent for the first time at this time. It is at this stage that the advance occurs. At the third stage, the saved time is used. During this period, the reference schemes are removed, the skill of practical action is formed and there is an opportunity for further perspective. The difficulty of the question is carefully dosed in compliance with the wave principle — easy questions are replaced by questions of medium difficulty, and the latter are very difficult. Easy questions contain more suggestive information than questions of average difficulty, in difficult questions it is even less. In order to answer a difficult question correctly, the student must mobilize all his creative potential. The main condition is compliance with the interconnection of neighboring issues, i.e. each subsequent question should take into account not only the content of the previous one, but also those questions and answers that formed the essence of the dialogue much earlier. When using this method of teaching, new knowledge is formed as a set of small discoveries made by the student himself, and the teaching technology consists in directing all these small discoveries. The method of micro-discoveries harmoniously combines all methods of inventive creativity: brainstorming, collective discussion, synectics and the induction of psycho intellectual activity.

These are not all the effects that manifest themselves when used, but they already convincingly show the advantages of using active learning methods. Active methods provide solutions to educational problems in various aspects:

* Formation of positive learning motivation;

* Increase of cognitive activity of students;

* Active involvement of students in the educational process;

* Stimulation of independent activity;

* Development of cognitive processes - speech, memory, thinking;

* Effective assimilation of a large amount of educational information;

* Development of creative abilities and non-standard thinking;

* Development of the communicative and emotional sphere of the student's personality;

* Disclosure of personal and individual capabilities of each student and determination of conditions for their manifestation and development;

* Development of skills of independent intellectual work.

Therefore, the use of active teaching methods allows for the effective organization and implementation of the game educational process. This achieves high interest and involvement of students, confidence and motivation of the teacher. And as a result, the school's activities correspond to the expectations and needs of students, parents, and society.

REFERENCES:

1. Ostonov K. Methods of teaching new pedagogical technologies in the teaching of mathematics. Methodological manual. Samarkand: SamDUnashri, 2006. 72 p.
2. Numonjonov SD. Innovative methods of professional training. ISJ Theoretical & Applied Science, 2020;1(81):747-750.
3. Berdikulova SA. Social Norms as A Mechanism For Regulating Social Consciousness In The Context Of Globalization. Theoretical & Applied Science. 2020;(1):744-746.
4. Avliyokulov N. Zamonavijŭkitištehnologijalari. Tashkent, 2001.
5. Berdikulova SA, Jamalova NU. Patriotic Education of Modern Youth. Economics and society. 2020;(3):15-17.

6. Muminjon N, Dilshodjonugli NS. Improvement of transformer protection elements. ACADEMICIA: An International Multidisciplinary Research Journal. 2020;10(6):394-398.

7. Ergashev I, Farxodjonova N. Integration of national culture in the process of globalization. Journal of Critical Reviews. 2020;7(2):477-479.

8. Zulaypoyeva G. Methods of Formation and Improvement of Literary Analysis Skills In Primary School Students. Archive of Conferences. 2021;15(1):70-72.

9. Ubaydulloyevna ZG. Antithesis-contradiction of meanings. ACADEMICIA: An International Multidisciplinary Research Journal. 2021;11(6): 693-697.

10. Farxodjonqizi FN, Dilshodjonugli NS. Innovative processes and trends in the educational process in Uzbekistan. ACADEMICIA: An International Multidisciplinary Research Journal. 2020;10(4):621-626.

11. Zaitov EX, Isaxonov JA. The Main Directions of Solving the Main Problems of Young Families In Modern Conditions. The American Journal of Interdisciplinary Innovations Research. 2021;3(3):70-74.

12. Nosirovna NN. et al. Energy saving technologies and problems of their implementation. Problems of modern science and education. 2019;12-2(145).

13. Ugli NSD. Types of transformer overload protection. Asian Journal of Multidimensional Research. 2021;10(4):552-556.

14. Kholmamatovich ZE. et al. The Role of Guardianship and Trusteeship in the Social Protection of The Interests of Socially Orphaned Childre. International Engineering Journal for Research & Development. 2021;6(2): 2-2.

15. qiziFarxodjonova NF. et al. Modernization and Integration of National Culture in the Context of Globalization. Scientific Bulletin of Namangan State University. 2020;2(9):137-144.

16. Muhammadieva O. Some historical aspects of formation on parliamentarism in the Republic of Uzbekistan. Theoretical & Applied Science. 2018;(1):54-57.

17. Farxodjonova NF. Modernization of Uzbek Language And National-Spiritual Heritage In National Culture. The American Journal of Social Science and Education. Innovations. 2021;3(1):585.

EFFECT OF POLYPHENOL EXTRACTS ON GLUTATHIONE PEROXIDASE ENZYME ACTIVITY IN CONDITIONS OF TOXIC HEPATITIS

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ABSTRACT

In this study, the inhibitory effects of helmar-1 and helmar-2 polyphenol extracts isolated from the helichrysummaracandicum plant on the activity of the antioxidant glutathione peroxides enzymes in a toxic hepatitis model were compared with silymarin.To induce toxic hepatitis, the subcutaneous area of the abdomens of the experimental animals were injected twice a week with a 50% solution of carbon tetrachloride in olive oil at a dose of 1 ml/kg. After an increase in the levels of the enzymes alanine aminotransferase (ALT) and aspartate aminotransferase (AST) were observed in the blood plasma,which indicates toxic hepatitis, the helmar-1 and helmar-2 polyphenol extracts and silymarin were administered subcutaneously at a dose of 20 mg/kg once daily for 15 days for pharmacocorrection.

KEYWORDS: *Helichrysummaracandicum, Glutathione Peroxidase, Malondialdehyde, Mitochondria, Superoxide Dismutase, Silymarin, Toxic Hepatitis*

INTRODUCTION

Under conditions of oxidative stress, an increase in the amount of active forms of oxygen (ROS) in the mitochondria is manifested by the occurrence of damage at the cellular level. This leads to an imbalance in pro- and antioxidant systems through the overproduction of free radicals or disruption of the body's antioxidant capacity **[1,2].**

Catalase (CAT), peroxidase (POD), glutathione peroxidase (GPx), and superoxide dismutase (SOD) are enzymes that have antioxidant effects in biological and biochemical systems. The antioxidant protection system protects the cell against oxidative damage of free radicals or other reactive molecules. Therefore, antioxidant enzymes such as CAT, POD, glutathione peroxidase (GPx), and SOD are of great importance in this defense system **[3].**

Poisoning of the body with toxicants is one of the main factors leading to the development of liver disease. It is known that the introduction of CCl_4 in experimental toxic hepatitis leads to an increase in LPO in hepatocytes and a significant decrease in the activity of antioxidant enzymes SOD, catalase, glutathione peroxidase **[3].**

In the context of toxic hepatitis, it is important to identify disorders of the functional activity of the liver mitochondria and antioxidant defense system, as well as their pharmacological correction with plant compounds. To this end, the effect of polyphenol extracts isolated from Helichrysum maracandicum on the activity of the enzyme glutathione peroxidase in mitochondria under conditions of toxic hepatitis caused by CCl_4 was studied comparatively with that of silymarin.

Materials and methods

Currently, there are many animal models of toxic hepatitis. One of the classical methods is the CCl_4-induced toxic hepatitis model. Experiments were carried out on 40 white male rats weighing 180-200g. Twice a week, CCl_4 was injected subcutaneously into the abdominal cavity at dose of 1 ml/kg (in olive oil as the vehicle) to induce toxic hepatitis. The animals were divided into 4 groups:

I control group (n = 10);

Group II CCl_4 (1 ml/kg) (n = 10);

Group III CCl_4 + *helmar-1* (20 mg/kg) (n = 10);

Group IV CCl_4 + *helmar-2* (20 mg/kg) (n = 10);

Group V CCl_4 + silymarin (20 mg/kg) (n = 10);

14 days after CCl4 injection in rats, after an increase in ALT and AST in the blood, group II animals were given olive oil once a day (1 ml / kg), group III was given helmar-1, group IV was given helmar-2 polyphenols, and group B was given silymarin daily once injected at a dose of 20 mg/kg for 10 days. The ALT and AST levels in the blood plasma of pharmacotherapeutic animals of Group III, IV and Group V were determined every 3 days and experiments were performed after approaching control values.

In the normal and toxic hepatitis groups, rats were isolated by differential centrifugation of the liver mitochondria **[4].**

The GP activity in the reaction medium (containing 2 ml of phosphate buffer (0.05MpH 8,0), 0,2 мл of 1 mM EDTA, 0.5 ml of 7.5mM oxidized glutathione, 0.2 ml of hemolysate, and 0.1 ml of 1,2 mM NADF.N) was determined at a wavelength of 340 nm after 10 min of reaction at 37°C due to the decrease in NADF.N [**5]**. Here, 1g of NADF.N protein is expressed as micromoles per minute. The content of mitochondrial proteins was determined by the method of Lowry modified by Peterson **[6].** The results obtained were processed using the Origin 6.1 program by calculating the arithmetic mean (M), standard error (m), and confidence index (p). A p value <0.05 was considered an indicator of a significant difference.

Results

In toxic hepatitis caused by CCl_4, there is an increase in prooxidant factors in the liver mitochondria as a result of increased levels of fatty acids as a result of membrane LPO. At this time, an imbalance of enzyme-dependent antioxidant defense systems occurs in the cell and mitochondria. In the context of toxic hepatitis, the activity of antioxidant enzymes SOD and catalase in liver tissue may change, as well as the activity of glutathione peroxidase. There is a growing interest in compounds that have the potential to enhance the antioxidant defense system of the organelle to the harmful effects of free radicals in the mitochondria in a pathological condition. In our next experiment, the effect of helmar-1 and helmar-2 polyphenol extract on the activity of glutathione peroxidase, another antioxidant enzyme, in the setting of toxic hepatitis was studied.

According to the results, glutathione peroxidase activity in the liver mitochondria of healthy group I rats was 80.11±1.75 mM/min mg protein. The activity of liver mitochondrial glutathione peroxidase enzyme activity in group II rats caused by toxic hepatitis was found to be 60.88 ± 1.40 mM/min mg protein, a decrease of 24.0±2.1% compared to the control group (Figure 1). When pharmacotherapy of animals with group III and IV caused by toxic hepatitis with helmar-1 and helmar-2 polyphenol extracts, respectively, their liver mitochondrial glutathione peroxidase enzyme activity was 74.51±3.16 mM/min mg protein and 75.98±3.56 mM/min mg protein. This indicates that glutathione peroxidase activity was restored to 22.3±1.20% and 24.8±1.17% compared to group II (Figure 1).

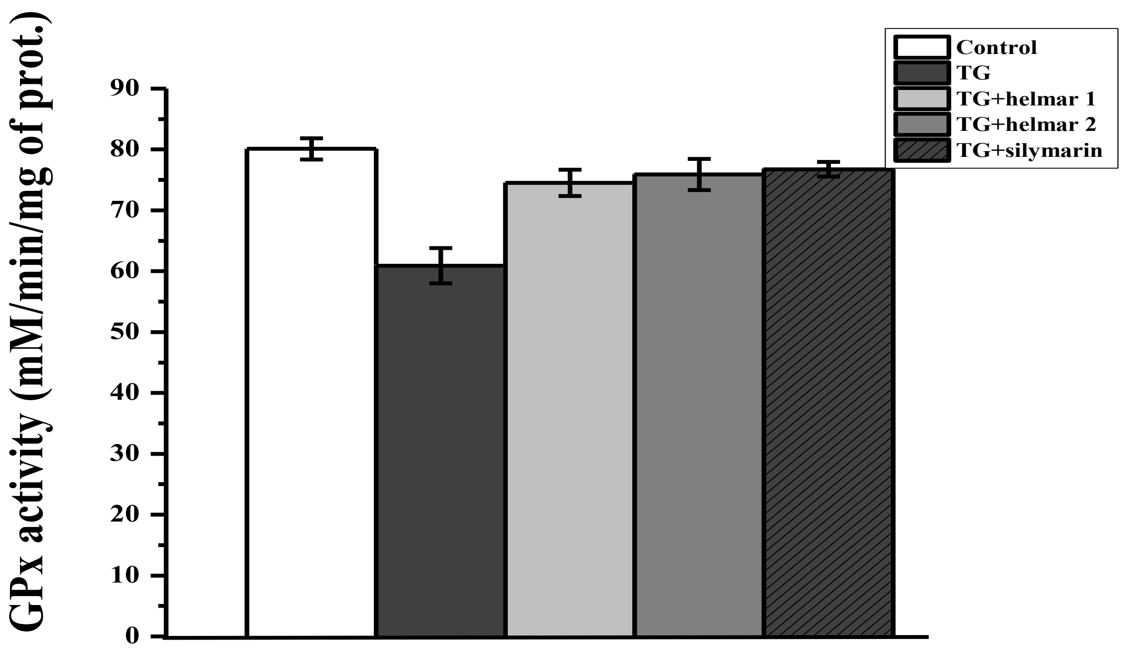

Figure 1. Effect of helmar-1 and helmar-2 extract (mM/min mg protein) on liver mitochondrial glutathione peroxidase activity in toxic hepatitis.

Note: - Statistical analysis Variability of differences between toxic hepatitis and toxic hepatitis + drug groups * P<0.05:

Thus, in toxic hepatitis caused by CCl_4, it was found that hepatic mitochondria restored the enzyme activity by acting closely on the glutathione peroxidase activity of helmar-1 and helmar-2 polyphenol extracts silymarin.

Disorders of lipid metabolism in the context of toxic hepatitis are associated with oxidative stress, which is manifested by the formation of ROS and DNA mutations in the mitochondria under its influence, as well as disruption of bioenergetic processes.

CONCLUSIONS:

In the conditions of toxic hepatitis, the activity of the antioxidant enzyme gutationperoxidase of rat liver mitochondria is reduced.

Liver mitochondrial gutation peroxidase activity in toxic hepatitis has been shown to restore antioxidant activity by regenerating natural polyphenol extracts at doses of helmar-1 20 mg / kg and helmar-2 20 mg / kg.

Based on the results obtained, it is possible to create further hepatoprotective drugs from helmar-1 and helmar-2 polyphenol extracts.

REFERENCES:

1. Lee MK, Kim SH, Yang H, et al. Asiatic acid derivatives protect primarycultures of rat hepatocytes against carbon tetrachloride-induced injuryvia the cellular antioxidant system. Nat Prod Commun. 2009;4(6):765-8.

2. Bueverov AO. Oxidative stress and its role in liver damage. Russian Journal of Gastroenterology, Hepatology, Coloproctology. 2002;12(4): 21-25.

3. Korda MM. Antioxidant status of the body in acute toxic liver damage and its correction by enterosorption and antioxidants: Abstract of the thesis. diss. honey. Sciences. Lvov, 1991;19.

4. Schneider WC, Hogeboom GH. Cytochemical studies of mammalion tissues: the isolation of cell components by differential centrifugation. Cancer. Res. 1951;11(1): 1-22.

5. Vlasova SN, Shabunina EI, Pereslegina IA. Activity of glutathione-dependent erythrocytes in chronic diseases. Moscow. The medicine. 1990. pp. 19-21.

6. Peterson GL. A simplification of the protein assay method of Lowry et al. which is more generally applicable. Analytical biochemistry. 1977;83(2): 346-356.

INTERTEXTUAL MARKERS IN TRANSLATION

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ABSTRACT

The article reflects an effort to scrutinize significant developments in the field of interfaces between intertextuality and translation,as well as to provide the general outline of approaches towards intertextuality research within the framework of translation studies. Theresearch is topical as it is the first attempt at an overview of the overall strategies towards adapting intertextuality to translation analysis.

KEYWORDS: *intertextuality, intertextual irony, myth, implicit intertext, logopoeia, metatext, metacommunication, intertextual hybrid, topology of culture.*

INTRODUCTION

The beginning of the new millennium introduced significant changes in the scientific paradigm of translation studies, which led to a significant reformatting of established research strategies. In translation studies, the study of intersexuality is conducted by representatives of many schools and areas on different methodological bases. The new millennium has brought about tangible changes into the scholarly paradigm of translation studies, thus, re-forming traditional research strategies. Translation-focused investigation of intertextuality is carries out by representatives of different schools and trends. Summarizing and systematizing their work, we highlight a number such areas: general philosophical (awareness of translation as an intertextual phenomenon and intertext as a model of translation);traditional (translation of quotations and explicit allusions); poststructural (reproduction of implicit intertext); polysystemic (appearance inthe target text of translation contexts). **[1]**

METHODS

The phenomenon of intertextuality has been in the focus of translation analysis long before the coinage of the very term. Albrecht Neubert and Gregory Schreve ("Translation as Text", 1992) conceive of intertextuality from the angle of the proto typical semantics. Intertextuality is perceived as the most important quality of the text along with intentionality, informativity, situationality, acceptability, cohesion and coherence. It is a model the reader compares with already existing samples abstracted from his/herexperience. In other words, intertextuality is a set of the reader's textual expectations that should be heeded bya translator. Intertextuality has a structure of the prototype with the hard core (typical features of the genre, which the reader easily identifies) and blurred edges of the periphery where some features are shared by different genres or text-types.

Results

Each translation has double intertextuality: the original has intersexual links with texts of the source language (SL) and translation establishes intertextual links with the texts of the target language (TL). The translator should give preference to textual connections of the TL to meet the target reader's (TR's) expectations. In general, the translator is the mediator of intertextuality of the source text (ST) and the target text (TT), thus translation can be referred to as mediated intertextuality. This method is also called interpretative: the translator shows "where the treasures lie" making the target reader feel the flavor of the original. Intertextuality is so widely employed as a method of analyzing explicit references to other texts that it seems to have lost all connections with deconstruction that gave rise to it. Since each sign keeps traces of other signs, each discourse – traces of other discourses, each text – traces of other texts, all text are virtually intertexts. Some intertexts are explicit while others are so implicit that even the author himself may be unaware of them. In the philosophical sense the phenomenon of intertextuality entails:

1) the ability of any text to generate senses through the presence or copresence of other texts in it; 2) the shift of the authoritative right on true understanding of the text from the author to the reader; 3) the recognition of inner instability of the text and correspondingly, the possibility of multiple interpretations of textuality in general.

Analysis

Thus, the novelty of the research lies in the effort to highlight and generalize most widespread as well as marginal but perspective approaches towards intertextuality within the translation studies framework as well as to afford their practical interpretation. Derived from the Latin intertexto (intermingle while weaving) intertextuality is a term first introduced by French semiotician Julia Kristeva in the late 1960s. The scholar argues that a literary work is not simply the product of a single author, but of its relationshipto other texts and to the structures of language itself. Thus, any writing is not absolutely creative because it always repeats something previously repeated. In the 1970s Anton Popovich ("Aspects of metatexts", 1967) elaborated a detailed typology of intertextual (his term is metatextual) links both at microstylistic and macrostylistic levels of the text. He employs the term met communication to describe all types of text interpretation – by translators, literary critics, scholars and readers. Metatexts are discriminated according to their corerelation with the prototext in different aspects: semantic, stylistic, axiological and in the aspect of reproducing the authors strategy. Pound's theory flashes out two approaches to comprehending intertextuality within the contemporary translation theory framework: 1) the word (Logos) accumulates explicit and implicit senses that require adequate translation; 2) secondary texts (metatexts) comprise all texts derivative of a prototext with various degrees of originality.

DISCUSSION

According to the axiological and stylistic criterion met texts can be: a) affirmative imitating the prototext and b) controversial. The translation studies research of intertextuality can cover a lot of problems as the translation itself can be viewed as an intertextual phenomenon. Peeter Torop draws a parallel between the translation activity and the author's strategy of integrating somebody
else's word into one's individual style **[2, p. 169].** The secondary nature of both activities derives from their relying on prototexts. As "each text is an intertext", "a multidimentional space in

which a variety of writing, none of them original, blend and clash" **[4, p.146],** the text we translate from can be regarded as an original only conventionally as its originality, according to Kristeva'smetaphor, consists of 'the mosaic of quotations" **[10, p.66].** Torop discriminates between the terms intertextuality and intextuality as broad and narrow understanding of intertextual links. Sometimes the translator makes the language of the original "to show through" the translated text and create intertextual hybrids.

George Steiner ("After Babel. Aspects of Language and Translation", 1992) regards intertextual elements in the broad culturological sense (not only words but also forms, themes and motifs) and refers to them as topologies of culture **[3, p. 448].** Topologiesare "manifold transformations and reordering of relations between an initial verbal events and its subsequent reappearances in other verbal or non-verbal forms". Correspondingly, topologies are "invariants and constants underlying the manifold verbal, formal and the matic shapes and expressions in our culture" **[3, p. 449].** Denisova singles out several functions of intertextemes due to the criteria of recognizability of the prototext and implicitness/explicitness of the intertext. The choice of the translation method depends on the fact what encyclopaedia (individual, national or universal) these intertextemes belong to. Main methods of translating intertextemes are 1) adaptation: to find a ST creative analogue; to refer to the translated versions of the intertextemes in the TL; and 2) foreignizing a) be means of commentary; literally and without the commentary where intertextuality is lost **[2, p. 298].** The key demand to the translation is that it "should create the thirdcultural space and generate new senses in the target culture" **[2, p. 263].** U. Eco advises a translator not to be afraid of radical transformations and substitute allusions that are unlikely to be known to the TR by absolutely different ones that can create similar pragmatic effect and evoke similar response. Ideal translation of an in tertextual reference is the one where a translator reproduces no less but also no more of what the original hints at **[4, p.255–269].**

Galina Denisova ("In the World of Intertext: Language, Memory, Translation", 2003) conceives of the intertext as a semiotic andpragmatic notion and defi nes it as any sign of the cited culture and any reproduction of phrases from the discourses available in thelanguage **[2, p. 77].**The phenomenon of translation is also viewed correspondingly: "Defined topologically a culture is a sequence of translations andtransformations of constants". G. Steiner substitutes the term intertextualityby his coinage interanimation : "The new beginning drawson precedent or canonical models so as to reduce the menacing emptiness which surrounds novelty" **[3, p. 477].**This "transfer ofsouls" (interanimation) has exerted influence on a substantial portion of Western literature, plastic art and philosophy and can varyfrom the obvious repletion to implicit allusion and change almost beyond recognition.

Translation studies paradigm of intertextuality has been elaborated by P. Torop ("Total translation", 1995). Total translation covers

1) Textual translation – translation of the whole text into the whole text;

2) Metatextual translation – translation of the whole text into the culture: commentaries, reviews, ads;

3) intertextual translation – the author translates into his text somebody else's word or the whole complex of them;

4) extratextual translation–splits the text into codes rendered by other than verbal means (screen production)[6, p. 23–24].For Marina Novikova ("Myths and Mission", 2005) translation is the

most obvious form of intercultural dialogue: “Translation has transformed all literary plots into international and wandering ones, all authors (together with their multilingual translators) have turned into “narrators” while all national languages and cultures got involved into a direct dialogue where interlocutors speak about the same though differently” **[8, p. 47].** Intertexts are very individual,they appear “from the shadow of memory” that is an unconscious remembrance of something previously read which has become apart of your soul **[10, p. 352].** In probing the notion of intertextuality as motivated translation strategy one can stress too disparate approaches:1) different translators link themselves up to different codes, draw senses from different sources provided by the intertextual2) target culture (TC) broadens the intertextual space of the text referring to the sources from the receiving system of the past and modern discourses. Each new translation through the penetration of new temporal and cultural layers transforms the original and its previous translations. The original together with its multiple translations of different languages and epochs constitute a common universe where texts indefinitely refer to each other and to themselves. Space of the original. On looking at the legacy of intertextuality the article flashes out key fields of its adoption by translation studies scholars:

1) philosophical interpretation of the ontology of translation as an intertextual phenomenon; 2)discourse model mapping the concept of intertextuality as prototypical signs of the ST recognized by SRs and those of the TT identified by TRs; 3)genre discrimination of metatexts according to types of their correlation with the prototext; thus translation is viewed as a fluctuation of primary and secondary elements in the structure of a translation that determines its genre; 4) traditional idea of intersexuality as the presence of explicit allusions and quotations in the structure of the ST(most widespread trend);

5) polysystemic approach aiming to single out translation intertextuality, i.e. literary and paraliterary references to the target culture in the text of translation; 6) poststructural studies whoseobject is the implicit intertext (myth world, intertextual irony) and its translation potential (perspective research trend).

CONCLUSION

The analysis of intertextuality and translation studies conflation raises one of the most topical theoretical problems – genre translation theory, now limited to some random ideas. The other perspective for further research is the systemic analysis of mechanism ofimplicit intertext actualization in translation.

REFERENCE:

1. Neubert A, Shreve G. Translation as Text. Kent; London: The Kent State Univ. Press; 1992. 197 p.

2. Steiner G. After Babel. Aspects of Language and Translation. Oxford; New York: Oxford Univ. Press; 1992. 538 p.

3. Popovic A. Aspects of Metatext. Canadian Review of Comparative Literature. 1976. Autumn. pp. 225–235.

4. Franko I. Moses and Other Poems. New York; Atlanta; Los Angeles; Chicago: Vantage Press; 1987. 146 p.

5. Pound E. Guido's Relations. The Translation Studies Reader. In: Venuti L. (Ed). London; New York: Routledge; 2000. pp. 24–33.

6. Hatim B, Mason I. Discourse and the Translator. London; New York: Longman; 1990. 258 p.

7. Pound E. Polite Essays. London: Faber & Faber; 1937. 207 p.

8. Shakespeare W. The Complete Works. Oxford: The Shakespeare Head Press; 1999. 126p.

9. Kristeva J. Desire in Language: A Semiotic Approach to Literature and Art. In: Roudiez LS, Gora T. (Ed), New York; 136 p.

10. Steiner G. After Babel. Aspects of Language and Translation. Oxford; New York: Oxford Univ. Press; 1992. 538 p.

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CHARACTERISTICS OF INNOVATION MANAGEMENT IN INDUSTRIAL ENTERPRISES OF THE REPUBLIC OF UZBEKISTAN

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ABSTRACT

This article highlights in detail the specific aspects of innovation management at industrial enterprises and presents in detail the existing problems that are inherent as a result of the analysis. The low interest of the industry in the implementation of technological developments and scientific research of our country hinders the technological development of the country's economy and is a heavy burden on the state budget ".

KEYWORDS: *Innovation Management, Integration, Intellectual Property, Innovation Index, International Rating, Marketer, Private Partnership*

INTRODUCTION

Our country is focusing on economic reforms aimed at the formation and development of an innovative economy. In his address to the Oliy Majlis, the President of the Republic of Uzbekistan Sh.M.Mirziyoev said: In particular, in the post-crisis period of the coronavirus, the country has felt the need to accelerate the recovery of economic growth and its transition to the path of innovative development of the economy.

According to the Global Innovation Index 2020, which is an international ranking of the indicators of innovative development of the economy, the intellectual potential of employees in the field of doing business in our country (including 22 in the field of intellectual development). The innovation communication index was 3.9 hectares and the level of knowledge acquisition of hired workers was 18.9 hectares. This indicates the low level of development of innovation management, in particular, innovation activity in the economy of the country.

Also, "... the real sector of the economy is not highly valued by enterprises. The low interest of the industry in the implementation of technological developments and scientific research of our country hinders the technological development of the country's economy and is a heavy burden on the state budget " **[1].** In particular, the implementation of research aimed at developing and improving the innovative management of industrial enterprises through the strengthening of innovative integration between the sectors of intellectual property, education and the national economy is of great scientific and practical importance today.

The analysis shows that in 2008-2020, the process of innovation management of enterprises engaged in economic activities in the national economy of the country has significantly improved, and the number of enterprises engaged in innovative activities has increased. **[2]**

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In addition, the number of innovations introduced by enterprises increased by 5.1 times, and in 2020 amounted to 3452.

In particular, the number of enterprises implementing technological innovations in enterprise management increased by 5.2 times and amounted to 1,390. During the period under review, expenditures on financing innovative projects in the national economy increased by 12.3 times and amounted to 6,434.8 billion in 2020. The volume of innovative products produced by enterprises increased by 19.3 times and in 2020 amounted to 25,543.6 billion soums. soums (see Figure 1).

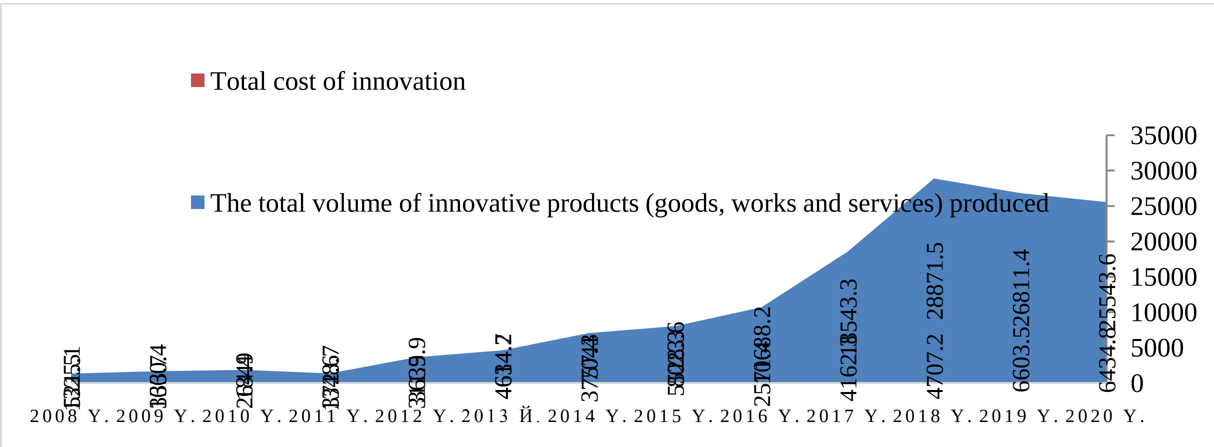

Figure 1. Financial indicators of innovative activity of enterprises in Uzbekistan, bln. in soums [3].

The analysis shows that in 2008-2020, the interest of enterprises in the country to engage in innovative activities is not high. In particular, the rate of introduction of innovations has increased in parallel with the increase in the number of enterprises engaged in innovative activities in business operations. In 2008, the average number of innovative projects per enterprise was 2.2, while in 2020 this figure was 2.4. Also, the indicator of the effectiveness of innovative activities of enterprises, ie the total amount of innovative products (goods, works and services) produced by enterprises, compared to the total cost of implementation of the innovative project in the period from 2008 to 2008 compared to 2008. Was equal to 4.0 times (see Figure 2). This is a direct indication of the improvement of management activities for the implementation of innovative projects in enterprises. However, the level of development of enterprise innovation management does not fully meet international requirements.

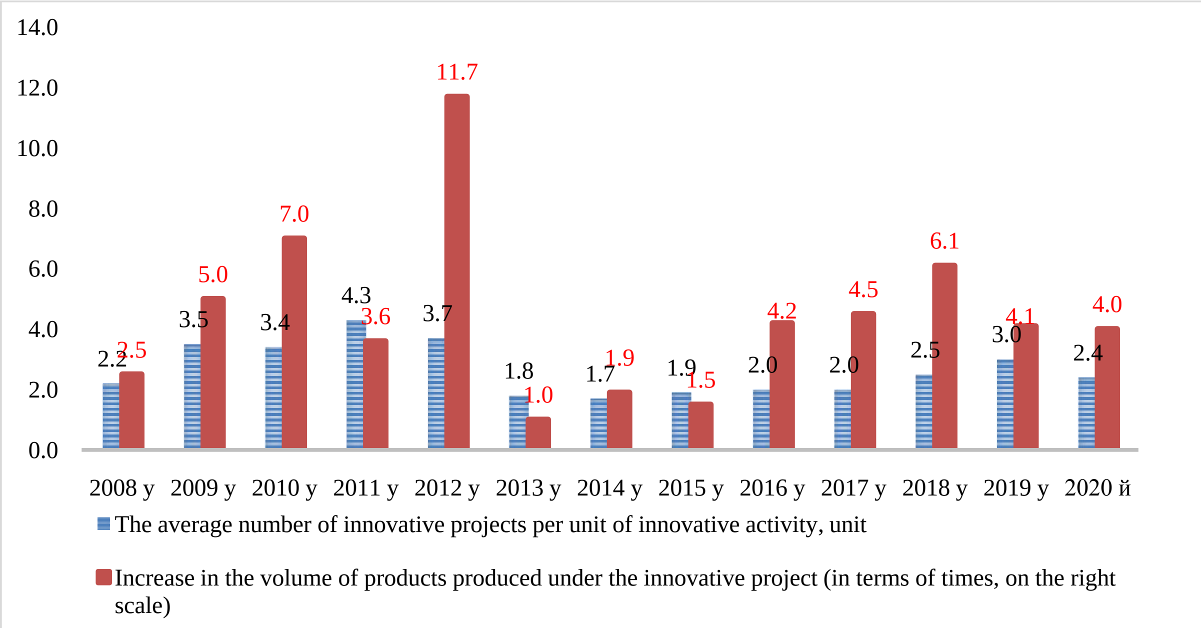

Figure 2. Analysis of indicators related to the innovative activity of enterprises in Uzbekistan [3].

Based on the results of the analysis, it was identified that the following problems exist in the development of innovation management of enterprises in the country:

- Managers of industrial enterprises, including managers and marketers for innovation activities of the enterprise, the necessary resource base for the implementation of innovative projects in the enterprise and the lack of opportunities for innovation development, as well as the ability to analyze the market of innovative projects;

- low level of implementation of innovative projects in industrial enterprises, development of innovative management at the enterprise and involvement of highly qualified personnel to increase its efficiency;

- Lack of personnel capable of developing innovative developments, creative use of best practices of innovation management of enterprises;

- Lack of development of innovative products (goods, works and services) in the management of enterprises, the implementation of innovative business projects;

- Lack of financial resources for the development of innovative projects by enterprises, their implementation;

- The mechanism for coordinating the effective use of innovative ideas is not properly established;

- The quality of innovative developments does not fully meet the requirements of the world market;

- The state support of the market of innovative developments in the country is not based on the mechanism of public-private partnership, as well as full compliance with the requirements of a market economy, etc.

Based on the above, the increase in the number of enterprises and organizations in the national economy of the country is characterized by traditional management. This shows that the aspiration of enterprises in our country to develop innovative management is low.

RERERENCES

1. Decree of the President of the Republic of Uzbekistan PF-6097 "On approval of the Concept for the development of science until 2030." 29.10.2020 Available at: https://lex.uz/docs/5073447

2. The Global Innovation Index 2020: Who Will Finance Innovation? Is the result of collaboration between Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO) as co-publishers, and their Knowledge Partners? 2020. p. 341. Available at: https://www.globalinnovationindex.org/gii-2020-report

3. Compiled by the author on the basis of data of the State Statistics Committee of the Republic of Uzbekistan Available at: https://stat.uz/uz/rasmiy-statistika/social-protection-2

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CLINICAL EFFICACY OF EXTRACORPOREAL AND INTRAVASCULAR HEMOCORRECTION METHODS IN PSORIASIS

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ABSTRACT

study of the influence of methods of extracorporeal and intravascular hemocorrection (plasmapheresis, ultraviolet blood irradiation, ozone therapy and their combination) on the course of the skin process and the quality of life of patients with widespread psoriasis vulgaris. Material. 253 patients with widespread psoriasis aged 18 to 72 years were examined. Treatment was assessed using the PASI (Psoriasis Area and Severity Index) and dermatological quality of life index (DQLI). Results. The inclusion of efferent-quantum methods and ozone therapy in the complex of psoriasis treatment contributes to a faster and more pronounced positive dynamics of the skin process, improving the quality of life. The most effective was the use of plasmapheresis and its variants with photomodification or ozone treatment of the returned erythrocyte suspension. Plasmapheresis and its modifications should be used in the complex treatment of patients with severe psoriasis. Conclusion. It seems promising to further study the methods of efferent-quantum medicine and ozone therapy and their wider use in the treatment of psoriasis and other chronic dermatosis.

KEYWORDS: *Psoriasis, Plasmapheresis, Ultraviolet Blood Irradiation, Ozone Therapy, Quality Of Life.*

INTRODUCTION

Psoriasis is an autoimmune, genetically determined chronic dermatosis of a multifactorial nature, characterized by hyperproliferation of epidermal cells, impaired keratinization, inflammation in the dermis, and pathological changes in the musculoskeletal system, internal organs, and nervous system **[1].** The disease rarely poses a threat to life, but it always causes a significant decrease in its quality, negatively affecting social adaptation, job choice and career growth **[2].** Psoriasis is characterized by a worse quality of life in comparison with such severe and life-threatening diseases as diabetes mellitus and oncopathology **[3].**

Due to the complexity and insufficient knowledge of the mechanisms of the etiopathogenesis of psoriasis, there is still no single effective treatment regimen for this disease. The methods of disease therapy available in the arsenal of modern dermatology are not always effective. The use of photochemotherapy, cytostatics, corticosteroids, high doses of vitamin A leads to dysfunction of the liver, bone marrow, intestines, and immune system **[4].** The procedures of efferent-quantum medicine and ozone therapy are devoid of a number of disadvantages of drug therapy. Influencing the blood, they have a wide range of biological effects, are well tolerated, have a low incidence of side effects, and are economically available **[5–7].**

Purpose: to study the effect of methods of extracorporeal and intravascular hemocorrection (plasmapheresis, ultraviolet blood irradiation, ozone therapy and their combination) on the dynamics of the skin process and the quality of life of patients with widespread psoriasis vulgaris.

Methods

An open prospective study was conducted, the protocol of which was approved by the local ethical committee. We examined 253 patients with a progressive stage of generalized psoriasis vulgaris aged 18 to 72 years (mean age 37.2 years). Among the examined men there were 202 (79.8%), women — 51 (20.2%). All patients were hospitalized at the Mordovian Republican Dermatovenerological Dispensary (Saransk) from 2007 to 2010. Criteria for inclusion of a patient in the study: progressive stage of widespread psoriasis vulgaris; voluntary written consent to participate in the study. Criteria for exclusion of a patient from the study: previous therapy with cytostatics and systemic corticosteroids; the presence of decompensated somatic pathology; tumor diseases; infectious and inflammatory diseases transferred in the last month. The age of onset of psoriasis in the examined patients ranged from 5 to 71.5 years (average 26.6 years). The duration of the disease varied from 2 months to 47 years, averaging 10.6 years. Heredity was burdened in 85 patients (33.6%).

The severity and prevalence index of psoriasis PASI in the studied patients ranged from 7.0 to 40.0 points (the average value of the index was 15.0 points). In 50 patients with more severe psoriasis, the PASI index was more than 20.0 points before the start of therapy. Rashes in these patients were widespread, marked brightness, infiltration of elements, profuse desquamation. Tendency to erythroderma was noted in 6 patients. Concomitant damage to the joints was noted in 80 patients (31.6%), damage to the nail plates was present in 113 patients (44.7%). Of the comorbidities, chronic diseases of the cardiovascular system, organs of the gastrointestinal tract, musculoskeletal system, chronic pathology of the upper respiratory tract, chronic bronchitis, acute respiratory viral infections prevailed. By randomization, patients were divided into a number of groups comparable in terms of sex, age, duration of the disease, severity of the skin process, and the nature of comorbidities. Group I patients received ultraviolet blood irradiation procedures against the background of standard therapy. Depending on the method of photohemocorrection and radiation characteristics, two subgroups were distinguished: Ia (n=35): standard therapy + 5 sessions of autotransfusion with ultraviolet irradiated blood (AUFOK) using the Yulia apparatus (Russia, Voronezh). We used the operating mode of the apparatus with the LK-6 emitter (633 nm). The blood was taken from the patient's vein at the rate of 2 ml per 1 kg of the patient's body weight into containers of the "Gemasin-500/400" type with a preservative of the "glugicir" type. Irradiation was carried out during reinfusion of autologous blood at a rate of 20–40 ml/min using a special disposable cuvette. Ib (n=38): standard therapy + 5–10 sessions (average 6.5) of intravascular photomodification of blood (IVBM) using the apparatus OVK-3 (Russia, St. Petersburg) and quartz fiber light guides. We used the II mode of the apparatus (wavelength 360–590 nm). The light guide was passed through a hole in the rubber part of the system for dripping solutions. Its end was at the level of the needle cut and was constantly washed with saline, which was administered drip (40–60 drops per minute) throughout the entire procedure (20 minutes). In group II (n=42), patients received 5–10 (average 7.5) intravenous drip infusions of ozonized saline (OSS) in the complex of therapy. The OFR was prepared on a Medozons BM medical ozone generator (Arzamas) by bubbling an ozone–oxygen mixture through an isotonic sodium chloride solution for 10 min. Infusion volume 200 ml, ozone concentration 2.5 mg/l. Sessions of photohemocorrection and ozone therapy were carried out daily.

Group III patients received efferent therapy procedures against the background of standard therapy: IIIa (n=32): 3–5 sessions (3.4 on average) of discrete plasmapheresis (DPA). In one session, 1200–1600 ml of blood was exfused (at the rate of 20 ml per 1 kg of the patient's body weight). Satisfactory general condition of patients with psoriasis made it possible to compensate for the loss of plasma with saline, which eliminates the possibility of contracting viral infections and significantly reduces the cost of the procedure. IIIb (n=30): 3-5 sessions (average 3.9) of plasmapheresis with autotransfusion of photomodified erythrocyte suspension (PA-APE) [7]. Principle of the method: with discrete plasmapheresis, one of the portions of autoerythrocytes (2.5–3.5 ml per 1 kg of the patient's body weight) was subjected to photomodification using the Yulia apparatus (LK-6 emitter) before returning to the patient. IIIc (n=34): 3-5 sessions (average 3.6) of plasmapheresis with autotransfusion of modified erythrocyte suspension with ozone (PA-AMME) according to our method (patent No. 2394563, registered in the State Register of Inventions of the Russian Federation on July 20, 2010) .). The principle of the method is that with discrete plasmapheresis, one of the portions of autoerythrocytes (2.5–3.5 ml/kg of the patient's body weight) before returning to the patient was diluted not with saline, but with 200 ml of ozonized saline (OSS) with an ozone concentration of 2.5 mg/ l. Plasmapheresis sessions were performed every other day. In group IV (n=42), patients received standard therapy (ST) for psoriasis (desensitizing, antihistamines, sedatives, hepatoprotectors, vitamin therapy, local exfoliating and resolving therapy, general suberythemal ultraviolet skin irradiation). To assess the clinical dynamics, the PASI (Psoriasis Area and Severity Index) index of coverage and severity of psoriasis was used **[8].** To calculate the index, the area of the affected body surface and the intensity of the main symptoms of psoriasis were determined. The severity of skin manifestations was assessed by three indicators: erythema (redness), infiltration and peeling, and was expressed according to a point system (from 0 to 96). Along with the PASI index, the dermatological quality of life index (QLI) [9], Russified by prof. N. G. Kochergin (2001). The

DIQL evaluates the negative impact of a dermatological disease on a patient's quality of life and consists of 10 questions characterizing various aspects of a patient's life: professional, domestic, sexual, and social. For each question, the patient must give one answer out of four proposed, reflecting the degree of influence (very strong, strong, not strong, no impact). Each answer has its own index; the sum of 10 indices is the DIQOL of a particular patient for a given period of time, which is in the range from 0 to 30. At the same time, the patient's quality of life is inversely proportional to the sum of points. We used DIC to assess the severity of the patient's condition and as a criterion for the effectiveness of the therapy.

Determining the timing of the onset of resolution of skin efflorescences, under clinical recovery and significant improvement, we understood a decrease in PASI by 75–100% from the original; under moderate improvement, 50–74% reduction in PASI; under insignificant improvement — decrease in PASI during therapy by 25-49%. Statistical processing of the results was carried out using the Microsoft Excel program. Descriptive statistics methods were used with the calculation of the arithmetic mean (M), the arithmetic mean error (m). The degree of significance of the difference in indicators was determined by Student's t-test. Correlation analysis was performed using the Spearman test (r). Results were considered significant at p0.05.

DISCUSSION

The inclusion of methods of extracorporeal and intravascular hemocorrection improves the effectiveness of psoriasis treatment. This is expressed by a faster and more complete positive dynamics of the skin process, improved hospitalization outcomes, and a more pronounced improvement in the quality of life. The greatest efficiency was noted in patients who received sessions of efferent therapy. When discrete plasmapheresis was included in the complex of therapy for psoriasis, a decrease in the PASI index ≥75% from the baseline was in 68.8% of patients, when using plasmapheresis with ultraviolet irradiation of returning erythrocytes - in 76.7%, with a combination of plasmapheresis and ozone therapy in 79.4 % of patients. Similar results indicate that in terms of clinical efficacy, efferent methods for psoriasis approach cytostatics, aromatic retinoids, systemic corticosteroids, and PUVA therapy. Patients treated with plasmapheresis and its modifications also showed a more pronounced positive dynamics of DIQ. This may be due to a faster regression of psoriatic lesions and an improvement in the general condition of the observed patients. In a number of patients of group III, the DIQL index decreased to zero, which means that the patient is completely psychologically free from psoriasis. The effectiveness of efferent methods did not decrease with an increase in the initial severity of the skin process. The high efficiency of plasmapheresis and its modifications in female patients may be due to the better adaptive capabilities of the female body**. [8]**

The literature **[9]** notes the possibility of enhancing the detoxifying, immunocorrective, rheocorrective effect of plasmapheresis by means of ultraviolet irradiation and ozonation of the returned globular mass. There are reports of a positive effect of a combination of efferent and quantum methods of treatment on the course of the skin process in psoriasis **[10].** In our study, in patients who received plasmapheresis in combination with ultraviolet irradiation or ozonation of returned erythrocytes, a slightly more pronounced positive dynamics of PASI and DICF indices was noted than in patients who received plasmapheresis according to the traditional method. However, this difference was not significant. Of the methods of photohemocorrection, the use of AUFOK was more effective for widespread psoriasis vulgaris. The different efficiency of blood photomodification methods can be explained by different irradiation parameters (the LK-6 emitter of the Yulia apparatus approaches the radiation of a helium-neon laser in terms of spectral characteristics), and different volumes of irradiated blood. It is also impossible to exclude the positive effect of the hemo-preservative used in AUFOK (glugicir). The clinical effectiveness of ozone therapy procedures for widespread psoriasis vulgaris approximately corresponds to the therapeutic effect of AUFOK sessions. The effectiveness of ozone therapy in psoriasis decreases with increasing age and initial severity of the skin process. **[11]**

CONCLUSION

Methods of efferent-quantum medicine and ozone therapy increase the effectiveness of complex therapy for widespread psoriasis vulgaris. They contribute to a faster and more complete positive dynamics of the skin process, a more pronounced improvement in the quality of life, and an improvement in the outcome of hospitalization. The greatest efficiency was noted when using plasmapheresis or its combination with photomodification or ozone treatment of returned erythrocytes. These methods should be used in the complex treatment of patients with severe psoriasis. **[12]**

REFERENCES:

1. Molochkov VA, Badokin VV, Albanova VI, Volnukhin VA. Psoriasis and psoriatic arthritis. Moscow, 2007. 300 p.

2. Kimball AB, Jacobson C, Weiss S. The psychosocial burden of psoriasis. Amer. J. Clin. Dermatol. 2005;6(6):383–392.

3. Kungurov NV, Filimonkova NN, Tuzankina IA. Psoriatic disease. Ekaterinburg, 2002. 193 p.

4. Vladimirova IS, Monakhov KN. Possibilities for improving the effectiveness of complex therapy for psoriasis. Vestn. dermatol. venerol. 2010;(2):58–63.

5. Dutkevich IG, Marchenko AV, Snopov SA. Extracorporeal photohemotherapy. SPb., 2006. 400 p.

6. Maslennikov OV, Kontorshchikova KN, Gribkova IA. Guide to ozone therapy. In: Novgorod N. (Ed), 2008. 326 p.

7. Piksin IN, Fedoseikin IV, Byakin SP. Quantum and efferent methods of treatment in surgery. Moscow, 2010. 248 p.

8. Fredriksson T., Pettersson U. Severe psoriasis - oral therapy with a new retinoid. Dermatologica. 1978;157(4):238–244.

9. Finlay AY, Khan GK. Dermatology Life quality Index (DLqI) — a simple practical measure for routine clinical use. Clin. Exp. Dermatol. 1994;19:210–216.

10. Letskalyuk YuF, Gonchar-Zaikin AP, Chimoshenko AG. Treatment of psoriasis by methods of extracorporeal hemocorrection. Topical issues of military and practical medicine: Sat. Proceedings of scientific-practical. Conf. Volga doctors. Military districts. Orenburg; 2000, p. 216.

11. Madasheva AG, Makhmudova AD. Biochemical parameters in patients with hemophilia with muscle pathologies before and after treatment. Young Scientists Forum, 2021;(4):233-238.

12. Madasheva AG, Zhuraeva MZ. Biochemical indicators and complex treatment of patients with psoriasis with therapeutic plasmapheresis. Achievements of science and education, 2019;10(51):78-82.

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IMPORTANCE OF VIDEOCONFERENCING IN EDUCATION AND COMPARISON OF SOME TYPES OF APPLICATIONS

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ABSTRACT

The given article presents information on the topic of videoconferencing and a comparison of different tools for creating effective online lessons. This study aims to determine the demand for videoconferencing and what conferencing applications could be applied in the process of education. The findings indicate that the main distinguishing feature of those applications is the content that is aimed to be shared and the number of participants. Those applications create opportunities for making the lesson more authentic. Particular attention is paid to the analysis of capacities of three applications as Microsoft Teams, Google Meets, and Zoom.

KEYWORDS: *Videoconferencing, Application, Online Education, Technology, Zoom, Google Meets, Microsoft Teams.*

INTRODUCTION

Recent changes in ecology and pandemic have made the life of humanity much more different from the traditional way and have created several obstacles for people to fulfill their duties. However, despite those changes, it has brought a lot of opportunities for the development of modern technology as well as creating a sufficient atmosphere for digitalization in all spheres. The vivid changes have also taken place in the field of education. Numerous types of distance learning tools are available nowadays. More and more network applications and software has been widely used in most spheres of life. A vivid example of innovative systems is video conferencing. Video conferencing has become the key to major problems and made it available for people to communicate and deal with their business wherever they are. With the presence of modernization, various apps have been created and made access easier. One can easily use those apps no matter they have computers or not, as those apps can be easily installed on phones and tablets. Some examples of the apps are Zoom, Microsoft Teams, and Google meet. **[1]**

Initially, it is essential to mention the video of the convenience conferencing offers in the process of education. There are plenty of benefits that video conferencing can offer. One of the most essential conveniences of video conferencing is without doubt distance, as it allows holding lectures and lessons remotely. It is of avail both for students and lecturers for the reason that instead of simply emailing files, participants have the opportunity to share documents and files in real-time and discuss them. Furthermore, video conferencing facilitate interaction by bringing people together. This is essential in all spheres, especially for language learners, giving opportunity for them to participate in the lectures of foreign teachers and learn the language better. Recording functionality is another benefit and it assists students to understand the topic in more detail in case they misunderstand any part. Finally, it develops not only the knowledge of students but also the ability to use modern technology and various applications. In fact, by taking into consideration above mentioned reasons it can be predicted that video conferencing may develop even more in the future. According to the recent analysis by Grand View Research, Inc., the global video conferencing market is predicted to reach $ 9.95 billion by 2028, with a compound annual growth rate of 11.4% over a period. **[2]**

Despite the advantages of video conferencing, there are some disadvantages. First of all, having less personal contact and understanding make it less preferable in the educational process. In case students have their questions, they may feel unconfident to ask. Moreover, in most cases, distractions are another obstacle that might be inconvenient for the participants. Paying increased attention to the ability of usage of technology leads to the loss of meaning of the purpose of education. **[3]** Video conferencing directly relies on technology; thus, it is obvious that software disorder, poor internet connection, and lack of technological awareness can prevent users from sufficient collaboration.

To decide which tool is the best one, it is essential to compare them and discuss their pros and cons of them.

One of the most used tools is Microsoft Teams which allows users to organize video or audio meetings with a single person or a group of people all from one application. One of the biggest advantages of this tool is that external visitors can join meeting through their web browser not downloading the application. It is beneficial because downloading applications may be a hindrance for students and Microsoft Teams alleviates the situation. This video conferencing platform also includes all the features of a top software provider, such as live subtitle, screen sharing, call recording, and others. In addition, Microsoft Teams offer advanced security and privacy measures. While using Teams, the teacher can create a notebook of the group - "One Note", share information, and assess the tasks. Built-in OneNote Class Notebooks and end-to-end assignment management enable educators to organize effective and timely feedback. Administrators and educational staff can stay up to date and collaborate using in-house teams for announcement and topical conversations. Teachers can share materials in professional-pedagogical communities. **[4]**

An alternative tool for video conferencing can be Google Meets, which creates major possibilities to make conferencing much easier. "Google Meet has become our go-to for providing professional development for our staff, allowing them to access PD from a location that is comfortable for them. "Meet makes it easy to record these sessions, so teachers who are unable to attend live can still access the content and learn from it," says Megan Swope, technology coach in Pennsbury School District. **[5]**

It offers a free version and paid version that can be customized. At the same time compared to other conferencing tools, Google Meet offers a simplified user interface that makes it easier to use. Despite the above-mentioned advantages, Google Meet is considered a secondary option for an online meeting tool. **[6]** This might be because a Gmail account is mandatory for this tool whereas a student may use other ids. Google Meet creates the possibility to use the integrated board. Creators used the famous Jamboard, which is integrated with the app to conduct meetings.

To clarify, Jamboard is an e-boarthatch is used online and both teachers and students can use it and write their notes on it. With Google Meet you can use it by the link created by the teacher.

Known as a primary conferencing tool, Zoom is a natural choice for teaching classes and facilitating a meeting with polling, recording, and other special features. **[7]** One of the biggest advantages of this tool is that it works with all major browsers and devices. Moreover, Zoom is easy to set up and has a range of scalable features. It allows the users to share and collaborate on their screens. There is a chance to save and search shared files and searchable history and a 10-year archive. Zoom makes it possible for the organizer to create a so-called “waiting room”. It allows using various games and activities effectively. While sharing files, Zoom as well as other videoconferencing tools creates an opportunity to share the screen. More importantly, the teacher can allow others to use and make notes to the main screen and document. One of the unique features of the Zoom application is that it has got the function of creating sessional rooms. While having traditional learning, there might be various types of activities that require dividing students into different groups and presenting tasks, especially during the lessons of foreign languages. Zoom meets has the function of separating participants into different groups and at the same time not turning them off completely. The organizer, in this case -the teacher can observe all the groups one by one and answer the questions if required.

Undoubtedly, it is true to say that even though various tools can be used to create online classes, one thing that prevents teachers from using these tools is the lack of ability to use them. For that reason, it is vital to increase the capability of teachers and help them to acquire modern technologies and software for creating online classes. “Day by day, utilizing from ICTs are getting more and more convenient, there are a lot of and various ways for teachers that can use during lessons as pedagogical tools, as teachers are considered the key player in successful implementation of educational reforms”**.**

Taking the above-mentioned ideas it should be stated that there have been radical changes in the way people live and think. With the presence of modernization, obstacles can be easily overcome and borders vanish. Despite the epidemiological situation in the world modern innovations create the possibility to interact, communicate and increase the degree of productivity of all spheres, in particular, the sphere of education by making it more interesting for students, motivating them, and enabling them to get qualified knowledge.

REFERENCES:

1. Filatova NS. The place of distance learning in the educational system of universities. Materials of the All-Russian scientific conference with international participation "Digital to help the teacher." - Cheboksary: Sreda Publishing House LLC; 2020

2. Baskakov YuA, Sabolev OM. The use of video conferencing in the process of education. Kazan pedagogical journal. 2010;(1).

3. Fayzullayeva MB. ICT is the key of motivation in teaching FL. Available at: https://cyberleninka.ru/article/n/ict-is-the-key-of-motivation-in-teaching-fl

4. Aslonov ShSh. Computer Linguistics and Philology: Problems and Solutions. Humanitarian Treatise, 2020;(84):17-19.

5. Aslonov S, Ruzimurodova Z. The Use of Acronyms and Initialisms in Bussines English. Студенческий вестник, 2020;(12-5):34-35.

6. Sherzodovich AS, Kizi RZD. Interpretation And Written Translation: Related Learning. Interpretation, 2020;6(6).

7. Aslonova ShI. Problems of Pedagogical Technologies in Teaching Youth in Higher Educational Institutions. Interscience, 2020;(21-1):59-60.

HISTORICAL AND THEORETICAL ASPECTS OF RUSSIAN FOLK CULTURE-ORAL CREATIVITY ON THE EXAMPLE OF "CHILDREN'S LITERATURE" COURSE

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ABSTRACT

On the basis of the course ("Children's Literature"), the paper examines historical and theoretical features of Russian folk culture - oral creativity. Russian folklore, particularly children's folklore, its types, genres, and connections to national folk pedagogy, are essential for a future teacher to fully comprehend and socio-psychologically perceive the world around children of primary school age, because folklore is the most valuable source for understanding people's culture.

KEYWORDS: *Children's Literature, Folklore, Spiritual Activities, Education.*

INTRODUCTION

Folk art, also known as folklore (English: folk wisdom), is a sort of oral and poetic creativity that includes verbal, musical, theatrical, theatre, and games. Folk art culture (which includes fine, decorative, and applied arts) is a socially conditioned and historically changing artistic activity distinguished by interconnected distinctive qualities. The collective nature of the creative process, traditionality, oral transmission from generation to generation, variability, and relationship to labor, everyday life, and customs are all examples. It has its own distinct place in art history, despite the fact that it cannot be classified as professional art.

Folklore is different, legitimately popular (national), and ubiquitous all at the same time (similar in socio-aesthetic ideals and ideological content). It arose from the practical components of labor songs, conspiracies, and incantations in ancient times. Their functional aspects gradually gave place to artistic ones. Calendar folklore emerges, with ritual calendar poetry, everyday beliefs, epic, proverbs, riddles, and songs mythologizing nature and civilization. **[1]**

Folklore, according to A.N.Tolstoy, is "the dignity and wisdom of the people." In his words, "study literature became and deepened his moral character, was his historical memory, the festive clothing of his spirit."[1]

All folklore is unique to each country, but it is also typologically unified (for example, by historical character, theme, plot, characters, ideological and imaginative content, composition, style). The national-historical distinctiveness, on the other hand, is preserved, as is the traditional iconography and stylistic techniques.

Folklore has the following characteristics and traits. This oral art, also known as folklorization, is based on continuity, tradition, improvisation, variation, enrichment, complementarities, wide interest, poetics, and artistic perfection. Traditional refers to the process of becoming a mass, folk, or folklore.

Main part

Folklore transmits the people's viewpoint and worldview in the forms and traits that have evolved historically. The passage of time passes those pieces of folklore that have piqued the public's interest for generations. Because of the power and range of ideological and creative generalizations, folklore has gained national relevance.

Folklore is woven into the fabric of civilization. Folk art arose from the common existence (during the primitive communal age) and evolved along with society's development. The people served as the creator medium, as well as the bearer of evolved folklore traditions.

Folklore began as a single person's activity based on a long-standing household and poetic tradition, with certain repeats found in other people's oral works. Only the most artistically effective individuals survive. As a result, folklore works without an author are folklore, suiting people's creative sensibilities. Oral folklore has evolved, improved, and spawned new oral-poetic works as a result of it. An oral work can be constructed in a variety of ways: imagery is consistently repeated, the plot evolves in a predictable manner, rules for organizing verse, figurative and stylistic strategies, and so on. **[2]**

Folklore's creative character is hence collaborative. It contains the people's tastes, hobbies, dreams, and daily lives. It is the most valuable asset of each nation's national culture, as well as a potent educational and training tool.

The following historical periodization applies to Russian folk culture - oral art - folklore:

IX-XIII – Kyiv Russia and feudal fragmentation;

XIV early XVII centuries – the creation of a centralized Moscow state

XVII (first half) - XIX centuries - the crisis of feudalism and the emergence of bourgeois relations, etc.

These periods are divided into smaller ones: for example, the IX-XШ centuries. – Folkloreperiod of strengthening and prosperity of the Old Russian early feudal state (IX-XI) and the epoch of feudal fragmentation (XII-XIII).

All types of folklore have undergone a long period of historical and cultural development. Folklore is inextricably linked to human action, life, and social consciousness. It's a spiritual occurrence, a spiritual activity, and a work of art. The ratio of utilitarian to artistic beginnings varied in it, with the most ancient art coming first, followed by the art of following eras. The periodization represents the evolution of folkloric works and their composition.

Russian folklore in its genre is divided into such types as:

epics, byvalshchik (urban legend), bylichki (dirty but true anecdote), legends and traditions, tales, proverbs, sayings, riddles, songs, ritual folklore; folk culture in various types of artistic creativity, folk theater.

Taking into account historical and theoretical aspects of Russian folk culture, as well as oral, artistic, and pictorial creativity, we can conclude that Russian folklore has made the greatest contribution to the overall culture of the Russian people, capable of causing active cognitive interest in other peoples. It's crucial to emphasize the pedagogical value of Russian folklore:

I. All types of folklore have four main components: labor, magic, ritual, and art.

Especially educationally effective elements of folklore are bylinas (epics), traditions, fairy tales, sayings, proverbs and songs.

- The predominance of utilitarian and domestic functions. Labor Songs. The conspiracies with rhythmic ordered-imperative components. Calendar songs associated with agricultural thoughts and concerns (magical-cursive, fortune-telling, ritual-functional, practical life). Wedding and Funeral.
- Folklore with ideological and aesthetic functionality, along with utilitarian-practical (in labor songs, conspiracies, ceremonial, magical). In the calendar songs of life basis, acquiring a religious and magical interpretation (the same in the wedding).
- The aforementioned components are displaced by ideological and artistic and purely mundane. Calendar songs become a form of creativity with an ideological and artistic and everyday meaning. Wedding songs are an expression of spiritual peace in relation to family members and the new family.
- The ideological and aesthetic character of all the songs.

As a result, all types of folklore have had a long history and stadial evolution. Folklore is inextricably linked to human action, life, and social consciousness. It's a spiritual occurrence. Spiritual pursuits and aesthetic production. The ratio of practical to artistic beginnings shifted in that way. The oldest art is presented first, followed by work from following eras.

Folklore is a valuable source for comprehending the culture of the people. Appendices 2 - 6 discuss the genres of Russian folklore, bylinas (epics), fairy tales, sayings, proverbs, winged words, aphorisms, riddles, songs, traditions - wedding rites, types of ritual folklore. **[3]**

Unusually rich and varied children's folklore of the Russian people, especially small genres. Its specificity, origin, types, genres, (their essence, themes, content), national basis, functionality, didactic, connection with folk pedagogy, a list of the most striking works, Russian successful folk art for children.

Russian folklore has been preserved through the efforts of scholars and collectors of Russian folklore (mostly from the 17th century to the present day). The visual and artistic reproduction of folklore works was done by famous Russian artists (the names of collectors and researchers of Russian folklore and its illustrators are given in Appendix No. 8).

Folklore is a valuable source of comprehension of the culture of the people.

CONCLUSION

On the basis of the course ("Children's Literature"), the article discusses the historical and theoretical features of Russian folk culture - oral art. Because folklore is the most valuable source for understanding folk culture, future teachers will need to know about Russian folklore, especially children's folklore, its relationship to species, genres, and folk pedagogy in order to fully understand the world around younger students and social and psychological perception.

REFERENCES:

1. Anikin VP. Russian Verbal Folk Art (Folklore): Methodological Guidelines. Moscow; 1988. p.99.
2. Bespalko VP. Pedagogy and progressive technologies of education. Moscow; 2011. p.30.
3. Zubareva EE. Children's Literature: Textbook for students of teacher training colleges in the specialty "Education in pre-schools" and "Pre-school education. Moscow: Enlightenment; 2005. pp. 5-43.

MANIFESTATIONS OF THE INFORMATION CRISIS IN THE PROCESS OF GLOBALIZATION AND ITS CONSEQUENCES

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ABSTRACT

In the current process of globalization, there is a struggle in the information space to achieve political goals, the use of information as a weapon is growing. We can observe such cases in the CIS countries. The riots in Russia, Belarus and Kazakhstan are good examples of this. The most dangerous of these are the moral threats that have a serious impact on the moral, family and social life, aimed at undermining the values and way of life of nations by influencing the psyche of the people.

KEYWORDS: *Global, Transnational Crime, Terrorism, Hacker, Conspiracy, Organized Crime, Drug Trafficking.*

INTRODUCTION

The international situation in the late nineteenth and early twenty-first centuries is characterized by a deepening of globalization. An important and topical aspect of the issue is that it is not easy to quickly understand the nature of the consequences of modern globalization for humanity.

Today, globalization, with its scope, influence, and growing mass character, is invading the national spirituality of the peoples of less developed and now developing countries, eroding their lands and preparing the ground for their failure in the future under the influence of mass spirituality. This aggression is carried out not only through the media, television, the Internet or mobile phones, but also through the economy, which is necessary for people's livelihood and livelihood.

The process of weakening of national spirituality is not noticeable under the influence of the indicator that the positive changes in the economies of countries are sometimes reflected in the material conditions of the people as a result of integration under the influence of globalization. This is especially evident in the impact of globalization on the destruction of national spirituality, the blurring of customs, traditions and values. **[1]**

Globalization is derived from the Latin word "glob", which can be translated as "rounding", "globalization". It is used to explain the transformation of the Earth into a globe, the same sphere at the disposal of mankind, due to scientific and technological advances.

In fact, globalization has existed in various degrees and forms since the second half of the twentieth century. Initially, it passed spontaneously, but after some time it became a factor in the development of the economy. Everyone is interested in this opportunity, and the rise of this process coincides with the beginning of the XXI century.

Speaking about the main factor and the reason why the process of globalization is entering our lives more and more quickly, it must be objectively acknowledged that today the development and prosperity of any country is so closely linked not only with its immediate and distant neighbors, but also with other regions and regions. it is not difficult to understand whether the exclusion of any country from this process will lead to positive results. It should be noted that globalization is a process that occurs in a situation directly related to the intensification of socio-political, economic life.

It's essence is the sharp expansion and complication of the interrelationships and interdependencies between nations and states. This is a new stage of social development on a global scale. Its emergence was possible only due to the achievements of science and technology.

It consists of many profound changes taking place in various spheres of human activity. An important aspect of globalization is the creation of universal systems of governing international relations. In general, globalization has covered all aspects of human activity, the practice of movement.

The ideological struggle continues in a society, both within the country and at the international and interstate level. At present, political forces and movements seeking to expand their sphere of influence through ideological means are intensifying. Ideological aggression against a particular nation, society, state, aimed at weakening and destroying the political and constitutional system, threatening the security of citizens and society is intensifying.

The evil forces engaged in such aggression skillfully try to use all means to achieve their nefarious goals, people's religious, national feelings, the existing socio-economic difficulties in life, as well as modern technology, telecommunications.

Today, their ulterior motives, such as occupying the hearts and minds of certain segments of the population, especially young people, with ideas that are acceptable to them, such as destructive ideas, religious extremism, and immorality, are becoming clear to the people.

At the threshold of the XXI century, historical experience shows that the security, stability and development of a state, a nation, its future depends in many respects on the level of potential and ability to detect a threat to this nation. "Threat" refers to the "intrusion" of 16 local, regional, regional and, finally, global negative factors that confuse human life in general and weaken the social structure, or rather the political basis of the state, aimed at a specific goal during a particular historical period. It is necessary to understand the specific negative political, social and historical situation in space and time.

An ideological threat is a set of ideological threats that threaten the fate of a society, state, or people, nation, people, and can lead to tragic consequences. An ideological threat is a socio-political movement, current or political force that inflicts an ideology that represents its interests on others through intimidation and violence. As the process of globalization deepens, various unconventional threats that pose a threat to humans are emerging. The most dangerous of these are the moral threats that have a serious impact on the moral, family and social life, aimed at undermining the values and way of life of nations by influencing the psyche of the people.

Our history proves that the Central Asian region has always been in the center of attention of evil forces with its natural resources and capabilities. From the first days of the New Year, the events in the neighboring Republic of Kazakhstan are worrying.

Under the pretext of rising prices for liquefied natural gas, some evil forces are trying to achieve their goals, described as a popular protest under the guise of a terrorist act, in which the "media" played a significant role.

Initially, Germans gathered under the guise of a peaceful rally. The government found the arguments justified, and soon the price of liquefied natural gas fell. However, despite the fulfillment of the demands, the "protesters" did not disperse, but turned into an armed conflict, a coup d'etat and the overthrow of the existing constitutional order. The immediate measures taken by the CSTO peacekeeping forces have borne fruit. External and internal threats were received. According to the intelligence service, about 20,000 people were trained abroad and trained by experienced specialists to take part in the riots.

If we look at the events in Andijan in 2005, based on the history of our country, one event is surprising. On the night of the incident, Interior Minister ZokirjonAlmatov briefed Islam Karimov on the situation. As a result, an operational headquarters was formed and they flew from Tashkent to Andijan on a 45-minute flight. They were greeted by Western media journalists, which is to be admired. Just think, in Europe and the Pacific, the average flight time is 8 hours, 17 hours, taking into account the preparation for the trip, add at least another 2 hours, 4 hours. Really? These could then come on May 14th. Apparently, they knew in advance what would happen in Andijan and intended to cover the terrorist act as a mass protest. **[2]**

In these difficult times, war is being waged through the media. For example, Allen Dallas, one of the fathers of the U.S. Central Intelligence Agency, said, “Whoever manages information in the future can control the world.”

However, the political interpretation of the problems in society by some people working under the guise of "blogging" is aimed at undermining the trust of our people and the state by blaming the state for the shortcomings of some leaders and trying to achieve its selfish goal. The information of such individuals should not be trusted.

It is especially surprising that the aggression of the Western countries against the Eastern countries, their crimes and genocides are not covered in the media or on social networks.

REFERENCES:

1. Pakhrutdinov Sh. The concept of "threat": theory and practice. Tashkent: Abu Ali Ibn Sina Medical Publishing House; 1998.

2. Karimov IA. The book of high spirituality and invincible power. 2008

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THE PRACTICAL SIGNIFICANCE OF USING A CREDIT MODULAR SYSTEM IN HIGHER EDUCATION

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ABSTRACT

The article describes the basic concepts of the credit-modular system used today in the country's universities, its content and essence. The main tasks of the creditmodular system and the forms of organizing the educational process in this system are discussed. A module is a part of a curriculum that covers several subjects and courses. This is a set of disciplines (courses) aimed at developing students' knowledge and skills, the ability to think analytically and logically.

KEYWORDS: *Credit-Modular System, Module, Credit, Independent Learning.*

INTRODUCTION

Currently, a number of measures are being taken to develop the higher education system in the country. Decree of the President of the Republic of Uzbekistan dated October 8, 2019 No. PF-5847 "On approval of the Concept of development of the higher education system of the Republic of Uzbekistan until 2030" provides for the creation of at least 10 higher educational institutions in the country. to be included in the list of the 1000 best higher education institutions of the rating of internationally recognized organizations (Quacquarelli Symonds World University Rankings, Times Higher Education or Academic Ranking of World Universities) in order to activate the educational process in higher education institutions - It is planned to switch to a credit-modular system **[1].**

The reconstruction of the educational process in higher education institutions on the basis of European standards means the development of a new form of organization of the educational process, in particular, the introduction of a credit-modular system of organization of the educational process. The credit system is necessary to indicate the scope and timing of work upon completion of the course system or curriculum.

The credit-modular system of education originated in the late 1960s and later spread to English-speaking countries - the USA, Great Britain and Canada. Initially, the modular system was used for individual classes, but later it became more widespread and was considered as a new form of education.

The credit-modular system is the process of organizing training, which is an assessment model based on a set of modular learning technologies and credit measurement. Its implementation as a whole is a multifaceted and complex system process. The principle of the credit module focuses on two main issues: ensuring independent work of students; assessment of students' knowledge based on ratings.

If we compare the traditional and modular education system, then in traditional education students are taught a clearly defined subject or discipline. These topics are mostly taught in the classroom. The modular training system consists of training modules.

A module is a part of a curriculum that covers several subjects and courses. This is a set of disciplines (courses) aimed at developing students' knowledge and skills, the ability to think analytically and logically. At the same time, the teacher organizes the educational process, reads live, video and audio lectures, coordinates and controls the student's activities. The student will independently study the topic and complete the tasks **[2].**

The credit-modular system is a model of the organization of the educational process based on the unity of modular learning technologies and credits as units of measurement of the student's academic load. A credit is a unit of measurement of a student's academic load. It takes into account all types of student's work provided for in the approved individual plan: classroom (lectures, practical and seminar classes), independent work on the analysis of images obtained with the help of modern technologies, preparation of students for the licensing integrated exams, practically oriented state exam.

The main objectives of the credit-modular system are:

- Organization of the educational process according to the modular principle;

- Determination of the cost of one subject, course (credit);

- Assessment of students' knowledge based on rating points;

- allow students to make their own study plans individually;

- increase the share of self-study in the educational process;

- The convenience of educational programs and the possibility of changing them based on the demand for specialists in the labor market **[3].**

It is obvious that increasing the share of self-study in the educational process is one of the main tasks of the credit-modular system.

Self-study is a purposeful educational activity of students in the higher education system, in which the teacher directs students to acquire independent knowledge in the learning process (topics and literature are recommended for self-study, independent work assignments are given, textbooks are recommended, consultations are organized and their implementation is monitored) and management is carried out. **[4]**

The credit-modular training system consists of the following forms of the educational process

• classroom classes - lectures, theoretical, practical, seminars, laboratory classes, educational (clinical) practice;

• extracurricular activities - work in a scientific library, independent work, individual counseling, clinical assignments, internships, coursework, postgraduate studies, student participation in scientific conferences, types of scientific activities in master's specialties, etc. **[5]**

As a rule, credit is an indicator of a student's academic performance in the curriculum, that is, the number of hours (hours) that a student spends on doing the relevant work. This may determine the educational institution, depending on the nature of the module and the importance of academic work for the formation of a future specialist. Each module has its own credit. **[6]**

Since the credit system of education includes the control of all forms of education (classroom and extracurricular), it is considered as a unit of measurement reflecting the achieved result, and not the number of hours studied in the learning process. Therefore, this is an important factor in improving the effectiveness of education. **[7]**

In short, the transition to this system is a requirement of the time, a priority for the development of education, and we should all use the achievements of world experience and not repeat its shortcomings. Considering that in developed countries a credit-modular system is successfully used, on the basis of which students work tirelessly, the share of independent study is growing, in our country this system expands the worldview of students and helps to grow them into mature professionals in their field. **[8]**

REFERENCES

1. Decree of the President of the Republic of Uzbekistan dated October 8, 2019 No. PF-5847 “On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030”. Available at: https://cis-legislation.com/document.fwx?rgn=119515
2. Timofeev AA, Ushko NA, Yarifa MA. Credit-modular system of education. Journal Modern Dentistry, 2013;(1):134.
3. Urazgaliyeva RI. Credit-modular system of organization of education as a factor in the formation of skills of self-educational activity of a student. Abstract of the dissertation for the degree of candidate of pedagogical sciences. Orenburg, 2010. p. 13.
4. Akhmedov BA, Khasanova SK. Public education system methods of distance in education in development of employees. Journal of Innovations in Engineering Research and Technology, 2020;1(1):252-256.
5. Gafforova GG, Khaitmetov RK, Madalimov TA. A Strategy of Action as A Complex System. International Scientific Journal Theoretical & Applied Science, 2020;90(10):448-452.
6. Akhmedov BA. Mathematical models for assessing the characteristics of software quality and reliability. Eurasian Education Science And Innovation Journal, 2020;3(10):97-100.
7. Gulboev NA, Duisenov NE, Akhmedov BA, Rakhmanova GS. Models of control systems for electrical networks. Young Scientist, 2020;22(312):105-107.
8. Mukhamedov GI, Akhmedov BA. Innovation “Klaster mobile” Ilovashi. Academic Research in Educational Sciences, 2020;1(3):140-145.

CUSTOMER SATISFACTION OF TWIN CITY SHOPPERS: WITH RESPECT TO SERVICES OF VARIOUS RETAIL STORE TYPES

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ABSTRACT

India is a land of increasing retail opportunities. The retailers have realized that creating superior customer service is the key for their success. The challenge to the retailer is not only to satisfy the customers, but also to offer various additional services to the customers. In this situation, well carved-out marketing design is essential to have a customer-centric approach. But, since the retailing is yet to take its final shape, they are to be proactive in identifying the customer satisfaction and conduct an analysis to measure the same across various dimensions. On the other hand, customers are also demanding more than what the retailers can provide. In this backdrop, this paper attempts to study the customer satisfaction in the perspective of twin city shoppers of various retail store types.

KEYWORDS: *Retail Stores, Store Types, Retail Factors, Retail Services, Overall Satisfaction.*

INTRODUCTION

Retail is a part of the service sector. This is due to the fact that today, retailers operate in a customer based market. Today's customers demand a lot and so the retailers are trying to meet their expectations. Customers are also empowered to ask for better services round the clock. They also wish to have services with lots of dignity and special treatment. In this relevance, a retailer can succeed only by providing better service and by maximizing the satisfaction levels of the customers. **[1]**

The term Customer Satisfaction defines a state of perception that the customer holds regarding a product or service in which the customer feels content with the service quality that has been provided. Customer Satisfaction levels can actually increase based on how retailers offer retail service. So, in establishing a customer satisfaction tracking system, the retailers have to monitor their retail factors and retail services. **[2]**

This paper aims to study the customer satisfaction in the perspective of twin city shoppers of various retail store types. For the purpose of analysis, the various retails stores considered for the study were grouped into twelve store types and an attempt was made to find out the significant differences among the retail factors by using few statistical tools. In this process, a modest attempt has also been made to rank the various retail store types based on their services and relate them to the overall satisfaction obtained by the customers. **[3]**

Objectives of the study

1. To know the demographics of customers of various store types.

2. To identify whether there are any significant differences among the store types with respect to various retail factors.

3. To relate the retail services of various store types to customers' overall satisfaction.

Methodology and Sampling

The main aim of the study was to relate the retail services to customers' overall satisfaction, of various retail store types located in Hyderabad and Secunderabad, listed in ReachoutHyderabad.com, numbering hundred. However, the information needed for the study was collected from four hundred customers of these retail store types on a convenience sampling basis.

Data Collection

The present study made use of primary and secondary data. A structured questionnaire was prepared to collect the primary data. A pilot study was undertaken before administering the questionnaire to the customers and it was found that there was no need for any modification, so the questionnaire was used for collecting data for this study. The primary data was collected from 400 customers of 100 retail stores through questionnaire. The secondary data has also been collected from textbooks, journals and magazines.

Limitations

1. The areas of the study were restricted only to the twin cities of Hyderabad and Secunderabad.
2. Due to the time constraints, only 400 customers of 100 retail stores were considered for the study.
3. The findings of the study were on the basis of the information provided by the customers and hence may be biased.

Data analysis

For the purpose of analysis, 100 retail stores considered for the study had been grouped into twelve retail store types and the data thus gathered from 400 customers had been classified, tabulated and presented in the form of simple tables. The statistical tools were used as and when necessary for the analysis of the data which include percentages, mean values and chi square test.

Objective 1: To know the demographics of customers of various store types

TABLE 1.1: DEMOGRAPHICS OF CUSTOMERS

Demographics	Store types												
	Department stores	**Hyper Market**	**Footwear**	**Supermarket**	**Optical**	**Electronic Stores**	**Food retailers**	**Furniture stores**	**Gifts and novelties**	**Jewellery stores**	**Garment stores**	**Other retail outlets**	**Total**
Gender Male	5	17	14	26	3	14	34	10	15	16	81	51	286
Female	2	7	3	10	4	1	22	6	6	13	27	13	114
Age <=18 Yrs	1	3	2	3	1	-	2	-	-	1	10	7	30
19-25 Yrs	0	5	3	4	1	-	4	3	2	6	16	7	51
26-35 Yrs	2	8	4	13	1	5	18	5	7	5	24	19	111
36-45 Yrs	3	2	5	8	3	7	17	5	8	9	29	18	114
>45 Yrs	1	6	3	8	1	3	15	3	4	8	29	13	94
Education <= SSC	1	1	4	2	1	2	2	3	2	4	11	5	38
Inter	2	-	1	6	-	-	1	1	2	1	5	3	22
Graduate	2	19	8	22	5	12	43	8	16	18	69	43	265
PG	1	3	2	2	1	1	4	2	1	4	16	7	44
Others	1	1	2	4	-	-	6	2	-	2	7	6	31
Socio-Economic status Upper	2	3	3	11	2	1	17	8	4	7	34	20	112
Middle	5	19	12	23	5	13	38	8	15	20	69	42	269
Lower	-	2	2	2	-	1	1	-	2	2	5	2	19
Income levels In Rupees <=10,000 pm	-	1	2	5	1	4	4	-	2	6	8	2	35
10,0001-20,000 pm	1	13	7	16	2	6	18	7	8	11	49	24	162
20,001-30,000 pm	3	6	5	7	2	2	19	5	6	7	33	25	120
> 30,000 pm	2	1	2	6	2	-	9	3	4	4	15	11	59
Non earning	1	3	1	2	-	3	6	1	1	1	3	2	24
Total Customers	7	24	17	36	7	15	56	16	21	29	108	64	**400**

Source: Questionnaire to the customers

Interpretation: From the demographics of the customers considered for the study, it is seen from the above table that the number of male customers was high. The table also shows that **most of the customers** belonged to the age group of 36-45 years, education as Graduation, socio-economic status as Middle class and fell in the income group of Rs. 10,001 to 20,000pm.

Objective 2: To identify whether there are any significant differences among the store types with respect to various retail factors.

Hypotheses Testing

The following hypotheses relating to various important retail factors like frequency of visits, patronage of membership card, purchase points, recommending the retail store and distance tavelled by the customers were tested with the help of Chi-square tests and the results are discussed below.

2.1: Frequency of visits

Null Hypothesis: There is no significant difference in frequency of visits to various store types by customers.

Alternate Hypothesis: There is significant difference in frequency of visits to various store types by customers.

TABLE 2.1: FREQUENCY OF VISITS

Visit frequency	**Store types**												
	Department store	**Hyper Market**	**Footwear**	**Supermarket**	**Optical**	**Electronic Stores**	**Food retailers**	**Furniture stores**	**Gifts and novelties**	**Jewellery stores**	**Garment stores**	**Other retail outlets**	**Total**
Very Regular	-	6	4	9	1	4	11	2	7	7	31	13	95
Regular	4	9	7	14	4	7	24	6	7	12	38	26	158
Occasional	3	8	5	11	2	4	12	6	2	7	27	17	104
First Time	-	1	1	2	-	-	9	2	5	3	12	8	43
Total Customers	7	24	17	36	7	15	56	16	21	29	108	64	**400**

Source: Questionnaire to the customers

Interpretation*:* The table value of Chi Square for 33 degrees of freedom at 5 per cent level of significance is 47.40 and the calculated value is 23.40. Since, the calculated value is less than the table value, the null hypothesis is accepted and it may be concluded that there is no significant difference in frequency of visits to various store types by customers.

2.2: Patronage of Membership card

Null Hypothesis: There is no significant difference in the patronage of membership card by customers at various store types.

Alternate Hypothesis: There is significant difference in the patronage of membership card by customers at various store types.

TABLE 2.2: PATRONAGE OF MEMBERSHIP CARD

Patronage of Membership card	Store types												
	Department store	**Hyper Market**	**Footwear**	**Supermarket**	**Optical**	**Electronic Stores**	**Food retailers**	**Furniture stores**	**Gifts and novelties**	**Jewellery stores**	**Garment stores**	**Other retail outlets**	**Total**
Yes	-	2	1	5	-	-	2	-	3	6	5	1	25
No	7	21	15	29	7	15	45	14	13	20	91	55	332
NA	-	1	1	2	-	-	9	2	5	3	12	8	43
Total Customers	7	24	17	36	7	15	56	16	21	29	108	64	**400**

Source: Questionnaire to the customers

Interpretation*:* The table value of Chi Square for 22 degrees of freedom at 5 per cent level of significance is 33.92 and the calculated value is 36.09. Since the calculated value is more than the table value, the null hypothesis is rejected and it be concluded that there is significant difference in the patronage of membership card by customers at various store types.

2.3: Purchase points

Null Hypothesis: There is no significant difference in the purchase points to the credit of customers at various store types.

Alternate Hypothesis: There is significant difference in the purchase points to the credit of customers at various store types.

TABLE 2.3: PURCHASE POINTS

Purchase Points	Store types												
	Department store	**Hyper Market**	**Footwear**	**Supermarket**	**Optical**	**Electronic Stores**	**Food retailers**	**Furniture stores**	**Gifts and novelties**	**Jewellery stores**	**Garment stores**	**Other retail outlets**	**Total**
Yes	4	4	-	10	-	4	47	4	-	4	26	14	117
No	3	19	16	24	7	11	9	10	16	22	70	42	249
NA	-	1	1	2	-	-	-	2	5	3	12	8	34
Total Customers	7	24	17	36	7	15	56	16	21	29	108	64	**400**

Source: Questionnaire to the customers

Interpretation: The table value of Chi Square for 22 degrees of freedom at 5 per cent level of significance is 33.92 and the calculated value is122.05. Since the calculated value is more than the table value, the null hypothesis is rejected and it may be concluded that there is significant difference in the purchase points to the credit of customers at various store types.

2.4: Recommending the retail stores

Null Hypothesis: There is no significant difference in the customers recommending the retail stores with respect to various store types.

Alternate Hypothesis: There is significant difference in the customers recommending the retail stores with respect to various store types.

TABLE 2.4: RECOMMENDING THE RETAIL STORES

Recommending the retail stores	Store types												
	Department store	Hyper Market	Footwear	Supermarket	Optical	Electronic Stores	Food retailers	Furniture stores	Gifts and novelties	Jewellery stores	Garment stores	Other retail outlets	Total
Yes	2	20	12	29	3	11	51	14	20	26	96	53	337
No	1	2	3	5	1	3	4	2	-	2	4	5	32
NA	4	2	2	2	3	1	1	-	1	1	8	6	31
Total Customers	**7**	**24**	**17**	**36**	**7**	**15**	**56**	**16**	**21**	**29**	**108**	**64**	**400**

Source: Questionnaire to the customers

Interpretation*:* The table value of Chi Square for 22 degrees of freedom at 5 per cent level of significance is 33.92 and the calculated value is 56.04. Since the calculated value is more than the table value the null hypothesis is rejected and it may be concluded that there is significant difference in the customers recommending the retail stores with respect to various store types.

2.5: Distance Travelled

Null Hypothesis: There is no significant difference in the distance travelled by customers to retail stores with respect to various store types.

Alternate Hypothesis: There is significant difference in distance travelled by customers to retail stores with respect to various store types.

TABLE 2.5: DISTANCE TRAVELLED

Distance Travelled	Store types												
	Department store	Hyper Market	Footwear	Supermarket	Optical	Electronic Stores	Food retailers	Furniture stores	Gifts and novelties	Jewellery stores	Garment stores	Other retail outlets	Total
< 1 km	-	5	1	4	-	4	6	3	3	4	21	9	60
1-5 km	3	12	12	26	3	8	41	9	14	19	63	38	248
> 5km	4	7	4	6	4	3	9	4	4	6	24	17	92
Total Customers	7	24	17	36	7	15	56	16	21	29	108	64	**400**

Source: Questionnaire to the customers

Interpretation*:* The table value of Chi Square for 22 degrees of freedom at 5 per cent level of significance is 33.92 and the calculated value is 22.64. Since the calculated value is less than the table value, the null hypothesis is accepted and it may be concluded that there is no significant difference in the distance travelled by customers to retail stores with respect to various store types.

Objective 3: To relate the retail services of various store types to customers' overall satisfaction.

The customers were asked to rank the twenty five retail services listed in Table 3.1, on a 10 point scale with 1 as least and 10 as best satisfactory. In the similar way, the overall satisfaction derived was also ranked by the customers.

TABLE 3.1: RETAIL SERVICES

Sl. No.	Retail Services
1.	Reputation of the store
2.	Arrangement to locate needed product
3.	Neatness and orderliness of displays
4.	Convenience of the store
5.	Convenient timings
6.	Lighting and layout
7.	Safety and security
8.	Ambience and esthetics
9.	Friendliness
10.	Sense of fun while in the outlet
11.	Customer care
12.	Customer sensitivity and concern
13.	Customer greetings / relation
14.	Complaint handling
15.	Receive communication
16.	Speed of checkout
17.	Attentiveness by the retailer
18.	Stock availability
19.	Open on holidays
20.	Speed and efficiency of the retailer
21.	Packing of purchased items
22.	Pricing
23.	Accuracy of signage and displays
24.	After-sales service
25.	Fulfill expectations
	Overall Satisfaction

Source: Questionnaire to the customers

The various ranks given by all the customers for the twenty five retail services as depicted in Table 3.1 were grouped and average ranks were taken for each store type. Similarly, ranks given for Overall satisfaction` derived by the customers of various store types were also grouped and average ranks were taken and the same is depicted in the Table 3.2

TABLE 3.2: CUSTOMERS' OVERALL SATISFACTION BASED ON RETAIL SERVICES

Sl. No.	Store Types	Average of ranks of twenty five retail services	Average of ranks on Overall satisfaction
1	Departmental stores	9	9
2	Electronic Stores	7	8
3	Food Retailers	7	6
4	Furniture Stores	7	7
5	Footwear	7	7
6	Gifts and Novelties	6	6
7	Garment Stores	7	7
8	Hypermarkets	7	8
9	Jewellery Stores	7	7
10	Optical	7	8
11	Super Markets	7	7
12	Other outlets	7	7

Interpretation: As seen in the above table based on the average ranking done for various store types, Departmental stores were ranked high for their retail services and for the overall satisfaction derived by the customers.

CONCLUSION

It is a well know fact that no retail store can exist without customers. The requirements of the customers are ever changing and are demanding more than what is needed. They are smarter, more price conscious, less forgiving and are open to similar or better offers by the competitors. In this relevance, a retail store can succeed, only by taking care of its customers and maximizing customers' overall satisfaction. **[4]** So, the concept of customer satisfaction occupies a central position in offering retail services. In this backdrop, a retail store is viewed as a cluster of retail factors and retail services that are important to attain overall satisfaction by the customers. **[5]** It could thus be concluded that with the immense relevance that customer satisfaction has gained, every retail store type should give importance to it and make the customers feel delighted with respect to the retail services. **[6]**

REFERENCES

1. Churchill C, Gilbert A, Surprenant C. An investigation into the Determinants of Customer Satisfaction. Journal of Marketing Research 1982;19(94):491-504.
2. Ashok R. Cashing in Customers. The Relationship Management Way. Managing Globl Organisation: Challenges, Opportunities and Strategies, Proceedings of the Fourth AIMS International Conference on Management, IIM Indore, 2006. p.512.
3. David S, Chalasani S. Exploiting niches using relationship marketing, Journal of Consumer Marketing, 1992;9(3):33-42.
4. Philip K. A generic concept of marketing, Journal of Marketing, 1972;36(2):46-54.
5. Webster Jr., Frederick E. The Changing Role of Marketing in the Corporation. Journal of Marketing, 56, October, 1992. pp. 1–17.

6. Regis MK. Relationship Marketing: Successful Strategies for the Age of the Customers, Addison-Wesley, New York; 1991.

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INCREASING THE EFFICIENCY OF LOGISTICS MANAGEMENT IN RAILWAY TRANSPORT

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ABSTRACT

The article provides information on the reasons for the emergence of uniform technological processes at the junction points of mainline and industrial railway transport. The role played by uniform technological processes in ensuring the efficiency of logistics management on the railways in various historical periods is shown. The existing difficulties associated with the development and implementation of unified technological processes are reflected.

KEYWORDS: *Uniform technological process, railway transport, logistics management, supply chain, junction point, freight transportation, regulations.*

INTRODUCTION

Currently, the effectiveness of the organization of mass transportation of goods by rail is largely determined by the rhythmicity and cyclicity of transport processes. The formation of reliable supply chains aimed at ensuring them is a rather complex task that requires taking into account a large number of influencing factors at various stages of cargo handling and movement. One of these factors is the synchronization of the technology of operation of railway stations of the adjacent tracks of industrial enterprises and terminals.

Logistics (transport logistics) is the planning, control and organization of the management of the transportation of goods and other operations performed in the process of delivering finished products to their destination. Logistics includes all processes that save time and space in the area of cargo flows of goods, finished products and materials within certain social systems that satisfy the supply needs and requirements of these systems. But, given the great importance of railway transport in the economy of Uzbekistan, this issue can be considered, to some extent, from a "departmental" position. **[1]**

The state of the theory of calculation of car flows and the existing software for automated systems for organizing car flows have a decisive influence on the adoption of appropriate practical decisions by specialists involved in this field. It is these factors that determined and put on the agenda the issue of logistics in rail transport as such; it was then that the word became not only fashionable among railway workers, but also necessary. At the same time, the essence of logistics by users of railway transport services often comes down to the problems of reducing the costs of financial and industrial groups, which actually own the main means of production and control over the primary industries (oil refining, coal, metallurgical, chemical, pulp and paper, etc.), which determine the main volumes of transportation. Their creation has led to a fundamentally new relationship between cargo owners and rail transport. For rail transport, transportation is a time-consuming process, time costs depend on many random factors and can only be estimated on average - according to technological standards.

Modern logistics processes at the junction of these transport systems, as a rule, are characterized by the presence in them of a large number of participants (cargo owners, owners of transport and logistics infrastructure, rolling stock operators, carriers, forwarders, outsourcers, etc.) pursuing their goals and interests, which do not always meet the overall goal of the supply chain.s a consequence, this circumstance negatively affects the quality of the logistics processes being formed and implemented.

Back in 1944, academician V.N. Obraztsov noted that "the junction of railway transport with industrial transport is a sore point of the transport problem. The fact that in this case the transport facilities belong to two owners, the constant clashes between them, the struggle for their interests - all this contradicts the state interests. Because of this, cars are delayed, downtime and mileage increase, fuel consumption, overload is often complicated, etc." **[2]**. The way out of the current situation V.N. I saw samples in the organization of the work of interacting organizations according to a single technological process (hereinafter - ETP), that is, in the unification of the control system for the movement of wagons on the railway and an industrial enterprise.

The introduction of the first unified technological process at the stations of the nodes of the railways of our country took place during the years of the Great Patriotic War. It is quite obvious that during this period, the main task that was set for railway transport was to make its work as efficient as possible from the standpoint of meeting the needs of the front and rear enterprises and minimizing the resources consumed. the unified technological process has certainly contributed to the achievement of this goal. An analysis of the results of the introduction of the first unified technological process showed that they made it possible to more than halve the unproductive idle time of wagons on the railway tracks of industrial enterprises **[3].** These data directly testified to the expediency of continuing work on optimization and mutual coordination of transport and logistics processes on mainline and industrial railways. Since 1947, the replication of TP on the railway network has begun everywhere.

Direct implementation of the unified technological process should be carried out on the basis of a document approved by authorized representatives of owners of interacting railway infrastructures. The specified document should include the order of shift-daily planning, time standards and the sequence of various operations (shunting, cargo, acceptance, etc.), the order of information interaction between the employees involved, etc. At the initial stage of the development of a single technological process, there were no strictly defined regulations on the composition and structure of this document. In the works of V.N. Obraztsov there were some recommendations, but no more. In addition, the legislative status of the unified technological process was unclear.

The situation changed in the 50s of the XX century. In 1953, the Ministry of Internal Affairs of the Uzbekistan put into effect the first regulatory document methodically regulating the development of a single technological process **[4].** A little later, in December 1954, the Council of Ministers of the Uzbekistan approved the Charter of the Railways of the Uzbekistan, containing provisions on the need to develop a unified technological process. One of the key ones was article 114 of this document, which stated that "the work of railway sidings of large enterprises (with a turnover of 100 wagons per day or more) with locomotives should be carried out on the basis of a single technological process of the railway sidings and the junction station, providing for the use of advanced working methods to accelerate turnover wagons at the railway station and access road".

Starting from this moment, the unified technological process received the status of an official regulatory document, mandatory for development.

The period of the 70s of the last century is characterized by the integration of technologies of production and distribution enterprises and railway transport into a single system. From this moment on, the role of a single technological process in the organization of supply chains is also changing. From documents aimed primarily at optimizing logistics processes at the junction points of transport systems, a single technological process is transformed into documents, the performance of which directly affects the efficiency of operational work on the railway network as a whole. **[5]**

This transformation of the role of a single technological process in logistics management also required changes to the norms regulating the procedure for their development. On June 17, 1970, the Ministry of Internal Affairs of the Uzbekistan approved new guidelines for the development of a unified technological process. From the point of view of the tasks solved by a single technological process, this document was certainly more progressive than the 1953 analogue, however, it quickly ceased to meet the requirements for a single technological process, including linking the work of railways with adjacent trunk transport systems (mainly by sea and inland waterway).

At the end of 1983, a third document appeared, symbolically called "Temporary Instructions" Despite its name, this document has been the regulatory basis for the development of a unified technological process for more than 35 years.

The changes in the structure of economic relations that took place at the end of the XX — beginning of the XXI century, the emergence of new equipment and advanced technologies, the increase in the number of participants in logistics processes and the expansion of forms of their interaction formed new requirements for a single technological process. Currently, from the point of view of increasing the efficiency of railway logistics management, the unified technological process is aimed at solving the following priority tasks

* fulfillment of applications accepted by the carrier for the transportation of goods;

* cargo delivery and delivery of empty rolling stock for loading on time;

* optimization of the number and technology of operation of locomotives and wagons involved in transportation, regardless of their affiliation;

* ensuring the most rational use of technical equipment of interacting enterprises;

* formation of the necessary conditions for the introduction of advanced logistics systems and cargo management technologies.

As the experience of implementing a single technological process at the present stage shows, these tasks can be successfully solved.

Another sign of the qualitative development of a single technological process is the expansion of the boundaries of their coverage. If earlier they synchronized the technology of operation of a railway station and one adjacent enterprise, now, if there are several enterprises of different owners adjacent to one station, they can all be linked into a single technology of operation. The same situation is possible if the railway tracks of one enterprise are adjacent to several stations. Similar to a single technological process are called complex.

It is also worth noting that at this point in time, the development and implementation of a single technological process are associated with a number of difficulties.

Firstly, there is no regulatory document defining the composition and structure of a single technological process. The "Temporary Instructions" adopted in 1983 fell under the mechanism of the "regulatory guillotine" on May 22, 2019. Any analogue of this document, at least temporary, has not yet been adopted, despite the fact that in accordance with paragraph 5.13 of the Order of the Ministry of Transport of Uzbekistan dated June 18, 2003 No. 26 **[6],** a single technological process should be developed according to the approved methodology of the Ministry of Transport of Russia (now the Ministry of Transport of Russia, as the successor).

Secondly, the process of development and coordination of a single technological process on railways is not clearly regulated. The only exception is the Uzbekistan Railway, which has a quality standard defining these issues.

CONCLUSION:

Rail Transportation First invented for use in the early 19th century, rail transport quickly became vital for the expansion of the western world and has played a pivotal role in the realm of logistics for over two centuries. In modern practice, rail is used more exclusively for the largest and heaviest payloads (bulk cargo) traveling across land. The vast majority of railway infrastructure connects highly populated areas with large unpopulated strips of land between them making rail ideal for long-distance and cross country hauls. Canada, for example, is very sparsely populated between coasts so anything shipped more than 500 miles often requires a rail transport. Rail transport is confined to a more limited infrastructure than road transport. As a defining trait, locomotives (trains, monorails, etc.) are confined to a traced path going between point A and B with very few points of divergence. Railways are costly and time consuming to construct and only a few new railways have been constructed since the early 1900’s. Additionally, railways are limited to semi-level geographic areas making construction increasingly laborious. Thus, railways are primarily only accessible in large metropolitan areas. This attribute makes rail one of the primary players in the intermodal transportation. Within the confines of the railway system, the rail vehicle is not influenced by traffic, points of diversion, and switch offs between modes. This makes the rail the most dependable mode for making long hauls across land with minimal damage. Trains commonly carry bulk cargo items such as coal, corn, iron, ore, and wheat, items that would be uneconomical to ship by truck.

From what is stated in the article, it is obvious that since the appearance of the first unified technological process, they have begun to play a huge role in improving the quality of the work of railways in the organization of supply chains. The subsequent development of the theory and practice of the introduction of a single technological process allowed to expand the possibilities of their use in solving various logistics tasks, such as reducing the turnaround time of the car, providing a transportation plan, creating the required conditions for cyclical transport processes, saving material and financial costs for the organization of supply chains, etc. The current difficulties in the development and implementation of a single technological process are not critical, but they require solutions that will allow the fullest use of this tool to improve the efficiency of logistics management in railway transport.

REFERENCES

1. Abdusoliyev AI, Kushakova MN. Temir yo'l transportini rivojlantirishning moliyaviy siyosatining tahlili va tamoyillari. Экономикаисоциум, 2021;9(88):893-896.
2. Abdusoliyev AI, Kushakova MN. Moliyaviy menejment tizimini rivojlantirish tamoyllari. Oriental renaissance Innovative, educational, natural and social sciences, 2021;1(9):972-977.
3. Razzoqova JR, Qaxorov MX, Kushakova MN. Temir yo'l transportining moliyaviy boshqaruv tizimini takomillashtirish. Oriental renaissance Innovative, educational, natural and social sciences, 2021;1(9):978-986.
4. Kushakova MN. Main directions of credit policy during the COVID-19 Pandemy. European Journal of Molecular & Clinical Medicine, 2020;7(2):1836-1839.
5. Kushakova MN. Financial planning problems in enterprises. EPRA International Journal of Economic Growth and Environmental Issues, 2020;8(5):20-21.
6. Dzhumanova AB, Kushakova MN, Khodzhaeva NA. Formation of accounting management information in the control system of enterprises of JSC Uzbekistan Railways. International Journal of Advanced Science and Technology, 2019;28(14):32-36.

THE CONTENT AND MEANING OF ZOO-ECOLOGICAL EDUCATION

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ABSTRACT

The article deals with the Zoo-eco-its logical education its content and meaning. Within this article,it is described the relation between humans and animals,also human-animals bond. Its significance,its beneficial characteristicsand human relations with animal nature as a part of environmentalissues of the ecology. The human-animal bond is a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors essential to the health and wellbeing of both. This includes, among other things, emotional, psychological, and physical interactions of people, animals, and the environment.

KEYWORDS: *Zoo-Ecology, Content, Meaning, Education, Human, Animal, Bond, Relation, Nature, Environment, Issues, Behavior, Wellbeing, Emotional, Psychological, Physical. Pets, Horse.*

INTRODUCTION

While studying zoo-ecology one must be more attentive in describing the term itself. “zoo” includes the animal world. It is very wide issue. And in order to describe environment of the animal world, first of all we have to distinguish the division or the types of the animal world. We know there are two types of animals in nature. They are : **[1]**

1. Wild animal world;

2. Domestic animal world. Like human’s environment, animals also have their own environment. Environment may be different. For example, natural, social, national, governmental, tribal, historical, traditional, local, and family environments. They all differ from each other in content and in meaning.

This article deals with the zoo-ecology and its meaning and content. A lot of scientific investigations have been carried out in this field of science. Practically, zoo-ecological education has its own ways of investigation. **[2]**

Zoo-ecology is a branch of ecology dealing with the relation of animals to their environment and to other animals.

In nature animal relationships with human go back to far history. According to the Human – Animal Bond research Institute (HARBI) the human –animal bond is a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors that are essential to the health and wellbeing of both. The emotional, psychological, and physical connections people have with the animal world. **[3]**

Humans have always exhibited a fascination with animals. Ancient cave art in Borneo depicting bovine –type creatures and domestication of animals illustrate how animals have played a significant role in human civilization for thousands of years. While human relationships with animals continue to evolve, there is a wealth of knowledge gathered from the historical and scientific aspects of the human-animal bond. Acknowledging these aspects increases the strength of the human-animal bond and improves the ability of the veterinary team to provide the highest quality of patient care. **[4]**

What is the Human-Animal Bond?- According to the Human-Animal Bond Research the emotional, psychological, and physical connections people have with animals and the environment are also incorporated into the definition of the human-animal bond. Relationships between human and animals vary, ranging from non-pat animals used in production and service to the most doted upon family pets, with the majority of animals' owners in the middle of this range. Therefore, relationships and attachments can vary among people and the animals in their lives. These relationships are also situational and conditional, depending on how humans view the animal. For example, a dedicated dog owner may enjoy a medium-rare steak, but balk at the thought of eating horse meat. The historical and scientific context behind the human-animal bond provides a deeper, understanding of the relationships between humans and animals, offers insight into how fulfilling this bond can be, and helps the veterinary team better integrate the bond into clinical culture. **[5]**

Why animals? – Human's desire secure connections and will seek attachment from inanimate objects and / or living organisms. Although human attraction toward living entities may vary, people are still interested in learning more about animals. One explanation of this interest and attraction is the biophilia hypothesis introduced by American ecologist E.O. Wilson in 1984. **[5]**

Biophilia is defined as the human inclination to dixate on various aspects of natural life, combining emotional tendencies for living beings and nature. **[6]**

The Human-Animal Bond is a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors essential to the health and wellbeing to both. This includes, among other things, emotional, psychological, and physical interactions of people, animals, and the environment. The veterinarian's role in the human-animal bond is to maximize the potentials of this relationship between people and animals. **[7]**

The AVMA recognizes: (1)the existence of the human-animal bond and its importance to client and community health, (2) that the human-animal bond has existed for thousands of years, and (3)that the human-animal bond has major significance for veterinary medicine service society, it fulfills both human and animal needs. **[8]**

Issues related to the human-animal bond are considered by the Steering Community of Human-Animal Interactions (SCHAI) with staff support from the Animal Welfare Division. The American Veterinary Medical Association has adopted a range of policies that relate to the human-animal bond. **[9]**

Mental- Health Benefits of the Human Animal- Bond. The human –animal bond is often used to describe the relationship shared between people and animals. Pet owners know it is so much more than a relationship and anyone who has ever loved a companion animal felt the strength of the human-animal bond. **[10]**

Our unique relationships with our pets can influence physical, social, emotional, psychological, and mental well-being for us and for them.

May be our pets can't tell us how they feel but research can tell us our companions feel the impact of the human-animal bond too. The human-animal bond also benefits our furry companions. Oxytocin is a hormone found in humans, cats and dogs. It is often referred to as "the love hormone" and plays a significant role in human bonding and might help explain how our pets feel about us. Studies have showed an increase in oxytocin levels in dogs after gazing into their owner's eyes and an increase in oxytocin levels in cats playing with their owners. **[11]**

The emotional strength of the human-animal bond may be difficult to describe to someone who has never shared a relationship with a pet but almost every pet owner recognizes unconditional love as a key component of the bond. Our pets offer friendship and love without judgment; they keepour secrets and listen to our fears, they are quick to forgive us when we make a mistake; and they don't hold it against us (although something I think my cat might hold it against me when I feed him later than usual).The bond we have with our pets can also provide us comfort and a sense of security. **[12]**

The psychological benefits- The psychological benefits of the human – animal bond have been indirectly recognized for many years. Even Sigmun Freud reportedly had his Chow- Chow, Lofi attend some of his sessions with clients. **[13]**

Today, the psychological benefits of the human-animal bond are well-known,

acknowledged, and actively studied. There are many therapeutic providers that offer animal assisted therapy sessions and many hospitals have a team of therapy dogs that can visit patients in the hospital. Teams of handlers and therapy dogs are often found comforting victims after a major natural disaster and a regular team of therapy dogs could be found on Boyliston Street Boston after the traumatic Boston Marathon in 2013. **[14]**

Although the benefits of the human-animal bond are becoming more recognized.

By society, it's important to acknowledge that everyone's relationship with their pet is unique and special.

Improvement in Mental Health-The human-an-mal bond has also been known to improve our mental health. Pets can improve symptoms to depression, anxiety PTSD, they can decrease feelings of loneliness. Pets can also improve our physical health. According to the Center for Disease Control (CDS) , pet ownership can lower blood pressure and can positively influence our rate of physical activity. **[15]** Our Compositions help us cope with stress which can improve cardiovascular health, For older adults, the human-animal bond has been directly linked you healthy aging. Pets can decrease isolation and improve social wellbeing among older adults. In settings where pet ownership may not be ideal, visitation from therapy animals can also have a significant impact on wellbeing. Therapy animals can improve quality of life for both the handler and the patients that are visited. **[16]**

Although the benefits of the human-animal bond and becoming more recognized by society, it’s improvement to acknowledge that everyone’s relationship with their pet is unique and special. Some people may consider their pet to be their best friend, a family member or like a child. Others may rely on their companion as a sours of emotional support, a connection to the past, or even hope for the future. Anyone who has ever loved an animal understands the unspoken strength of the human-animal bond. **[17]**

A few words can be written about other animals-horses. Horses may not love each other in the same capacity of a human loving another human. Certainly feel and- give affection. It is about that any relationship of a horse and human being. **[18]**

CONCLUSION

Subsequently, the love you feel for your horse may not be exactly reciprocated. But a horse can certainly feel-and give-affection. It’s about trust. Like any relationship, don’t rush things. Your horse has to trust you in order to let you get close. It is not easy for a horse. As pray animals by nature, their instincts are to be on guard. Take your time and build up trust between you and your horse. **[19]**

Longtime horseman Franklin Levinson from “Way of the Horse “writes that “love, respect and trust are basically the same thing for a horse”. These things must be earned. His advice to his readers is that horses respect leadership and this can be done by a directing movement on the ground before attempting to ride. “Unfortunately, it is always the first thing done with horses “; he writes, “when it should be the last, gaining knowledge of horses should always be the first thing taught”. **[20]**

REFERENCES

1. Zhabborova OM, Umarova ZA. Content Of Children's Pedagogy And Its Measures In A Cluster Method. Academic research in educational sciences, CSPI conference. 2021;1: 59-62.
2. Mardonov Sh K, Zhabborova OM. Innovative Cluster Method Of Preparation Of Future Primary School Teachers. Academic research in educational sciences, CSPI conference. 2021;1:142-145.
3. Zhabborova OM. Mechanisms Of Using The Cluster Method In Primary Education. Academic research in educational sciences, CSPI conference. 2021;1:63-67.
4. Zhabborova OM, Umarova ZA. Cluster Method Of English Learning In Primary Schools. Academic research in educational sciences, CSPI conference. 2021;1:68-71.
5. Mardonov ShK, Zhabborova OM. Innovative Approaches To Foreign Language Learning In Higher Primary Education. Academic research in educational sciences, CSPI conference. 2021; 1:119-121.
6. Zhabborova OM. In The Credit-Module System Of Kitish Ў Principles Of Selection Of Students. Academic Research In Educational Sciences, 2021;2 (6):1095-1099.
7. Zhabborova OM. Electronic-Module Methods Of Distance In Primary Education. Academic Research In Educational Sciences, 2021;2 (5):1294-1299.
8. Zhabborova O, Ташпулатова Д. Qualification requirements for primary school teachers. Economics and Socialism, 2021;5(84).

9. Karimjonov A, Жабборова O. Jan Amos Komensky's views on education. Economics and Sociology, 2021;5(84).

10. Zhabborova OM, Ahmedova NSh. Factors of educating primary school students on the basis of national ideas. Economics and Socialism, 2021;4(83).

11. Jabborova OM. Systems for The Development of Primary Education in The Process of Higher Pedagogical Education. The American Journal of Social Science and Education Innovations, 2021;3(04):449-453.

12. Jabborova OM, Mardonov ShQ. Ta'lim jarayoniga innovatsiyalarni tatbiq qilishning tashkiliy-pedagogik jihatlari. Xalq ta'limi jurnali, 2021;(2).

13. Zhabborova OM. Professional training of future teachers of fine arts in difficult conditions. Economics and Socialism, 2021;4(83).

14. Zhabborova OM. Integration issues in primary education. Academic research in educational sciences, 2021;2 (4):702-706.

15. Zhabborova OM, Bakhtiyorova SЭ. A new system of approaches to teaching foreign languages in primary education. Academic research in educational sciences, 2021;2(3):1040-1045.

16. Zhabborova OM, Tashpulatova DM. Pedagogical interpretation of the new ideology of Uzbekistan. Academic research in educational sciences, 2021;2 (3):584-589.

17. Zhabborova OM, Tashpulatova DM. Requirements for primary school teachers. Academic research in educational sciences, 2021;2(2).

18. Zhabborova OM, Chimpulatova ChD. Cluster teaching of primary education. Academic research in educational sciences, 2021;2(1).

19. Zhabborova OM, Umarova ZA. Resolving pedagogical conflicts in the teaching of the "educational" fan cluster method. Academic research in educational sciences, 2021;2 (1).

20. Jabborova OM, Umarova ZA. Pedagogical conflicts in primary school students-as an important social-pedagogical problem. European Journal of Molecular & Clinical Medicine, 2021;7(2):516-523.

THE COURSE OF ANEMIC SYNDROME IN RHEUMATOID ARTHRITIS

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ABSTRACT

This article discusses the course of anemia syndrome in rheumatoid arthritis and its consequences, causes, diagnosis, and prevention. Rheumatoid arthritis (RA) is one of the most common inflammatory diseases of the joints, occupying about 10% in the structure of rheumatological pathology. It is not only a medical but also an economic problem, since the onset of the disease in most cases is observed in people of working age.

KEYWORDS: *Anemia Syndrome, Rheumatoid Arthritis, Consequences, Causes, Diagnosis, Prevention, Articular Syndrome.*

INTRODUCTION

Recent studies have shown the leading role of cytokines and other mediators of inflammation in the development of not only the articular syndrome, but also the entire range of systemic manifestations of this disease. Based on the data obtained, fundamentally new and more effective drugs were developed and introduced into clinical practice, the action of which is based on the anticytokine principle **[1,2].** However, despite these advances, a number of questions regarding the pathogenesis of individual manifestations of RA and especially their treatment remain open. These include the problem of anemic syndrome - a frequent companion of rheumatoid inflammation.

Main part

Epidemiology According to the literature **[3],** anemia develops in 30–70% of patients with RA. In this case, anemia of chronic disease (ACD) is most often diagnosed - 25-64% of cases **[4, 5],** iron-deficiency anemia (IDA) - 36-48.4% **[6]** and B12-deficiency - 24-29% **[7]**. Cases of development of mixed, aplastic and hemolytic anemias are also described **[8, 9].** The results of our study showed that 57 (64%) of the 89 examined patients with RA were diagnosed with anemia. At the same time, IDA was detected in 32 (56%) patients, ACD - in 14 (25%), mixed - in 11 (19%). Pathogenesis Change in iron metabolism It is believed that the leading role in the development of anemia in RA is played by a change in iron metabolism, a shortening of the life of erythrocytes, and their inadequate production by the bone marrow (BM) **[10].** This may be due to exposure to various pro-inflammatory cytokines such as interferon-γ, interleukins (IL), tumor necrosis factor-α (TNF-α) (tumor necrosis factor (TNF)). The level of these cytokines and activity significantly increase in RA. In recent years, it has been established that hepcidin, a 25-amino acid peptide synthesized in the liver, plays the role of a universal humoral regulator of iron metabolism **[11, 12].** The relationship between hepcidin and iron metabolism was first described by C. Pigeon et al. [**4].** It has been noted that under the action of pro-inflammatory cytokines, in particular IL-6, hepcidin hyperproduction occurs, which blocks the receptors of ferroportin, a transmembrane protein that transports iron adsorbed by enterocytes into the blood. This assumption was confirmed in an in vitro experiment, in which the regulatory functions of ferroportin and hepcidin were studied. The authors used 59Fe-labeled rat erythrocytes that were phagocytosed by macrophages. The results showed that about 70% of 59Fe is released into the blood, which is associated with the regulatory function of ferroportin. It was noted that the effect of hepcidin on macrophages led to a decrease in the level of ferroportin and a decrease in the amount of 59Fe in the blood. A similar effect was found when mice were injected with synthetic hepcidin.

Changes in iron metabolism can also occur as a result of an increase in the phagocytic activity of macrophages. There is evidence that this is facilitated by IL-1, which, acting on neutrophils, leads to the release of lactoferrin from them; the latter binds free iron and delivers it not to erythrocytes, but to macrophages. Shortening the life span of erythrocytes A certain role in the development of anemia in patients with RA is played by a shortening of the life span of erythrocytes, which is probably associated with an increase in the activity of the reticuloendothelial system and increased phagocytosis. The results of studies have shown that the inflammatory mediator prostaglandin E2 activates Ca2+ permeable cationic and Ca2+ sensitive K+ channels, resulting in hyperpolarization of the erythrocyte membrane. This leads to a shift of phosphatidylserine from the inner to the outer cell membrane, where it acts as a receptor that attracts macrophages. This is followed by recognition of erythrocytes by macrophages with their subsequent phagocytosis. In an experiment on mice, it was shown that the introduction of TNF-α or endotoxin also shortens the life of erythrocytes **[13].**

The role of pro-inflammatory cytokines The results of a number of studies have shown that the development of anemia in RA may be associated with the ability of pro-inflammatory cytokines to disrupt the formation of erythrocytes. One of the mechanisms for this may be the redistribution of iron (decrease in the amount of Fe2+ required for the synthesis of heme in the blood serum with its sufficient content in the depot). It is known that the main source of iron for heme synthesis in erythroblasts is iron-containing macrophages (siderophages), which receive Fe2+ ions from phagocytized old erythrocytes or from transferrin protein circulating in the blood. It is under the influence of pro-inflammatory cytokines IL-1 and TNF-α that excessive activation of siderophages occurs, which enhances phagocytosis and blocks their ability to transfer iron to erythroblasts. The direct toxic effect of cytokines on erythropoietin can also lead to the development of anemia. In particular, macrophage inflammatory protein 1α has such an effect, the level of which in the blood serum of RA patients with anemia is significantly higher than in patients without anemia. It was also shown that in patients suffering from RA and anemia, an increase in the level of TNF-α in the blood was accompanied by a decrease in the concentration of serum erythropoietin. This allowed the authors to suggest that TNF-α inhibits the production of this colony-stimulating factor. There is evidence that inflammatory cytokines also have an inhibitory effect on erythropoietin receptors and related intracellular signal transduction mechanisms (mitogen and tyrosine kinase phosphorylation) and thus inhibit cell proliferation. Papadaki H.A. et al. in patients with RA and anemia, an increase in the number of apoptotic and a decrease in the number of normal CD34+/CD71+ and CD36+/glycoprotein A+ cells was found in the BM [24]. At the same time, a decrease in the number of colony-forming erythroid units (CFUe) was also observed. At the same time, a positive correlation was found between the level of TNF-α and the number of apoptotic cells, and a negative one – with the number of CFUe and the level of hemoglobin. On this basis, the authors concluded that TNF-α causes apoptosis of erythroid precursors in the BM, which leads to a decrease in hemoglobin levels. The results of our study also showed an increase in the levels of pro-inflammatory cytokines in RA patients with reduced hemoglobin levels, which can trigger a cascade of pathological reactions leading to the development of anemia. Thus, in patients with RA and anemia, an increase in the concentrations of TNF-α (32.54±9.71; 7.69±3.45 pg/ml, respectively) and IL-1 (166.32±18.54; 102.28 ±16.34 pg/ml, respectively) compared with patients with normal hemoglobin levels. **[14]**

The influence of medicines The development of anemia may also be due to the effects of medications used to treat RA. Methotrexate, which is the "gold standard" for the treatment of RA, can have a toxic effect on CM and blood cells, causing anemia. Especially often methotrexate, being a powerful inhibitor of dihydrofolate reductase, causes megaloblastic anemia. This drug disrupts the methylation process of deoxyuridine monophosphate, as a result of which the latter is phosphorylated and converted into deoxyuridine triphosphate, which accumulates in the cell and is integrated into DNA. As a result, defective DNA appears, in which thymidine is partially replaced by uridine, which leads to megaloblastic anemia. According to some data, even small doses of methotrexate (12.5±5.0 mg/week) can cause anemia. At the same time, there is evidence of the safety of low doses of methotrexate and even an increase in hemoglobin levels in the treatment of elderly patients (mean age 78.8 years) suffering from RA. So, in 33 patients taking methotrexate for 2 years at a dose of 7.5 mg/week, an increase in hemoglobin concentration from 124 to 130 g/l was registered. The results of our study revealed a phase relationship between the duration of methotrexate intake and the level of hemoglobin. It was found that with a duration of methotrexate intake ≤1 g, the hemoglobin concentration remains within the normal range. At the same time, with the duration of methotrexate intake for 1–3 years, a significant decrease in hemoglobin concentration is observed, which may be associated with the toxic effect of the drug, and when taken for >3 years, this indicator normalizes, probably due to inhibition of the production of pro-inflammatory cytokines and decrease in RA activity. The use of sulfasalazine and gold preparations can also lead to anemia (often aplastic). Nurmohammed M.T. et al. registered severe pancytopenia in a patient taking sulfasalazine for 4 months; while the hemoglobin level barely exceeded 54 g/l. Another study noted the development of pancytopenia in 7 out of 10 RA patients taking gold preparations. Inhibition of CM function can also be provoked by azathioprine. This drug is also capable of causing displacement of phosphatidylserine into the outer shell of the erythrocyte, shrinkage of the cell, and later its death. The use of aminoquinoline drugs, on the one hand, can lead to disruption of erythropoietin production and, accordingly, to the development of anemia, on the other hand, these drugs have an anti-inflammatory effect, causing a decrease in the concentration of IL-1, IL-6, which reduces the activity of RA, the severity of articular manifestations and anemia.

Diagnostics As already mentioned, most often with RA, either ACD or IDA develop. Since they have similar clinical and laboratory features, this complicates the differential diagnosis. At the same time, it is believed that ACD is, as a rule, normocytic and moderately hypochromic in nature, the serum iron content in this anemia can be slightly reduced, and the total serum iron-binding capacity (TIBC) is usually within the normal range or moderately reduced, the ferritin concentration corresponds to normal or slightly increased. With true iron deficiency, anemia is always hypochromic microcytic, it is accompanied by an increase in TIBC and a decrease in the concentration of ferritin. The results of our study also showed that in the blood serum of patients with RA and IDA, microcytosis and hypochromia of erythrocytes, a decrease in iron and ferritin levels, an increase in TIBC, transferrin and erythropoietin concentrations are observed. With ACD, the normal sizes of erythrocytes, the levels of color index, iron, TIBC, transferrin, elevated / normal ferritin levels, an increase in the concentration of erythropoietin and its relative insufficiency are recorded. The greatest difficulty in diagnosis is mixed anemia, since it combines the signs of IDA and ACD. So, according to Simek M. et al., the level of serum iron in patients with mixed anemia (4.4±5.3 mmol/l) did not differ from its indicators in patients with IDA (3.4±1.69 mmol/l) and AChZ (4.6±2.7 mmol/l). At the same time, the iron concentration in blood serum in patients with ACD (4.6±2.7 mmol/l) was significantly higher compared to that in IDA (3.4±1.69 mmol/l). The results of our study showed that mixed anemia is normo-/hypochromic, normo-/microcytic in nature, characterized by a decrease in iron levels, a reduced/normal level of ferritin, an increase/normal FBC, an increased/normal concentration of transferrin, and a relative deficiency of erythropoietin. Since most laboratory parameters in mixed anemia are multidirectional (combining signs of IDA and ACD), we came to the conclusion that for its early diagnosis it is necessary to use the following criteria: a combination of low iron levels with a reduced / normal ferritin concentration and a relative deficiency of erythropoietin in the blood serum .

Prevention In the prevention of anemia in RA, one of the main places is occupied by adequate treatment of the underlying disease. According to some authors, the use of a new generation of drugs for the treatment of RA - disease-modifying drugs - allows you to increase the concentration of hemoglobin. Thus, when infliximab, a TNF-α antagonist, was added to the basic therapy with methotrexate, in patients with RA and anemia, the hemoglobin level significantly (p=0.0001) increased by 10–20 g/l. Another TNF-α antagonist, etanercept, also has a positive effect on hemoglobin levels. Folic acid is prescribed to patients receiving methotrexate both in the case of the development of folic acid deficiency anemia and for its prevention, which not only eliminates its deficiency, but also reduces the toxicity of the cytostatic. Calcium folinate, an antidote for folic acid antagonists, can be used to treat and prevent megaloblastic anemia in RA patients. It contributes to the restoration of folate metabolism, prevents damage to CM cells, protects hematopoiesis, restores the biosynthesis of nucleic acids and compensates for the deficiency of folic acid in the body. Treatment Given the high incidence of anemia in patients suffering from RA, the development of methods for its correction is an urgent issue. Successful treatment of the underlying disease that caused the development of anemia, as a rule, allows to normalize the existing hematological disorders. If effective treatment of the underlying disease is not possible, therapy aimed at correcting anemia is used. Correction of low iron levels primarily consists in eliminating the possible causes of its occurrence. In the presence of IDA, patients are prescribed oral or parenteral forms of iron preparations. The latter are used when oral forms are poorly tolerated or their absorption in the intestine is limited (for example, inflammatory changes in the gastrointestinal tract (GIT)). To prevent the development of IDA, it is recommended to eat foods containing a large amount of iron, and vitamins that improve its absorption.

Currently, the issue of choosing an iron preparation remains relevant, the oral forms of which can be represented by ionic salt forms of Fe2+ or non-ionic ones - developed on the basis of the hydroxide-polymaltose complex (HPC) Fe3+. There is a fundamental difference in the metabolism of these drugs. Thus, due to its low molecular weight, the absorption of salt forms of Fe2+ is a passive uncontrolled process, which can lead to their excessive accumulation and overdose. At the same time, due to the Fe2+ oxidation reaction, free radicals are formed, which can damage the gastrointestinal mucosa, which can subsequently block the absorption of many trace elements, incl. and the iron itself. The features of HPA Fe3+ are its high molecular weight, the presence of an iron hydroxide core surrounded by a polymaltose shell, which limits its absorption, and therefore their overdose becomes almost impossible. When they are used, there is also no stage of oxidation with the transition of Fe2+ to Fe3+, and, accordingly, the release of free radicals. All this significantly reduces the risk of adverse reactions characteristic of iron salt preparations. So, Jacobs P. et al. compared the effectiveness of IDA treatment with preparations containing ferrous sulfate (Group 1) and GPA (Group 2). The results of the study showed that there were no significant differences in the increase in hemoglobin levels between the groups (group 1 - 121±11 g/l, group 2 - 123±15 g/l, $p>0.05$). At the same time, the ferritin concentration was significantly higher ($p<0.05$) in patients of the 1st group (12.1±11.3 ng/ml) compared with the 2nd (5.5±4.9 ng/ml). The incidence of side effects from the gastrointestinal tract was also significantly higher ($p<0.05$) in the 1st group (44.7%) than in the 2nd (17.5%). Human recombinant erythropoietin (HRE) is successfully used in the treatment of ACD. According to some authors, the clinical effect of erythropoietin therapy is not only in the correction of anemia and a decrease in the need for blood transfusions, but also in a possible positive effect on the course of the underlying disease due to interaction with the cytokine signaling cascade. So, in the observation of Kaltwasser J. et al. treatment of RA patients with TRE resulted not only in an increase in hemoglobin levels, but also in a decrease in the activity of the underlying disease.

CONCLUSION

The results of our study also showed that the use of iron preparations in the treatment of IDA, TRE in the treatment of ACD, and a combination of these groups of drugs in the treatment of mixed anemia allowed normalization of hemoglobin levels and iron metabolism in most patients. However, despite the normalization of the hemoglobin level, the objective data of RA activity did not significantly change after the therapy, while after 3 months. maintenance therapy, a significant decrease in both clinical and laboratory-instrumental indicators of RA activity was noted.

REFERENCES:

1. Kovalenko VM, Kornatsky VM. Diseases of the circulatory system: dynamics and analysis. Analytical and statistical manual. 2008. pp. 66–79.

2. Smolen JS. Landewé R, Breedveld FC. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs. Ann Rheum Dis. 2011;70:1519.
3. Kovalenko VM, Kuzmina GP, Markova OYa. Probability of development of cytokine-mediated anemic syndrome in animals with rheumatoid arthritis. Ukrainian Journal of Rheumatology. 2010;2(40):33–38.
4. Doyle MK, Rahman MU, Han C. Anemia in early rheumatoid arthritis is associated with interleukin 6-mediated bone marrow suppression, but has no effect on disease course or mortality. J Rheumatol. 2008;3:380–386.
5. Nikolaisen C, Figenschau Y, Nossent JC. The differentiation of anaemia in rheumatoid arthritis: parameters of iron-deficiency in an Indian rheumatoid arthritis population. Rheumatol Int. 2008;6:507–511.
6. Tandra M, Srivastava A. Iron deficiency in rheumatoid arthritic patients especially with in the middle Age. International Journal of Systems Biology. 2010;2:1–5.
7. Bloxham E, Vagadia V, Scott K. Anaemia in rheumatoid arthritis: can we afford to ignore it? Postgrad Med J. 2011;87:596–600.
8. Vucelić V, Stancić V, Ledinsky M. Combined megaloblastic and immunohemolytic anemia associated--a case report. Acta Clin Croat. 2008;(4):239–243.
9. Santen S, Dongen-Lases E, Vegt F. Hepcidin and hemoglobin content parameters in the diagnosis of iron deficiency in rheumatoid arthritis patients with anemia. Arthritis & Rheumatisn. 2011;63:3672–3680.
10. Raj DS. Role of Interleukin-6 in the Anemia of Chronic Disease. Semin Arthritis Rheum. 2009;(5):382–388.
11. Sun CC, Vaja V, Babitt JL, Lin HY. Targeting the hepcidin-ferroportin axis to develop new treatment strategies for anemia of chronic disease and anemia of inflammation. Am J Hematol. 2012;87:392–400.
12. Theurl I, Schroll A, Nairz M. Pathways for the regulation of hepcidin expression in anemia of chronic disease and iron deficiency anemia in vivo. Haematologica. 2011;96:1761–1769.
13. Мадашева, АГ, Махмудова АД. Биохимические показатели у больных гемофилией с мышечными патологиями до и после лечения. Форум молодых ученых, 2021;(4):233-238.
14. Madasheva AG, Zhuraeva MZ. Biochemical indicators and complex treatment of patients with psoriasis with therapeutic plasmapheresis. Achievements of science and education, 2019;10(51):78-82.

THE CHEMICAL COMPOSITION OF FIGS AND ITS IMPORTANCE IN TRADITIONAL MEDICINE

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ABSTRACT

This article provides information about the natural compounds and chemical elements that make up the fig. There are also methods of treating figs in folk medicine and modern medicine. The healing properties of the fig fruit have been known and popular since ancient times. In folk medicine, figs are widely used in the treatment of inflammation of the liver, spleen and lungs. It is also widely used in medicine. The benefits of figs for women and their bodies are incomparable. If you have painful menstruation during the period, eat 3 figs a day - menstruation will soon return to normal.

KEYWORDS: *Figs, Carbohydrate, Vitamin, Fig Leaves, Iron, Selenium.*

INTRODUCTION

Figs are one of the most delicious and useful and healing fruits. Figs contain chemical elements that are important for the human body, along with carbohydrates, fats, proteins and vitamins. Of these, iron, selenium, magnesium, ph noosphorus, potassium, sodium, zinc, copper, manganese are the most common. It was found that the amount of these elements varies depending on the type of fig and climatic conditions. **[1]**

There are several main varieties of figs:

Crimean black - fruits weighing 80 g, almost black, very sweet.

Dalmatian - the fruits are large (about 180 g), pear-shaped, the color of the shell is green, the flesh is red.

Early gray - the fruits weigh up to 40 g, the color - light brown, the berries can be purple.

Randino - olive-colored fruit, weight - about 100 g.

Abkhazian purple color - late variety, the fruit weighs up to 80 g.

Kadota - green-skinned fruit, pink body, weight - about 70 g.

The ingredients in the fruit help control the skin's sensitivity to ultraviolet radiation, so it is recommended to use figs before the bathing season. This helps to form a flat body. The fruit contains melanin, which protects the body from the harmful effects of sunlight. Figur-based maskshelp maintain skin elasticity and have a rejuvenating effect. **[2]**

The amounts of 10 chemical elements in yellow figs grown in Uzbekistan are given in Table 1

TABLE 1 THE AMOUNT OF CHEMICAL ELEMENTS IN THE FRUIT OF YELLOW FIG (FICUS CARICA), MG (RELATIVE TO 100 MG)

№	Name of element	Amount	№	Name of element	Amount
1	calcium	0,35	6	Sodium	1,0
2	Iron material	0,4	7	Spirit	0,2
3	magnesium	17	8	Coppor	0,1
4	Phosphorus	14	9	Manganese	0,1
5	Potassium	23,2	10	Selenium	0,2

The content of 8 organic substances in yellow figs grown in Uzbekistan is given in Table 2.

TABLE 2 THE AMOUNT OF ORGANIC MATTER IN THE FRUIT OF YELLOW FIG (FICUS CARICA), MG (RELATIVE TO 100 MG)

№	Name of element	Amount	№	Name of element	Amount
1	Protein	3	5	carbohydrate	58
2	Fat	0,8	6	sucrose	55
3	Hun fiber	18	7	starch	3
4	saturated acid	2,4	8	unsaturated acids	2

The healing properties of the fig fruit have been known and popular since ancient times. In folk medicine, figs are widely used in the treatment of inflammation of the liver, spleen and lungs. It is also widely used in medicine. The peculiarity of figs is that its honey has a multifaceted effect like honey. Figs have diuretic properties and also prevent excessive sweating. Mild poisoning can be treated with figs. This is because its substances improve gastrointestinal function and expel toxins from it, resulting in improved kidney and liver function.

hot milk is poured on it, infused for half an hour and given to the patient before meals. This blessing also has the property of reducing fever. To do this, the patient should drink a drop of dried figs. Figs reduce the amount of cholesterol in the blood. It is therefore a means of preventing cardiovascular disease and obesity. This boon benefits the mine in anemia due to the presence of large amounts of iron. Figs are also recommended for asthma, lung pain and wheezing. Consume up to 300 grams of its wet fruit and up to 120 grams of dried fruit at the same time possible. **[3]**

On the healing properties of figs, Ibn Sina spoke of drinking its milky juice as a diuretic and washes away kidney stones. Fig juice cures tumors that are difficult to absorb. Eating figs before meals rejuvenates the body and softens the stomach. In folk medicine, not only the fruit but also the leaves of the fig tree are used medicinally. Figs are rich in vitamin C, which strengthens the immune system and protects against viruses. Ripe and mixed fruits of figs are used in anemia. Figs are a rich source of tryptophan, which is essential for optimal brain function and mental health. According to some scientists, tryptophan prevents aging because an adequate amount of it in the diet slows down the aging process of the cells. Furalen from fig leaves is used in the treatment of vitiligo. Decoction of figs helps in diseases of the kidneys and urinary tract, gastritis and constipation. In the medicine of many countries, open wounds are treated with the milky juice of fig leaves. Decoction made from dried seeds is used in postpartum hemorrhage and gastrointestinal diseases. A fresh tincture made from a mixture of its nettle leaves is widely used in dysentery and inflammatory diseases of the intestinal mucosa. Like other fruits, it isthe fruit also contains many antioxidant compounds. Antioxidants play a very important role in maintaining good health: they reduce the risk of vascular and heart disease, inflammatory diseases, tumors and many other diseases, and it is an excellent anti-aging tool. **[4]**

Figs are high in iron and help prevent anemiais useful. The magnesium and potassium contained in figs provide the necessary substances to the muscle tissue and improve the activity of the heart muscle, which has a positive effect in the prevention and treatment of tachycardia. helps to normalize. Hence, figs are recommended in the treatment of urinary incontinence, anemia, sore throat and cough, gastrointestinal diseases.

Relieves constipation. Figs are very useful for the gastrointestinal tract, as it helps fight constipation. It contains substances involved in the digestive process. Soluble fiber helps the body very well as it helps to moisten the hardened stool, which prevents constipation and, if present, can get rid of the disease

Lowers cholesterol. Figs contain substances that help lower cholesterol in the body. Pectin is a soluble fiber that binds cholesterol and helps remove it from the body along with feces. It also contains compounds that are natural alternatives to drugs that help lower phytosterols, cholesterol and triglycerides**.**

Useful for diabetes. The glycemic index of this product is very low, so it is allowed to use in diabetes (if you do not overeat), even if the fruit contains a lot of sugar. Figs do not adversely affect blood sugar and do not increase it. Potassium in figs plays a supporting role as it is involved in the process of glucose uptake.

Dental diseases. Decoction of the fruit and keeping it warm in the mouth eliminates the cocoon binding of the gums. There are benefits to using milk when it is working.

Paralysis. Boil figs and radishes together, collect them after cooking, add 100 g of honey to the water and boil it, and drink the prepared tincture 2-3 times a day to prevent paralysis.

Wounds. Boiling figs and drinking water and washing the wound is effective in healing purulent wounds. Take a tablespoon of dried fruit, grind it, put it in two cups of boiling water and boil for 10 minutes. It cools down after cooling and rinses the mouth to help heal various sores in the mouth. The prepared solution is soaked in gauze and applied to the skin wounds. **[5]**

Fresh figs help relieve toothache. To do this, cut the fruit in half, remove the pulp and put on the gums for 5–7 minutes. Repeat this 3-4 times and the toothache will gradually disappear. Oriental women use these fruits to whiten tooth enamel. To do this, burn 2–3 fruits on an open fire, collect the ashes and mix with glycerin. Brush your teeth twice a day with the resulting paste and repeat it once a week to see that your teeth are whiter. The benefits of figs for women and their bodies are incomparable. If you have painful menstruation during the period, eat 3 figs a day - menstruation will soon return to normal. For expectant mothers, this fruit contains large amounts of fiber and trace elements. During pregnancy, if you include it in your daily diet, it will reple nish a pregnant woman’s body with enough iron. Helps maintain a normal weight without compromising the health of the baby and the woman.The benefits of figs for men and their bodies are incomparable. Put 5 figs in boiling water, boil for an hour until crushed and strain. Drinking the resulting infusion mixture twice a month can significantly help in the treatment of prostatitis in men.

REFERENCES

1. Vorontsov VV, Uleyskaya LI. Figs and other citrus plants in the house. Moscow: "Fiton", 2008. 144 p.

2. Skurikhin MI, Tutelyan VA. Chemical composition of Russian food products: Handbook. Moscow; 2002. -236 p.

3. IR Askarov. Therapeutic encyclopedia. A classic word. Tashkent; 2019. p.1590.

4. Gencer NS, Coskuncu KS, Kumral NA. The colonization preference and population trends of larval fig psylla, Homotoma ficus L. (Hemiptera: Homotomidae). Journal of Pest Science, 2007;80(1): 1-8.

5. Haydarov QH, Hojimatov QH. Plants of Uzbekistan. Toshkent: O’qituvchi; 1976.

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ACTIVE FORMS OF TRAINING OF TEACHERS OF THE SUBJECT" EDUCATION" DEVELOPING PROFESSIONAL COMPETENCES

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ABSTRACT

The article provides information about the active forms of training of teachers of the science of" education" developing professional competences, as well as their functions in pedagogical and spiritual and educational activities. On the one hand, the student, that is, the object of continuous spiritual education; on the other hand, the teacher of the subject "education", that is, the subject of the concept of continuous spiritual education. It was concluded that for the contribution of each pupil It is necessary to record at least one quality in a week. As a result, there was a rapid recording of the manifestation of moral qualities in readers.

KEYWORDS: *Competence, Personality-Oriented Educational Technology, Concept, Motivational Value, Cognitive, Innovative Thinking, Moral Qualities.*

INTRODUCTION

In the modern concept of teaching Social Sciences, the formation of professional competences or acquired knowledge and skills is emphasized as the practical purpose of applying the usual tasks in the field of social relations. These are: civil and social activities; interpersonal relations; relations between people of different nationalities and religions; in the family and household sphere; the interaction of their actions and actions of other people with the norms established in the law, the promotion and application of legal methods and means of protecting the rule of law in society are in the sentence. **[1]**

As qualification requirements for professional activities of teachers of Educational Sciences:

In pedagogical activity:

-organization and management of social and spiritual and educational work in the team;

-make the right decision in conditions where opinions are different;

-effectively organize and spend students ' free time;

-having the ability to choose different methods of education and training, modern pedagogical technologies wisely, to ensure compliance of methods and technologies with national mentality on the basis of creative approach;

In spiritual and educational activity:

-to plan spiritual and educational work, master the methodology of its organization, integrate the idea of national independence into the minds of students;

-knowledge of methods and technologies for the emergence of immunities against ideological and information attacks in students;

-to carry out explanatory work on the role and impact of information and communication technologies in global processes;

- individual conversation on issues of moral and moral education in the neighborhoods;

-in the conduct of national traditions and rituals, one must have the ability to reveal such high human qualities as universal values, kindness, tolerance, patriotism, loyalty-the condition of the league is established.

At present, existing and newly developed educational methods of teaching, the introduction of a classification of technologies into higher pedagogical education, practice are being represented as a topical issue. **[2]**

Active forms of training aimed at developing professional competences

№	Types of training	Applicable technologies	The effectiveness of increasing the activity of the audience %		
			Қуйи	Ўрта	Юқори
1	Keys method	Problematic educational technologies		20%	80%
3	Laboratory exercises	Technologies that promote education	12%	40%	48%
4	Seminar sessions	Team training technology	8%	44%	48%
5	Lessons - demonstrations of educational products created individually or in a group (daydjests, mini projects, mini studies, virtual tours, etc.)	Personality-oriented educational technology	2%	13%	85%
6	Practical conferences	Personality-oriented educational technology	18%	26%	56%
7	Online lessons	Information-communicative technology		12%	88%
8	Roll Games	Group training technology		16%	84%

Diagnostic block in the process of professional training includes the degree of development of social competence in the subject teachers "training", the criteria and indicators of this. As a criterion, it includes four components: motivational valued, cognitive, active, professional moral virtue components.

The theory of a step-by-step approach in the process of professional training, taking into account the above-mentioned diagnostic criteria and indicators of the development of social compensations in the teachers of the subject "upbringing" by applying to (M.Koranov, N. Saydahmedov), the levels of Social Competence Development were defined as low, medium, high. **[3]**

As a result of the model developed by us, a graduate student is a teacher of primary education with the necessary skills and certain moral qualities in solving professional tasks. So result-two features are taken into account. On the one hand, the student, that is, the object of continuous spiritual education; on the other hand, the teacher of the subject "education", that is, the subject of the concept of continuous spiritual education. In this subject" methods of educational work " students are required to develop certain moral and moral competences, such as loyalty to the motherland, entrepreneurship, willpower, ideological immunity, compassion, responsibility, tolerance, legal culture, innovative thinking, labor, and at the same time to teach the formation of general secondary education in primary school students on the basis of state educational standards and curricula.

As indicators of the manifestation of the result, students will be able to find non-standard solutions to standard issues and situations related to social competence, work with social sources of information using modern means of communication, including Internet resources; critical understanding of social political, economic, ideological information from various sources, on this basis, to demonstrate their own conclusions, assessments and attitudes; to solve; modern social education, spiritual enlightenment, analysis of ideological phenomena and situations; mastering the usual social roles through participation in role-playing games and trainings that analyze pedagogical situations in practical life; using the acquired knowledge to determine the algorithm of pedagogical based, legally and socially approved behavior and actions in certain situations; fundamental protection of one's point of view, opposition to destructive ideas in the form of "anti-ignorance enlightenment" through participation in discussions, discussions, debates, debates about the reforms carried out in Uzbekistan, the strategy of actions, national idea, spiritual threats; writing creative pedagogical essays and analyzing the issue of social compensation in them; creation and implementation of social educational projects in the school. **[4]**

Co-operative competency is actively implemented in the system of continuing education of the Republic of Uzbekistan. The results of our recorded research revealed that there is a need to develop indicators and indexes of the stages and levels of development of social compensation of teachers of the subject "upbringing" in higher educational institutions. After all, without solving this technological task, the effectiveness of organizational and methodical work in this regard cannot be guaranteed. From the above analysis, including the printouts of the degree of competence used in practice, the stages and levels of the development of social competence of primary education teachers were developed.

Another factor that gives information about the effectiveness of the development of professional and social competences in the teachers of the science of" education "is to teach them to observe and evaluate the dynamics of spiritual moral qualities that are formed in the students on the basis of the concept of" continuous spiritual education". We developed and introduced the algorithm of "mobile method of recording moral qualities in students "to students in academic groups in which experimental-research work is carried out. The essence of this method is as follows: it is known that the head of the primary class does not have the opportunity to note in detail the qualities that are manifested in certain situations in each student. **[5]**

Because, first of all, he can not constantly monitor every student. Secondly, this work takes a lot of time. Thanks to this, teachers were offered a simplified way of doing this: the teacher introduces a special program on his tablet. It includes the list of Primary School students in the class Journal and the list of qualities provided for the upbringing of students in the concept of continuous spiritual education: loyalty to the motherland, entrepreneurship, willpower, ideological immunity, kindness, responsibility, tolerance, legal culture, innovative thinking, labor and other spiritual and moral competences. The third section was left empty.

It was justified to write down the order number of the reader in the journal, depending on the manifestation of the above 10 qualities in this or that reader. It was concluded that for the contribution of each pupil It is necessary to record at least one quality in a week. As a result, there was a rapid recording of the manifestation of moral qualities in readers. The results of this method gave an opportunity to observe the positive and negative qualities that are manifested in the readers.

REFERENCES

1. Ochildiyev A. Ideological landscape of today's world. Tashkent:" world of creativity", 2002. pp.6-29.
2. Juraev N. Ideological immune. Tashkent; "spirituality", 2000. pp.9-15.
3. Kasimova ZH. Pedagogical bases of formation of ideological immunity in student youth: candidate of Pedagogical Sciences. ...the dis. Tashkent: UPFITI, 2004. pp.18-154.
4. Muslimov NA, Sharipov ShS et al. Professional qualifications and pedagogical skills. Educational materials in the direction of continuous professional development. Tashkent: TDPO, 2009. 69 p.
5. Muslimov NA. Professional formation of the teacher of future vocational education. Tashkent: Science publishing house, 2004. 130 p.

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EFFECTIVENESS OF INFORMATION TECHNOLOGY AND USE OF TECHNOLOGIES IN TEACHING GENERAL SCIENCES

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ABSTRACT

The article provides for the enhancement of the quality of education through the use of modern media to offer a range of benefits for the teacher (pedagogue) and students. Using e-learning tools to improve distance learning, electronic textbooks, manuals, and learning curricula have the capability to use in the distance learning. At the same time, they have more independent thinking, more creativity in learning activities.

KEYWORDS: *Distance Learning, Information Technology, E-Mail, Audio-Video Tutorials, Toutor-Consultant, Individual And Differential Diagnostics, Problem-Based Learning Methods, Hypertext And Hypermedia Systems, Electronic Textbook, Internet-Intranet Network.*

INTRODUCTION

The quality of education is expected to be increased as a result of enrichment of teaching methods in the field of higher education. The method of distance learning is a great important for both teacher and students. Internet technologies, such as multimedia, provide the development of computer programs based on the educational materials required for students. The distance education provides access to and use of the latest and most up-to-date methodological literature from worldwide educational institutions. The distance teaching method differs from traditional education. It allows students to study at a convenient time, place and conditions. Curricula for individual and group will be developed regardless of course.

Distance education is the process of acquiring knowledge and skills that facilitates the exchange of learning information through the use of remote learning environments and the implementation of the learning process and management system.

Distance education is an aggregate of information technology that allows students to measure the mainstream content of the learning material, interact independently with students and teachers in the learning process, learn to master the materials they study, and evaluate their knowledge and skills.

Distance education is a remote communication between teachers and students who are involved in the learning process (target, content, method, organizational form, teaching aids, etc.), special tools of Internet technology, and interactivity.

The main purpose of distance learning is to provide students with the opportunity to study at a voluntary international educational institution, wherever they live, to enhance the quality of teaching by faculty members in educational institutions, to ensure continuous education for learners, and to bring together different forms of education.

The difference of distance education system from traditional education system is its high mobility, the greater the mobility of the audience, the richness of the teaching methodology, and the effectiveness of the learning process, regardless of where the audience are.

The method of distance education puts new tasks in front of expert tutors (pedagogues). This is because the regular replenishment of learning materials, the creative approach of educators and innovation, they need to co-ordinate the indicators with the achievements of the world science.

This tutorial is based on the requirement of education, which allows students to work independently, learn more, work independently with the computer, and use creative knowledge, and the acquired knowledge can be checked supplemented and with specialized teaching materials and tests. With a broad introduction of information technologies, distance education also can be implemented in addressing a number of social issues.

The distance education system can include the following: initial organizational work (also possible in conventional order). This includes getting involved with the group, getting to know the audience, testing them for initial learning, organizing access classes, recommending educational resources and other organizational issues;

- Electronic lectures and handouts for students;
- Communication the audience with the tutor-consultant;
- Communication professor - correspondence with the trainees.

This includes advice by email, seminars, electronic testing, independent work of listeners over the Internet, independent work with audio-video tutorials, keep in mind the knowledge in expert system;

- Independent work of listeners;
- Current control (exam);
- Preparation and presentation of graduation paper;
- Presentation of diplomas or certificates to the audience;
- Different teleconferences.

The mobility of the distance learning system creates problems for the planning and management of educational audiences, the use of teaching materials and electronic libraries, the use of global and local computing tools for computer networks, and the effective use of educational materials such as tout or - consultants and teachers' training **[1, p.142 -145].**

The basic principles of organizing distance learning:

- the ability of a volunteer age group to study, ie flexibility in time and space:

-the choice of high quality teaching materials;

- High level of transparency and effectiveness of the teaching process.

Distance education pedagogically:

- is considered as a specific direction;

- Availability of individual and differentiated teaching and learning;

- Psychological characteristics of the student;

- Strengthening the motivation of learners to improve their learning;

- Provision of interdisciplinary continuity;

- Use of problematic teaching methods;

- Enrichment of modern teaching methods;

- It has the ability to be consistently used in group and tactile methods.

Distance education provides of teachers and learners the rights to equalize, select, and freely express their opinions. The challenge of today's education system is to teach the audience how to operate freely in the education environment. To do so, it is necessary to create conditions for them to work independently. It requires the teacher participating in distance learning to gain some knowledge and skills. This knowledge and skills can be divided into four parts:

General knowledge and skills of a teacher in the field of new information technologies:

- To know the working principles of personal computers and their external devices;

- Modern software;

- acquiring the basic principles and software of the Internet;

- Knowledge of methodological materials and scientific literature on the use of new information technologies in education;

- understanding the possibilities of using the computer to manage the learning process;

- analyze the software's didactic capabilities;

- With method of organizing and conducting trainings using new informational technologies;

- Independently search for information on the Internet, various e-books, databases, information search engines and dictionaries;

- selecting, storing and analyzing information;

- apply the information received to the problem solving.

Special knowledge and skills of teachers in the field of Internet technology:

- knowing the basic forms of telecommunication systems and general principles of operation;

- understanding the features of users' access to the Internet at different levels;

- knowing the organization and conduct of teleconsultations;

- knowing telecommunication (etiquette);

- accessing various telecommunications means to communicate with other users;

- having the "navigational" skills in the network;

- working with information resources of the network;

- understanding the features of using software to create distance learning courses;

- working with e-mail;

- communicating with users over the network;

- working with modern hypertext and hypermedia systems;

- distinguishing between educational content within the Internet;

- preparing data for network transfer using various utility and utility utilities.

General knowledge and skills of the teacher in the field of pedagogy and psychology:

- knowing the personal style of distance learning in students' learning activities;

- Knowing factors that determine the effectiveness of students in distance learning; - knowing characteristics of the process of distance learning;

- knowing the features of organizing independent work of students in the Internet environment;

- having the means to communicate with distance learning participants;

- organizing and conducting psychological and pedagogical tests of students;

- creating personal psychological and pedagogical portrait a student;

- Psychological support to learners at the initial stage of the curriculum;

- Formation of small groups based on the psychological compatibility of learners;

- Psychological and pedagogical diagnostics of virtual learning groups;

- creating a good psychological environment within the virtual learning community;

- preventing and minimizing the conflict situations.

The general knowledge and skills of the teacher in the field of new information technologies:

- Modern styles of personality

- learning the methods of collaborative learning, methods of projecting, research methods and other methods;

- having individual, group and frontal methods of education;

- adjust the current form of education used to the Internet;

- combining daily and correspondence forms of education;

- unifying individual, group and frontal forms of education when working with remote students;

- Organization and carrying out telecommunication project;

- organizing and conducting a teleconference as a modeler;

- organizing and conducting a topic chat;

- organizing and conducting monitoring of students' academic activities;

- being able to effectively control the students' knowledge and the system of testing **[2, p.160-165].**

Nowadays, a lot of works are being done in the Republic to organize and conduct distance education. For use in distance learning electronic versions of electronic textbooks, manuals and textbooks created by all professors and teachers and works are underway to improve them.

An electronic textbook, an electronic learning-methodological complex, and, in general, the advantage of the science-based e-learning resources of textbook is that it has an "intellectual" power, as well as an opportunity to present information on time and in the right place. The electronic textbook should have all the relevant teaching materials in a particular subject, and its intellectual level, in turn, offers a number of advantages over a simple textbook. For example, you can quickly find the information, master the theme level by using multimedia and graphic elements, and so on.

Each e-textbook should have a separate look and meet a specific standard requirement. Electronic textbooks can be divided into four categories based on the use of computer-based learning methods and the comprehensive learning of the science curriculum.

Type 1: Provides educational material in the form of verbal (textual);

Type 2: Provides educational material in verbal (two-dimensional) graphics;

Type 3: "Multimedia" multimedia electronic textbook, which is presented in the form of three-dimensional graphic representation, audio, video, animation and partial verbatim;

Type 4: An electronic textbook that teaches the student the ability to enter the real world and to look at the real world described in the "screen world" by means of tactics (sensing, detecting), without being loud and three-dimensional spatial.

All electronic textbooks provide a great opportunity to increase the efficiency of the teaching process and to provide students with independent learning and distance learning.

The main purpose of the use of electronic textbook is to increase the effectiveness, quality and productivity of the educational process through the formation of a new information and educational method, the use of modern information and pedagogical, information and computer technologies, the widely use of electronic textbooks in contemporary educational resources, , practical introduction of distance learning methods and access to the global e-learning system.

The features of the electronic textbook include:

- Presentation of educational material on multimedia, using visual, hypermata, voice formats;

- combining all the textbooks for different types of textbooks, dictionaries, collections of topics and practical and laboratory exercises;

- establishing direct contact between learners and instructors;

- Possibility of installing a part of the tutor's teaching and control functions on the computer training facilities;

- The ability to respond to the student's counseling, explanation, inquiry-seeking information and the ability to quickly control the learning outcomes;

- using computer imaging models of object being studied by computer visualization;

-lack of modifications and improvements to learning materials;

- creating and keeping cheap learning materials;

-increased activity of the student (learner);

- Possibility of distance learning in education;

- Ability to use in conjunction with traditional textbooks (e.g., paper) and its advantages.

Access to eBooks is based on the psychological aspects of communicating with the computer, providing them with educational material in electronic textbooks, and complying with the verbal-logical, sensory-perceptive and expression of the cognitive process.

Also, psychological processes related to consciousness include information acquisition (mainly sight, hearing, feeling), attention (its stagnation, concentration, transformation, distribution and reputation), thinking (theoretical, practical,

- moving), imagination, memory (momentary, short and long term, short-term, short-term memory allocation) and others;

- Electronic textbooks are key to user needs, creative approach to learning and creating optimal working conditions for health **[3, 58-63].**

In summary, we have the opportunity to improve the quality of the learning process using the capabilities of modern media, as well as e-books, manuals, and curriculum-friendly ones. Students will also be able to independently obtain computer skills and timely identify the results of their learning.

REFERENCES:

1. Abdukodirov AA, Pardaev AKh. Theory and operation of distance learning. Tashkent: Fan. 2009. 145p.

2. Tashtemirov DE. Distance learning in the system of vocational education. Problems of using new innovative technologies in the educational process: Proceedings of the international scientific and practical conference. October 30-31, 2009. Republic of Kazakhstan, Shymkent, 2009. pp.160-165.

3. Toshtemirov DE, Toshtemirova N. Methodological tools for the organization of distance learning. Bulletin of GulSU. Guliston, 2009;(2):58-63.

CHEMICAL COMPOSITION OF THE ROSE HIP AND PREPARATION OF USEFUL FOOD COMPOUNDS

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ABSTRACT

This article provides information on the chemical composition, physiological and antioxidant activity, medicinal properties of dried and fresh fruits of rose hip plant. It is advisable to use rose hip instead of such synthetic drugs. Rose hip fruit is also very good for anemia due to its iron content, so two teaspoons of the fruit in a glass of boiling water and drunk three times a day after meals is useful in anemia, kidney, bladder and liver diseases. These potent food supplements have been officially registered by the Ministry of Health of the Republic of Uzbekistan and have been recommended for production and implementation.

KEYWORDS: *Nutrients, Chemical Composition, Biologically Active Substances, Natural Antioxidants, Medicinal Food Additives.*

INTRODUCTION

Today, the production and consumption of various food additives is growing rapidly. This field is also developing in our country, in particular, the chairman of the Academy of Medicine of Uzbekistan, Honored Inventor of Uzbekistan, Doctor of Chemical Sciences, Professor of Andijan State University I.R Askarov and a full member of the Academy of Medicine of Uzbekistan, Doctor of Chemistry, professor of the Latvian Institute of Organic Synthesis F.Polyak, in collaboration with the President of the Latvian Academy of Sciences, Academician I.Calvinshlar, for the first time in the world developed new medicines based on plant substances, such as "AS-QURQUMIN", "ANTIKOVIR", "ANTIVIR 101", "ASKOVIR", "NONI ANTIVIR" invented food additives. These potent food supplements have been officially registered by the Ministry of Health of the Republic of Uzbekistan and have been recommended for production and implementation. These food additives have antioxidant effects, cleanse the blood and liver, for residents of degraded areas, mining metallurgy, chemical industry, mines, workers of manufacturing enterprises with high radiation environment, exposure to harmful elements of the environment, viruses, harmful effective in protecting against the effects of bacteria and microorganisms, chronic fatigue, nervous tension and others. The chemical composition of rose hip is effectively used in the production of such medicinal food additives.

Rose hip is a major helper of the immune system, a source of biologically active substances and trace elements, a multivitamin raw material with natural antioxidant properties **[1].** Infusion made from rose hip strengthens the immune system of the human body, strengthens the cardiovascular system, lowers blood pressure, normalizes the digestive system. It also lowers cholesterol levels, has a positive effect on the regeneration of all organs, intoxicates the body at the cellular level, i.e. Rose hip has a strong antioxidant effect **[2].** The nutrient content of rose hip fruit consists of biologically active substances **[3].** Their amounts are given in Table 1.

TABLE 1 NUTRIENT CONTENT OF ROSE FRUIT, 100 G/MG

Chemical composition	**Dried rose hip fruit**	**Freshly picked rose hip fruit**
Carbohydrates	48,3 г	22,4 г
Proteins	3,4 г	1,6 г
Oils	1,4 г	0,7 г
Dietary fiber	23,2 г	10,8 г
Organic acids	5 г	2,3 г
Water	14 г	60 г
Kul	4,7 г	2,2 г
Energy value	284 kkal	109 kkal

Many diseases are caused by a lack of macro and micro elements in the body. Synthetic drugs are now used to treat such diseases. Excessive use of these drugs can lead to diseases such as salt accumulation in the internal organs, increased cholesterol levels and disorders of gastric function. It is advisable to use rose hip instead of such synthetic drugs **[4].** Rose hip fruit is also very good for anemia due to its iron content, so two teaspoons of the fruit in a glass of boiling water and drunk three times a day after meals is useful in anemia, kidney, bladder and liver diseases **[2].** The composition of rose hip fruit is rich in macro-and micronutrients, the amounts of which are given in Table 2 below.

TABLE 2 QUANTITATIVE CONTENT OF MINERALS OF DRIED AND FRESHLY PICKED FRUITS, 100 G/MG

Chemical composition	**Dried rose hip fruit**	**Freshly picked rose hip fruit**	**Daily demand**
Potassium	50 mg	23 mg	2-5,5 g
Calcium	60 mg	28 mg	0,8-1 g
Magnesium	17 mg	8 mg	0,3-0,4 mg
Sodium	11 mg	5 mg	1,1-3,3 g
Phosphorus	17 mg	8 mg	1,2 g
Iron	3 mg	1,3 mg	14 mg
Manganese	54 mkg	19 mkg	2-5 mg
Mis	220 mkg	113 mkg	2 mg

Rux	0,25 mg	0,26 mg	15 mg
Molybdenum	9000 mkg	4330 mkg	0,075 mg

Rose hip fruit contains useful vitamins [3], the quantitative content of which is given in Table 3.

TABLE 3 THE AMOUNT OF VITAMINS IN ROSE HIP FRUIT, 100 G/MG

Vitamin Names	**Dried rose hip fruit, mg**	**Freshly picked rose hip fruit, mg**
Vitamin E	3,8	1,7
Vitamin C	1000	650
Vitamin A	817	434
Beta carotene	4,9	2,6
Vitamin B1	0,07	0,05
Vitamin B2	0,3	0,13
Vitamin B3	1,4	0,7
Vitamin К	-	25,9
Vitamin PP	1,4	0,7

CONCLUSION

Information on the chemical composition, physiological and antioxidant activity, medicinal properties of dried and fresh fruits of rose hip plant was studied. The data were analyzed, and the results showed that the fruits of peppermint contain 7-10 times more vitamin C than currants and 40-50 times more than lemons.

REFERENCES

1. Askarov IR. Tabobat qomusi. Toshkent. “ Mumtoz So’z”. 2019. 595p.

2. Askarov IR. Sirli Tabobat. Toshkent: “Fan va texnologiyalar nashriyot uyi”. 2021. 283p..

3. Петрова СН, Ивкова АВ. Химический состав и антиоксидантные свойства видов рода Rosa L. Ивановски государственный химико-технологический университет. 2014. pp.13-19.

4. Checheta OV, Snopov SV. Determination of flavonoids in rose hips. Bulletin of the Voronezh State University. Pharmacy. 2011;1:205-209.

MODERN TECHNOLOGIES IN THE ACTIVITY OF A TEACHER-PSYCHOLOGIST

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ABSTRACT

Today, the word "technology" is increasingly used by specialists in the field of pedagogy and psychology. In the psychological literature, this term is either not considered meaningfully at all or it has an ambiguous meaning. This article discusses modern technologies that can be used in the work of teachers and psychologists.

KEYWORDS: *Technology, Activity, Teacher-Psychologist, Development, Method, Modern, Self-Development.*

INTRODUCTION

The term "technology", based on the wording of many literary sources, is understood as art, skill, skill, a set of processing methods, changes in state.

Any activity can be either technology or creativity. It all starts with a creative idea and ends with technology.

The basis of any technology is a clear definition of the ultimate goal. In technology, the goal is seen as a central component **[1]**.

What psychological and pedagogical technologies are most relevant in the work of a teacher-psychologist?

The teacher-psychologist, working with children, constantly focuses on their personality structures. In this area, the specialist uses the following technologies: information, through the use of which knowledge, skills and abilities are formed. Operating technologies provide the formation of ways of mental actions. Technologies of self-development are aimed at the formation of self-governing mechanisms of personality. Heuristic - on the development of the creative abilities of the individual. Applied ones develop effectively - the practical sphere of personality.

Let's consider these technologies in more detail.

Information Technology

In the work of a psychologist, information technology is very relevant.

Thanks to the implementation of the project "Development of a unified educational information environment of the school" for a limited period of time, the education system has achieved significant success in the field of informatization.

With the help of information technologies, the implementation of the main activities of a school psychologist is relevant: diagnostics, consultation, developmental work, education, only the forms and means of their implementation differ significantly from the generally accepted ones. The implementation of the main activities of a school psychologist in the remote service mode occurs through **[2]**:

- Creation of a thematic psychological electronic library for schoolchildren, teachers, parents on topical issues that concern them,

- exhibiting educational, diagnostic materials for children, with which children can work on-line,

- conducting remote psychological actions and competitions,

- Organization of remote counseling for target groups (in particular, it is possible to create the Internet - trust, a special section, when accessed, closed remote communication between a psychologist and a client is possible),

- organizing forums for designated groups, where they could express their opinions, requests, give feedback, get advice

- Organization of distance learning schools

- holding a chat of a team of psychologists with children, parents, holding a remote consultation of a psychologist, teacher, administration, as well as chats, with the involvement of specialists from other cities, conducting teleconferences with teachers, children

- conducting surveys of target groups

- organizing a psychological workshop for target groups

Speaking about the activities of a remote school psychological service, it is important to note that the remote activity of a psychologist with all target groups should correspond to the real activity of a school psychologist at the moment at school, which ensures the integrity of the functioning of all areas of the psychological service. In addition, the same topic should be carried through the work with all target groups **[3].**

One of the areas of using information technology in the work of a school psychologist can be considered the use of Internet design as a method of correctional and developmental work of a psychologist. The term "Internet project" is one of the most commonly used terms on the Internet. In a narrow sense, it is identified with the concept of "site". In a broad sense, an Internet project is a project in which computer capabilities and services are used to solve a problem.

Examples of the final products of Internet design include the following: a website, a computer presentation, a computer drawing, an e-book, a magazine, a computer game, a remote competition, a festival, a teleconference, a discussion chat, and other remote events.

The inclusion of children in the development and implementation of their own Internet projects has a great developmental potential. On the one hand, as a team form of work, the Internet project allows you to form cognitive abilities, project thinking, the subjective position of schoolchildren, the ability to work together, and work in a team. On the other hand, content content allows you to solve a wide variety of psychological problems: correctional, developmental, and educational.

An integral part of the implementation of the Internet project is the media presentation of the results of the project, in which children not only present project products, but also develop the skills of expertise, planning and selection of information, communication skills, etc. When preparing for a presentation, it is important that the children, either on their own or with the help of the teacher, develop the assessment criteria as well as the structure. **[4]**

Internet design is often used as part of psychology media lessons, where IT technologies are actively used.

In general, the use of ICT in the work of a school psychologist poses new challenges for the development of collections of digital sources, correctional programs, the creation of electronic textbooks - workshops in psychology, electronic additions to well-known teaching materials in psychology, etc. Information technologies are becoming more and more firmly included in the activities of a teacher-psychologist and are used in the usual way.

Technology of educational games:

Educational games occupy an important place among modern psychological and pedagogical technologies. Educational games perform three main functions:

Instrumental: the formation of certain skills and abilities - can be expressed in game exercises;

Gnostic: the formation of knowledge and the development of students' thinking - is expressed in didactic methods;

Socio-psychological: the development of communication skills, expressed in role-playing games.

The learning game technology can be combined with technologies such as group technology, diagnostics, and training.

The role of educational games in education and psychology is extremely important. In pedagogy, they are an integral part of developmental education, which is based on the development of activity, initiative, and independence of students. In psychology, these technologies develop the cognitive, social, professional activity of students.

Psychological activity involves the use of techniques such as:

Music therapy is the use of music for: relaxation and calming, activation of the emotional sphere, correction of the emotional state.

Aromatherapy is the use of scented substances for relaxation and aesthetic purposes.

Color therapy - the use of color visualization for depression, anxiety, fears.

Dance therapy is the use of dance movements or imitations to music to relieve muscle tension.

Body therapy - methods of working with the body, the purpose of which is to improve physical and mental well-being.

Art therapy

Art therapy includes a number of areas of psychological work related to creativity - isotherapy, color therapy, phototherapy, fairy tale therapy, music therapy, collage. The psychology of creativity has long been successfully used in work with children and adults.

Play therapy

This technology solves the following range of tasks: psychocorrection, psychoprophylaxis, development and harmonization of the child's personality, improves the psychological climate in families and small groups.

Play therapy includes individual, pair and group games, techniques involving the use of dolls, figurines, relaxation techniques based on the active work of the imagination, various forms of artistic expression, etc.

Cooperation

Technologies of cooperation realize democracy, equality, partnership in the subject relations of a psychologist and a child. This technology is the most relevant in the organization of research activities, competitive movement, as well as in training work.

Person-oriented

They put the personality of the child at the center of the entire school socio-psychological system, providing comfortable, conflict-free and safe conditions for its development, the realization of its natural potentials. Person-centered technology is the embodiment of humanistic philosophy, psychology and pedagogy.

Humane - personal

They differ primarily in their humanistic essence, psychotherapeutic focus on supporting the individual, helping her. They "profess" the ideas of respect and love for the child, an optimistic faith in his creative powers, rejecting coercion:

The term "psychological technologies" implies an aspect related to the formation and development of the subject's personal qualities.

Psychological prevention - assistance in the full development of the personality of all participants in the educational process, prevention of possible personal deformations in the process of interaction, assistance in understanding the destructive influence of psychological violence. The main task of psychological prevention is the creation of conditions conducive to an adequate and competent response of the individual to manifestations of psychological violence, the refusal to use its forms in interaction.

Psychological counseling - assisting participants in self-knowledge, positive self-attitude, adaptation to real life conditions, formation of a value-motivational sphere and a system of relations with others, awareness of the value of non-violence, overcoming professional deformations, achieving emotional stability, contributing to personal and professional growth and self-development.

Psychological correction is an active psychological and pedagogical influence aimed at eliminating deviations in personal and professional development, harmonizing mental health.

In practical psychology, there are two areas of correction. The first is a set of individualized measures to strengthen the regulatory functions of the psyche, the development of emotional self-control and self-government. The second is normative-value correction, which consists in introducing certain directions into the individual-personal system of norms and behavioral standards, in accordance with which a person corrects the performance of his life and activity functions.

Psychological rehabilitation is a process that mobilizes personal adaptive mechanisms during the experience of psychotraumatic circumstances caused by the state of the external environment. Rehabilitation involves the return of what is lost or may be lost due to changing conditions.

It is psychological trainings that are most often considered as rehabilitation psychotechnologies.

Thus, psychological and pedagogical technologies find their appropriate place in the integral pedagogical process. Any psychological and pedagogical technology, its development and application require the highest creative activity and professional knowledge of the teacher-psychologist.

REFERENCES

1. Andreev VI. Pedagogy: A training course for creative self-development. 2nd ed. Kazan: Center for Innovative Technologies; 2010. 608 p.

2. Leontiev AA. Pedagogy of common sense. "School 2010 ..." The concept and programs of continuous courses for a general education school. Issue. 1. Moscow, 2010, pp. 18-2

3. Smirnov NK. Health-saving educational technologies and health psychology at school. Moscow: Arkti; 2016. 320 p.

4. Fomin AS. Game dance as a technology of the XXI century. Human Ecology: Sat. works. Volume V. Part VI. Specific technologies of modern education. Novosibirsk; 2013. pp.185-205

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INFLUENCE OF COCOON WRAPPING AGROTECHNICS ON THE QUALITY OF COCOONS

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ABSTRACT

In addition to heredity, the biological and especially technological properties of cocoons are greatly influenced by the conditions of cocoon wrapping - temperature, humidity, light, ventilation (aeration), the quantity and quality of cocoons.As a result of temperature changes during cocoon wrapping, the speed and nature of the silkworm wrapping the silk fibers into the cocoon shell of the worm also change.

KEYWORDS: *Cocoon, Cocoon, Temperature, Humidity, Varietal Cocoons, Spotted Cocoons, Biological Indicators, Mulberry Leaves, High Productivity, Preserved Live Cocoons, Cocoon Production, Live Cocoon, Productivity, Varietal Cocoons, Technological Indicators.*

INTRODUCTION

As the temperature increases, the speed of movement of the silkworm also increases, and the oscillation width of the head increases. Therefore, the octagons are also formed larger, and the silk fiber becomes thinner. Silk production during cocoon wrapping consists of two processes: on the one hand, the body of the silkworm is compressed by pressure on the silk separating gland, under the influence of which the silk mass is pushed towards the compression apparatus. There is always a drop of liquid silk on the end of the tube (it must be a drop of sericin), the silkworm touches the tube to a point, sticks the end of the silk fiber in place, and shakes its head to pull the silk fiber out of the tube. The faster this movement, the thinner the silk fiber will be, because the silk mass is mechanically stretched too much. **[1]**

At a temperature of 21^0C, the silkworm forms a single octopus with a height of 3.5 mm in 3.17 seconds and a silk fiber thickness of 24.91 microns, with a silk fiber release rate of 2.11 mm per second. At a temperature of 29^0C, the silkworm produces octopuses of 4.6 mm in height, which takes only 1.69 seconds for each octopus, the thickness of the silk fiber decreases to 20.43 microns, and the rate of octopus formation increases to 6.01 mm per second. **[2]**

Main part: One of the main technological properties of silk fiber is its metric number and its non-uniformity. At the beginning of the cocoon wrapping period, the silkworm produces thick silk fibers with a low metric number of 2,500-3,000. will have. Typically, the metric number of the last end of the silk fiber in a single cocoon is two to three times greater than the metric number of the silk fiber at its beginning. The number of silk fibers, depending on its average amount, usually varies from 17-25% within a single cocoon and between 12-18% between cocoons. The larger the average metric number of the silk fiber, the less the diversity within and between the cocoons, and the higher the technological properties of the cocoons. The variety of thicknesses of silk fibers plays a particularly big role in the automatic spinning of silk from cocoons, which are now widely used in our silk factories. **[3]**

The temperature conditions of cocoon wrapping affect the metric number of silk fibers to vary, as well as technological parameters such as cocoon sericity and silk yield. The yield of silk, on the other hand, is directly related to the tensile (elasticity) property of the cocoons, which depends on the state of sericin. Interesting data have been obtained as a result of research on the processes during cocoon wrapping. In particular, when the temperature rises to 25-26^{0}C during cocoon wrapping, the cocoon wrapping time is generally reduced, the average metric number of silk fiber is increased, its variety is reduced, the cocoon is seripak and silk fiber is produced more. Also, when the temperature rises to 28-29^{0}C, the metric number and diversity of the silk fiber further increases, but in return the cocoon silk is significantly reduced and the silk fiber is produced very little. Thus, it was found that both low (21-23^{0}C) temperature and high (28-29^{0}C) temperature during cocoon wrapping reduce the biological performance and technological properties of cocoons, 25-26^{0}C is a good temperature. It is best to have a decreasing temperature, ie 26^{0}C on the first day of cocoon wrapping, 25^{0}C on the second day and -24^{0}C on the third day. The cocoons obtained at this temperature have high technological properties. This condition is especially favorable for the uniformity of the thickness of the silk fiber: if at 21^{0}C the variation in the thickness of the silk fiber is 23%, at 25^{0}C it is 19.4% and at 270 it is 15.5%. This means that if the temperature in the cocoon during the cocoon wrapping period is gradually reduced over the days without being kept at a moderate level, the worms will rapidly cocoon and the silk fiber will come out flat and the technological properties will be good. **[4]**

The relative humidity of the air during cocoon wrapping also plays a big role. When the relative humidity is high 80-85% (although all other conditions are favorable), the biological performance and technological properties of cocoons deteriorate significantly. Silk pulling from the cocoon and raw silk output is particularly declining. When the air temperature is low and the relative humidity is low, the average mass of the cocoon decreases. When both humidity and temperature are high, silkworms wrap a lot of cocoons, but the cocoon shell becomes porous and unsuitable for pulling silk. **[5]**

Results and Discussions: Many years of scientific observations and experiments of advanced cocoons have shown that when the relative humidity of the air in the room during cocoon wrapping is 60-70%, it is desirable that the biological and technological characteristics of the cocoons meet the requirements.

The level of illumination of the cocoons wrapped by the worms also causes the thickness of the silk fibers to vary. When the pods are illuminated unilaterally, the percentage of variation in the thickness of the silk fiber increases, while when uniformly illuminated in all directions, or when the whole area is uniformly darkened, the variability decreases. **[6]**

According to N.Akhmedov (2004), an increase in air temperature of 28^{0}C and humidity of 80%, as well as a temperature of 21^{0}C and humidity of 80% reduce the overall productivity of silkworms and reduce the quality of raw materials. In addition, the norm (relationship) between the sponge and the cocoon shell is violated. In low temperature and high humidity air and in low humidity the opposite is lighter. **[7]**

According to Professor N.Akhmedov, worms are very sensitive and sensitive during cocoon wrapping, and even a slight stimulation of them has a negative effect. Although the cocoon wrapping conditions change slightly, the worm continues to weave the cocoon, but the process of removing the silk fiber is disrupted, affecting the technological process. **[8]**

The quality of the cocoon, ie the size, shape, weight, percentage of the shell, hardness and its technological properties are greatly influenced by the yield of silk, wrapping, fiber length and toughness.

When the temperature is low, the cocoon wrapping period lasts 7-10 days and many worms cocoon in Ghana, as well as the number of worms left unwrapped.

Excessive temperatures accelerate the cocoon wrapping process, resulting in an increase in the number of cocoons that are bumpy, spotty, and deformed. When the temperature is high, the worms place the silk fibers randomly in the cocoon shell, which in turn reduces the washing of the cocoons and the release of raw silk from the cocoon.For high-yielding cocoons, which have recently been introduced into production, it is recommended that the temperature during cocoon wrapping be 25ºC and humidity 60-70%. **[9]**

With this in mind, in our study we initially aimed to study the effects of varying temperature and humidity on cocoon wrapping, maturation, yield, and biological performance. According to the study, when the temperature is below 25ºC (20-21ºC) or high (28-29ºC), the worms do not suddenly emerge from the stem, their viability decreases, and often the worms wrap the cocoon in the cocoon (Table 1). **[10]**

TABLE 1 THE EFFECT OF TEMPERATURE AND HUMIDITY DURING COCOON WRAPPINGON THE SURVIVAL RATE OF THE WORMS AND THE PERCENTAGE OF EXODUS

During cocoon wrapping		Worm survival and emergence,%	Cocoon wrapping%	
TemperatureºC	Humidity, %		In ghana	when the handle is placed to wrap the cocoon
21 ºC	77	86,0	24	76
23 ºC	73	87,0	14	86
25 ºC	70	91,0	9	91
28 ºC	65	84,0	6	94

TABLE 1THE EFFECT OF VARIABLE TEMPERATURE ON COCOON WRAPPING ON THE MATURATION, QUANTITY, VARIETY AND YIELD OF SILKWORM COCOONS

Worm feeding and cocoon wrapping		The ripening of the cocoon	Total wrapped cocoon, %	Quantity of cocoons, %	Yield of cocoons from a box of worms, kg
TemperatureºC	Humidity %				
20-21	65-70	12	82	78	68
20-21	80-85	11	80	76	70
24-25	65-70	9	90	93	78
24-25	80-85	9	90	91	71
25-26	65-70	8	93	94	82
28-29	65-70	7	85	87	64
25-29	80-85	7	84	85	63

It was found that a sudden change in the temperature in the cocoon during cocoon wrapping affects the maturation of the cocoon, the amount of cocoons wrapped, the percentage of Variety cocoons and the cocoon yield obtained from a box of worms. For example, cocoons are harvested in 11 days at a temperature of 20-21ºC, 9-10 days at a temperature of 24-25ºC, 7-8 days at a temperature of 28-29ºC, and 8 days at a temperature of 25-26ºC. consumption was known. From these data, it can be seen that the decrease in temperature during cocoon wrapping indicates that the cocoon matures for 3 days, while the temperature exceeds the norm, which is reached the day before. At the same time, the moisture content of the elongated cocoons was found to be slightly higher than normal. It has been found that cocoon maturation accelerates when the cocoon is wrapped at high temperatures and that the cohesiveness of the cocoon fiber increases. **[11]**

Similar differences are also seen in the total number of coiled cocoons. In particular, 78-80% of worms at low temperatures are cocoons at an average temperature of 88-90%, 82-83% at high temperatures and finally 92% at moderate temperatures and humidity. 90-92%, 94% at 25-26 ° C and 84-86% at 28-290 ° C. This means that when the cocoon wrapping is at a low temperature, the total number of cocoons wrapped by the worms is 78-80%, which is 2-4% higher than at the moderate temperature (92%) and 82-83% when the temperature is high, which is 9% higher than the control option. It was found to be as low as 10%. It was also found that there was a drastic change in the cocoon yield from a box of worms. For example, the cocoon yield from a box of worms is 66.8-68.3 kg at low temperatures, 72-81 kg at medium temperatures, 54-63 kg at high temperatures, and in the control variant this figure is 83 kg. was found to vary from 2 kg to 20 kg compared to the other options. **[12]**

If the cocoon wrapping conditions are poor, the amount of defective cocoons will increase. A drop in temperature of 20-23°C or more than 28 degrees Celsius can lead to an increase in the number of cocoons that are deaf / dead inside the cocoon, dead, but without spots on the outside, and black-spotted / dead inside the cocoon. adversely affects the property. **[13]**

The effect of variable temperature and humidity in the cocoon during cocoon wrapping on the biological parameters of the cocoon (average weight, cocoon shell weight and silkiness) is shown in Table 3.

TABLE 3 TEMPERATURE AND HUMIDITY OF THE COCOON, WHICH DIFFER SHARPLY IN THE COCOON EFFECT ON INDICATORS

Worm feeding and cocoon wrapping		Worm feeding and cocoon wrapping	Weight of silk shell, mg	Silk %	Yield of cocoons from a box of worms, kg
Temperature°C	Temperature°C				
20-21	65-70	1,98	440	22.2	68
20-21	80-85	2.00	450	23.0	70
24-25	65-70	2,15	505	23.5	78
24-25	80-85	2,05	480	23.4	71
25-26	65-70	2,18	520	23,8	82
28-29	65-70	2.02	450	22.3	64
28-29	80-85	1,90	430	22,6	63

The data in the table show that a sudden change in temperature during cocoon wrapping leads to a reduction in the average weight of a cocoon, a decrease in the weight and silkiness of the cocoon shell. For example, when the worms are in the cocoon wrapping temperature (25-26 ºC), the weight of one cocoon is 2.12 g, which is 1.94-1.95 grams at low temperatures and 1.86-1 at high temperatures. 97 grams, a decrease of 5.5-12.7% compared to the control variant. It was found that such a change also occurs in the weight and silkiness of the silk shell, ie the weight of the silk shell decreases by 2-20%, the silkworm by 0.3-2.0%. **[14]**

CONCLUSION

The relative humidity during cocoon wrapping has a major impact on the quality of the cocoon. At the beginning of the cocoon wrapping period, the relative humidity may increase, for example. The silkworm evaporates a lot of water from the body during the cocoon wrapping period. In addition, uneaten leaves, stalks, and poorly dried stalks also evaporate water. Increased humidity leads to conditions for the growth of microorganisms and the spread of disease, resulting in the death of many worms and a decrease in the quality of the cocoon. **[15]**

When the relative humidity of the worm air decreases below a moderate level, the evaporation of water from the leaf surface of the worm body increases.

During the cocoon wrapping it is necessary to constantly ventilate the barn. There should be no elvizak winds in the ventilation. One-way ventilation is required, otherwise the temperature and humidity may drop. To do this, use special ventilation holes in the wormhole during the day. **[16]**

The lighting of the cocoon is also important during cocoon wrapping. The moisture in the cocoon rises and mold forms, the worms do not wrap around the cocoon to the end, affecting the cocoon crop. That is why the windows and windows of the courtyard are covered with paper.

Some worm breeders stop feeding when the worm begins to wrap the cocoon, cover the worms by covering the stalks with a cloth or cloth. **[17]**

Not all of the worms in the batch start packing cocoons at the same time. Usually the worms come out of the bunch in 1-2 days. On the first day 8%, on the second day 40%, on the third day 46%, on the fourth day 6% worms come out.

REFERENCES

1. Soliyeva MB, Sh TJ, Asronov EK. To Learn of Biological And Productive Indicators of Imported Mulberry Silkworm Breeds. The American Journal of Applied sciences, 2021;3(04):131-137.
2. Asronov EK, Soliyeva MB. The importance of feeding silkworms under polyethylene. ACADEMICIA: An International Multidisciplinary Research Journal, 2020;10(10):1169-1174.
3. Asronov EK, Solieva MB. Influence of Temperature Changes on Productivity and Quality of Cocoons During Feeding Of Silkmoth. Economics and Society, 2020;(12-1):388-391.
4. Soliyeva MB, Yuldasheva KT, Xatamova XK, Kimsanova XA, Isroilova SS. The effect of shelf life of live cocoons on their temperature and quality. Asian Journal of Multidimensional Research (AJMR), 2021;10(3):254-260
5. Tuychiev ZhSh, Ubaidullaev SSh, Turdieva FT, Solieva MB. Changes in the Share of Defective Cocoons Depending On the Terms of Admission to The Factory. Modern trends in the development of science and technology, 2015;(4-2):78-81.
6. Tuychiev ZhSh, Mirzaev RO, Solieva M, Gafurova YuK. Dependence of The Quality of Cocoons of The Primary Generation On The Number of Forms Changed From The Pedigree Batch. Modern trends in the development of science and technology, 2016. 124.
7. Yuldasheva KT, Soliyeva MB, Daminov XE, Botirov ST, Mamadjanova GS. The process of growth of vegetative organs of olive seedlings in protected areas during the development phase. Asian Journal of Multidimensional Research, 2021;10(4):287-293.
8. Sokhibova NS, Nazirova MIK, Botirovna SM. Influence of Rearing Silk Worms With High Productive Mulberry Leaves on The Biological Indicators of Silk Gland And Raw Silk Effectiveness. Life Sciences and Agriculture, 2020;(2).
9. Sharipovich AA, Sheralievich YN, Botirovna SM, Mukhammadovna EJ. Study of methods for identification and storage of morphological features of grapes grown in the conditions of Fergana Region. The American Journal of Agriculture and Biomedical Engineering, 2020;2(07):20-24.
10. Yuldasheva KT, Soliyeva MB, Kimsanova XA, Arabboev AA, Kayumova SA. Evaluation of winter frost resistance of cultivated varieties of olives. Academicia: An International Multidisciplinary Research Journal, 2021;11(2):627-632.
11. Xatamova XK, Yuldasheva KT, Soliyeva MB, Kimsanova XA, Juraboyeva SM. Methods of preserving subtropical fruits. Asian Journal of Multidimensional Research (AJMR), 2021;10(1):109-115.
12. Yuldasheva KT, Soliyeva MB, Xatamova XK, Kimsanova XA. Effect of arbuscular mycorrhiza on micro propagated olive. Academicia: An International Multidisciplinary Research Journal, 2020;10(12):1491-1498.
13. Asronov EK, Salieva MB, Saliev SA, Davlatov HR. Storage of fruit and vegetable products. In The Northern Sea Route, water and land transport corridors as the basis for the development of Siberia and the Arctic in the 21st century. 2018. pp. 264-266.

14. Xatamova XK, Soliyeva MB, Kimsanova XA, Yunusov OB, Yuldashev RT. Methods of Drying Subtropical Fruits And Their Importance For Human Health. The American Journal of Applied sciences, 2021;3(05):148-154.

15. Asranav EK, Salieva M, Alizhanov J. Healing properties of mulberry. Academic journalism, 2019;(5):24-28.

16. Alisher V, Komiljonovna KH, Botirovna SM, Yulbarsovna DS. Bamiya-Medicine-Wireline And Technology. PalArch's Journal of Archeology of Egypt / Egyptology, 2020;17(6):3479-3482.

17. Xatamova XK, Yunusov OB. Useful Properties of Cherries and Cherry Juice. The American Journal of Agriculture and Biomedical Engineering, 2021;3(06):6-12.

SOME FEATURES OF PEACH VARIETIES

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ABSTRACT

As the population grows, so does the demand for fruits and vegetables. Peaches are also distinguished from other fruits by their healing and tenderness, delicate nature. We think about the description of some varieties of peaches grown in Uzbekistan and their useful properties.

KEYWORDS: *Peaches, Varieties, Useful Vitamins, Soil Climatic Conditions, Water Requirements, Fertilizer Requirements.*

INTRODUCTION

Fruits and vegetables cooked in our country are rich in trace elements and vitamins necessary for the human body. If we take a single peach fruit, its beneficial elements play an important role in strengthening human health. **[1]**

This fruit tree loves heat and is not very tall. The width of the branches differs from other fruits by the fact that they also bloom in pink. Peaches are believed to be native to northern China. It is reported to have spread to Europe via Italy. **[2]**

Ripe peaches contain up to 15% of sugar, apple, grape, lemon, ascorbic (vitamin C) acids, essential oils, potassium, calcium, iron, minerals, vitamins of group B, provitamin A, pectin. In particular, its yellow color contains a large amount of carotene. **[3]**

Peach trees bear fruit early, yield abundantly every year, the fruit is very beautiful, the trees grow vigorously, but are more resistant to cold than other legumes. Peach trees can yield up to 100-150kg in 3-4 years after planting. It is not difficult to care for and harvest small branches. Peach varieties ripen from June to November, thus extending the supply of peach fruit to 5 months. The fruit is juicy, sweet, untouchable, soothing and very tasty. It is eaten fresh, as well as jams, compotes and various pickles. Peaches are quickly absorbed by the human body, they are rich in various vitamins, mineral salts and are useful in building hemoglobin. **[4]**

Peaches are very common and can be successfully grown in many parts of Uzbekistan. For good development of peaches in the summer requires adequate watering, fertile soil with good permeability and nitrogen-rich, as well as thinning of the fruit, as well as the use of chemicals against peach leaf blight and moniliosis. **[5]**

Peach tree has a short lifespan (15-20 years). Peaches (including hairless species) do not need a pollinating tree because they can self-fertilize.

Peaches reliably take root from hard tree cuttings obtained in winter, and some varieties also take root from cuttings obtained in summer. **[6]**

To get peach cuttings, cutting a branch 10-12cm long with a straight stem and many leaf nodes along the length is the best choice for rooting peach trees. Hardwood cuttings should be brown, the bark hard and the whole stem completely leafless. Soft tree cuttings are usually bent and have a green stem, while semi-hard tree cuttings are green and leafy at the tip, the bark is slightly hardened. **[7]**

Requirements for soil conditions

Peach trees prefer soils with partial pH (amount of hydrogen ions in the soil) slightly higher 6.0 and 6.5. This figure can make a tree grow even a little more or less, but such conditions have a negative impact on its health and yield. Peach trees grow well in sandy and water-permeable soils. If the water permeability of the soil is poor, it is recommended to add manure, sand or peat (plant humus) and mix it into a deep chisel. It is not recommended to put the above-mentioned products to improve the soil composition in the pit where the seedlings are planned to be planted. **[8,9]**

The roots of peach trees die in well-drained soils, stop growing and die.

Most fruit trees grow well in conditions where the pH of the soil is close to 6.5. Due to the high pH of the soil in most parts of Uzbekistan, it is possible to normalize its pH by adding gypsum before planting. The results of soil analysis should be used to determine the pH of the soil and the level of fertility. **[10]**

Requirements for irrigation

The peach tree consumes the most water at a young age - it is recommended to water the annual seedlings once a week or in summer, twice a week. According to the recommendation of Steve Albert, Senior Gardener of the University of California, the yield of fruit trees will be higher when the soil is kept moist enough. A peach tree can bear fruit even in the absence of water, but the tree is under stress and the fruits remain small. Mulch (crushed plant and tree debris) is placed around the trunk to retain soil moisture, but the mulch should not touch the trunk. **[11]**

Fertilization procedure

Peach trees thrive in nitrogen-rich soils, and the nutrients they need in the first place include elements such as nitrogen, calcium, phosphorus, magnesium, sulfur, and potassium. Although these nutrients are present in the soil to a certain extent, laboratory analysis of the soil can help determine the extent of their presence and deficiency. Less commonly needed nutrients include chlorine, iron, manganese, boron, copper, zinc, and molybdenum. **[12]**

White peach-2 is an old, fertile, locally resistant graft that provides the main material for grafting. The fruits are more medium and late, ripening white in August-September. The trees are strong, 8 years old, 4.7 m tall, the branches are 4.5 m wide, sparse, round in shape, the fruit weighs 100-110 g. The fruit is covered with soft hairs and is easily cut from the tree when ripe. Yields every year. Yields 70-90 kg in each bush. The fruit is consumed mainly fresh, can be dried and canned. **[13]**

Fairy-tale white Vir-navi tree, dark-branched, broadly oval. The leaves are lanceolate, the upper side is dark blue, the lower side of the leaf is light blue. Fruit weight 100-150gr, round flattened, sunken on both sides. The flesh is white-tender, very juicy, moderately sugary, tastes good. Peach is one of the most frost-resistant varieties. The fruits are mainly edible and ripen by the third decade of June. **[14]**

Lola is a medium-ripe variety, zoned for planting in all regions of the country. Fruits ripen in late July to early August, average weight 70-80g, hairless, round, orange-yellow, dark red on top. The flesh is yellow, juicy, sweet, with a characteristic sour taste, well separated from the grain. Mostly freshness is consumed. The crop enters at the age of 2–3 years after planting, and the full crop in 5–6 years. Yields every year. The fruit can be used for universal purposes. Among the varieties of peaches are very beautiful, good for consumption and drying. **[15]**

Raspberry is a medium-ripe variety, zoned for planting in all regions of Uzbekistan. Fruits ripen in August, large (150-180g), round ovoid, pale yellow, the sunny side is raspberry, hairy, fleshy, juicy, sour-sweet, tender, easily separated from the seeds. Grows well in lightly irrigated soils and gives good yields. The fruit is used for universal purposes. **[16]**

Start-growing tree grows on average, at the age of 7-8 years it reaches a height of 4.2-4.5 m. The weight of the fruit varies from 120 g to size. On July 25-28, the fruits ripen gradually, one after the other, for 20–25 days. The fruit is used for unvesal purposes. **[17]**

Farkhod is a late-ripening variety, adapted for planting in all regions of Uzbekistan. Fruits ripen in early September, large (up to 180g), round, slightly curved on three sides, reddish-orange. The flesh is yellow, densely sweet, slightly sour. The bean is easily separated. Seedlings are harvested in 3 years, yielding every year. **[18]**

Elberta is a large, widespread, high-yielding variety. The tree is large but the fruit buds do not tolerate frost. When the year is good, each bush will yield more than 80-100 kg. Requires annual pruning. The fruits ripen in the first half of August. The fruit is large, round, ovoid, sometimes pointed, thickly covered with reddish hairs. The flesh is yellowish, delicious. It can be sent to other places, canned and peeled. **[19]**

Serhosil (Obilniy) - new tree, height 5.5 m, fruit weight 70-80 g. Planted seedlings will bear fruit in 3-4 years, and by 6-7 years the harvest will be complete. Cooking is continuous (15-20 days). **[20]**

Golden Birth (Golden Jubilee) - a variety of yellow flesh, universal, early ripening peach. The fruit is large (130-150 g), oblong-ovoid, golden-haired. Resistant to transport and storage. The fruit is eaten fresh, partially canned and dried. It can be sown in all regions of Uzbekistan, especially in the southern regions. **[21]**

REFERENCES

1. Khatamova HK, Kimsanova KA. The Peach Propagation Methods. The American Journal of Agriculture and Biomedical Engineering, 2020;2(11):42- 46.

2. Ostanakulov TE, Narzieva SH, Gulomov BH. Fundamentals of Fruit Growing. Tashkent; 2010.

3. Xatamova XK, Yunusov OB. Useful Properties of Cherries and Cherry Juice. The American Journal of Agriculture and Biomedical Engineering, 2021;3(06):6-12.

4. Xatamova XK, Yuldasheva KhT, Soliyeva MB, Kimsanova XA, Juraboyeva ShM. Methods of preserving subtropical fruits. Asian Journal of Multidimensional Research (AJMR), 2021;10(1):109-115.

5. Soliyeva MB, Sh TJ, Asronov EK. To Learn Of Biological And Productive Indicators Of Imported Mulberry Silkworm Breeds. The American Journal of Applied sciences, 2021;3(04):131-137.

6. Asronov EK, Soliyeva MB. The importance of feeding silkworms under polyethylene. ACADEMICIA: An International Multidisciplinary Research Journal, 2020;10(10):1169-1174.

7. Asronov EK, Solieva MB. Influence of Temperature Changes on Productivity and Quality of Cocoons During Feeding of Silkmoth. Economics and Society, 2020;(12-1):388-391.

8. Soliyeva MB, Yuldasheva KT, Xatamova XK, Kimsanova XA, Isroilova SS. The effect of shelf life of live cocoons on their temperature and quality. Asian Journal of Multidimensional Research (AJMR), 2021;10(3):254-260

9. Yuldasheva KT, Soliyeva MB, Xatamova XK, Kimsanova XA. Effect of arbuscular mycorrhiza on micro propagated olive. Academicia: An International Multidisciplinary Research Journal, 2021;10(12):1491-1498.

10. Asronov EK, Salieva MB, Saliev SA, Davlatov HR. Storage of Fruit and Vegetable Products. in the Northern Sea Route, water and land transport corridors as the basis for the development of Siberia and the Arctic in the 21st century. 2018. pp. 264-266.

11. Xatamova XK, Soliyeva MB, Kimsanova XA, Yunusov OB, Yuldashev RT. Methods of Drying Subtropical Fruits And Their Importance For Human Health. The American Journal of Applied sciences, 2021;3(05):148-154.

12. Asranav EK, Salieva M, Alizhanov J. Healing Properties of Mulberry. Academic journalism, 2019;(5):24-28.

13. Alisher V, Komiljonovna KH, Botirovna SM, Yulbarsovna DS. Bamiya-Medicinal Plant and Flour Production Technology. PalArch's Journal of Archeology of Egypt / Egyptology, 2020;17 (6):3479-3482.

14. Yuldasheva KT, Soliyeva MB, Daminov XE, Botirov ST, Mamadjanova GS. The process of growth of vegetative organs of olive seedlings in protected areas during the development phase. Asian Journal Of Multidimensional Research, 2021;10(4): 287-293.

15. Tuychiev JSh, Ubaidullaev SSh, Turdieva FT, Solieva MB. Changes in the Share of Defective Cocoons Depending on the Terms of Admission to The Factory. Modern trends in the development of science and technology, 2015;(4-2):78-81.

16. Tuychiev JSh, Mirzaev RO, Solieva M, Gafurova YuK. Dependence of The Quality of Cocoons of The Primary Generation on The Number of Forms Changed From The Pedigree Batch. Modern trends in the development of science and technology, 2016. 124.

17. Yuldasheva KT, Soliyeva MB, Daminov XE, Botirov ST, Mamadjanova GS. The process of growth of vegetative organs of olive seedlings in protected areas during the development phase. Asian Journal Of Multidimensional Research, 2021;10(4):287-293.

18. Sokhibova NS, Nazirova MIK, Botirovna SM. Influence of Rearing Silk Worms With High Productive Mulberry Leaves on The Biological Indicators of Silk Gland And Raw Silk Effectiveness. Life Sciences And Agriculture, 2020;(2).

19. Sharipovich AA, Sheralievich YN, Botirovna SM, Mukhammadovna EJ. Study of methods for identification and storage of morphological features of grapes grown in the conditions of Fergana Region. The American Journal of Agriculture and Biomedical Engineering, 2020;2(07):20-24.

20. Yuldasheva KT, Soliyeva MB, Kimsanova XA, Arabboev AA, Kayumova SA. Evaluation of Winter Frost Resistance of Cultivated Varieties of Olives. Academicia: An International Multidisciplinary Research Journal, 2021;11(2):627-632.

21. Yuldasheva KT, Soliyeva MB, Xatamova XK, Kimsanova XA. Effect of Arbuscular Mycorrhiza on Micro Propagated Olive. Academicia: An International Multidisciplinary Research Journal, 2020;10(12):1491-1498.

THE INFLUENCE OF VARIETIES OF WINTER LENTILS ON THE DENSITY OF PLANTINGS AND THE TIMING OF SOWING ON THE COMPOSITION OF THE GRAIN YIELD OF PLANTS

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ABSTRACT

In our field experiments carried out for this purpose, it was revealed that when growing varieties of winter lentils Darvon and Sibron with a planting density of 850, 1100 and 1300 thousand grows / ha. at two different planting dates, the formation of crop components in plants varied.

KEYWORDS: *winter lentils, variety, Darvon, Sibron, variant, term*

INTRODUCTION

In the republic, the cultivation of winter lentils is expected to open the way for the development of this important food crop. For this purpose, a lot of scientific research is being carried out in our country. Experiments to determine the optimal planting dates, the norms of plant density of mineral fertilizers, the optimal water and nutritional regimes for soil and climatic conditions, on the basis of this, making recommendations ensures a wide distribution of this variety for any newly created variety. **[1]**

Object and research methods. In our field experiments carried out for this purpose, it was revealed that when growing varieties of winter lentils Darvonand Sibron with a planting density of 850, 1100 and 1300 thousand grows / ha. at two different planting dates, the formation of crop components in plants varied. The height of the main stem of the autumn lentil variety Sibron was higher in the variant with a plant density of 1100 thousand plants / ha, in the 1st planting period it was 44.2 44.1 cm. In the other two variants, the height of the main stem was 4.1 and 1 , 5 cm below. In the Darvon variety, the height of the main stem is observed in the variant with a planting density of 1300 thousand hectares / ha, by 45.4 and 45.9 cm, respectively, or 3.6–1.9 and 3.1–1.3 cm higher, than in other options. **[2]**

Research results and their discussion. The number of beans formed in each bush is 37.1-41.4, for Sibron and Darvon varieties - 39.2-43.1 in variants with 850,000-1100,000 bushes, and with a variant with 1300 thousand plant / ha the number of beans in plants it decreased by 1.8-8.7, on each bush - to 34.4-35.3. A similar situation was observed in the second planting period (table 1.)

One of the main criteria in analyzing the results of research aimed at improving the technology of growing crops is yield. In field experiments carried out this year, the highest yield of both varieties was observed in variants with a planting density of 1,100,000 bushes per hectare (table 2.)

In the first sowing period, the yield of the Sibron variety in the first variant was 16.3 c / ha, the Darvon variety - 20.3 c / ha. In the variant with a planting density of 850 thousand plants / ha, the lowest yield was 15.7 and 15.6 c / ha, respectively, for theSibronand Darvon varieties. With a planting density of 1,300,000 plants / ha, the yield decreased by 0.2 c / ha for the Sibron variety and by 1.2 c / ha for the Darvon variety. **[3]**

The same results were obtained in the second term of sowing winter lentils. The Sibron variety gave a yield of 16.4 kg / ha with a planting density of 1,100,000 shoots, which is 1.4 centers / ha more than the variant with a planting density of 850,000 bushes and 1,300,000 bushes. For the Darvon variety, these readings were 17.2 and 0.1.0.6 c / ha, respectively. Based on this, this year high yields were achieved in the bushes of the winter lentil varieties Sibron and Darvon with a planting density of 1,100,000 bushes for both planting periods. **[4]**

When comparing the yield by sowing dates, the sowing on October 20, the yield was higher. When sown on November 5, the yield of winter lentils was 1.1 - 1.8-0.2 c / ha for the Sibron variety and 0.7 - 3.1-0.8 c / ha for the Darvon variety, compared to October 20. Therefore, it is advisable to plan the optimal planting date for winter lentil varieties Sibron and Darvon on October 20.

Based on the results of field experiments and laboratory analyzes carried out in 2012-2013, we present the following conclusions and recommendations based on the characteristics of the cultivation of winter lentils. **[5]**

TABLE 1. INFLUENCE OF VARIETIES OF WINTER LENTILS ON THE DENSITY OF PLANTINGS AND THE TIMING OF SOWING ON THE COMPOSITION OF THE GRAIN YIELD OF PLANTS 1-sowing date

№	planting densityy	Sowing timee	Number of plants before harvest	The height of the main stem	Place of the first beans, so	On average 1 bush			Weight of 1000 grains, g.
						Number of beans	Quantity grainn	Grain weight, g.	
1	850000	20.10.11	831000	40,3	11,5	37,1	43	2,9	75
2	1100 000	20.10.11	1085000	44,2	13,3	41,4	53	3,0	80
3	1300000	20.10.11	1235000	43,1	12,9	35,3	41	3,0	80
4	850000	20.10.11	839000	41,6	10,9	39,2	47	2,8	77
5	1100000	20.10.11	1075000	43,3	13,1	43,1	50	3,1	80
6	1300000	20.10.11	1253000	45,2	14,1	34,4	42	3,1	80

INFLUENCE OF VARIETIES OF WINTER LENTILS ON THE DENSITY OF PLANTINGS AND THE TIMING OF SOWING ON THE COMPOSITION OF THE GRAIN YIELD OF PLANTS 2-SOWING DATE

№	planting densityy	Sowing timee	Number of plants before harvest	The height of the main stem	Place of the first beans, so	On average 1 bush			Weight of 1000 grains, g.
						Number of beans	Quantity grainn	Grain weight, g.	
1	850000	5.11.11	732000	39,3	9,4	36,1	40	2,8	75
2	1100 000	5.11.11	1065000	44,1	13,1	39,3	45	3,1	79
3	1300000	5.11.11	1269000	42,7	14,6	35,2	39	3,0	80
4	850000	5.11.11	817000	41,2	10,3	36,3	40	2,7	75
5	1100000	5.11.11	1071000	44,8	11,7	40,9	44	2,9	80
6	1300000	5.11.11	1229000	45,9	13,9	35,1	39	2,9	80

Productivity of winter lentils, kg / ha (1 sowing period) Table 2

Variants	Repetition				Average yield
	I	II	III	IV	
Sibron 850000	15.2	15.7	16.1	16,1	15,7
Sibron 1100 000	19.6	19.3	18.8	18,9	19,1
Sibron 1300 000	16.2	16.3	16.9	15,8	16,1
Darvon850000	17.2	16.8	16.2	16,3	16,6
Darvon 1100 000	19.2	20.5	20.6	20,3	20,3
Darvon 1300 000	17.4	17.1	17.5	17,5	17,1

Productivity of winter lentils, kg / ha (2 sowing period)

Variants	Repetition				Average yield
	I	II	III	IV	
Sibron 850000	15.1	14.3	14.1	15,2	14,7
Sibron 1100 000	16.2	16.4	16.9	16,9	16,3
Sibron 1300 000	15.8	16.3	15.6	15,9	15,9
Darvon850000	15.1	15.4	15.7	16,0	15,9
Darvon 1100 000	17.7	17.4	17.1	16,7	17,2
Darvon 1300 000	16.2	16.1	16.9	15,9	16,3

Consolidated suggestions and recommendations

As the development of the farming movement in our country, as a result of ongoing reforms in agriculture, ensuring the implementation of the decree of the President of the country to replenish the domestic market, paying attention to growing non-traditional agricultural crops like winter lentils, growing imported winter lentil seeds since 2000 and actions taken on the basis of the project on the development of scientifically grounded agricultural technology for the corresponding varieties Darvon and Sibron, winter lentils are relevant and meet the requirements of today. **[6]**

In our opinion, taking into account the development of lentil cultivation in our country, a change in the attitude towards this culture will improve the material and technical base of the industry, maximize the specialization of the industry, and improve the quality of scientific research. **[7]**

REFERENCES

1. Vavilov PP. Botany, Tashkent; 1980

2. Dospeksov B A. Method of field experiment, Moscow; 1985

3. Mannopova M, Isamova M. Promising grain legumes. Materials of the scientific-practical conference "Advanced technologies in agriculture". Andijan; 2002. pp. 262-265.

4. Mannopova M, Egamov I, Yakubov Z. Annual legumes improve soil fertility. Own PETI, Materials of the scientific-practical conference, 2007. pp. 180-182

5. Mannopova M. Lentils - an environmentally friendly food product. Prospects for the development of selection, seed production and agricultural technology for growing cereals, legumes and oilseeds. Materials of the International Scientific and Practical Conference. Andijan; 2011, pp163-165.

6. Mannopova M, Yakubov Z. "Edible lentils". "Prospects for the development of selection, seed production and agricultural technology for growing cereals, legumes and oilseeds." Materials of the international scientific and practical conference. Andijan; 2011. pp.151-153

7. Rakhimov GN. And others.Recommendations for the cultivation of leguminous crops in Uzbekistan. Tashkent: "Trud"; 1998.

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BRINGING UP THE YOUNG GENERATION AT THE LEVEL OF SPIRITUAL MATURITY AND PERFECTION IS A MODERN REQUIREMENT

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ABSTRACT

This article analyzes the issues of studying some topical issues of ideological prevention of ideological depression among young people. The urgency of this issue in the work of ideological prevention with young people today is justified. The study and development of the heritage of unscientific ancestors is not even possible, let alone adopted. The most important task for today is to bring up the members of our society, first of all, the young generation, to develop in their hearts and minds the national idea, national ideology, love for the motherland.

KEYWORDS: *Ideology, Ideological Prevention, Ideological Depression, Ideological Addiction, Alien Ideas, National Ideology.*

INTRODUCTION

After the independence of the people of Uzbekistan, the need for harmoniously developed people to strengthen it economically, politically, legally and spiritually has greatly increased. Therefore, from the first days of independence, the first President of the Republic of Uzbekistan Islam Karimov in all his speeches in the Oliy Majlis, answered questions from reporters and in other works expressed his views on a healthy generation, harmoniously developed generation, a perfect man. The formation of civil society is in many respects connected with the effectiveness of work in the field of educating a perfect man. Adoption of the Law on Education and the National Program of Personnel Training by the activities and initiatives of the first President of the Republic of Uzbekistan, the organization of the work of the youth social movement "Kamolot" at the level of modern requirements, At the heart of all of this is the social and historical needs of the people.**[1]**

Literature review

Indeed, all the activities of man, from the smallest of actions to the pursuit of a higher social goal, take shape accordingly, first of all, when they are ideally formed in his mind. Consequently, the knowledge of any thought, idea, point of view, the universe and, in it, views instead of man, is absorbed into the mind of man, and accordingly, his character, behavior, all his activities take on a certain character. The most important task for today is to bring up the members of our society, first of all, the young generation, to develop in their hearts and minds the national idea, national ideology, love for the motherland.**[2]**

President Sh. In the words of Mirziyoyev, "… When it comes to educating young people, it is necessary not to rush, to think carefully in all respects, based on the wishes of young people and parents."**[3]**

In addition to this, the great statesman and politician, the first President IA Karimov, said: it should be noted that activism and civic position are on the rise.

In this regard, no doubt, at the time, that is, 18 years ago, "Training" and; It is also a historic event that we have adopted the National Program for the Development of School Education, a new system in the field of education that is free of old stereotypes and complications, and which today attracts the attention of others.

Research Methodology

As a result, we have managed to form a generation that is independent and innovative, modern, and our children, who are able to take control of the future of our country, are coming to the podium today. " Therefore, the upbringing of a harmonious, perfect person has always been a dream of mankind. People with such a dream were considered to be the sages of the lands that belonged to their own spirituality and enlightenment. Among them is the place and respect of our great wise ancestors who lived on our land. This is a simple fact recognized by the wider world community of science. In the dream of raising a harmoniously developed generation, we can cite a lot of evidence from our own history.**[4]**

Suffice it to recall the ideas put forward in Farobi's spiritual heritage in The City of Noble People. According to him, in this play, "... every citizen of the society is a noble person, regardless of his position and position. A virtuous person knows all the rules of his state, follows them, thinks, is a master of his profession, and, when necessary, sacrifices his life for the Motherland.

The people of the city of Fozils will respect each other, and there will be oriental tenderness, kindness and respect between parent and child, teacher and student. First of all, it is worth noting that such thinking itself is based on the high level of spirituality of the ancestors, and, of course, such an opinion is the result of studying the centuries-old heritage in this regard. So, there is a moral basis for our intention to raise a harmoniously developed generation. The concept of enlightenment in the traditions and blood of our nation, the nature of the pursuit of knowledge and knowledge has been formed over thousands of years. The pursuit of enlightenment is one of the age-old virtues of our people. Similar thoughts of the ancestors were passed from language to language. The people, especially the leaders, were aware of this. In particular, it is known from historical sources that Sahibkiran Amir Temur also worked with the advice of his ancestors, the advice of the sages of the time, who passed through in building a great state. It is known all over the world that conditions were created for the development of science at that time. Culture has developed, and skyscrapers and mosques have been built that amaze the world today. This state was recognized by all states as the highest cultural center, and they sent their ambassadors. Sending ambassadors is the result of respect and recognition of the rightful state.

Analysis and results

The state founded by Amur Temur was reduced to a swamp of ignorance.

The main foundation of the state was cracked, not because it was built incorrectly, but because the poorly baked bricks on the solid foundation were crooked. Turkestan was destroyed by another state in the second half of the 19th century. Ignorance never recognizes science. The ignorant person at the head of ignorance develops the strict "rules" of the lower worldview and begins to force others to obey him. The study and development of the heritage of unscientific ancestors is not even possible, let alone adopted. Therefore, the statehood of Amir Temur, the society of Farobi, the medicine of Ibn Sino, the exact sciences of Khorezmi, the encyclopedic science of Beruni, the universe of Ulugbek - all were left behind the veil of ignorance and forgotten. The dream of the grandparents remained a dream **[5]**.

When a dream is lost, life is considered to have ceased. That is why such a dream in the blood of the ancestors rose at the end of the XIX acp. It was written in the Tsarist Russian colony that ignorance was the cause of the dream, and the country's intellectuals who sought to get rid of it were the first to analyze it. Mufti Mahmudhoja Behbudi, the leader of the Turkestan Jadids, who sacrificed his life for freedom, analyzed the flaws that led to this ignorance and concluded: "Secular science and knowledge are needed to survive in the world. ("Needs of the Nation", Samarkand newspaper, 1913, No. 26). In this short quote, "Why have we become a colony?" there was an answer to the question. The so-called "secular science and science" is a factor that keeps the power, culture and spirituality of a state among the developed countries. The development of such science and the soundness of the education system are in the conditions created for the development of science. Therefore, a number of Jadids in Tashkent, such as Munavvarqori, Abdulla Avloni, Fitrat in Bukhara, Ashurali Zahiri in Kokand, and Abduqodir Shakuri in Samarkand, joined the education reform.

An interesting situation emerges in the process of studying educational reforms. It is known that the 130-year history of Uzbekistan coincides with two different colonial periods. The first is Tsarist Russia, the other is the period of the Red Empire. Both of these different colonial policies have periods of collapse. It was at this time that the representatives of the national liberation movement, the devotees of the nation, thought about education reform, looking for ways to implement the reform.

The period of the collapse of Tsarist Russia coincided with the national liberation movement of the local intelligentsia - the Jadids. Until 1917, at the heart of these movements was the idea of reforming education, adapting the advanced aspects of developed countries, opening schools, publishing textbooks and educating children.

The second is the period of the collapse of the Red Empire. When we looked at the pages of Uzbek newspapers, we were convinced that the main focus is on education reform. For example, the following quote from the speech of the first President Islam Karimov, who was then the leader of Uzbekistan at that time in the former Soviet Union, proves our dream:

"I have to say that without careful training, without appreciating them, without trusting and supporting them, I don't think there is any way to change the situation in any field."

CONCLUSION

In fact, the first President Islam Karimov, while working in Kashkadarya region, said that the most important issue was to improve the general education and professional level of people, increase their literacy on the basis of new requirements, introduce a system of continuing education.

"Everyone needs to understand that without deep and solid knowledge, we cannot accomplish the tasks ahead of us, and we cannot make progress."

Let us return to the occasion in which these ideas were expressed. At a time when the former regime does not believe in its own decline, and seeks to maintain its dominance, for which conflicts between nations are organized, crime increases, and in the evenings it is impossible to walk on the streets, for some reason, the level of personnel, their quality training. Why this resemblance? This peculiarity was repeated at the beginning of the century. After all, the scholars who lived for the sake of freedom, after gaining freedom, thought a lot about the level, level of education, dedication, courage, perseverance of the young people who run the country. If there were no such cadres, they were worried about educating them. Because in order to preserve freedom, the state must have developed production, a well-off population, the ability to rebuild and maintain its army, as well as national cadres who have equal relations with other states. Therefore, before calling Ayuhannos "Freedom", they lived in the grief of preparing a harmoniously developed generation that would be able to capture and maintain it. They believed that one of the practical ways to realize the dream of freedom was to educate the youth.

REFERENCES

1. Mukhtorov A. Unity of needs and interests in the development of national ideas: Philosophy. doct. diss. abstracts. Tashkent; 2009. 46 p.

2. Rasulov H. Ideology of society in Uzbekistan: national foundations and formation: Fals. fan. nomz. dis. avtoref. Tashkent; 2002. 24 p.

3. Sobirova MA. The essence, sources and social functions of the ideology of national independence (socio-philosophical analysis): Fals. fan. nomz. dis. avtoref. Tashkent: National University of Uzbekistan; 2001. 20p.

4. Tashanov A. The negative impact of destructive ideas on the understanding of national identity. Philosophical science. doct. diss. Tashkent: O'zMU, 2017. 34p.

5. Tulenova GJ. The role of the spiritual factor in increasing the social activity of young people (socio-philosophical analysis): Fals. fan. doc. dis. avtoref. Tashkent: TATU, 2006. 32p.

THE WAY OF INDEPENDENT DEVELOPMENT - A KEY FACTOR OF NATIONAL REVIVAL AND PROGRESS OF UZBEKISTAN

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ABSTRACT

This article analyzes the social processes associated with the national recovery and growth of our country, which has an independent path of development, and explores the role and importance of the idea of "from national revival to national progress" in these processes. In addition, the opinions of the researchers are presented in the context of the topic and compared with the personal approaches of the author.

KEYWORDS: *Idea, National Ide, System, Social Life, Society, New Reforms, Independent Development, National Revival.*

INTRODUCTION PART

There are principles to rightly describe the post-independence period of Uzbekistan as a stage of national revival of our independent democratic development. Independence has laid the foundation for the establishment of a democratic state and a strong civil society in our country, as the true owner of the destiny of the people of Uzbekistan, and the opportunity to live a decent life.

Among the sources of threats to national recovery in the first years of independence is the fact that Uzbekistan is surrounded by some countries that are burdened with ethnic, demographic, economic and other problems. Moreover, it should not be overlooked that our country borders on a hotbed of instability in the region, such as Afghanistan, which is fueled by religious extremism, ethnic intolerance, drug trafficking and various external forces. Complicating matters is the fact that regional conflicts are often a constant source of dangerous threats, such as terrorism and violence, drug trafficking and arms trafficking, mass human rights abuses.

MATERIALS AND METHODS

Thus, security threats at the time included political extremism, such as religious extremism, and nationalism, ethnic, inter-ethnic, local and tribal conflicts, corruption and crime, and environmental issues. In this regard, it should be noted that, especially in recent times, geopolitical goals have become more synonymous with ideological policy. At the same time, ideological influence appears to be the most influential tool of geopolitics. That is, the goals of different countries are realized through the ideological influence on the minds and hearts of different segments of the people, in particular, the youth, with the aim of creating an ideological environment focused on their activities and interests. It is not easy to see this process firsthand, to know how it is going, that is, where, in what ways, which people are capturing the hearts of evil, alien ideological goals. **[1]**

National revival, enlightenment development and the development of the peoples of the world require that geopolitics, while pursuing certain goals, must be consistent only with the idea of peace and stability, prosperity of countries and peoples, free and prosperous life. It should be the main criterion of current geopolitical goals, embodying the ideas of national development, peace, well-being of the people, social cooperation, interethnic harmony and religious tolerance. **[2]** It should not serve to ideologically divide the world by instilling unhealthy ideologies and ideas in the minds and hearts of other nations, but to serve mutually beneficial cooperation and the solution of world problems by mutual consent. In this sense, a new approach to geopolitics will have a special meaning and significance in the XXI century and will serve the development of the world.

Even in the current context of Central Asia's independence and progress, certain political forces and ideological circles in the world have not stopped trying to take advantage of this region, which has a huge economic potential and a favorable geopolitical position **[3]**.They use all forms of influence and pressure to achieve their goals. In particular, it should be noted that there are cases of ideological interaction, such as obstructing the process of mutual economic integration of the Central Asian countries, arousing dissatisfaction with each other.

RESULTS AND ANALYSIS

To this end, various ideological, religious and ideological means have been used to disrupt the historically formed socio-economic, cultural and enlightenment ties in the region, to provoke conflicts between friendly and brotherly states, peoples and nations, and to create hotbeds of tension. In particular, taking advantage of the strong role of Islam in the worldview and spirituality of the peoples of Central Asia, subversive efforts to teach them an Islamic "lesson" and spread religious extremism and fundamentalism in the region under the banner of Islamic revival are intensifying.

Over the years of independence, Uzbekistan has taken the lead in ensuring stability in Central Asia and the mutual integration of countries in the region. These very important factors, based on the achievements of the future, have certainly frightened the enemies of the development of our people and our country.

If the goals of our enemies were achieved in Uzbekistan, it would lead to great political changes not only in our country, but also in the whole region, and would have a huge negative impact on the process of regional integration. This, in turn, means that one of the factors hindering the process of national recovery in our country is related to the dangers and threats in this area.

For the same reason, it should be noted that the concept of "national revival" inherent in the period of independence of Uzbekistan reflects the goals of entering the world civilization and rising to the ranks of the most advanced countries. Such harmonization is not a mechanical process, but a complex dialectical process that requires political, organizational, material, theoretical behavior, ideological consolidation, taking into account the values of the past, as well as the current aspirations of our people.

In the socio-philosophical interpretation of the concepts of "national revival" and "national progress", the gradual and dynamic process associated with significant positive changes not only in the economic sphere, but also in the spirituality, politics and worldview of peoples as a result of Uzbekistan's accession to world civilization.

The history of mankind in the next century testifies to the fact that among the peoples involved in such a process there is mutual trust, cooperation, mutual respect and the desire to resolve conflicts on the basis of mutual consent and consensus. The desire to enjoy the values and experiences of each other's cultural achievements is formed. The tendency of nations to unite with each other forms a single, entire civilization, a planetary consciousness. That is, the harmony of nationalism and universality is clearly manifested in world civilization and becomes the program of action of the world community.

The study of any phenomenon requires that it examine the conditions that have arisen, all the changes that have taken place in its content in the course of historical development, and so on. However, the purpose of studying the concepts of "national revival" and "national progress" does not allow to draw attention to various aspects of the problem of traditions, in particular, the study of their origin and history of development **[4]**.

Therefore, from the point of view of the concepts of "National Revival" and "National Rise" formed during the independence of Uzbekistan, all attention is paid to the study of the formation of a new attitude to the traditions and customs, including the state, traditions and customs. it is necessary to focus on defining the role and importance of social functions in the life of a renewed society, as well as the role of new customs and traditions in the national revival and raising the morale of the people. **[5]**

CONCLUSION

According to the concept of “national revival”, the idea that national customs and traditions are derived from the social needs and interests of society is of great methodological importance for understanding their essence and functional purpose. Customs and traditions as a social phenomenon are based on the principles of stability and repetition of events in different spheres of life. For many years, the formation of labor skills in the new generation, the regulation of youth labor has been an important task of traditions and customs. **[6]**

At present, this task has lost some of its significance due to the changing nature of production, the strengthening of the education system and general vocational training. Only in handicrafts, in the activities of folk craftsmen, and in some other areas related to manual labor, which are achieved directly in the course of labor activity, some mechanization-free skills are preserved.

Our research clearly proves that national revival and ascension require renewal, not general denial, but dialectical denial, while preserving the most valuable, most important aspects of the achievements made in the stages of social development. In this regard, the first stage of recovery, which included the first reforms and changes in the formation of the foundations of national statehood in post-independence Uzbekistan - 1991-2016, was a period of transition, which left a huge mark on the life of our country.

The examples and evidence of the recent past show that the tasks of national identity, economic, social, spiritual and enlightenment progress of society, development of living standards and comprehensive progressing of the country played a special role in creating the basis for national revival.

REFERENCE

1. Jo'raev N. Spirituality strategy of Uzbekistan. Tashkent: Manaviyat; 2016. 32p.

2. Nazarov K. Spirituality: Explanatory dictionary of basic concepts. Tashkent: NMIU; 2009. p. 678

3. Nazarov K, Ergashev I. National Idea and Leader Responsibility. Tashkent: G. Gulom Publishing House of Literature and Art; 2008.

4. Musaev F. Philosophical and legal bases of building a democratic state. Tashkent: Uzbekistan; 2007. p.255

5. Ergashev I. Civil Society and Youth. Science and Education. 2021;2(2).

6. Ergashev I. Uzbekistan's National Ideology in the Context of Democratic Society Development Ибодулла Эргашев. 1000 kopii. 2021. p. 18.

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ANALYSIS OF COMPETITIVE PERFORMANCE OF SOCCER PLAYERS

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ABSTRACT

The article analyzes the technical and tactical skills of the soccer team players. The analysis of game characteristics, which gives the opportunity to determine the level of reliability and effectiveness of the technical activities of soccer players. The first way is preferable, because the activity of the athlete at the moment of the game always acts as the culmination of the most complete direction of his physical and mental exertion. As a result, the training system and the training load of each player should be consistent with the goal of achieving adaptation to the specific activities of soccer players.

KEYWORDS: *Competition Training, Technical Actions, Effectiveness, Structure, Research, Soccer Player.*

INTRODUCTION

Analyzing the competitive activity of highly qualified soccer players, a number of researchers have noted that one of the main directions, as well as the complexity in the organization of player training is the control of competitive activity. **[1]**

The complexity associated with many different factors of the competitive stage is that today's soccer is a metrically non-competitive game, evaluated as a result of all the points. Second, the mindset of team play includes a variety of interactions such as: defensive and offensive tactics, great variability and conflict situations that require a fraction of subjectivity in evaluating performance. Third, the high intensity and professional orientation of modern soccer requires careful analysis and objective criteria for monitoring and evaluating the competitive activities of players. **[2]**

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The complexity associated with many different factors of the competitive stage is that today's soccer is a metrically non-competitive game, evaluated as a result of all the points. Second, the mindset of team play includes a variety of interactions such as: defensive and offensive tactics, great variability and conflict situations that require a fraction of subjectivity in evaluating performance. Third, the high intensity and professional orientation of modern soccer requires careful analysis and objective criteria for monitoring and evaluating the competitive activities of players. **[4]**

The main parameters of modern soccer are considered technical and tactical movements (TTD), the volume, accuracy and professionalism of players.

Analysis and evaluation of everything that happens during the competition allows you to solve a number of important problems, including a more objective and optimal to build training process, to identify the cause-and-effect relations affecting the outcome of the sport match, to identify trends in the further development of the game, etc. **[5]**

Technical and tactical skills of soccer players can be determined in two ways: by analyzing the competitive activity during the game or by performing test tasks. The first way is preferable, because the activity of the athlete at the moment of the game always acts as the culmination of the most complete direction of his physical and mental exertion. From our point of view, only in the game you can most objectively determine the best and worst sides of his preparedness and on the basis of the analysis apply the necessary recommendations in the competitive activity of soccer players. Accordingly, it makes sense to agree with the experts, revealing the data of management of the players' activity, that it is necessary to adjust the impact of each player and the team as a whole. As a result, the training system and the training load of each player should be consistent with the goal of achieving adaptation to the specific activities of soccer players. In other words, it is a process of influencing the elements of the training system on the athlete, representing the achievement of high sports results. **[6]**

It is especially necessary to solve this problem in sports games, and in particular in soccer, where the dependence of motor actions on external conditions can be strictly deterministic, and more often stochastic.

In our opinion, to manage the educational and training activities of players, you need to know the ability of each player; this is the main factor in the stage of formation of sportsmanship. However, first, we need to identify the main components of the training process. Definitely, it is the activity of soccer players, consisting of movements with and without the ball. Constituents of competitive activity with the ball - a broad concept it is defined for both the athlete and for the team as a whole. The ways of defining this structure are also different. We consider the concept of the components of competitive activity soccer player with the ball as a differentiation of technical and tactical actions. Conducting the experiment from this perspective, we can consider in practice the main actions of the soccer player on the field, revealing his individual characteristics. **[7]**

In the process of the experiment, conducted on the Uzbek athletes soccer team "Lochin", we set the following objectives:

1. To analyze the components of the ball players' activity, i.e. to determine the step-by-step motor technical and tactical actions.

2. Determine the probability of applying these actions.

Determine the effect of performing a technical-tactical action.

In solving the first problem, all technical and tactical motor actions were divided into:

- Ball passing;

- Ball passing; ball passing;
- stepping around; crossover;
- Shots on goal;
- Interceptions;
- Various kinds of one-on-one fighting;
- Standard positions.

In the process of pedagogical observation we used the system of monitoring of athletes. The probability of applying technical actions was made up by the formula: Kvp= DD/VD,

Kvp is the coefficient of probability of application; DD is the total number of motor actions; TD is the total number of all actions. **[8]**

The effect from the performance of technical-tactical actions was discovered as a product of the significance of technical actions by the point for the technique of the motor action, expressed in points. The effect of defensive and offensive actions was defined separately.

Offensive actions are: different passes and kicks on goal, passing, leading, standard positions, unilateral actions (with attacking); defensive actions - interceptions, unilateral actions (defensive). **[9]**

TABLE 1 TOTAL TECHNICAL ACTIONS OF PLAYERS IN FIVE MATCHES

№ in sequence	Technical and tactical action	Total number of actions	Motor action	Application probability factor	% applications	Effect, points
1	Short Transmission	264	37	0,14	14	3,4
2	Reception, short transfer	➢	44	0,167	16,7	3,3
3	Straddle technique	➢	32	0,12	12	1,2
4	Combat at the top	➢	21	0,079	7,9	1,9
5	Reception, short pass, stroke	➢	18	0,069	6,9	3,8
6	Reception, introduction, short handoff	➢	22	0,083	8,3	3,2
7	Reception, introduction, stroke	➢	10	0,038	3,8	1,2
8	Reception, circumvention, middle pass	➢	9	0,038	3,8	3,0
9	Reception, introduction, middle gear	➢	6	0,034	3,4	3,6
10	Middle gear	➢	6	0,022	2,2	3,3
		➢				
33	Long Transmission	➢		0,004	0,4	3,0

Table 1 shows the total performance of technical and tactical actions with the ball by "Lochin" team player. The reliability of these indicators is indicated by a significant statistically significant difference ($p \leq 0,01$). As can be seen from Table 1, during 5 games soccer player O. used 33 different ligatures. And the total number of all technical actions for 5 games was 264. 6 of these 33 joints are distinguished (tabl. 2) which make 174 of 264 technical actions, or 65.9 % of total variance in this sample. These six ligaments determine the game of the player O. in the given part of the championship. Each of these ligaments has its own probability coefficient of application and its own effectiveness. **[10]**

TABLE 2 THE MAIN LIGAMENTS OF TECHNICAL ACTIONS WITH THE BALL OF THE SOCCER PLAYER ODILOV

№ in sequence	Technical Action	Total number of actions	Motor action	Application probability factor	% applications	Effect, points
1	Short Transmission	264	37	0,14	14	3,4
2	Reception, short transfer	➢	44	0,167	16,7	3,3
3	Reception, out maneuvering the opponent	➢	32	0,12	12	1,2
4	Combat at the top	➢	21	0,079	7,9	1,9
5	Reception, circumvention, short pass	➢	18	0,069	6,9	3,8
6	Reception, introduction, short handoff	➢	22	0,083	8,3	3,2
	Total	264	174	0,659	65,9	M-2,8

After viewing and analyzing the five selected games of the Uzbekistan championship, we compared the components of the implementation of technical actions with the ball by soccer player O. in the game and in training. For this purpose, we also recorded five selected training sessions of this soccer player in the same segment of the national championship. In these sessions, the soccer player faced the main task of improving technical skill. Comparing the structure of technical actions performed by the player O. in the game and in training, we can note the following: out of the six most frequently used ligatures in the game, in training O. applied only two. The remaining four ligaments are absent in training. This happened because in training exercises were used without taking into account the individual manner of playing the player. Not taken into account the structure of his playing actions with the ball. However, it should be noted that the coefficient of probability of application of these ligatures in training is higher than in the game. The efficiency of performing technical actions is also higher. But efficiency is higher, mainly because many of the exercises used in training are often performed without resistance from the opponent. Based on all of the above, we can conclude that these trainings do not completely solve the problem of improving technical skill soccer player, because they did not take into account the structure of its competitive activity with the ball. **[11]**

CONCLUSIONS

1. A certain sequence of technical actions of a soccer player with the ball, characteristic for each individual athlete, was revealed. So, for the team player "Lochin" O. out of 33 bundles of technical actions with the ball 6 can be distinguished, which account for 65.9% of the total variance of this sample. **[12]**

2. Each individual athlete is characterized by his/her own probability of applying these or those technical actions, which determines his/her manner of playing the game.

3. The efficiency of a soccer player to perform technical actions with the ball in training is higher than in a game, because they were performed often without resistance and creation of extreme competitive conditions.

4. In order to improve the technical skill of soccer players, it is necessary in the educational and training process to individualize the improvement of technical skill, and the identified sequence of execution of technical methods to improve in training.

REFERENCES

1. Godik VA, Godik MA, Ryabochkin AV, Sabitov Sh, Yadin BD, Modern technologies in medical and biological support training players. Medico-biological problems of sport. FNTS VNIIFK, 2014. pp. 25-33.

2. Davydov AE. Analysis of technical and tactical actions of players in soccer. Actual Studies. 2020;14 (17):75-79.

3. Privalov AV. Increasing the effectiveness of receiving the ball on the basis of individualization of special strength training of qualified soccer players: Ph. ... candidate of pedagogical sciences. St. Petersburg, 2018. 24 p.

4. Yunusov SA. Features of Periodization of Training Process of Highly Qualified Parapauerlifters . FanSportga. 2021;(1):29-32.

5. Abdusoliyev AI, Kushakova MN. Principles of Analysis of the Financial Policy of the Development of Railway Transport. Economics Association, 2021;9(88):893-896.

6. Abdusoliyev AI, Kushakova MN. Trends in the development of financial management systems. Oriental renaissance Innovative, educational, natural and social sciences, 2021;1(9):972-977.

7. Razzoqova JR, Qaxorov MX, Kushakova MN. Improving the financial management system of railway transport. Oriental renaissance Innovative, educational, natural and social sciences, 2021;1 (9):978-986.

8. Kushakova MN. Main directions of credit policy during the COVID-19 Pandemy. European Journal of Molecular & Clinical Medicine, 2020;7(2):1836-1839.

9. Kushakova MN. Financial planning problems in enterprises. EPRA International Journal of Economic Growth and Environmental Issues, 2020;8(5): 20-21.

10. Dzhumanova AB, Kushakova MN, Khodzhaeva NA. Formation of accounting management information in the control system of enterprises of JSC Uzbekistan Railways. International Journal of Advanced Science and Technology, 2019;28(14):32-36.

11. Sultanova S, Kolesnikova TD, Smolennikova L, Strelnikova N. Generation of an instrument base for analysis of economic processes for the purpose of building a model of spatial development of regions in the context of global challenges. Attended in international conference on economics, management and techlogies, 2021 (ICEMT 2021), 2021;1(1):134-145.

12. Igamberdieva KE. Internal Audit in Business Subjects: Goals, Objectives and Principles. International Journal of Innovative Research in Science Engineering and Technology (IJIRSET), 2022;11(3):2322-2330.

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