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THE IMPORTANCE OF PEDAGOGICAL MECHANISMS OF LEGAL SOCIALIZATION OF FUTURE TEACHERS

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***Annotation:** The article highlights the relevance of legal socialization of future teachers based on the needs and demands of society, the content and importance of concepts in inter-disciplinary integration based on the views of scientists. In addition, the components of the improvement of pedagogical mechanisms of legal socialization of future teachers were reflected in the system of educational strategies.*

***Keys words:** law, socialization, legal socialization, mechanism, pedagogical mechanism, educational strategy.*

Introduction: The strategy of new Uzbekistan includes the existing political-legal, socio-economic, spiritual-educational reforms in the field of human rights, the formation of human rights culture, Islamic rights and gender issues in the higher education system. development of a continuous education system, introduction of modern methods of forming respect for the law in society;

- "Organization of human rights, women's rights, and children's rights training courses in higher education institutions and personnel, as well as in preschool and general education institutions, academic lyceums and colleges"[1] tasks require the improvement of the systematic regulation of mechanisms for the development of legal consciousness and legal culture in society. One of the important requirements of the development of the society is to educate the young generation who is able to socialize, respects the rights and freedoms of the individual, abides by the rules of the democratic state and society. This requires clarifying the psychological and pedagogical features of the development of professional qualities of pedagogues, who are considered educators of the young generation, on the basis of legal socialization, studying the organizational and pedagogical conditions, and improving the pedagogical mechanisms of legal socialization.

It is worth saying that the work carried out in the reform of the higher education system during the past years is aimed at improving the legal foundations of the higher education system, including "The priority of the systematic reform of higher education in the Republic of Uzbekistan to define directions, raise the process of training highly

qualified personnel with modern knowledge and high spiritual and moral qualities, independent thinking to a new level in terms of quality, modernization of higher education, social sphere based on advanced educational technologies and in order to develop economic sectors" [2] adopted in the Decree of the President of the Republic of Uzbekistan "On approval of the concept of the development of the higher education system of the Republic of Uzbekistan until 2030" dated October 8, 2019 No. PD-5847 ".. .increasing attention to the quality of personnel training in humanitarian and pedagogical directions, revising and improving curriculum and programs in pedagogical education directions and specialties based on advanced foreign experience, this way It is important to start from the higher education system that the students studying in shows that and is a reflection of a consistent policy in raising a healthy generation.

Also, "State educational standard of higher education" dated October 19, 2021. The main provisions. In the Decision No. PD-35-2021 "On approval of the standard of the Republic of Uzbekistan" based on state requirements, regular improvement of the professional competence of pedagogues, the quality of the educational process, educational standards, educational programs, It is provided by such factors as the potential of pedagogues involved in the educational process, the mental potential of learners, technical means of the educational process, educational technologies, and the quality level of educational process management.

Experiences show that, as the President of the Republic of Uzbekistan, Sh. Mirziyoyev, said, at the current stage of the development of society, "another main task of the education sector is to train the new generation, the fundamentals of science and one's specialty, which is necessary for today. "It is to educate educated young people", indicates the necessity of forming a generation of modern and broad-minded young people.

In the process of improving the integration of disciplines in the development of education in society, a number of new terms and concepts are entering the science and fields of pedagogy. One such concept is the term "legal socialization", which is a combination of the words "legal" and "socialization". "Legal" is a concept related to law, and it means that it is characteristic of law, such as discipline, discipline. In the explanatory dictionary of the Uzbek language, the category "socialization" not only expresses the meanings of "socializing" and "generalizing", but also means legal activation at a certain level.[4] E. Durkheim connects the concept of "socialization" with the problems of collective consciousness, first of all, the transfer of social norms and traditions from generation to generation.

Most modern sociologists consider socialization as a process of interaction between individuals who develop their own strategies in society and norms and value systems accepted by society. For example, G. Roche defines socialization as "the process by which a person perceives and assimilates socio-cultural elements of his environment, adds them to his personality under the influence of important social factors, and thereby adapts to the social environment" [5,149] describes as legal socialization is the process of assimilation of the system of legal knowledge, values and norms by a person, as a result of which a person successfully adapts to life socially and legally.

"Legal socialization" of a teacher in society is carried out in cooperation with various factors, agents and on the basis of a number of pedagogical mechanisms. It is known that the concept of "mechanism" is an interdisciplinary definition, and its meaning changes depending on the field of application. In scientific and pedagogical studies, the concept of "mechanism" is considered as a set of interrelated elements that determine the order of pedagogical activity.[6] Pedagogical mechanisms are natural changes in the transition from a pedagogical cause (influence) to a pedagogical consequence. Changes that occur in the mind, behavior, and personality of students and teachers under the effect of pedagogical influences: from hearing to understanding and remembering, from knowledge to belief, from skills to habits, from actions and habits to qualities, professional development from skills to professional culture indicates the systematic organization of pedagogical mechanisms.

Pedagogical mechanisms work between cause and effect, pedagogical effect and result. Often, it has a psychological and pedagogical nature, understanding it, relying on it when choosing a pedagogical effect, regulating its "operation" is the most delicate part of pedagogical work. Pedagogical mechanisms due to the conscious and purposeful implementation of human-human relations lie in the systematic structure of professional activity. Based on the systematic structure and activity of professional activity, pedagogical reality in the life of a person and society is represented by the main systematic types of pedagogical phenomena - education, training, teaching, development. Each of them has its own pedagogical facts, laws and mechanisms.

Thus, it can be said that the concept of "mechanism" is activated in pedagogical literature to describe the interrelated system and processes of formation of a certain ability or quality of a person. Like any complex phenomenon of reality, the mechanism has both static and dynamic properties, which represent a set of joint actions, complex specific functionality and multidimensional processes. A.V. Suyushkov made the following additional point to understand the "mechanism concept". Pedagogical

mechanism is an integrated system of multi-level interacting and interdependent processes with a specific beginning and interdependence of results [7].

Based on such interpretations of the concept of legal socialization of future pedagogues, it can be said that the implementation of educational strategies of legal socialization is the possibility of practical implementation of the planned knowledge and skills, developed about the teacher's pedagogical goal and means of achieving it. It is an action oriented to the scientific-theoretical socio-legal result that corresponds to the ideas.

In turn, the mechanism of legal socialization of future teachers is described as a mechanism of pedagogical strategy implementation as follows:

- a set of all elements that ensure the implementation of the functions of the pedagogical system;
- entities and tools that ensure the implementation of a set of measures in the material-technical, organizational, management and social-psychological direction;
- is the activity system of professors and teachers in legal, scientific-pedagogical support of professional and personal development of future teachers [8, 104-109]

In fact, improving the system of pedagogical mechanisms of legal socialization of future teachers is directly related to the study of the current situation in this regard, the search for measures to enrich it, and the determination of targeted measures in the implementation of current plans to eliminate shortcomings. Improving the pedagogical mechanisms of legal socialization of future teachers determines the goal of achieving the following tasks from a scientific-theoretical, legal, and practical point of view.

In our opinion, in the legal socialization of future teachers:

- on its legal basis (the Universal Declaration of Human Rights (adopted and announced on December 10, 1948 by Resolution 217 A (III) of the United Nations General Assembly);
- the Convention on the Rights of the Child (the Convention was adopted in New York on November 20, 1989. It consists of 54 articles);
- Constitution of the Republic of Uzbekistan (consisting of the Law of the Republic of Uzbekistan No. ORQ-837 dated 1.05.2023, Chapter 11, Article 75)
- Law of the Republic of Uzbekistan "On Education" dated September 23, 2020 (ORQ-637) and presidential decrees and decisions related to the field of education);
- to know the basics of science in his specialty (compulsory, elective block of subjects: pedagogy, field of psychological sciences, etc.);
- to be able to analyze the basics of pedagogy and psychology (methodological, that is, to know the general philosophical laws of education);

- scientific theoretical (knowing the laws of legal knowledge based on the principles of pedagogy and psychology);
- methodical (knowing the levels of designing stages of educational processes in professional activity);
- requires technological knowledge (having the competence to organize educational work in professional activity based on the requirements of pedagogical technology).

Taking into account the above, it can be said that "social pedagogy" is the educational discipline that constitutes the system of social-pedagogical mechanisms of teacher's professional training. The reason: Social pedagogy is a field of pedagogy aimed at studying the laws of socialization of a person, developing and applying technologies of effective methods of social pedagogical activity in order to solve social problems of society. So, as the socialization of a person continues from birth to the end of his life, the subject of "social pedagogy" is the main component for legal socialization, in professional training of a person for the needs of society. The inclusion of this subject in the professional training program of teachers is related to the division of social pedagogy into an independent field of pedagogical knowledge, and its value and importance in modern conditions are determined as follows.

On the basis of the state requirements for social pedagogy, the tasks of improving the organizational and pedagogical conditions of legal socialization of future teachers, clarifying the criteria and indicators for the development of social and legal competence of students were defined as follows:

- filling the content of social pedagogy subjects with socio-legal knowledge;
- to build the process of studying social pedagogy as a process of enriching the experience of the future teacher in solving pedagogical problems of the socio-legal context, and using the technologies of modern educational technologies, contextual education, project-based teaching, and the development of critical thinking;
- development of social and legal competence of future teachers in starting their social and legal activities;

Thus, the overview of pedagogical mechanisms of legal socialization of future pedagogues includes the following features.

- the generality of interrelated elements in ensuring the integrity of legal socialization of future pedagogues;
- as a unique set of inseparable actions aimed at the implementation of legal socialization of future pedagogues;

- the accuracy of defining and developing all the elements and tools that ensure the implementation of a set of measures in the material-technical, organizational, legal and social pedagogical direction for the legal socialization of future pedagogues;

- the synergistic effect of the integration of elements that make up the pedagogical mechanism of legal socialization of future pedagogues;

- the dynamism of the pedagogical mechanism of legal socialization of future pedagogues, the ability of the teacher to practically implement the set of planned actions;

the functional direction of the pedagogical mechanism of legal socialization of future pedagogues, which corresponds to the developed ideas about the pedagogical goal and the means of achieving it, determines the orientation to the legal result.

In conclusion, we emphasize that all the resources used by the teacher to ensure the meaningful learning of students are a specific embodiment of a certain pedagogical concept, educational strategy.

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CONCILIATION AS A MEANS OF ADR VS ARBITRATION AND MEDIATION

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Abstract: *Currently, alternative methods of dispute resolution are increasingly being developed, their specific forms of conflict resolution of different tones and hybrid forms of resolution of several different issues are also emerging. This article examines scientific-theoretical approaches as well as international and foreign legislation practices to reveal the importance and special features of such settlement as arbitration and mediation as one of the alternative forms of dispute resolution. In particular, the process of carrying out the conciliation process of such countries as China, Korea and India from Asian countries, the Russian Federation from the CIS countries, Germany, Hungary and Ireland from the European Union as well as Australia and Brazil will be analyzed comparatively by studying their similarities and different aspects,*

Key words: *Alternative methods of dispute resolution (ADR), Arbitration, Mediation, Conciliation, Conciliation agreement, Conciliator, Judicial conciliator, Judicial mediator, Conciliation center*

Introduction

Today, the importance of alternative dispute resolution tools is growing. There are several reasons for this tendency. The first is to ensure that disputes are resolved quickly and efficiently, while the other is to reduce the workload of state courts, which is the traditional way of resolving such cases. This trend is developing not only at the international level, but also in the territory of a particular country, including Uzbekistan.

At this point, we need to focus on what is meant by alternative dispute resolution.

Alternative Dispute Resolution (“ADR”) refers to any method of resolving disputes out of court. The ADR combines all the processes and methods of conflict resolution that arise outside any public authority. The most popular ADR methods are mediation, arbitration, conciliation, negotiation and settlement [1].

All ADR methods have common features, i.e. they allow the parties to find solutions to their disputes outside of traditional litigation, but are governed by different rules. For example, unlike mediation and conciliation, there is no third party involved in the negotiations to assist the parties in reaching an agreement, where the purpose of the third party is to facilitate the conclusion of a settlement agreement between the parties. In arbitration, a third party (arbitrator or several arbitrators) plays an important role due to the fact that an arbitration award is subsequently binding on the parties. By comparison, in conciliation and mediation, a third party cannot influence a binding decision for the parties.

Although ADR methods have different characteristics, they all have the character of complementary means and differ from each other in their application in practice and legal mechanisms. The main advantages of ADR are speed, privacy and flexibility.

Methodology

The research methodology is based both on the general scientific methodology of cognition of reality and private-scientific methods: historical, system-structural analysis, comparative legal analysis, analysis of judicial practice data. The study of procedural legislation, mediation, and legal consultation, as well as several national sources and other regulatory acts was carried out using the methods of specific research, logical and statistical analysis. In work, the author relied on the results of research by European, Russian and American legal theorists in the considered and related fields of knowledge, and international frameworks as well as the foreign legislations and practices of certain countries like Germany, Ireland, Hungary, Brazil, Russia, China, India, Australia and South Korea.

Results

At present, Uzbekistan has adopted special laws regulating ADR methods such as arbitration and mediation. In particular, the Law of the Republic of Uzbekistan on Mediation of July 3, 2018 LRU-482 “On Mediation” and the Law of the Republic of Uzbekistan on Arbitration of February 16, 2021 LRU-674 “On International Commercial Arbitration” can be quoted as an example.

But there is no special law on conciliation. In other words, this mechanism exists in the form of scattered norms as alternatives to existing national legislation, which also regulate only a certain stage of conciliation. In particular, in national legislation, the ADR in the form of conciliation exists in the form of “settlement agreement” and “conciliation”, but there are no norms that disclose its content and regulate its implementation with the participation of a third party.

In particular, in the case of crimes under Article 66¹ of the Criminal Code of the Republic of Uzbekistan [ii] according to Chapter 62 of the Criminal Procedure Code of

the Republic of Uzbekistan [iii], on cases on administrative offenses specified in Article 21² of the Code of Administrative Liability of the Republic of Uzbekistan in accordance with Chapter XXIII¹ of this Code [iv] and at all stages of civil proceedings in accordance with Chapter 17 of the Code of Civil Procedure of the Republic of Uzbekistan [v] and at all stages of economic proceedings in accordance with Chapter 16 of the Code of Economic Procedure of the Republic of Uzbekistan [vi] the settlement agreement is allowed. The specific features of concluding a conciliation agreement in national legislation are:

- the agreement is made only through the court;
- the proceedings are terminated when the settlement agreement is concluded;
- the settlement agreement is approved by the court and is not reapplied to the court on the executed case.

In this regard, the institute of conciliation in national legislation differs somewhat from the views of scholars on the scientific and theoretical content of conciliation and the basics of international and foreign law.

According to Olive du Preez, conciliation is an easy way to resolve conflicts where positive relationships are established. In doing so, the conciliator seeks to establish a positive and conciliatory relationship between the parties. The goal is to correct the relationship, reduce fear, and improve communication to guide the parties to negotiate and compromise without conflict. He also explained that conciliation is a psychological component of the mediation process and that the parties have the opportunity to determine their final outcome. A similar idea was quoted by Pretorius. He stressed that conciliation is an organized negotiation process, which is the first stage in bringing the parties into the mediation process [vii].

So, it is clear from these comments that conciliation is neither a negotiation nor a mediation. On the contrary, conciliation is a separate form of ADR between negotiation and mediation and is a process that takes place through an independent third party, as opposed to the case provided for in the above national legislation.

According to Angelina Isabel Valenzuela Rendón, the conciliation is a process involving the actions of the parties aimed at reaching a settlement agreement through a process conducted by a person or persons (a conciliator or conciliation commission, if there are several conciliators) who does not have the power to make an independent decision on a dispute between the parties, but an independent neutral third party that can give recommendations to the parties to reach a mutually real, real, effective and enforceable agreement.

It should be noted that in this case, too, the principle of impartiality and independence of the conciliator is emphasized. It can be concluded that the conciliator must be an independent person with no connection to the parties and the state. This situation also shows that the conciliation is very different from the form provided in the national legislation.

Also, although Angelina Isabel Valenzuela Rendón emphasizes that albeit mediation and conciliation are automatic compositional methods of dispute resolution, they differ from each other because in the mediation the mediator has no right to make recommendations, and in conciliation he can make recommendations to the conciliating parties and even this is considered correct [viii].

In this case, we can see one of the main features of conciliation that differs from mediation. This is because the national legislation does not give the mediator the right to express his independent opinion on the case as a basis for a settlement agreement.

The result of the conciliation process is a settlement agreement. Of course, a settlement agreement can only be enforced if it does not act in violation of the law and if it complies with all established legal rules. As the requirement of legality is important so that there is no problem in enforcing it. Voluntary enforcement of a settlement agreement is also possible only when permitted by law.

So how similar and different is the execution of a settlement agreement with the execution of other forms of ADR? The answer to this question can be found in international and foreign law.

According to P.T. Esenbekova, in fact, the enforcement of a voluntary settlement agreement is also based on a court decision [ix]. As noted above, national law also stipulates that a settlement agreement must be enforced by a court order approving it.

This means that although the settlement agreement must be enforced, it will depend on the legislation of the particular country. In this case, voluntary execution can be understood as voluntary performance of a contractual obligation or execution of a court document without coercive measures on the terms set out in it.

In particular, the conciliation agreement reached in Colombia is binding in accordance with Act No. 446 of 1998 [x].

The International Conciliation Act is the 2002 UNCITRAL Model Law on International Commercial Reconciliation. For the first time, the document provides a legal definition of conciliation. According to Article 1, paragraph 3 of this document, “conciliation” is a process in the form of the participation of a third party(s) or mediation, conciliation, provided by the parties assisting the parties in resolving disputes arising from contractual and other legal relations. The conciliator has no power to compel the parties to settle the dispute [xi].

Hence, in this norm, it can be seen that conciliation is confused with mediation. This situation changed in 2018, and in order to avoid similar uncertainties, the 2002 UNCITRAL Model Law was amended and renamed in 2018. Thus, the UNCITRAL Model Law on International Commercial Mediation and International Settlement Agreements Resulting from Mediation, consisting of 3 parts, was adopted. The second section of this document is devoted to mediation, and the third section is devoted to conciliation [xii].

According to these international documents, the conciliation process differs from the ADR forms in the form of mediation and arbitration with the following features:

Firstly, a third party can move more freely and present his or her views on the case as an invitation to the parties.

Secondly, it is not necessary to enter into a separate agreement, such as in mediation or arbitration, to initiate the process, but rather one party submits an offer to the other party 30 days before the start of the conciliation process.

Thirdly, the amicable agreement signed at the end of the conciliation is binding on the parties only if they reach the final conclusion that this agreement will resolve the dispute. At the same time, the national legislation of the states has different mechanisms for its implementation. But the main difference is that it is not as binding on the parties as it is in mediation, nor is it as binding on the parties as in arbitration. Because it can be changed or canceled until it has a mandatory play feature. The parties can then apply to other forms of ADR or a state court.

In the national law of some countries, the parties to a dispute through conciliation may appoint an arbitrator to reach an arbitral award based on the conciliation agreement they have entered into, thereby enforcing the enforcement. Such legislation and practice exist in **Hungary** and the **Republic of Korea**.

In **China** and the conciliation process is conducted by the arbitral tribunals, as the law allows them to reach a written conciliation agreement or an arbitral award based on it if the settlement is reached as a result of the conciliation. Interestingly, both documents are genuine and equally valid.

In some jurisdictions, the status of a settlement agreement reached after conciliation depends on whether the settlement occurred in the judicial system and the legal process applied to the dispute. For example, under **Australian** law, agreements reached in conciliation outside the scope of conciliation schemes annexed by the court are not registered by the court and cannot be enforced. On the contrary, the court will issue an enforcement order only if this rule is followed.

In **India** while the settlement agreement signed by the parties, it has the same status and effect as the arbitral award under the Arbitration and Reconciliation Act of

1996. Because the conciliation process is conducted by the arbitral tribunal and ends with the issuance of an arbitral award. According to this Act, conciliation does not apply to criminal cases, illegal transfers and family matters, including divorce [xiii].

In **Germany** according to the Code of Civil Procedure (Zivilprozeßordnung), conciliation is carried out in an arbitration proceedings provided by the court and approved by a binding arbitral award.

In addition, in the **Honkong Special Administrative Region** of China the conciliation agreement will be enforced and executed by the Court of First Instance only if the conciliation is conducted in an arbitration process based on an arbitration agreement.

In **Ireland** there is also a special law on conciliation. This is the 2010 National Conciliation Act. A distinctive feature of the Irish Conciliation Institute is the contractual nature of the resulting settlement agreement, which means that its implementation is voluntary, if not, there is liability for non-performance of contractual obligations. In this case, the party will be able to apply to the court under the settlement agreement [xiv].

The procedural rules governing the institution of conciliation emerged in the **Russian Federation** after the 2018 “procedural revolution”. In accordance with the Federal Law “On Amendments to Certain Legislative Acts of the Russian Federation” of July 26, 2019, relevant amendments were made to the Code of Civil Procedure, the Code of Arbitration and important provisions of the legislation of the Russian Federation on Notaries. According to him, the conciliation process will be applied not only in the civil process, but also in the administrative process. According to the new amendments, the conciliation process has been defined in court, arbitration and out-of-court forms.

Under the new reforms in the Russian Federation, a judicial conciliation has given the judge the right to recommend the conciliation process to the parties before the trial. In arbitration, the parties can take the initiative and move from arbitration to conciliation. A document that is the result of conciliation made in out of court and arbitration is said to be a document that, if it is notarized, can be enforced when it is not voluntarily executed.

According to the conciliation process in the trial, as mentioned above, the court shall adjourn the trial if the parties respond positively to the judge’s proposal on the conciliation process on their own initiative. In this case, the trial is suspended until the parties fail to reach an agreement or refuse to continue the conciliation, or until the expiration of the period specified for the conciliation process, after which the trial resumes. As a rule, the reconciliation process lasts 2 months. It is noteworthy in this

case that the period of suspension of the court is not taken into account in the expiration of the period of consideration of the case in court.

The conciliation process in court is regulated by the Rules of Conciliation and procedural legislation approved by the Supreme Court of the Russian Federation. According to him, conciliation in court is carried out by a judicial mediator on the basis of the principles of independence, impartiality and integrity. A former retired judge may be a judicial mediator at his / her own discretion, and the list of judicial mediators shall be approved by the Plenum of the Supreme Court of the Russian Federation, and the parties may choose a conciliator from this list.

In the **Federal Republic of Brazil** the conciliation and mediation process shall be regulated in accordance with the norms set out in Section 5 of the Code of Civil Procedure, which entered into force on 18 March 2016. In Brazil, conciliation centers have been set up in each court, which also provide mediation services. The activities of these centers are regulated by the relevant territorial courts and by the rules of the National Council of Justice. Judicial conciliators, mediators, private mediation centers and chambers must be registered in the List of Courts of Appeal or Federal Courts of Appeal and in the National Register, which contains information on the field of activity of specialists in this field. ^[xv].

An analysis of the implementation of conciliation procedures in Russian and Brazilian civil proceedings allows the identification of standard features and differences.

In Brazil, the legal consolidation of these procedures is more precise, and the procedure is clearly understood: how, where, and by whom. The Brazilian Code of Civil Procedure provides for the establishment of specialized conciliation centers in each court, which significantly increases the attractiveness of these methods. In addition, the requirements for a judicial mediator, registration, payment for services, and much more are clearly defined.

In the Code of Civil Procedure of the Russian Federation, in the Code of Arbitration of the Russian Federation, in the Code of Administrative Procedure of the Russian Federation, these procedures appear only as an opportunity to appeal to them in court. Therefore, it creates complications such as the parties having to refer to a lot of documents and prolonging the process.

Conclusion

The above-mentioned analysis of foreign experience and international legal practice shows that the importance of the conciliation process as a form of ADR in further simplifying and improving the quality of the dispute resolution process is manifesting itself globally at the beginning of the XXI century.

In order to reflect the conciliation process in the national legislation in a way that reflects its essence, as well as to bring national legislation in line with international legal framework and practice, a number of legal innovations should be introduced into the national legal system.

In particular, it is necessary to open conciliation and mediation centers under economic and civil courts in Uzbekistan. This can lead to the spread of unpopular mediation among the population, as well as to the promotion and practice of these forms of ADR, such as in Australia, Brazil and the Russian Federation, by offering conciliation and explaining its benefits to the parties and a reduction in the workload of the courts can be achieved.

Arbitration courts, as in Germany, China, India and the Russian Federation, should introduce the practice of conciliation in Uzbekistan, ie establish rules for conciliation in TIAC.

Introduce the practice of notarization, as in the Russian Federation, to ensure the implementation of out-of-court conciliation agreements, to adopt a separate law on conciliation, as in Ireland, or to establish the fundamental basis for this, as in the 2018 UNCITRAL Model Law. It is necessary to include Part 2 of the Law “On Mediation”, which contains separate provisions on “Conciliation”.

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TALABALAR ONGINI RIVOJLANTIRISHNING IJTIMOYIY-PSIXOLOGIK ASOSLARI

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***Annotatsiya:** Ushbu maqolada Oliy ta'lim muassasalarida ta'lim-tarbiya ishlari samaradorligini keskin oshirishda talabalarning ijtimoiy-psixologik xususiyatlarining o'rganilishining asosiy jarayonlari, holatlari va bosqichlarining adaptatsion kuzatuvlarni tahlil qilishga oid nazariyalar yoritilgan.*

***Kalit so'zlar:** ijtimoiy-psixologik, ijtimoiy yetuklik, akmeologiya, bolalik qurboni, o'smirlik davri, yosh toifalari, ideal "men", haqiqiy "men".*

Tadqiqotlarda talabalar deganda moddiy va ma'naviy ishlab chiqarishda ijtimoiy hayotga va mutaxassislikka oid rollarni muayyan qoida va maxsus dastur asosida bajarishga tayyorlanayotgan ijtimoiy guruh tushuniladi. Oliy o'quv yurtidagi ta'limning o'ziga xos xususiyatlari talabalarning boshqa ijtimoiy guruhlar bilan (ular xoh rasmiy, xoh norasmiy bo'lishidan qat'i nazar) muloqotga kirishish uchun muhim imkoniyat yaratadi. Talabalik davrining asosiy xususiyatlaridan biri ijtimoiy yetuklikning jadal sur'at bilan ro'yobga chiqishidir. Ma'lumki, ijtimoiy yetuklik (kamolot) shaxsdan zarur aqliy qobiliyatni hamda ijtimoiy turmushda bajariladigan turli rollarni egallashga (oila qurishga), farzandlarni tarbiyalashga, foydali mehnatda qatnashishga (mas'ul vazifada ishlashga) tayyorlanishni talab qiladi.¹ Mazkur jarayonning bosh mezonlari va ko'rsatkichlari o'rta ma'lumotlilik, jamoatchilik topshirig'i, mehnatda faollik ko'rsatish, qonunlar oldida javobgarlik, mutaxassis bo'lish imkoniyati, unga intilish tuyg'usi, irodaviy zo'r berish, yosh otalik va onalik burchi, jamoat arbobi vazifasini o'tash, ijtimoiy guruhga raxbarlik qilish, sport bilan shug'ullanish, bo'sh vaqtni tashkil eta olish, to'garakda qatnashish va hokazolardan iboratdir. Rus psixologiyasida balog'at muammosi birinchi bo'lib 1928 yilda N.N. Rivnikov, yetuk shaxsiyatni o'rganadigan rivojlanish psixologiyasining yangi bo'limini "akmeologiya" deb atagan. Psixologlar uzoq vaqt davomida bolaning aqliy rivojlanishi muammosi bilan qiziqishgan va bu odam "bolalik qurboni" ga aylangan. Talabalik davri o'smirlik davridan balog'at yoshigacha bo'lgan o'tish davri bo'lgan

¹ Ergash G'oziyev. "Ontogenez psixologiyasi" T: 2010y.200-bet

yetuk yosh psixologiyasi yaqinda psixologiya fanining predmetiga aylandi. Bu yerda o'smirlik aqliy rivojlanish jarayonlarining tugashi, qisqarishi nuqtai nazaridan ko'rib chiqilgan va eng mas'uliyatli va tanqidiy yosh sifatida tavsiflangan. L.S. Vigotskiy, o'smirlik psixologiyasini aniq hisobga olmagan, bolalikni kattalikdan aniq ajratib ko'rsatgan holda, uni birinchi marta bolaligiga kiritmagan. "18 yoshdan 25 yoshgacha bo'lgan yosh - bu bola rivojlanishining yakuniy bo'g'inidan ko'ra, kattalar zanjirining boshlang'ich bo'g'ini ". Demak, o'smirlik an'anaviy ravishda bolalik davrida qolgan barcha dastlabki tushunchalardan farqli o'laroq, uni birinchi bo'lib L.S. Vygotskiy "yetuk hayotning boshlanishi" deb atagan. Keyinchalik bu an'ana mahalliy olimlar tomonidan davom ettirildi. Alohida yosh va ijtimoiy -psixologik toifadagi talabalar fanda nisbatan yaqinda - 1960 -yillarda Leningrad psixologiya maktabi tomonidan B.G. Ananyev kattalarning psixofiziologik funksiyalarini o'rganishdi. Yosh toifasi sifatida kollej talabalari "kamolotdan yetuklikka o'tish davri" ni ifodalovchi kattalarning rivojlanish bosqichlari bilan bog'liq va kech o'smirlik - erta voyaga etish (18-25 yosh) deb ta'riflanadi. Barkamollik - balog'at yoshidagi talabalarni aniqlash ijtimoiy -psixologik yondashuvga asoslangan.

Talabalar guruhini "institut tomonidan tashkil etilgan maxsus ijtimoiy toifa, muayyan odamlar jamiyati" deb hisoblashda talaba yoshining asosiy xususiyatlarini ajratib ko'rsatib, uni boshqa guruhlardan yuqori ta'lim darajasi, yuqori kognitiv motivatsiya, eng yuqori ijtimoiy faollik va intellektual va ijtimoiy etuklikning uyg'un kombinatsiyasi bilan ajratib turadi. Umumiy aqliy rivojlanish nuqtai nazaridan, talabalar - bu shaxsning intensiv ijtimoiylashuvi, yuqori ruhiy funksiyalarining rivojlanishi, butun intellektual tizimning shakllanishi va umuman shaxsiyat davridir. Agar talabalar guruhini faqat biologik yoshni hisobga olgan holda hisobga oladigan bo'lsak, u holda o'smirlik davrini insoniyatning bolalik va balog'at yoshidagi o'tish davri deb atash kerak. Shuning uchun xorijiy psixologiyada bu davr ulg'ayish jarayoni bilan bog'liq.

O'smirlik davri qadimdan odamni kattalar hayotiga tayyorlash davri sifatida qaraladi, garchi har xil tarixiy davrlarda unga boshqa ijtimoiy maqom berilgan bo'lsa. Yoshlik muammosi uzoq vaqtdan beri faylasuflar va olimlarni xavotirga solgan, garchi bu davrning yosh chegaralari aniq bo'lmagan, o'smirlikning psixologik, ichki mezonlari haqidagi tasavvurlar sodda va har doim ham mos kelmagan. Ilmiy o'rganish nuqtai nazaridan, yoshlar, P.P. Blonskiy, insoniyatning nisbatan kech yutug'iga aylandi.

O'smirlik davri jismoniy, balog'at va ijtimoiy kamolotga erishish bosqichi sifatida aniq baholandi va o'sish bilan bog'liq edi, garchi bu davr haqidagi g'oyalar vaqt o'tishi bilan rivojlangan bo'lsa va turli tarixiy jamiyatlarda u turli yosh chegaralari

bilan belgilangan bo'lsa. Yoshlik g'oyasi tarixan rivojlangan. I.S. Konning ta'kidlashicha, "yosh toifalari ko'pchilikda emas, balki hamma tillarda dastlab ijtimoiy maqom, ijtimoiy mavqe kabi xronologik emas". Yosh toifalari va ijtimoiy mavqei o'rtasidagi bog'liqlik hozirgi davrda ham saqlanib qolmoqda, ma'lum bir xronologik yoshdagi shaxsning rivojlanish darajasi uning ijtimoiy mavqeini, faoliyatining xarakterini va ijtimoiy rollarini belgilab beradi. Yoshga ijtimoiy tizim ta'sir qiladi, boshqa tomondan, shaxsning o'zi, sotsializatsiya jarayonida, o'zlashtiradi, yangi narsalarni qabul qiladi va eski ijtimoiy rollarni tark etadi. K.A. Abulxanova-Slavskaya, yetuk yoshdagi ijtimoiy sharoitga ishora qilib, insonning hayot yo'lining davriyligi, o'smirlik davridan boshlab, yoshga to'g'ri kelishini to'xtatadi va shaxsiy bo'ladi deb hisoblaydi. O'smirlik davrining psixologik mazmuni o'z-o'zini anglashni rivojlantirish, kasbiy o'z taqdirini belgilash muammolarini hal etish va balog'atga etish bilan bog'liq. Erta o'smirlik davrida kognitiv va kasbiy qiziqishlar, ishga bo'lgan ehtiyoj, hayot rejalarini tuzish qobiliyati, ijtimoiy faollik shakllanadi, shaxsning mustaqilligi tasdiqlanadi. Yoshligida, odam o'zini tanlagan ishida o'zini namoyon qiladi, professional mahoratga ega bo'ladi va aynan yoshligida kasbiy tayyorgarlik tugaydi, demak, talabalik vaqti. A.V. Tolstixning ta'kidlashicha, yoshligida odam iloji boricha samaraliroq, eng katta jismoniy va ruhiy stressga dosh beradi va intellektual faoliyatning murakkab usullarini o'zlashtirishga qodir. Tanlangan kasbda zarur bo'lgan barcha bilim, ko'nikma va ko'nikmalarni egallash, kerakli maxsus shaxsiy va funktsional fazilatlarni (tashkilotchilik qobiliyati, tashabbuskorlik, jasorat, topqirlik, bir qator kasblar uchun zarur bo'lgan aniqlik, aniqlik, reaksiya tezligi) eng oson, va boshqalar.) aks ettiradi. Talaba ma'lum yoshdagi va shaxs sifatida uch tomondan tavsiflanishi mumkin:

1) psixologik jarayonlar, holatlar va shaxsiyat xususiyatlarining birligi bo'lgan psixologiyadan. Psixologik tomondan asosiy narsa - ruhiy xossalar (yo'nalish, temperament, xarakter, qobiliyat), bunga ruhiy jarayonlarning borishi, ruhiy holatlarning paydo bo'lishi, aqliy shakllanishlarning namoyon bo'lishi bog'liqdir;

2) ijtimoiy, unda ijtimoiy munosabatlar mujassamlashgan, o'quvchining ma'lum bir ijtimoiy guruhga, millatga mansubligi natijasida hosil bo'lgan fazilatlari;

3) yuqori asabiy faoliyat turini o'z ichiga oladigan biologiyadan, analizatorlarning tuzilishi, shartsiz reflekslar, instinktlar, jismoniy kuch, jismoniy va boshqalar. Bu tomon asosan irsiyat va tug'ma moyillik bilan oldindan belgilanadi, lekin ma'lum chegaralar ichida u o'zgaradi. yashash sharoitlari ta'siri ostida. Bu tomonlarni o'rganish o'quvchining fazilatlari va imkoniyatlarini, uning yoshi va shaxsiy xususiyatlarini ochib beradi. Agar siz talabaga ma'lum bir yoshdagi odam sifatida murojaat qilsangiz, u oddiy, kombinatsiyalangan va og'zaki signallarga yashirin

reaktsiya davrining eng kichik qiymatlari, analizatorlarning absolyut va differentsial sezgirligining optimalligi bilan tavsiflanadi. murakkab psixomotor va boshqa ko'nikmalarni shakllantirishdagi eng katta plastika. O'smirlik davridagi boshqa yoshlarga qaraganda, operativ xotira va e'tiborni o'zgartirish, og'zaki-mantiqiy muammolarni hal qilishning eng yuqori tezligi qayd etilgan. Binobarin, talabalar yoshi avvalgi barcha biologik, psixologik, ijtimoiy rivojlanish jarayonlariga asoslangan eng yuqori, "tepalik" natijalarga erishish bilan tavsiflanadi. Agar biz talabani shaxs sifatida o'rganadigan bo'lsak, unda 18-20 yosh-bu axloqiy va estetik hissiyotlarning eng faol rivojlanishi, xarakterning shakllanishi va barqarorlashuvi davri, va bu, ayniqsa, butun ko'nikmalarni egallash davri. Voyaga etganlarning ijtimoiy rollari: fuqarolik, kasbiy, mehnat va boshqalar. Bu davr "iqtisodiy faoliyat" ning boshlanishi bilan bog'liq bo'lib, demograflar odamni mustaqil ishlab chiqarish faoliyatiga qo'shilishini, mehnat tarjimai holining boshlanishi va o'z oilasini yaratish. Motivatsiyaning o'zgarishi, qadriyatlar yo'nalishining butun tizimi, bir tomondan, kasbiylik bilan bog'liq maxsus qobiliyatlarning intensiv shakllanishi, boshqa tomondan, bu yoshni xarakter va aqlning shakllanishining markaziy davri sifatida ajratib turadi. Bu sport rekordlari davri, badiiy, texnik va ilmiy yutuqlarning boshlanishi. Talabalar yoshi, shuningdek, bu davrda intellektual va jismoniy kuchga ham ega bo'ladilar. Ammo ko'pincha bu imkoniyatlar va ularning amalda bajarilishi o'rtasida "qaychi" paydo bo'ladi. Doimiy ravishda ortib borayotgan ijodiy imkoniyatlar, tashqi jozibadorlik bilan birga keladigan intellektual va jismoniy kuchlarning rivojlanishi, bu kuchlarning o'sishi "abadiy" davom etishi haqidagi tasavvurni yashiradi. "Yaxshiroq hayot hali oldinda, rejalashtirilgan hamma narsaga osonlik bilan erishish mumkin". Universitetda o'qish vaqti o'smirlikning ikkinchi davriga yoki etuklikning birinchi davriga to'g'ri keladi, bu shaxsiyat xususiyatlarining shakllanishining murakkabligi bilan tavsiflanadi. Bu yoshdagi axloqiy rivojlanishning o'ziga xos xususiyati - xulq-atvorning ongli motivlarini kuchaytirish. Yuqori sinflarda etishmayotgan fazilatlar sezilarli darajada mustahkamlanadi - maqsadga muvofiqlik, qat'iyatlilik, qat'iyatlilik, mustaqillik, tashabbuskorlik va o'zini tuta bilish qobiliyati. Axloqiy masalalarga (maqsadlar, turmush tarzi, burch, sevgi, sadoqat va boshqalar) qiziqish ortadi. Shu bilan birga, rivojlanish psixologiyasi va fiziologiyasi mutaxassislar 17-19 yoshda odamning o'z xatti-harakatlarini ongli ravishda tartibga solish qobiliyati to'liq shakllanmaganligini qayd etishadi. Tez-tez qo'zg'almas xavf, o'z harakatlarining oqibatlarini oldindan ko'ra olmaslik, bu har doim ham munosib motivlarga asoslanmasligi mumkin. Shunday qilib, V.T. Lisovskiyning ta'kidlashicha, 19-20 yosh-bu fidoyilik va to'liq fidoyilik davri, lekin tez-tez salbiy namoyishlar.

Yoshlik-bu o'zini o'zi anglash va o'zini o'zi qadrlash davri. O'z-o'zini hurmat qilish ideal "men" ni haqiqiy bilan solishtirish orqali amalga oshiriladi. Ammo ideal "men" hali tasdiqlanmagan va tasodif bo'lishi mumkin va haqiqiy "men" hali shaxsning o'zi tomonidan to'liq baholanmagan. Yosh shaxsning shaxsiyatining rivojlanishidagi bu ob'ektiv qarama-qarshilik uning ichki shubhasini keltirib chiqarishi mumkin va ba'zida tashqi tajovuzkorlik, chayqalish yoki tushunarsizlik hissi bilan birga keladi.

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“LA’NATI” QARG‘ISHI ASOSIDA YUZAGA KELGAN ODDIY FOLKLORIZMLARNING TARJIMADA BERILISHI

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Annotatsiya. Oddiy folklorizmning har bir ko‘rinishi badiiy asarning qurilishida, syujetida o‘ziga xos o‘rin tutadi. Shuning bilan birga bir tildan ikkinchi tilga tarjima jarayonida oddiy folklorizmning berilishi ham alohidalik kasb etadi. Maqolada oddiy folklorizmning bir ko‘rinishi misol tariqasida olinib tahlilga tortilgan va keng fikr yuritilgan.

Kalit so‘zlar: “Masnaviyi ma’naviy”, asliyat, tarjima, inglizcha tarjima, o‘zbekcha tarjima, mutarjim, maqol, oddiy folklorizm.

Mahmud Qoshg‘ariyning “Devonu lug‘oti-t-turk” asarida “qarg‘aldi” so‘ziga shunday izoh beriladi: “qarg‘aldi, la‘natlandi”¹. Ulug‘ tilshunos “Jak qarg‘aldi” deb misol keltiradi, bu gap tabdilchi tomonidan “Shayton la‘natlandi” deb berilgan. Ma‘lumki, la‘natlanish faqat shaytonga nisbatan qo‘llanadi. Ammo xalqimizda shaytonsifat insonga nisbatan yoki qattiq qiynalganda narsaga, jonivorga, voqelikka nisbatan “la‘nati” tarzidagi qarg‘ish qo‘llanadi. Demakki la‘natlanish Allohning Azozilga bergan jazosi bo‘lsa, vaqt o‘tib bu so‘z qarg‘ish tarzida shakllangan.

Maqol janrining shunday namunasi bor:

Duo olgan omondir,

Qarg‘ish olgan yomondir².

Vaqt o‘tib, insonda so‘zlashuv jarayoni yuzaga kelgan hamda og‘zaki ijod namunalari yaratila boshlangan. Qarg‘ish janri ham folklorning boshqa janrlari qatori zarurat mahsuli sanaladi. Inson gazablenganda yo kuch ishlatish orqali g‘azabini, nafratini ifodalagan, yo so‘kingan. Sekin-asta g‘azabini, dil og‘riqlarini Allohdan jazo so‘rash orqali ifoda qilgan. Natijada qarg‘ishning qator namunalari dunyoga kelgan.

Ba‘zan mohiyatiga yetib-yetmay “padaringga la‘nat” qarg‘ishi ishlatiladi. Shu sabab bunday qarg‘ishni qo‘llamasligi uchun xalq “Kim birovga “padaringga la‘nat”

¹ Mahmud ibn Husayn ibn Muhammad Qoshg‘ariy. Turkiy so‘zlar devoni (Devonu lug‘oti-t-turk). 3 jildlik. 2-jild. – Toshkent: Mumtoz so‘z, 2016. – B.156.

² O‘zbek xalq maqollari. – Toshkent: Adabiyot va san‘at, 1989. – B.81.

desa, o‘zining otasini la‘natlagan bo‘ladi”, – deydi. Bu ta‘qiq o‘git sifatida ham shakllangan. Fikr qilinsa, Odamning yaralishi bilan bog‘liq jarayonda yuzaga kelgan voqelik diniy tafakkurdan afsonaga ko‘chgan va xulosa qargishga ham aylangan. Inson jahlini mutlaqo bajarolmagan pallada “la‘nati” qargishi u tomonidan istalgan kishi yoki narsaga nisbatan aytiladi. Bu qarg‘ish boshqa qarg‘ishlar ichida eng yomoni, nazdimizda. Chunki la‘natlanish Allohning mutlaqo kechirmasligi bilan bog‘liq. Shu ma‘noda asli jin qavmidan bo‘lgan Azozil la‘natlagan shayton yoki iblis nomi bilan diniy adabiyotda mavjud, ayni damda, dunyo adabiyotida fisq-u fasod ramzini anglatuvchi obraz sifatida qo‘llanib kelinadi:

“Masnaviyi ma‘naviy”ning “Birinchi daftar”idagi “Xalifa Laylini ko‘rgani hikoyati” faslida shoirning shunday bayti bor:

В-ар ҳасад гирад туро дар раҳ гулӯ,
Дар ҳасад **Иблисро** бошад ғулӯ¹.

Shoir insondagi hasadning iblisga xosligini aytar ekan, la‘nati so‘zini qo‘llamaydi, aslida shayton, iblis deyildimi, la‘natlanish motivi anglashiladi. La‘natlanishiga sabab asli insonga hasad qilishida. Asliyatda qo‘llanmagan “la‘nati” qarg‘ishi asliyatda mavjud emas, ammo o‘zbek tarjimoni qarg‘ish janridan foydalanib, oddiy folklorizmni yuzaga keltiradi:

Gar hasad ko‘nglingga solsa bir g‘uluv,
La‘nati iblisning etgan kori bu.

Tarjimon oddiy folklorizm asosida hasadning oqibatini chuqurroq anglatadi, insonga hasadning shaytoniy ekanini uqtiradi. Bu so‘zni qo‘llagani bayt ma‘nosini buzmaydi, aksincha boyitadi.

And if on the way envy seize you by the throat,
it belongs **to Iblis** to go beyond bounds in envy²

Ingliz tarjimoni “iblis” so‘zini tarjima qilmay aynan qoldiradi, bosh harf bilan berishi, bizningcha, obraz sifatida qo‘llangan deb hisoblagani bilan bog‘liq. “La‘nati” so‘zi Nikolson tarjimasida ham mavjud emas.

“Birinchi daftar”ning “Sehrgarlarning Muso alayhissalomdan, asoni oldin sen tashlaysanmi yoki bizmi, deb so‘raganlari” faslida quyidagi bayt bor:

Тифли чон аз шири шайтон боз кун,
Баъд аз онаш бо малак анбоз кун.
То ту торику малулу тирай,
Дон, ки бо **деви лаъин** ҳамширай³

¹ Мавлоно Чалолуддин Муҳаммади Балхӣ.. Маснави Маънавӣ. Нашри Замон, 2001. – Б. 26.

² THE MATHNAWÍ OF JALÁLU‘DDÍN RÚMÍ. Translation by R. A. Nicholson. University of Cambridge. – P. 28

³ Мавлоно Чалолуддин Муҳаммади Балхӣ.. Маснави Маънавӣ. Нашри Замон, 2001. – Б. 57.

Asliyatda “la’nati dev” izofali brikmasida oddiy folklorizm qarg‘ish asosida hosil qilingan. Odatda, folklorda dev obrazi mavjud bo‘lib, ertaklarda, xalq dostonlarida salbiy obraz sifatida gavdalanadi, ammo zarur bo‘lganda ijobiy qahramonlarni tan olsa, ular bilan bahsda yengilib, yordam berishga va‘da bersa, va‘dasini bajaradi. Shu ma’noda, bu obraz shayton darajasida salbiylik kasb etmaydi. Shoir jonni go‘dakka qiyos qiladi. Go‘dak sut ichishi lozim. Ammo shoir shayton sutini ichmasligini istaydi.

Jon-go‘dak, shayton sutidin sen ayir,
So‘ng maloiklarga hamroh aylagil.

To qorong‘usen, malulu tiyrasen,

La’nati shaytonga chun hamshirasen.

Faslda halol luqma, tavba qilish, bu yo‘lda tinmay ko‘zyosh to‘kish haqida fikr boradi. Jamol Kamol “la’nati dev” birikmasini “la’nati shayton” tarzida o‘zbekchaga tarjima qiladi. Oldingi baytda shayton tilga olingani sabab o‘zbek tarjimonining tutgan yo‘lini qoralab bo‘lmaydi, ammo satrni “**La’nati ul devga** chun hamshirasen” tarzida tarjima qilinsa, asliyat aynan saqlanardi. Ehtimol, shoir so‘z takroridan qochgandir. Aytish lozimki, la’natilik shaytonga xosligi va oldingi baytda shu so‘zning mavjudligi Jamol Kamol tutgan yo‘lni oqlaydi.

Wean the babe, your soul, from the Devil’s milk,
and after that make it consort with the Angel.

While you are dark and vexed and gloomy,

know that you are sucking from the same breast as **the accursed Devil**¹

Ingliz tarjimoni **the accursed Devil** tarzida tarjima qilar ekan, asliyatdagi so‘zni aynan bermay, o‘zbek tarjimoni kabi ish tutadi: “la’nati shayton” tarzida beradi. Shoir qarg‘ish orqali yuzaga keltirga oddiy folklorizm ikki tarjimada ham saqlangan. Ammo oddiy folklorizmni yuzaga keltirgan qarg‘ish aynan saqlanmagan.

“Birinchi daftar”ning “Iso dinini yo‘qotmoqchi bo‘lgan boshqa bir juhud podshohining hikoyati” faslida qasam tarzida keltirilgan qarg‘ishlarni ko‘rib, ayni shu fasldagi “Va-s-samoyi-zoti-l-buruj”, ya’ni “Burjlar egasi bo‘lmish osmonga qasam”² ma’nosiga ega bo‘lgan, “Qur’oni karim”ning “Burj” surasi birinchi oyati keltirilgan baytga e’tibor qildik. Ko‘rinadiki, qasam islomda inkor qilinmagan, faqat qasam Allohndan o‘zgasiga bog‘liq bo‘lishi mumkin emas. Ushbu fasldagi baytga diqqat qiling:

Ҳар кӣ ў бинҳод ноҳуш суннате,
Сўйи ў нафрин равад ҳар соате³.

¹ THE MATHNAWÍ OF JALÁLU’DDÍN RÚMÍ. Translation by R. A. Nicholson. University of Cambridge.- P. 106.

² Mavlono Jaloliddin Rumi. Masnaviyi ma’naviy. – Toshkent: MERIYUS XHMK, 2010. – B.796.

³ Mavlono Чалолуддин Муҳаммади Балхӣ.. Маснави Маънавӣ. Нашри Замон, 2001. – Б. 34.

Shoir “unga la’nat yog‘ilsin” deyish orqali oddiy folklorizmni qo‘llar ekan, kimga, nega la’nat yog‘ilishi lozimligini oldingi baytlarda izohlaydi. Ammo shoir nazarda tutgan maqsadni anglash uchun nafaqat shu faslni, balki undan oldingi bir nechta faslni o‘qib uqish lozimligi ayon bo‘ladi. Jaloliddin Rumiylarning ayrimlari xor bo‘lgani, juhud vazir tomonidan bu din vakillarini yo‘ldan chiqarish uchun qilingan nayranglar bir-bir yoritir ekan, bu xorlikning ildizlarini ochib beradi: ayrim nasroniylar “Injil”da Muhammad payg‘ambar nomi keltirilgan, e’zozlangan bo‘lsa ham bu ismni xor qilishga uringanlari uchun o‘zlari juhud vaziri tomonidan xor qilingan.

Kimki bu yo‘lga kirarkan, ul yomon,

Boshiga **la’nat yog‘ilsin** har zamon.

Vazirning vafotidan so‘ng yangi vazir kelar ekan, u ham oldingi vazirning yo‘lidan ketishga chog‘landi. Shu sabab shoir bunday inson shayton qatorida bo‘lishini ta’kidlash uchun oddiy folklorizmdan foydalandi.

Whoever establishes an evil tradition,

towards him goes malediction every hour¹.

Jamol Kamol kabi ingliz tarjimoni ham asliyatdagi oddiy folklorizmni saqlab qoldi va “**towards him goes malediction**”, ya’ni “unga la’nat yog‘ilsin” shaklida tarjima qildi. Faqat o‘zbek mutarjimi “boshiga la’nat yog‘ilsin” deb tarjima qilar ekan, ramali musaddasi mahzuf vaznini saqlab qolishga erishdi. Ammo oddiy folklorizm bor satrda, aynan qargish berilganda azl, yani cho‘ziq bo‘lishi zarur bo‘lgan hijoning qisqa aytilishi holati uchraydi.

Aksariyat qarg‘ishlar shaytonga bog‘lab aytilar ekan, fisq-u fasod, hasad, kibr qoralanadi. Negaki, Azozil jin qavmidan bo‘lsa-da, farishtalar ustoziga aylangan bo‘lsa ham kibr, hasad kabi illatlarga berilib la’in sanalgandi. “Ikkinchi daftar”ning “Payg‘ambar Alayhissalomning xastaga etgan nasihati davomi” faslida shoir insonning fe’lidagi qusurlarni aytib o‘tadi:

Дев кй бвад, к-ў зи Одам бигзарад?

Бар чунин натъе аз ў бозй барад?

Дар ҳақиқат нафъи Одам шуд ҳама,

Лаънати ҳосид шуда он дамдама²

O‘zbek tarjimoni asliyatdagi “dev” so‘zini bir necha bor “lain”, “shayton” so‘zlari bilan beradi. Ko‘rinadiki, shoir “dev” deganda shaytonni nazarda tutadi. Tarjimonlar esa buni to‘g‘ri anglaydilar.

Odamiydin ul lain o‘tgaymu hech?

¹ THE MATHNAWÍ OF JALÁLU’DDÍN RÚMÍ. Translation by R. A. Nicholson. University of Cambridge. – P. 48.

² Мавлоно Ҷалолуддин Муҳаммади Балхӣ.. Маснави Маънавӣ. Нашри Замон, 2001. – Б. 180.

Odamiy-la o‘ynasa, yutgaymu hech?

Darhaqiqat naf‘i odamdir hama,

La’nati hosid erur ul damdama.

Bu baytlarda hasad la’natlanadi, ayni damda, la’natlangan dev yoki lain hasadda, fisqda odamdan o‘tolmasligini ifodalash orqali inson tubanlashsa, unga hech narsa yetolmasligiga iqror bo‘linadi. Ingliz tarjimoni Adam tarzida berar ekan, asliyatdagi kabi Odam Atoni nazarda tutgani oydinlashadi. Jamol Kamol tarjimasida esa bu so‘z satr boshida kelgani sabab bosh harf bilan berilgan bo‘lsa, ikkinchi baytda kichik harf bilan turdosh ot tarzida keltirilgan.

Who is the devil that he should surpass Adam

and win the game from him on such a board?

In truth, it all turned out to Adam’s advantage:

that guile became a curse to the envious one.

Asliyatdagi fikrni oddiy folklorizm kuchaytirib, ta’kidlab ko‘rsatgan bo‘lsa, tarjimonlar oddiy folklorizmni saqlash orqali ta’sirchanlikni ham saqlay olganlar.

“Masnaviyi ma’naviy” “Qur’oni karim”dan quvvat topishi bilan bir qatorda xalqning asriy chashmasi bo‘lmish folklordan ham kuch oldi. Oddiy folklorizm shoirning haqiqatlarni ifodalay olishiga ko‘mak beruvchi vosita sifatida ulug‘ asar suyetida, kompozitsion qurilishida, g‘oyaviy-badiiy jihatdan yuksalishi yo‘lida muhim omil bo‘lib xizmat qildi.

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ЎҚУВЧИ ЁШЛАРНИ ВАТАНПАРВАРЛИК РУҲИДА ТАРБИЯЛАШ ЯНГИ ЎЗБЕКИСТОН ЖАМИЯТИНИ БАРПО ЭТИШНИНГ МУҲИМ ШАРТИ СИФАТИДА

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Аннотация: Ушбу мақоланинг мазмунида ўқувчи ёшларни ватанпарварлик руҳида тарбиялаш янги Ўзбекистон жамиятини барпо этиш ва уни тараққий эттиришнинг муҳим шартларидан бир эканлиги баён этилади.

Калим сўзлар: Янги Ўзбекистон, ўқувчи ёшлар, ватан, ватанпарварлик, илм-фан, таълим, тарбия, маънавий тарбия, маънавият, маданият, маърифат, маърифатли инсон, , миллий ва умуминсоний қадриятлар.

ПАТРИОТИЧЕСКОЕ ВОСПИТАНИЕ СТУДЕНТОВ – ВАЖНОЕ УСЛОВИЕ СОЗДАНИЯ НОВОГО УЗБЕКИСТАНСКОГО ОБЩЕСТВА

Аннотация: В содержании данной статьи указано, что воспитание студенческой молодежи в духе патриотизма является одним из важных условий становления и развития нового узбекского общества.

Ключевые слова: Новый Узбекистан, студенчество, молодежь, Родина, патриотизм, наука, образование, воспитание, духовное образование, духовность, культура, просвещение, просвещенный человек, национальные и общечеловеческие ценности.

PATRIOTIC EDUCATION OF STUDENTS IS AN IMPORTANT CONDITION FOR ESTABLISHING A NEW UZBEKISTAN SOCIETY

Annotation: In the content of this article, it is stated that educating young students in the spirit of patriotism is one of the important conditions for establishing and developing the new Uzbek society.

Keywords: New Uzbekistan, students, youth, motherland, patriotism, science, education, upbringing, spiritual education, spirituality, culture, enlightenment, enlightened person, national and universal values.

КИРИШ.Тадқиқот ишининг долзарблиги: Биз Янги Ўзбекистонни барпо этишга қарор қилган эканмиз, иккита мустаҳкам устунга таянамиз. Биринчиси – бозор тамойилларига асосланган кучли иқтисодиёт, Иккинчиси – аждодларимизнинг бой мероси ва миллий ва умуминсоний кадриятларга асосланган кучли маънавият.(Шавкат Мирзиёев). Дарҳақиқат, бугунги куннинг энг долзарб масалаларидан бири бу, янги Ўзбекистон ўқувчи ёшларини миллий ва умуминсоний кадриятлар асосида ватанга садоқат руҳида тарбиялаш экан, бунинг учун аввалам бор уларнинг сиёсий онги ва сиёсий маданиятини ошириш, маънавий дунёсини бойитиш ва маданиятини юксалтиришдек кечиктириб бўлмайдиган вазифаларни амалга ошириш ҳар бир ота-она, оила, маҳалла ва таълим муассасаларининг муқаддас бурчи ҳисобланади. Ўқувчи ёшларимиз жисмоний ва маънавий жиҳатдан етук, маданиятли, тафаккур тарзлари юқори бўлса, улар жамиятда тезроқ ўзлигини англайдиган, ижтимоий жараёнларда ўз муносабатларини билдира оладиган онгли, сиёсий дунёқарашга эга шахслар бўлиб камол топади. Натижада, янги Ўзбекистон ўқувчи ёшларида ватанни севиш ва ватанга садоқат руҳида меҳнат қилиш қобилиятлари шакилланиб боради. **Муаммони ҳал қилиш йўллари:** Юртимиз ўз мустақиллигини қўлга киритганидан кейин, мамлакатимиз олдида ечимини топиш зарур бўлган бир қатор кечиктириб бўлмайдиган муаммолар пайдо бўлди. Бу муаммоларнинг ечими бевосита ўқувчи ёшларимизнинг тарбияси билан чамбарчас боғланган бўлиб, ўқувчи ёшларимиз эртанги кунимизнинг яратувчилари сифатида халқимизнинг миллий давлатчилиги тарихини чуқур англаб етиши, ўз қалби, онги ва шуурларида миллий маънавий кадриятларимиз асосида ватанпарварлик туйғуларини шакиллантириб боришлари лозим бўлади. Шу боисдан ҳам ўқувчи ёшларни ватанпарвар ва баркамол инсонлар қилиб тарбиялашда авваламбор миллий маънавий ва умуминсоний кадриятларнинг нақадар муҳим ва долзарб эканлигини бугунги кунда ҳар бир таълим муассасасининг таълим-тарбия берувчи мутахассислари унутмаслиги лозимдир. Бу ҳақида мухтарам президентимиз Ш.М.Мирзиёевнинг қуйидаги фикрлари сўзимизнинг исботи бўла олади: “ёшларимизни ватанпарварлик руҳида тарбиялаш бўйича узлуксиз олиб бориладиган ишлар биз учун долзарб аҳамиятга эгадир. Барчамизга яхши маълумки, ватанпарварлик ҳар бир давлат ҳаётининг маънавий асоси ҳисобланади ва жамиятни ҳар томонлама ривожлантириш борасида энг муҳим сафарбар этувчи куч сифатида намоён бўлади”[1], деб такидлаб ўтади.

Таклиф ва тавсиялар: Мамлакатимиз таълим тизимида ўқувчи ёшларнинг маънавий юксалиш жараёнида унинг барча ҳуқуқий, сиёсий, ахлоқий, маданий ва мафкуравий тасаввурлари ижтимоий тузум ва тузилмаларнинг таъсири

туфайли шакилланиб ва ривожланиб боради. Натижада ўқувчи ёшлардаги соғлом, нафис жисмоний қиёфа, юксак маънавий ҳис-туйғулар, миллий тафаккур ва умуминсоний тушунчалар бирлиги асосида ватанпарварлик таркиб топади. Миллий тафаккур ва умуминсоний тушунчалар уйғунлашган ҳолда ўқувчи ёшларнинг онги ва қалбида маънавий баркамолликни вужудга келтиради. Ўқувчи ёшларнинг ватанпарварлигини ахлоқий қадриятлар қонун-қоидаларига риоя этган ҳолда миллий руҳда тарбиялаш биринчи навбатда ёшларда меҳнатсеварлик, инсонпарварлик, ватанпарварлик, меҳр-оқибат сингари инсоний фазилатларни шакиллантира боради. Миллий маънавий қадриятлар эса, ўз навбатида, жамиятимиз тараққиётининг инсонийлашуви, халқимизнинг фаровонлиги ҳақидаги тасаввурларининг рўёбга чиқиши ва оммавийлашувида жуда катта ижтимоий сиёсий аҳамият касб этади. Янги Ўзбекистон жамиятимизда бугунги кунда амалга оширилаётган ижтимоий, сиёсий ва маънавий-маърифий соҳалардаги демократик ислохотлардан кўзланган асосий мақсад ўқувчи ёшларимизнинг юксак маънавиятли шахсларга эришувини таъминлаш, баркамол авлодни тарбиялаб вояга етказиш, ижтимоий сиёсий тараққиёт жараёнларида ҳар томонлама камол топган инсонларни шакиллантириш, миллий ва умуминсоний қадриятларни ўзида мужассам этган етук баркамол шахсларни вояга етказишдир. Шундай олийжаноб мақсадларни кўзлаган кўп миллатли Ўзбекистонимизда бир мақсад сари интилиш, ўқувчи ёшларнинг келажакдаги ўрни ва уларда янгича дунёқарашни шакиллантириш бугунги янги жамиятимизнинг долзарб масалаларидан бири ҳисобланади. Бу ҳақида мамлакатимиз президенти Ш.М.Мирзиёев жумладан шундай дейди: “Бизнинг ҳавас қилса арзийдиган буюк тарихимиз бор. Ҳавас қилса арзийдиган улуғ аجدодларимиз бор. Ҳавас қилса арзийдиган беқиёс бойликларимиз бор. Ва ишонаман, худо хоҳласа, ҳавас қилса арзийдиган буюк келажакимиз ҳам бўлади”[2], деб таъкидлаб ўтганлар. Ўқувчи ёшларимизнинг маънавий баркамол бўлиши уларнинг соғлом, ақл-заковатли, маърифатли, маъданиятли, инсонпарвар, меҳнатсевар, миллатпарвар ҳамда масъулиятлилик сингари инсоний фазилатларга эга бўлишини тақозо этади.

Бу ҳақда Ўзбекистон Республикасининг Биринчи Президенти Ислом Каримов ўз даврида жумладан шундай деган эди: “ Биз ҳаётга катта орзу-умидлар билан кириб келаётган ёшларимизга бир ҳақиқатни, яъни, Эй болам, сенинг Ватанинг битта – барчамизга азиз, бетакрор мана шу Ўзбекистон. Ота-боболарингнинг ҳоки шу ерда ётибди. Шу муқаддас замин сени дунёга келтирган, сен уни обод этишинг, ҳимоя қилишинг шарт. Нафақат сенининг ўз ҳаётинг, балки сенга умид кўзини тикиб турган ота-онанг, опа-сингилларинг, ёш

гўдақлар, нуруний қарияларимизнинг ҳаёти ҳам ана шу бурчингни нечоғлик адо этишинга боғлиқ деган тушунчани уларнинг қалбига, онгу шууруга сингдиришимиз даркор”[3].

Кутилаётган ижтимоий самара(НАТИЖА): Янги Ўзбекистонда амалга оширилаётган ижтимоий, маънавий-маърифий соҳалардаги демократик ислохотлардан кўзланган асосий мақсад ўқувчи ёшларимизнинг юксак маънавиятга эришувини таъминлаш, баркамол авлодга таълим-тарбия бериб вояга етказиш, ижтимоий ривожланиш ва тараққиёт жараёнида ҳар томонлама камол топган инсонларни шакиллантириш, миллий ва умуминсоний қадриятларни ўзида мужассам этган ҳамда етук комил инсонларни вояга етказишдир. Шундай олийжаноб мақсадларни кўзлаган кўпмиллатли янги Ўзбекистонимизда ягона бир мақсад сари интилиш, ўқувчи ёшларимизнинг ёрқин келажagini ўйлаш мамлакатимизнинг биринчи президенти Ислам Каримовнинг бир қатор маърузаларида ҳам ўз аксини топган. Жумладан бу ҳақида ўз даврида шундай деган эдилар: “Бундай эзгу интилиш, бундай ҳаракатларнинг негизида, айти бизнинг миллатимиз ва халқимизга мансуб бўлган бағрикенглик ва олижаноблик фазилатлари, шу билан бирга, мустақиллик йиллари давомида юртдошларимиз дунёқарашининг тубдан ўзгаргани, аввало, ёш авлодимизни тарбиялаш ва маънавий юксалтириш йўлида қилаётган барча-барча ишларимиз ўз ифодасини топган” [4], дея айти ҳақиқат гапларни айтиб ўтган эдилар. “Ҳозирги шиддатли замоннинг реал ҳақиқати шундан иборатки, интеллектуал ва маънавий бойликка эга халқ ва миллат, ҳеч шубҳасиз, ҳақли равишда бугунги ва эртанги кунга эгалик қила олади. Биз ёш авлодимизни миллий қадриятларга садоқат руҳида тарбиялаш билан бирга, уларнинг умумбашарий тараққиёт ютуқлари, замонавий билимларни ҳар томонлама чуқур ва пухта эгаллаши учун барча шарт-шароитни яратиб беришимиз лозим. Чунки ҳозирги пайтда давр бизнинг олдимизга қўяётган юксак талабларга жавоб беришга қодир бўлиб яшаш, турли-туман мураккаб муаммоларни ўз вақтида ва оқлона ечиш учун, албатта, замонавий билим ва тафаккур сув билан ҳаводек зарур” [5].

Хулоса қилиб айтганимизда, ўқувчи ёшларимизнинг янги жамият куриш ва янгича яшаш тарзига асосланган миллий-маънавий тафаккури ва дунёқарашини шакиллантириш бугунги куннинг энг муҳим вазифаларидан бири саналади. Мамлакатимизда олиб борилаётган сиёсий, иқтисодий, ва маънавий ислохотларга мос равишда ўзбек миллий давлатчилиқ тарихимиз, миллий ўзлигимиз, анъана ва қадриятларимиз руҳини, замонавий ислохотларнинг маънавий-мафкуравий моҳиятини ўқувчи ёшларимиз онгига сингдирадиган ва

ундаги ватанпарварлик, миллатпарварлик, меҳнатсеварлик ва ўзбекона ахлоқ-адоб, миллий маданият руҳида тарбиялай оладиган ижтимоий-маданий тараққиётни ривожлантириш доимий ва узлуксиз жараён бўлиб кун тартибидаги энг муҳим ва долзарб вазифалардан бири бўлиб қолаверади.

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GINGIVIT KASALLIGIDA QO‘LLANILUVCHI SINTETIK PEREPARATLARINING NOJO‘YA TASIRI

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Annotatsiya: Maqolada gingivit kasalligining kelib chiqishi, qo‘llaniluvchi sintetik preparatlarining kimyoviy tuzilishi, tarkibi va nojo‘ya ta‘siri to‘liq o‘rganildi va tahlil qilindi.

Tayanch so‘z va iboralar: gipertenziya, taxikardiya, perikardit, gipotenziya, qabziyat, diareya, glossit, disfagiya, ezofagit, gastrit, dispepsiya, soxtamembranoz kolit, pankreatit.

Аннотация: В статье всесторонне изучено и проанализировано происхождение заболевания гингивит, химическая структура, состав и побочные эффекты применяемых синтетических препаратов.

Ключевые слова и выражения: Артериальная гипертензия, тахикардия, перикардит, артериальная гипотензия, запор, диарея, глоссит, дисфагия, эзофагит, гастрит, диспепсия, псевдомембранозный колит, панкреатит.

SIDE EFFECTS OF SYNTHETIC MEDICINES USED IN GINGIVITIS

Annotation: In the article, the origin of gingivitis disease, the chemical structure, composition and side effects of the used synthetic drugs were fully studied and analyzed

Keywords and expressions: Hypertension, tachycardia, pericarditis, hypotension, constipation, diarrhea, glossitis, dysphagia, esophagitis, gastritis, dyspepsia, pseudomembranous colitis, pancreatitis.

KIRISH Gingivit, milk yallig‘lanishi (lot. *gingivitis*) — tish-milk birikmalari yaxlitligi buzilmasdan milklarning yallig‘lanishi. O‘z vaqtida davonlanilmasa gingivit paradont kasalligining destruktiv shakli — parodontitga o‘tishi mumkin. Milk yallig‘lanishi ko‘pincha milklarning shishishi yoki qonashi bilan namoyon bo‘ladi.

Gingivit odatda og'iz gigienasiga rioya qilmaslik natijasida tishlarda mikroblar karash to'planishi tufayli yuzaga keladi. Gingivit rivojlanishiga shuningdek noto'g'ri ortodontik davolash ham sabab bo'lishi mumkin, bu og'iz bo'shlig'i va tishlarni yaxshi parvarish qilmaslik bilan birga patogen mikroorganizmlarning intensiv rivojlanishiga turtki bo'ladi. Bakteriyalar (kamroq hollarda viruslar, zamburug'lar) milk yallig'lanishining bevosita sababchisi hisoblanadi [5]

Gingivit erkaklarda ayollarga qaraganda ko'proq uchraydi. Kasallik noqulay ijtimoiy-iqtisodiy vaziyatda bo'lgan, shuningdek adekvat stomatologik yordam olish imkoni bo'lmagan va ruhiy chekinishlari bo'lgan kishilar guruhida keng tarqalgan.

Gingivitning alomatlari, belgilari, tasnifi Kataral gingivit kasallikning eng keng tarqalgan shakli hisoblanadi. Asosiy alomatlari - milklarning qizarishi, ozgina shishganligi, ko'pincha tishlarda yumshoq va qattiq qatlamlar hosil bo'lishi. Tishlarni yuvishda milk yallig'langanligi va qon ketishi kuzatilishi mumkin.

Surunkali gingivit bemorda og'riq chaqirmasligi, biroq yallig'lanish uzoq va zaif davom etishi bilan ajralib turadi. Shuning uchun surunkali gingivit ko'p hollarda tish shifokorining profilaktik tekshiruvlarida tashxislanadi. Surunkali gingivitda vaqti-vaqti bilan tish yuvish paytida qonash, og'izdan noxush hid kelishi, milning qizarganligi va shishganligi qayd qilinadi. Kasallik o'tkirlashganida, milk yorqin tus oladi, shishadi va qonaydi. Tishda qatlam to'planishi qayq qilinadi, ba'zan ular tishning qattiq to'qimalariga zarar yetkazadi [2]

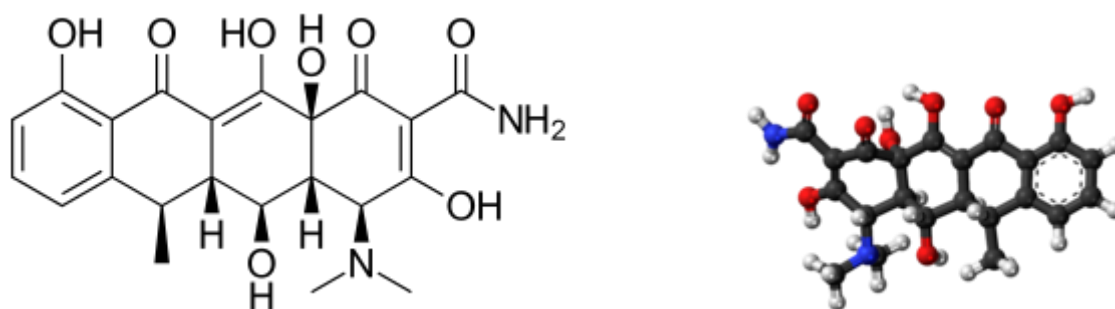
Gipertrofik (giperplastik) gingivit kamdan-kam hollarda uchraydi va ko'pincha organizmdagi endokrin o'zgarishlar bilan bog'liq. Ushbu turdagi kasallik o'smirlarda (yuvenil gingivit), homilador ayollar va qandli diabet bilan kasallangan kishilarda kuzatilishi mumkin. Gipertrofik gingivitda tish-milk so'rg'ichlar hajmi oshadi. Kasallikda milklar qonashi, yiring ajralishi kuzatiladi, milklar qo'ng'ir-ko'kimtir tusga kiradi, og'izdan noxush hid keladi, tishda qatlam to'planadi, soxta-patologik cho'ntaklar shakllanadi.

O'tkir nekrotizatsiyali yarali gingivit KXT-10 da alohida tasniflanadi. Kasallikning sababchilari bakterial infeksiya hisoblanadi. Og'izning shilliq qavati yallig'lanadi, qonashi, yoqimsiz hid kelishi qayd qilinadi, tishlararo so'rg'ichlarning nekrozi paydo bo'ladi. Kasallik yoshlarda (17-30 yosh) og'iz gigienasiga yetarli rioya qilmaslik tufayli kelib chiqadi. O'RVI, gripp, angina, OITS, sil kasalligi va boshqa kasalliklarda paydo bo'lishi mumkin.

Natijalar muxokamasi Gingivitni davolash Kasallikning kechishidan kelib chiqib, tegishli davolash o'tkaziladi: u og'iz bo'shlig'ini professional tozalash yoki jarrohlik yordamida davolash bo'lishi mumkin. Jiddiy yoki uzoq muddatli gingivitda penitsillin, tetratsiklin, doksitsiklin, metronidazol, siprofloksatsin, klindamitsin kabi

antibiotiklardan tizimli foydalanish mumkin. Milkdagi og'riqni qoldirish uchun paratsetamol yoki ibuprofen buyuriladi.

Doksisiklinga sezuvchan qo'zg'atuvchilar chaqirgan infeksiyon kasalliklarda qo'llaniladi. Dori vositasiga rezistentlikni rivojlanishini oldini olish va samaradorligini tutib turish uchun faqat doksisiklinga sezuvchanligi isbotlangan (yoki taxmin qilingan) qo'zg'atuvchilar chaqirgan infeksiyalarni davolash uchun qo'llaniladi.

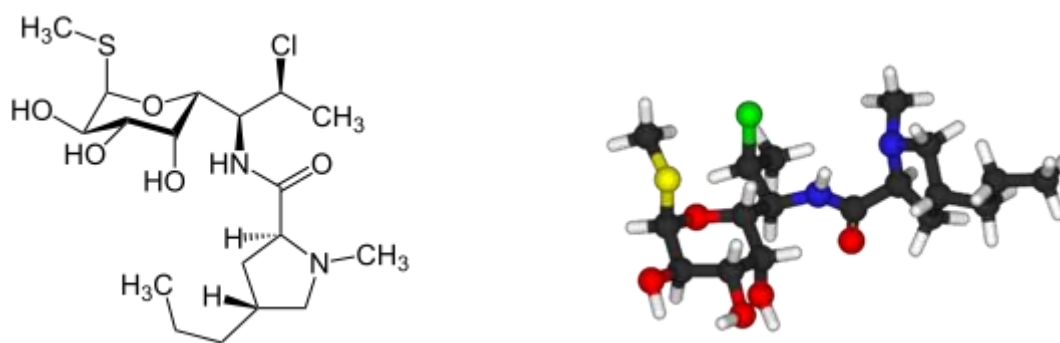


Doksisiklin $C_{22}H_{24}N_2O_8$

Ajratib olingan qo'zg'atuvchi va uni antibiotiklarga nisbatan sezuvchanligini borligi to'g'risida ma'lumot bo'lganida shifokor optimal antibiotikni tanlash uchun undan qo'llanadi, bunday bo'lmaganda antibakterial vositani empirik tanlovi mahalliy epidemiologik ma'lumotlarga va sezuvchanlik to'g'risidagi ma'lumotlarga asosan amalga oshiriladi. Doksisiklinga chidamli mikroorganizmlarning ko'pchilik shtammlari to'g'risida ma'lumotlarni borligi tufayli, ekma ekish va antibiotiklarga nisbatan sezuvchanlikni aniqlash tavsiya qilinadi.

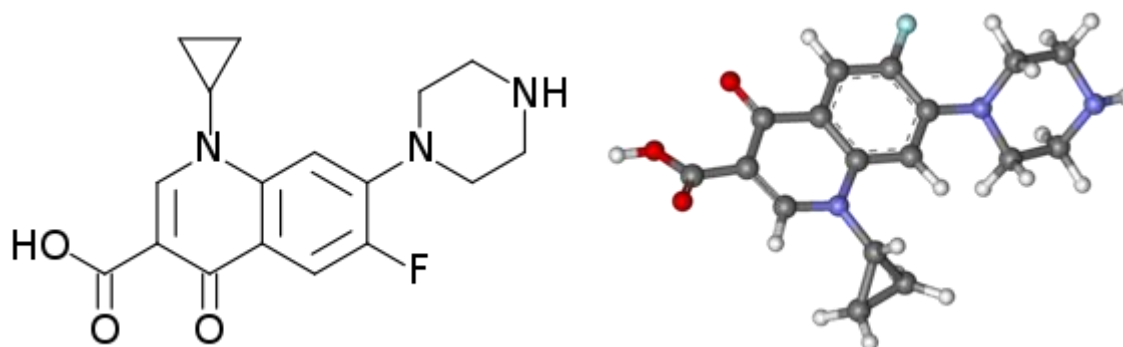
Nojo'ya ta'sirlari: bosh og'rig'i, xavfsiz bosh miya ichki gipertenziyasi, quloqlarni (shovqin) shang'illashi; taxikardiya, shishlar, perikardit, gipotenziya; ko'ngil aynishi, qusish, qabziyat va diareya, qorinda og'riq, glossit, disfagiya, ezofagit, gastrit, me'da va o'n ikki barmoq ichakni yaralanishi, dispepsiya, enterokolit (rezistent stafilokokk shtammlarini proliferatsiyasi hisobiga), soxtamembranoz kolit, pankreatit, qizilo'ngachni yarasi; makulopapulyoz toshma, terini qichishishi, terini qizarishi, fotoonixolizis, eksfoliativ dermatit keltirib chiqarishi mumkun [4]

Klindamitsin bu antibiotik bir qator kasalliklarni davolash uchun ishlatiladi bakterial infeksiyalar, shu jumladan suyak yoki qo'shma infeksiyalar, tos a'zolarining yallig'lanish kasalligi, Strep tomoq, zotiljam, o'rta quloq infeksiyalari va endokardit. Bundan tashqari, davolanish uchun ham foydalanish mumkin husnbuzar va ba'zi holatlar metitsillinga chidamli Staphylococcus aureus (MRSA). Bilan birgalikda xinin, u uchun ishlatilishi mumkin bezgak. Bu og'iz orqali, tomonidan mavjud tomir ichiga yuborish, va teriga yoki qin ichiga surtiladigan krem sifatida qo'llaniladi.



Klindamitsin $C_{18}H_{33}ClN_2O_5S$

Tez-tez uchraydigan nojo'ya ta'sirlarga ko'ngil aynish, diareya, toshma va in'ektsiya joyida og'riq kiradi. Bu kasalxonada davolanish xavfini oshiradi *Clostridium difficile* kolit taxminan to'rt marta va shuning uchun faqat boshqa antibiotiklar mos bo'lmagan hollarda tavsiya etiladi. Natijada muqobil antibiotiklar tavsiya etilishi mumkin. Odatda homiladorlik paytida xavfsiz ko'rinadi. Bu Linkozamid sinfi va bakteriyalarni oqsil hosil bo'lishiga to'sqinlik qiladi.



1-siklopropil-6-ftor-4-okso-7-piperazin-1-il-xinolin-3-karbonovaya kislota
 $C_{17}H_{18}FN_3O_3$

Siprofloksatsin antibiotik hisoblanadi. U ftorxinolonlar deb nomlangan antibiotiklar guruhiga kiradi. U jiddiy yuqumli kasalliklar yoki boshqa antibiotiklar ta'sir qilmagan infeksiyalarni davolash uchun ishlatiladi.

Yon ta'siri tabletkalarni yoki suyuqlikni qabul qilgandan keyin kasal bo'lish (ko'ngil aynish), tabletkalarni yoki suyuqlikni qabul qilgandan keyin diareya, ko'z tomchilari yoki malhamdan foydalangandan so'ng qichishish, yonish yoki mo'rtlashish hissi bilan qizil yoki noqulay ko'z, ko'z tomchilari yoki malham bilan og'izda yomon ta'm, ko'z tomchilari yoki malhamdan foydalangandan keyin ko'zingiz yuzidagi oq dog'lar keltirib chiqarishi mumkin.

Jiddiy yon ta'siri mushaklar kuchsizligi, og'riyotgan yoki tendonlarda og'riq yoki shish. Bu ko'pincha to'piqdan yoki buzoqdan boshlanadi, lekin sizning elkangizda, qo'llaringizda yoki oyoqlaringizda bo'lishi mumkin. Siprofloksatsinni qabul qilishning

dastlabki 2 kunida yoki hatto to‘xtaganidan keyin bir necha oy o‘tgach sodir bo‘lishi mumkin. Bu ko‘pincha bolalarda uchraydi, qattiq charchash, xavotirga tushish yoki juda past kayfiyatni his qilish yoki uxlash yoki narsalarni eslashda qiynaladi, qulog‘ingizga qo‘ng‘iroq qilish (tinnitus), ta‘mni yo‘qotish, ikki baravar ko‘rish yoki ko‘rish, hid, ta‘m yoki eshitishdagi boshqa o‘zgarishlarga sabab bo‘lishi mumkun.

Xulosa Gingivitni oldini olish og‘iz gigienasiga rioya qilish (tish pastalari, gellar, chayqash), chekishni tashlash, elektrik tish cho‘tkalarini qo‘llash, metronidazolli tish gellari qo‘llash tavsiya etiladi. So‘nggi yillarda olib borilgan ilmiy tadqiqotlar efir moylar saqlagan og‘izni chayish uchun eritmalar foydali ta‘sir ko‘rsatishini aniqlanganligi ushbu kasallikni davolash choralarini yengillashtirdi. Yuqorida keltirib o‘tganimizdek sintetik dori pereparatlarning nojo‘ya tasirlari o‘rganilib, tabiiy giyoxlardan tayorlangan davolovchi vositalardan foydalanish samarali foyda berishiga yana bir bor amin bolish mumkun.

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ISSUES OF PHYTOMELIORATION IN OPTIMIZING THE GEOECOLOGICAL STATE OF PASTURES

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Annotation. *The article geographically studied the ecological state of pastures in our republic, shows the causes of environmental problems observed in pastures, and measures to maintain their sustainability. The article describes in detail the importance of agrofetocenoses in improving the condition of pastures.*

Keywords: *desert areas, cattle breeding, pastures and hayfields, plants, harmful poisonous plants, nutritious plants.*

Introduction. In the desert regions of our country there are large farms specializing in the breeding of cattle. It is known that karakol breeding is one of the most important branches of animal husbandry in the republic. In Karakol, the main source of food is the natural cover of deserts and hills. Of the 23.1 million hectares of pastures and hayfields in Uzbekistan, 17.5 million hectares are used for animal husbandry as desert pastures. Of these, 37.1% are in a state of crisis, more than 1 million hectares are covered with harmful and poisonous plants, more than 0.5 million hectares are fragrant groves. Due to the influence of these alien non-edible or hardly edible plants, the hay productivity of pastures is sharply reduced.

One of the main reasons for the crisis of these pastures is the misuse of pastures and the spread of frankincense and similar poisonous and harmful plants. It is known that poisonous and harmful plants often grow in deserts and semi-deserts. When these poisonous plants are digested by Karakol sheep, they cause serious illnesses and even lead to their death (*Morozova, 1946*). In addition, the constant use of pastures leads to the fact that pastures become unusable and create conditions for the reproduction of alien and harmful poisonous plants. According to experts (*Shamsuddinov, Ibragimov, Normurodov, Makhmudov*), in order to strengthen the food base of Karakol sheep, their productivity can be increased by planting fertile pasture crops on low-yielding pastures.

According to them, the most effective ways to increase the productivity of desert and hilly pastures are the creation of artificial agrophytocenoses and hedges. These created hedges and agrophytocenoses have a positive effect on the external

environment and ensure a longer retention of moisture in the soil. This work will reduce the wind in winter and help to capture more moisture in the soil by retaining moisture on the hedges. Also, in areas where hedges are installed, the type of herbaceous plants is larger than in open areas, and the forage yield is 2-3 times higher.

Main part: Karakol breeding is an important and significant area of animal husbandry in our republic, which is part of the natural pastures of desert-hilly areas intended for year-round use. However, the extremely low productivity of natural pastures (1.5-3.5 c/ha), their sharp fluctuations over the years and seasons, their crisis at different levels require intensification of research in the field of increasing their productivity.

Although technologies have been developed to create pasture agrophytocinoses suitable for pasture crises, autumn-winter pastures in mountainous areas, individual desert ecological types, based on the ongoing economic, social and organizational reforms in karakol breeding, the need to develop technologies suitable for new forms of agriculture farms is growing. It is also essential to know the customs of extremely complex ecological environments (deserts, hills) and to develop science-based technologies.

In Uzbekistan, herds of cattle, sheep, goats, horse nests, pastures in the hilly and foothill areas are grazed all year round from early seasonal spring to late autumn.

If we take into account that the development of forage crops in the desert occurs in conditions of high solar radiation, scorching heat, extremely limited (poor) soil and air humidity, then the mutual ratio and proportions of each type of agrophytocenosis established in this environment should be ecologically justified and correctly selected.

If we pay attention to the state of research on this important scientific and practical issue today, then the volume of scientific and practical research on improving the condition of natural pastures in the arid regions of Central Asia is limited. However, most of them are devoted to improving the condition of pastures and clarifying the scientific issues of enrichment. Therefore, among the next important tasks, focusing on the study of the optimal composition, types and alternative ratios of life forms of plants (shrubs, semi-shrubs, herbs) in the environment of a certain ecological type of pasture atrophytocenoses (plantations), established in desert areas, and special experimental studies in this regard, should be to fulfill.

On the territory of Uzbekistan, pasture science faces important issues:

1. Accelerating the development of the scientific foundations of the new system and principles of pasture use in the era of new management;

2. To deepen the study of biomorphological, ecological-physiological and economic features of promising phytomeliorants of desert plants, to involve in the study of new species, to improve the zonal systems of desert plant science;

3. Further improvement of pasture phytomelioration technology, taking into account the unique soil and climatic conditions of Kyzylkum.

4. Increasing attention to the issues of proper mechanization of the main phytomeliorative measures and others.

Plant reclamation is an important factor in preventing desertification. Due to the fact that Kyzylkum is a large and promising livestock breeding region of our desert republic under the leadership of P. Korovin, the description of scientific research in the field of phytomelioration of these pastures is of particular importance.

To date, in order to increase the productivity of pastures in Kyzylkum, a large-scale program has been implemented and the following has been achieved:

1. The ecological conditions of the distribution of desert edible plants have been comprehensively studied and their bioecological characteristics have been determined.

2. In the conditions of gypsum and sandy desert, 2000 samples belonging to almost 30 botanical families were tested, and promising phytomeliorants were selected. Basically, the prospects for xerophytic and psammophytic shrubs and semishrubs have been determined.

3. The technology of surface and deep improvement of pastures has been developed.

4. A scientific base has been created for the creation of hedges, pasture agrophytocenoses intended for multi-season use.

In terms of increasing the productivity of pastures in Kyzylkum, it is currently necessary to solve a number of urgent tasks:

1. Creation of special enterprises that increase the productivity of active pastures and grow seeds of important phytomeliorants on the basis of mutual agreements with karakol-breeding farms or farms;

2. Establishment of permanent financing of activities aimed at increasing the productivity of pastures at the expense of centralized funds and local budgets;

3. Another important measure to improve the pasture management service in the Kyzylkum region is the improvement of the meteorological observation service and the provision of specialists who predict the productivity of pastures with existing agrometeorological stations and, if necessary, make a prompt assessment.

According to V. Dalakyan, R. Asanov, L. Kim, who studied plants scattered over pastures:

	Camel-thorn	when budding contains	1 kg of hay	Contains (in gr)
1	Water	193,0	Ash	96,7
2	Protein	99,0 gr	Calcium	11,0
3	Fat	38,0 gr	Phosphorus	1,3
4	Cellulose	345,0 gr	Protein (food unit 0.22)	33
5			Dry matter	807,0

The above-ground stock of false camel's thorn in the Khorezm oasis, depending on the growing conditions, gives 15-2 tsr / dry weight, which makes it the best year-round fodder plant. The cultivation of such nutritious plants on the pastures of our republic allows us to further develop cattle breeding and animal husbandry.

We can see such plants in the table below and some (psamophytic) fodder plants common in sandy deserts:

№	plant name
1	Artemisia diffusa
2	Aeluropus litoralis
3	Ceratoides eversmaniana
4	Carex phosodes
5	Eramopyrum orientale
6	Bromus tectorum
7	Kochia prostrata
8	Haloxylon persicum
9	Alhagi psedalhagi
10	Halothamus (Aellenia)

The results of preliminary observations and calculations show another important fact that promising phytomeliorants (Halothamnus subaphylla Botsch, Ceratoides, Cyperus holoschoenus) are valuable forage species in terms of their ability to adapt to drought and other adverse environmental conditions for keeping in desert areas.

Conclusion: If we talk about the pastures of our republic, then the most optimal way to improve areas in crisis in desert-hilly conditions, that is, covered with harmful plants, is the creation of artificial agrofetocenoses (pastures) from a mixture of shrubs, semi-shrubs and grasses. All sandy massifs in our country are considered the main fodder base for livestock, but the fodder supply is not the same throughout the year, depending on the two seasons. In this regard, shrubs, semi-shrubs, perennial and annual fodder plants are characteristic of sandy deserts.

In the course of research, it was found that 337 species of fodder plants grow in these sandy massifs. Among them, some of the most common plants *Halóxylon*, *Calligonum*, *Láurus nóbilis*, *Carex hordeistichos*, *Ferula*, *Hedéra hélix*, *Salvia*, *Agriophýllum*, *Halothamnus subaphylla* Botsch are the main food for camels and sheep in winter, autumn or early spring and summer. Also, the focus is on the development of agrotechnical foundations for creating optimally structured pasture agrophytocenoses in certain environmental conditions (sowing dates, seed consumption rates, seeding depth, yield, etc.).

Promising phytomeliorants that adapt to local conditions are tested when creating plantations with different life forms and different ratios (minimum, optimal, maximum) of the proportion of edible plants. Various variants of phytomelirants, consisting of shrubs (*H.aphyllum*), semi-shrubs (*Halothamnus subaphylla* Botsch, *Kóchia*, *Verbáscum thápsus*, *Ceratoides*, *Cyperus holoschoenus*), with different proportions of shrubs, semi-shrubs, herbaceous species and the share of agrophytocenoses, are considered. Hedgerows are being built in many places.

When observing the growth, development and yield indicators of the tested species in the experiments, differences in these indicators of the first two-year-old plantations were noticeable.

In our country, a lot of work is being done to protect pastures, ensure their rational use, as well as further develop the cultivation of stinky ferula and the widespread use of resource-saving technologies in pastures.

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MAKTABGACHA YOSHDAGI BOLALARDA MATEMATIK TASAVVURLARINI SHAKLLANTIRISH USULLARI

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***Annotatsiya.** Mazkur maqolada maktabgacha yoshdagi bolalarda elementar matematik tushunchalarni shakllantirishda ta‘limning ilg‘or metodik usullaridan foydalanishning nazariy, tarixiy va amaliy jihatlari yoritib berilgan.*

***Kalit so‘zlar.** Tushuncha, qonun, qaror, standart, tarbiya, o‘qitish, intellekt, faoliyat, metod, dastur, tafakkur, abstraksiya.*

KIRISH

Yurtboshimiz Sh.Mirziyoyev tashabbusi bilan vazirliklar tarkibidan Maktabgacha ta‘lim vazirligining ajralib chiqishi asnosida sohada ko‘plab hal qilinishi zarur bo‘lgan masalalar belgilab berildi. Ushbu masalalar qonunchilik asosida qabul qilinayotgan qaror va qonunlar asosida ijroga yo‘naltirilib borilmoqda. Maktabgacha ta‘lim vazirligi O‘zbekiston Respublikasi Prezidentining Maktabgacha ta‘lim tizimi boshqaruvini tubdan takomillashtirish chora-tadbirlari to‘g‘risidagi PF-5198-sonli Qarori asosida 2017 yilning 30 sentabrda tashkil qilindi. Vazirlik tomonidan O‘zbekistonda birinchi marta MTTlarga mavzuli rejalashtirilgan ta‘lim dasturi tarqatildi. Ta‘lim jarayoniga endi kirib kelayotgan bolalar har tomonlama qo‘llab-quvatlash tamoyili asosida ishlab chiqilgan yangi dastur “Ilk qadam” deb nomlandi.

Mazkur davlat dasturi barcha maktabgacha ta‘lim tashkilotlarining davlat o‘quv dasturi sifatida 2018 yildan buyon amaliyotga joriy qilinib kelinmoqda. Dastur bolani kompetensiyaviy yondashuv asosida maktabga tayyorlashni ko‘zda tutib, ular umumiy va rivojlanish sohalari kompetensiyalari sifatida bola shaxsini hayotga tayyorlash, unda ijtimoiylashuv ko‘nikmalarini shakllantirishda tayanch manba bo‘lib xizmat qilmoqda.

Maktabgacha ta‘limni rivojlantirish maqsadida O‘zbekiston Respublikasi Prezidentining 2019 yil 16 dekabr kuni “Maktabgacha ta‘lim va tarbiya to‘g‘risida”gi Qonunining imzolanishi navbatdagi muhim qadamlardan bo‘ldi. Qonun bilan

maktabgacha ta'lim va tarbiya sohasidagi davlat siyosatining asosiy yo'nalishlari, maktabgacha ta'lim va tarbiya olishga doir davlat kafolatlari aniq belgilab berildi.[1]

Vazirlar mahkamasining 2020 yil 22 dekabrda "Maktabgacha ta'lim va tarbiyaning davlat standartini tasdiqlash to'g'risida"gi 802-sonli qarori bo'yicha tarbiyalanuvchilarga ta'lim-tarbiya berish bugungi kunda barcha maktabgacha ta'lim tashkilotlarida yo'lga qo'yilgan. Davlat standartining maqsadi maktabgacha ta'lim tizimini zamonaviy talablarga asoslangan holda tashkil etish, bolalarni sog'lom va har tomonlama yetuk qilib voyaga yetkazish hisoblanadi. Uning vazifalari qatorida ta'lim-tarbiya jarayoniga samarali ta'lim va tarbiya shakllari hamda usullarini joriy etish hamda ta'lim-tarbiya jarayonining hajmiga, mazmuniga va sifatiga doir majburiy minimum talablarni joriy etish va nazoratini tashkil etish ham bor.

ADABIYOTLAR TAHLILI

Bolalarning intellektual ta'limi uchun dunyoni o'qitish uchun zarur bo'lgan aqliy jarayonlarning rivojlanishiga ta'sir qiluvchi matematik tasavvurlarni o'zlashtirish juda katta ahamiyatga ega.

Adabiyotlar tahlillari shuni ko'rsatadiki, matematik tushunchalarni rivojlantirish mahsulining yuqori darajadagi yangiligi, unga erishish jarayonining o'ziga xosligi va aqliy rivojlanishga sezilarli ta'sir ko'rsatish bilan ifodalanadi. Ayrim mualliflar bolaning turli fikrlashlari ularning oldida turgan yangi muammolarni mustaqil yechishga, chuqur bilimlarni tez egallashga, qulay imkoniyatga yengil o'tishga undaydi, deb hisoblaydilar.

Psixolog olim P.Ya.Galperin va T.V.Taruntayevalar bolada matematik tasavvurni shakllantirish ob'ektiv-hissiy faoliyatga asoslanishi kerak, natijada bilimlarning butun hajmini o'zlashtirish, hisoblash va o'lchash qobiliyatlarini mohirlik bilan tushunish, umumiy matematik tushunchalarga yo'naltirish uchun mustahkam, elementar asosni topish oson deb hisoblashadi.

Matematik o'qitish metodikasi didaktik printsiplarga asoslangan: izchillik, tizimlilik, individual yondashuv, bosqichma-bosqichlik. Bolalarga vazifalar ketma-ketlik bilan beriladi, ular darsdan darsgacha murakkablashadi. Yangi mavzuga o'tishda, taqdim etilgan materiallar takrorlanadi, bu bolalar bilimlarini chuqurlashtirish va diqqatlarini yangi ma'lumotlarga yo'naltirishga imkon beradi (EI Shcherbakova).

S.L.Rubinshteynning birinchilardan bo'lib umumiy aqliy rivojlanish borasida qilgan izlanishlari maqsadga muvofiqdir. U ruhshunoslikdagi faoliyat toifasini ruhiy izlanishning obyektini hamda maqsadi qilib kiritdi va asosladi. Faoliyat nazariyasi asosida S.L. Rubinshteyn faoliyat tushunchasini subyektdan obyektga o'tish deb kiritadi. S.L.Rubinshteyn faoliyatning ikkinchi bosqichini obyektidan subyektdan qarab borgan aloqadan iborat deb hisoblaydi.

“Faoliyat”, “harakat” tushunchalarining fundamental psixologik tushunchalari A. N.Leontyev ishlarida yoritilgan. Faoliyat - subyektning bir-biriga bog‘langan realligining o‘zaro ta’sir ko‘rsatishi deb bilgan. A.N.Leontyev, reallikning bola ongida aks ettirilishi - “ta’sir”ning natijasi bo‘lmay, o‘zaro tahsir, yahni bir-biriga duch kelgan jarayonlarning natijasidir, deb hisoblaydi.

A. N. Leontyev va S.L. Rubinshteynning o‘qitish amaliyotidagi xulosalariga qaraganda, matematik tushunchalarni shakllantirishda faoliyat shakllarining ishlanmasi va ishlatilishi hamda ta’limdagi faoliyat tamoyillarining bir-biriga ketma-ket o‘tkazilishi eng foydali va natijali yo‘nalishdir.

F.N.Blixer ko‘p yillar bolalarda matematik tasavvurlarini o‘stirish masalalari ustida ishladi. U quyidagi kitoblarni yozdi: «Bolalar bog‘chasi va nulevoy guruhda matematika», «Didaktik o‘yinlar», «Birinchi sinfda qiziqarli o‘yinlar va mashqlar», 1932, 1934, 1938, 1945, 1958-yillardagi tarbiya dasturlarining matematikaga o‘rgatish bo‘limini ishlab chiqdi.

A.M. Leushina o‘zining butun hayotiy faoliyati davomida maktabgacha tarbiya yoshidagi bolalarga sanoqni o‘rgatish masalalari bo‘yicha ish olib bordi, Leushinaning pedagogik ishlari: Bolalarni bog‘chada sanashga o‘rgatishga tayyorlash temasi 1959-1961-yillardan boshlab bosilib chiqdi. «Bolalar bog‘chasida sanoq mashg‘uloti» 1963-yilda bosilib chiqdi. Juda ko‘p maqolalari «Дюшкольня воспитания» jurnalida e’lon qilingan.

50-90 yillarda O‘zbekistondagi bolalar bog‘chalari elementar matematik tasavvurlarni shakllantirish metodikasi asoslari rivojlanishi bo‘yicha ko‘pgina pedagoglar ish olib bordilar. Jumladan, H.U. Bikbayeva 1973-yildan boshlab, rossiyalik pedagoglar, A.M. Leushina, A.A. Stolyar, L. S Metlinalarning ishlarini ko‘rib chiqib, ularning hammasi bizning O‘zbekiston bolalar bog‘chalariga to‘g‘ri kelmasligini isbotladi va yangi dastur yaratdi. Metodistlar X.I. Qosimova, Z.I. Ibrohimovalar bilan birgalikda 1995-yili «Maktabgacha yoshdagi bolalarda matematik tasavvurlarni, shakllantirish» mavzusida O‘rta va Oliy pedagogika bilim yurtlari uchun o‘quv qo‘llanma tayyorlandi.

N.U. Bikbayeva X.I. Qosimovalar tomonidan respublikadagi pedagogika oliy o‘quv yurtlari uchun «Maktabgacha tarbiya yoshidagi bolalarda elementar matematik tasavvurlarni shakllantirish asoslari va metodikasi» kursi bo‘yicha dastur tayyorlandi.

M.Jumayev tomonidan “Maktabgacha yoshdagi bolalarda matematik tasavvurlarni shakllantirish metodikasi va nazariyasi” 2007 yilda nashr etildi.

Rus olimlaridan Mihaylova A., Nosova E.D., Stolyar A. A., Polyakova M. Y.I. Tixeyevalar o‘z ilmiy ishlarini taqdim etganlar.

MUHOKAMALAR

“Ilk qadam” davlat o‘quv dasturi asosida O‘zbekiston Respublikasining ilk va maktabgacha yoshdagi bolalar rivojlanishiga qo‘yiladigan davlat talablarida belgilangan elementar matematik malakalarni rivojlantirishning mazmuni maktabgacha ta‘lim tashkilotlarida har bir bolada sodda matematik malakalarni shakllantirishni ko‘zda tutadi.

Maktabgacha yoshdan bolalarda matematik bilimlarning yetarli bo‘lishiga katta ahamiyat berish muhimdir. Chunki, inson hayoti davomida matematik hisob-kitoblarga tez-tez duch keladi, ya‘ni matematik bilimlar har qadamda kerak bo‘ladi. Agar biz maktabgacha yoshdan bolalarni matematika olamiga turli qiziqarli usullardan foydalangan holda olib kira olsak, matematik bilimlar bilan yetarli darajada qurollantirsak, ular maktabda a‘lo baholarga o‘qib, yuqori natijalarga erishadilar, hayoti davomida xalqimiz uchun foydali kasbni tanlash va chuqur egallashda qiynalmaydilar. Chunki qaysi kasbni olmaylik uni mahorat bilan bajarishga albatta matematik bilimlar kerak bo‘ladi. Shu sababli turli ta‘limiy usullar, qiziqarli she‘rlar, topishmoqlar orqali bolalarning yoshiga mos matematik bilimlar berib borishga katta ahamiyat berish muhimdir.

Bolada bilish kompetensiyasining shakllanishi bu mantiqiy tafakkurning shakllanishi bilan bog‘liq. Matematik tushunchalarni ilk yoshda shakllantirish orqali kelajakda mantiqiy fikrlashi yuksak rivojlangan insonni tarbiyalashga erishish mumkin.

Bugungi kunda bolalarda elementar matematik tushunchalarni shakllantirishning dolzarb masalasi bu – qanday qilib predmetlar, voqealar, va ko‘rinishlar o‘rtasidagi oddiy aloqalarni tushunish va ularni yaxlit bir butunlik sifatida idrok qilishini hosil qiluvchi mukammal metodik usullarni ishlab chiqishdir. Savodga o‘rgatishning ilg‘or usullarini tadbiq etish orqali sodda matematik tushunchalar mohiyatini bola tasavvurida erta yosh bosqichlarida samarali shakllantirish mumkin. Shuning uchun tadqiqotchilar hali hanuz ushbu metodikalar yuzasidan tajriba-sinov ishlarini davom ettirmoqdalar.

Ilk matematik tushunchalarning qanchalik aniq va mukammal bo‘lishi, bolalarda mantiqiy fikrlash, xulosa chiqarish jarayonlarining kuchli bo‘lishini ta‘minlaydi. Ya‘ni matematika bolalarni mantiqiy fikrlashga - to‘g‘ri fikrlash, to‘g‘ri fikrlardan to‘g‘ri xulosalar chiqarishga o‘rgatadi, shu bilan birga nutqning takomillashuviga katta yordam beradi. Ilk matematik tushunchalar bolalarning yoshiga mos tarzda qiziqarli qilib o‘rgatilsa, samarali natijalarga erishiladi. Bolalarda umumiy bilimlar bilan birgalikda o‘ziga bo‘lgan ishonch, mustaqil fikrlash, o‘z fikrini chiroyli ifoda eta olish kabi fazilatlar shakllanadi.

Maktabgacha ta'lim tashkilotlarida ta'lim-tarbiyani tarbiyachi amalga oshiradi. U pedagogik jarayonda markaziy o'rinni egallaydi. Shuning uchun tarbiyachi o'z sohasini chuqur bilishi, har xil metodik vositalarni yaxshi egallagan, puxta pedagogik-psixologik tayyorgarlikka ega bo'lishi muhimdir. Maktabgacha yoshdagi bolalarda matematik tasavvurlarni shakllantirish jarayonida ularga oddiy matematik tushunchalarni o'rgatibgina qolmay, ayni vaqtda bolalarning mantiqiy tafakkurini o'stirish, mustaqillik faoliyatini shakllantirish, maqsadga intilish, topshirilgan vazifani ma'suliyat bilan bajarish, o'z oldiga qo'ygan maqsadga erishish, qat'iyatlilik, muomala madaniyatini shakllantirish ham muhimdir.[2]

NATIJALAR

Ma'lumki, bolani maktabga tayyorlash asosini matematik, nutqiy, o'qish va yozish malakalarini o'zlashtirganlik sifati tashkil etadi. Boshlang'ich matematik tushunchalar sifatida asosan bolalarda quyidagi tushunchalarni shakllantirishga e'tibor qaratiladi:

- Olamni idrok etish ko'nikmasi;
- Matematik o'yinlarni o'ynash malakasi;
- Miqdoriy munosabatlarni mustahkamlash;
- Geometrik shakllar haqidagi tasavvurlarni kengaytirish;
- Fazoda yo'nalish olishini takomillashtirish;
- Vaqtni aniqlash tasavvurlarini tarkib toptirish;
- Raqamlar, elementar hisob-kitob amallarini bajara olish;

Maktabgacha ta'lim yoshidagi bolalarga ta'lim berish jarayonini takomillashtirishda bo'lajak pedagoglarning ilmiy va uslubiy ta'minlanganligi, ularning kasbiy tayyorgarligi asosiy masalalardan sanaladi. Ayniqsa, bolalarda matematik tasavvur va bilimlarni rivojlantirish ularning intellektual jihatdan yetuk insonlar bo'lib ulg'ayishida o'ziga xos o'ringa ega.

Maktabgacha ta'lim yoshidagi bolalarga ta'lim berish jarayonini takomillashtirishning asosiy vazifalaridan biri bo'lajak pedagogning ilmiy va uslubiy ta'minlanganligi, uning kasbiy tayyorgarligini oshirishdan iborat. Maktabgacha ta'lim yoshidagi bolalarda miqdor va son, buyumlarning katta ligi va shakli, geometrik figuralar haqidagi tushunchalarni shakllantirish uchun bir xil harakat usullarini har xil vaziyatlarda va turli ko'rgazmali materiallar bilan ko'p martalab aytib ko'rsatish ularni bolalar o'zlashtirishlariga imkon beradi.

Umumlashtirish va abstraktlashtirish qobiliyati predmetlarning xususiyatlarini aniqlash va shu xususiyatlarga qarab mazkur predmetlarni bir-biriga taqqoslash hamda guruhlariga ajratish asosida o'sib boradi. Shuning uchun bola maktabga borguniga qadar unda matematik tasavvurlarni shakllantirish uchun maktabgacha ta'lim

tashkilotlarida barcha o'quv-tarbiya ishlari bir-biri bilan uzviy bog'liq ravishda ish olib boriladi. Fan-texnika nihoyatda jadal rivojlanayotgan bugungi davrda bolalarning turli sohalaridagi tajribalarni sodda holda o'rganishi va ulardan amaliyotda foydalana olishi uchun ularning maktabgacha yoshdan kerakli va zarur bilimlarni egallashlariga jiddiy e'tibor berishimiz lozim. Ayniqsa, matematik bilimlar bola hayotida, uning har tomonlama rivojlanishida katta ahamiyatga ega. Ilk matematik tushunchalarning qanchalik aniq va mustahkam bo'lishi bolalar tafakkurining, ulardagi analiz va sintez, mantiqiy fikrlash, xulosa chiqarish jarayonlarining kuchli bo'lishini ta'minlaydi.[3]

Matematik bilimlar bolada mantiqiy tafakkur, intellektning faollashuvi va tushunchalar haqidagi tasavvurni kengaytirish manbayi sifatida xizmat qiladi. Shu bois ta'limiy faoliyatlar mazmunini takomillashtirish, jarayonni didaktik manbalar bilan boyitib borish, amaliy ishlar va turli interfaol usullardan foydalanish ko'lamini kengaytirishni taqozo etadi.

XULOSA

Bolalilik – insonning butun dunyoni bilishga, o'rganishga bo'lgan katta qiziqishlar uyg'onadigan eng go'zal pallasidir. Bola ichki energiyasi shu qadar yuqori sur'atni namoyon qiladiki, kattalar ko'pincha bu energiyani jilovlashga harakat qiladilar.[4] Ammo yillar davomida olib borilayotgan tadqiqotlar bu jarayonlarga nisbatan teskari munosabat bildirishni nazarda tutmoqda. Ya'ni, bola harakatlarini cheklash emas, balki turli faoliyatlarga yo'naltirish zarurligi ta'kidlanmoqda.

Bolani savodga tayyorlash bu oddiy va oson jarayon emas. Pedagogdan yuksak mahorat va sabr talab qiladigan, kasbiy bilimlarni yuqori darajada o'zlashtirishni taqozo etuvchi holatdir. Maktabgacha yoshdagi bolaning yetakchi faoliyati sifatida o'yinlar bu jarayonda tarbiyachiga ko'makchi sifatida xizmat qiladi. O'yin o'z mazmuni orqali bolani har qanday sohaga tayyorlash vazifasini bajaradi. Shuning uchun bugungi kunda maktabgacha yoshdan boshlab bolalarni aniq fanlarni egallash malakasini shakllantirishga yo'naltirilgan o'qitish uslublarini ishlab chiqarishga katta e'tibor qaratilmoqda.

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GEOTERMIK (GEOTERMAL) ENERGIYA. GEOTERMAL ELEKTROSTANSIYALAR

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***Annotatsiya:** Ushbu maqolada Geotermik (geotermal) energiya va geoytermal aslida nima ekanligi hamda geotermal elektr stansiyalarining ish jarayoni, ularning tuzilishi haqida ma'lumot keltirilgan.*

***Kalit so'zlar:** Geotermik, sel'siy, geotermal elektrostantsiya, geotermal resurslar, fotonli, serkulyatsion, turbina.*

Kirish: Hozirgi kunda dunyoning 80 mamlakatida u yoki bu darajada geotermal issiqlikdan foydalaniladi. Ularning ko'pchiligida, aniqrog'i, 70 mamlakatda tabiiy issiqlikning bu turi utilizatsiyasi- issiqxonalar, basseynlar qurilishi, davolash maqsadlari va boshqalarda rivojlanish darajasiga etdi. Taxminan, 25 mamlakatda esa, geotermal elektrostantsiyalar mavjud.

Yer osti markazida harorat- Sel'siy bo'yicha 6000 daraja atrofida bu yer ustki qatlami jinlarini eritish uchun yetarli darajadagi issiqlik. Agar yer po'stlog'i qatlami yupqa bo'lsa, hatto, bir necha kilometr yer chuqurligida ham, harorat Sel'siy bo'yicha 250 darajadan yuqori bo'lishi mumkin. Umuman, joylashish joyiga ko'ra, harorat ko'tarilishi har 30-50 metrda bir darajaga oshaveradi. Vulqonli hududlarda, yer po'stlog'ining erigan jinlari yerning yuza qismiga juda yaqin joylashgan bo'ladi.

«Geotermal» so'zi yunonchadan olingan bo'lib, geo (yer) va therme (issiqlik energiyasi) ma'nosini bildirib, geotermal energiya yer osti issiqligi, degani. Biz bu issiqlikni bug' yoki issiq suv ko'rinishida tiklab, undan binolarni isitish va elektr energiyasi ishlab chiqarishda foydalanishimiz mumkin.

Ba'zi mamlakatlarda ming yil davomida, geotermal energiyadan ovqat pishirish va binolarni isitish maqsadlarida foydalaniladi. Issiq yer osti jinslari suvni isitadilar, natijada bug' ajralib chiqadi Issiqlik qatlamiga qadar chuqur qaziladi, bug' yuqoriga ko'tariladi va turbinalarni ishga kiritishga xizmat qiladi, bu esa, o'z navbatida, generatorlarni ishga tushiradi.

Ilk geotermal elektrostansiya Landrello (Italiya)da, ikkinchisi esa, Vayrek (Yangi Zelandiya)da qurilgan. Qolganlari: Islandiya, Yaponiya va Amerika Qo'shma Shtatlarda faoliyat ko'rsatmoqda. Islandiyada geotermal issiqlikdan uylarni isitishda va elektroenergiya ishlab chiqarishda foydalaniladi. Agar jinslar bug' chiqarish uchun yetarli darajada issiq bo'lmasa, har holda, energiyasidan foydalanish mumkin.

Geotermal energiya Islandiya va Yangi Zelandiyadek faol vulqonli joylarda muhim resurs bo'lib hisoblanadi. Bu narsa, suvni qaysi darajagacha isitish mumkinligiga va jinslarning qay darajada issiqligiga, ularga yetguncha qancha suv olib tashlashimiz kerakligiga bog'liq.

Issiq hududdagi quduqqa suv yuboriladi, suv bosim ostida yuqoriga ko'tarilib, yuzaga chiqadi va bug'ga aylanadi. Bug' turbogenerator uchun yoki issiqlik almashtiruvchi moslama orqali uylarni isitishga xizmat qilishi mumkin. Turbinalar yoki turbina kuraklari aylanishida ishlatishdan oldin, bug'ni tozalash kerak.

Geotermal energiyadan quyidagi sohalarda foydalanish mumkin.

1. Akvakul'turalar (suv ekinlari), bog'dorchilik va termokul'turalar. Muqobil energiya manbaalaridan tropik iqlim va issiq suv talab qiladigan bog' va dengiz ekinlarini o'stirishda foydalaniladi. Issiqxonalarda ham geotermal energiya beradigan issiqlik va bug' yordamida harorat va namlikni saqlashda foydalanish mumkin. Geotermal energiyaning muqobil energiya manbalaridan krevetkalar o'stiradigan fermalarni isitishda ham foydalansa bo'ladi.

2. Sanoat va qishloq xo'jaligi. Geotermal energiya butun dunyoda sanoat va qishloq xo'jaligi rivojlanishida muhim rol o'ynashi mumkin. Masalan, bu energiyani qog'oz ishlab chiqarishning har bir bosqichida ishlatish mumkin. Yangi Zelandiyaning qog'oz ishlab chiqaradigan kombinalari ataylab geotermal energiya qazib chiqariladigan joylarga quriladi. Geotermal energiya mingdan ortiq sanoat va qishloq xo'jaligi masalalarida ideal yechim bo'lib xizmat qilishi mumkin, chunki, uning narxi juda arzon.

3. Oziq-ovqat sanoati. Oziq-ovqat va qayta ishlash sanoatida muqobil geotermal energiya manbalaridan katta foyda olishlari mumkin. Ushbu energiyadan

foydalanishning yo'llaridan biri – oziqovqat sanoati ob'ektlarini bug' bilan sterializatsiya qilishdir. Yerda katta miqdorda issiqlik va bug' mavjud; bu bug'dan jihozlar va xonalarni kimyoviy vositalarsiz sterializatsiya qilishda foydalanish mumkin. Bu esa, mikroorganizmlarni mutatsiyaga uchrashdan saqlab qoladi, shunda ularga kimyoviy unsurlar ta'sir etolmaydi va yanada zararli shtammlar rivojlanishining oldi olinadi. Geotermal energiya oziq-ovqat sanoatida ishlatiladigan kukun va kontsentratlar olinadigan o'simliklarni quritishda yordam berishi mumkin. Ba'zan bu narsalardan mahsulotlarni qo'shimchalarsiz saqlashda foydalanish mumkin. Maxsulotlar bug'da, yoki geotermal energiya yordamida boshqa usullar bilan tayyorlanishi mumkin.

4. Yashash va tijorat xonalarining issiqlik bilan ta'minlanishi. Muqobil geotermal energiya manbalaridan har xil turdagi binolarni: uylardan tortib fermalarni, saroylargacha, barcha inshootlarni isitishda foydalanish mumkin. Bu energiyadan foydalanish nafaqat issiqlikni ta'minlaydi, balki, haroratni to'la nazoratda saqlash imkonini beradi. Geotermal tizimli isitish va sovutishda elektroenergiya xarajatlari juda kichik, chunki, pechka yoki konditsioner kerak bo'lmaydi. Biz bilamizki, bu moslamalar ancha-muncha elektr energiyasini yutib, kommunal xizmatlar to'lovini oshirib yuboradi. Haroratni boshqarish geotermal bloklari issiqlikni kamaytirishi yoki ko'paytirib berishi mumkin, bu esa yil davomida qulay mikroiklimni saqlaydi.

5. Elektroenergiya ishlab chiqarish. Geotermal elektrostansiyalar ko'p afzalliklarga ega bo'lgan katta miqdorda elektroenergiyani ta'minlashi mumkin, chunki, elektroenergiya ishlab chiqarish uchun yoqilg'i qazib olishga ehtiyoj bo'lmaydi. Geotermal energiya juda toza, chunki elektroenergiya ishlab chiqarish uchun yer qa'rida mavjud bo'lgan issiqlik va bug'dan foydalanadi.

Geotermal elektrostansiyalar

Bu elektroenergiya havoni ifloslantirmaydi, chunki, uglerod darajasi baland emas va zaharli gazlar yo'q. Bu energiya manbai - qazib chiqariladigan va chet el yetkazib beradigan yoqilg'iga muhtoj emas. Geotermal energiya butun dunyoda elektr va yoqilg'i energiyasi mavjudligi va narxi barqaror turishini ta'minlashi mumkin. Qazib chiqariladigan yoqilg'i zahiralarini yaqin kelajakda tugaydi va muqobil energiya manbaalari energetik inqiroz holatining oldini olishga yordam beradi. parchalaganda atom reaktorlarida olish mumkin bo'lgan issiqlikdan ancha ko'p. Agar insoniyat faqatgina geotermal energiyani ishlatib, Yer qa'ridagi harorat, 41mln.yil o'tgachgina, yarim gradusga pasayadi.

Muqobil energiya manbaalari orasida geotermal energiyaning o'ri, albatta katta. Jumladan, jahon elektr energiyasi ishlab chiqarilishida, u 60% dan ko'proqni tashkil etadi. Geotermal resurslarning asosiy iste'molchilari, yaqin emas, uzoqroq kelajakda, shubhasiz, issiqlik ta'minoti, va kamroq darajada elektr energiyasi ishlab chiqarish bo'ladi. Hozirgi paytda geotermal konlar razvedka va ekspluatatsiyasi dunyoning 70 dan ortiq mamalakatlarida olib borilmoqda, 60 ta mamlakatda geotermal resurslardan sanoatda foydalanish yo'lga qo'yilgan.



1.1 Rasm Geotermal elektrostantsiya ko'rinishi

2000-yilda jahonning 58 mamlakatida umumiy o'rnatilgan quvvati 16,4 ming MW (t) va yillik mahsulot ishlab chiqarishi 192 ming TJ/g bo'lgan sanoat geotermal issiqlik stantsiyalari ishlagan (1.1.-chizma, 1.2.-chizma), bu esa, 8,2 mln t sh.yo.ni tejab qolishga yordam bergan (1.1-jadval).

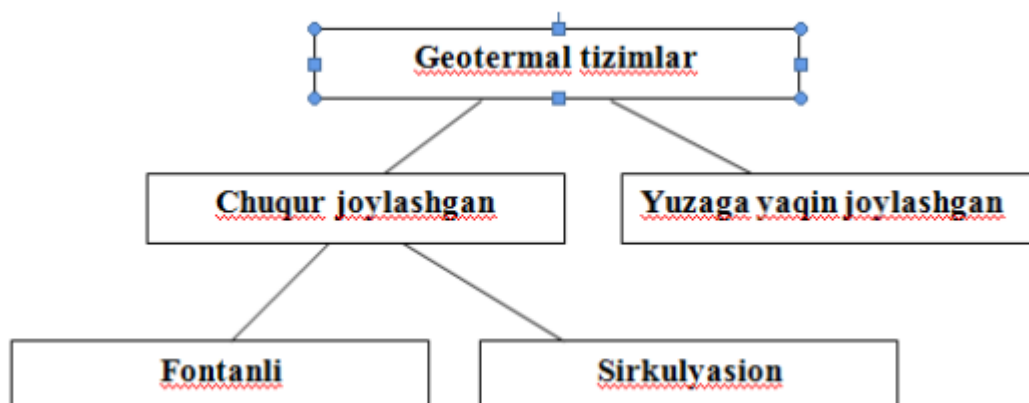
Jahon amaliy tajribasida past haroratli geothermal resurslarning ishlatilishi shuni ko'rsatadiki, uning ko'p qismi (73%) xonalar, yuvinish xonalari, baliqchilik va issiqxonalariga ketar ekan. Qishloq xo'jaligida geotermal issiqlik ta'minoti ulushi ham anchagina o'sgan. Butun dunyoda bu maqsadda energiya ishlab chiqarilishi 310 ming t.sh.yo.ni tashkil etadi va bu sohada dunyoda energiyadan foydalanish ko'rsatkichining 7% iga teng.

Past haroratli (27-70°C) geotermal energiyaning ishlatilishi, Fransiyada 60-yillarning boshida yo'lga qo'yilgan. 1984 yilga kelib, mamlakatning 10 ta shaharida geotermal sirkulyatsiyali tizimlar ishga solinib, 45 ming kvartira isitilishini ta'minlagan. Yana bir qancha shaharlarda geotermal issiqlik ta'minoti tizimi (GITT) qurilishi boshlangan edi.

Jahonning 10 mamlakatida issiqlik geotermal energiyasidan foydalanish ko'rsatkichlari

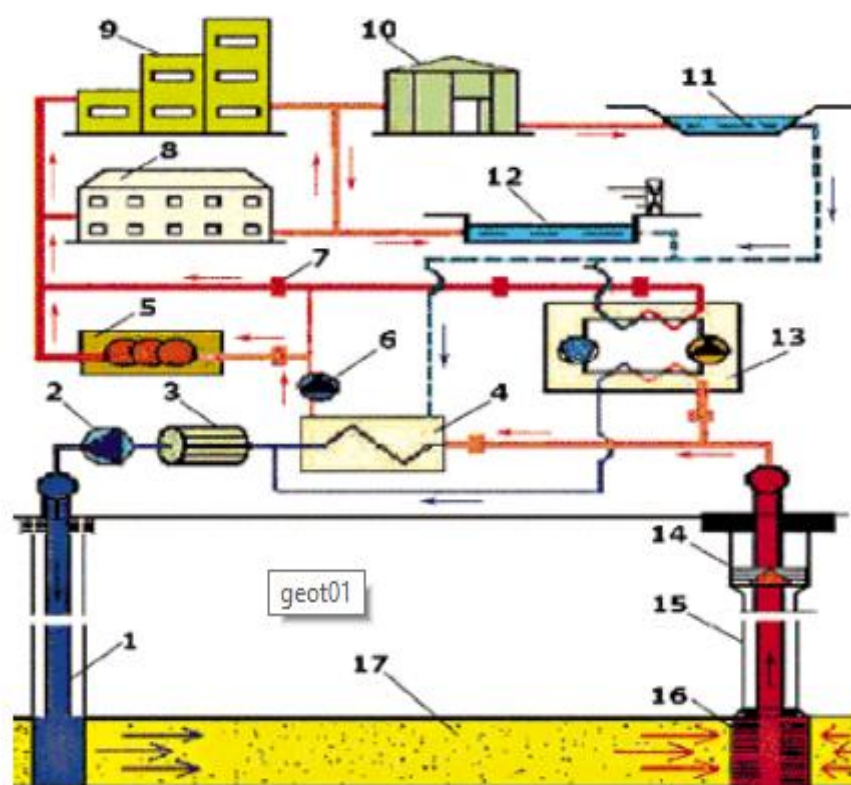
№	mamlakat	Issiqlik quvvati, MW	Ishlab chiqarilgan energiya, TJ/g	Tejalgan yoqilg'i, ming. t/yo
1	Xitoy	2282	37908	1630,04
2	Yaponiya	1166	27515	1183,15
3	AQSh	3766	20302	872,99
4	Islandiya	1469	20170	867,31
5	Turkiya	820	15756	677,51
6	Yangi Zelandiya	308	7081	304,48
7	Gruziya	250	6307	271,20
8	Rossiya	307	6132	263,68
9	Fransiya	326	4895	210,49
10	Shvetsiya	377	4128	177,50

Yer qa'ridan issiqlik energiyasi qazib chiqarish geotermal texnologiyasi, nafaqat qazib chiqarish jarayonini, balki, uni qayta ishlash va issiqlik manbaini iste'molchiga talab etilgan sifatda, ko'rsatkichlari tushuniladi.



Geotermal tizimlar klassifikatsiyasi
Geotermal tizimlar klassifikatsiyasi 1.4-chizma:

Geotermal issiqlik ta'minoti stantsiyasi (tizimi) printsiptial sxemasi (o'zgaruvchanlik gorizontida termik suv tashuvchanlik ishlab chiqishda): 1– suvi siqib chiqariladigan quduq; 2–yer yuzasidagi nasos qurilmasi; 3– suv tayyorlagich va suv-gaz tozalagich tizim; 4-issiqlik almashtirgichlar; 5-isituvchi qozonxona; 6-tarmoqli nasos; 7- magistralli teplotrassalar; 8–uy-joy massivi; 9-sanoat ob'ektlari; 10-panikli issiqxonali kombinat; 11–baliqchilik xo'jaligi; 12–bal'neologik va sportsog'lomlashtiruvchi kompleks; 13-issiqlik nasoslari; 14–yuklanadigan nasoslar; 15–qazib chiqaradigan (suv ko'targich) quduq; 16–quduqoldi fil'trlari tizimi

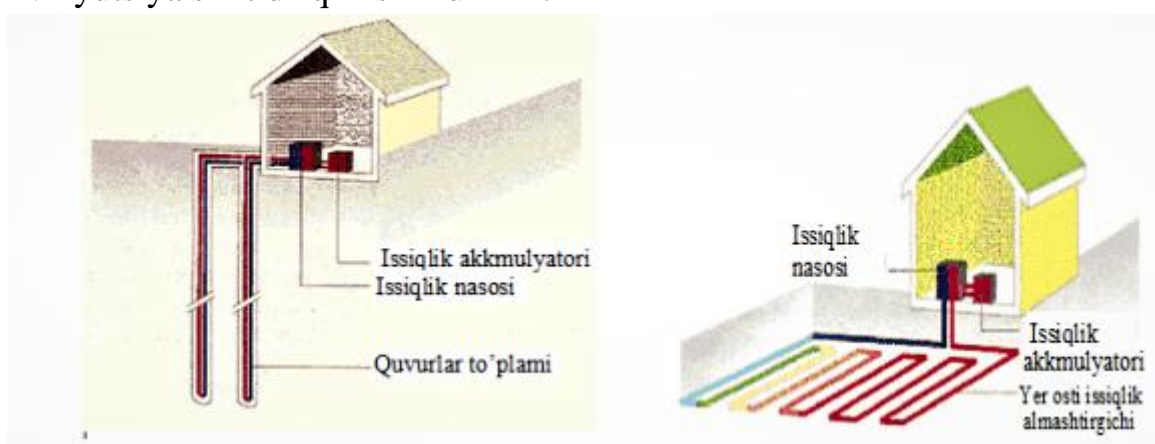


Fontanli texnologiya, hozirgi paytda, tarkibida bosim ostida flyuidlar (suv, rassol, suv-bug'li qorishma-lar, bug') bo'lgan tabiiy o'tkazuvchan kollektorlarda ifodalanadigan geotermal konlar ishlab chiqishda yetakchi o'rin tutadi.

Ishlatiladigan quduqlardan, kollektordagi ortiqcha bosim hisobidan yoki nasosli tortib chiqarish natijasida yuzaga chiqarilgan qatlamli flyuid, iste'molchiga yetkaziladi va isitishda ishlatilgandan so'ng, tabiiy, yoki sun'iy suv havzasi, oqava suvlar oqimiga chiqarib tashlanadi. Bu texnologiyaning, asosan, ekologik va resurslar nuqtayi nazaridan anchagina kamchiliklari bor, shu tufayli, uning yirik energetika rivojlanishida istiqboli yo'q.

Sirkulyatsion texnologiyaning 3 turi geotermal sirkulyatsion tizim (GST)larda taqdim etilgan: tabiiy o'tkazuvchan kollektorli sun'iy ravishda kollektorlar tomonidan tog' jinslarida yaratilgan o'zgaruvchan yoriqli zonali. Tabiiy kollektorlar bilan geotermal konlar ishlab chiqishda sirkulyatsion texnologiya Frantsiyada muvaffaqiyatli qo'llanilmoqda va Germaniya, Daniya, Shveysariya, AQSh, Pol'sha, Rossiyada va boshqa mamlakatlarda sanoatida keng tarqalgan.

Past haroratli, kichik chuqurlikdagi geotermal energiyani ishlatishning yuzaga yaqin (kichik chuqurlikdagi) texnologiyalariga, bir qadar texnik-iqtisodiy fenomen yoki issiqlik ta'minoti tizimidagi real revolyutsiya sifatida qarash mumkin.



1.5 chizma Yuzaga yaqin (kichik chuqurlikdagi) o'zgaruvchan haroratli geotermal tizim. a - gorizontal kanallarda; b -quduqlarda

10 yildan kamroq vaqt ichida, AQShda ko'p variantli texnologiya ishlab chiqilgan va yuz minglab harakatdagi issiqlik ta'minoti tizimi qurilgan. Har yili, 50-80 ming yangi tizimlar ishga tushirilmoqda. Bu texnologiya, Shvetsiya, Shveysariya, Kanada, Avstriya, Germaniya, AQShda muvaffaqiyatli ishga solinayapti. 2000 yilning oxirida, dunyoda 500 mingga yaqin, o'rtacha quvvati 10 kW va umumiy quvvati 2,2 GW (t) bo'lgan shunday tizimlar ishlab turgan. Yuzaga yaqin (kichik chuqurlikdagi) geotermal tizimlardan, turli xildagi yashash uylari (arzonidan boshlab, to hashamatli, individual yoki ko'p qavatli uylargacha)ni, benzin quyish shaxobchalari, supermarketlar, cherkovlar, ta'lim muassasalari va hokazolarni isitish yoki sovutishda foydalaniladi.

Ko'rib chiqilayotgan texnologiyalarning mohiyati shundaki, kichik chuqurlikda joylashgan, yopiq yoki ochiq konturli, issiqlik nasosiga ulangan, isitiladigan xona ichida joylashgan yer osti issiqlik

almashtirgichni yaratish kerak. (1.5-chizma.) Bunda, 5-14 °C intervaldagi jinslar haroratidan foydalaniladi.

Bu tizimlardan nafaqat tog' jinslari yoki suvda jamlangan geotermal energiyalarda, balki quyoshda jamlanganlarida ham foydalaniladi. Bu tizimda ishlatiladigan u yoki bu energiyaning aniq ulushi, issiqlik almashtirgichning joylashish chuqurligi, o'sha hududning iqlimi va gidrogeologik sharoitlariga bog'liq. Yuzaki joylashgan gorizontall issiqlik almashtirgich (teploobmennik)lar uchun asosiy hissa quyosh energiyasi ulushi, deb taxmin qilinadi.

Bunday moslama qurilishi uchun ketadigan asosiy xarajatlar, to'g'ridan-to'g'ri elektr energiyasi bilan isitish tizimlarini yaratishga ketadigan xarajatlardan 50-100% baland bo'lishi mumkin. Lekin, issiqlik ishlab chiqarishning ekspluatatsion xarajatlari, an'anaviy isitish manbaalari elektr energiyasi xarajatlaridan 60% ga past va havoli isitish nasoslaridan 25% ga past. Xarajatlar qoplanishi vaqti keskin kontinental iqlimda, ya'ni tizimlar qishda binolarni isitish, yozda sovutish uchun ishlatilganda, pasayishi mumkin. AQShda, xarajatlarning 4-8 yilda qoplanishi yomon natija emas, deb hisoblanadi.

Geotermal energiya manbalaridan foydalanishning quyidagi afzalliklari mavjud:

- geotermal energiya- atrof- muhitni ifloslantirmaydi;
- geotermal energiya-panik effektiga zamin yaratmaydi;
- elektrostantsiyalari ko'p joyni egallamaydi;
- yoqilg'i ishlatilmaydi;
- geotermal elektrostantsiyalar qurilishi energiyani arzonligini ta'minlaydi;

Geotermal energiya manbalaridan foydalanishning quyidagi muammolari mavjud:

- issiq toshlar yetarli chuqurlikda, qazish oson bo'lishi uchun mos tipda bo'lishi kerak;
- ba'zan geotermal joylar yillar davomida «zaiflashib» qolishi mumkin.

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THE ROLE OF THE STATE MUSEUMS OF THE REPUBLIC OF KARAKALPAKSTAN IN THE FIELD OF TOURISM AND THE IMPORTANCE OF THEIR MANAGEMENT

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Abstract: *In this article, the issues of the organization of state museums operating in the Republic of Karakalpakstan are highlighted, the objects stored in them, the number of employees, the number of tourists who visited and the income from them are analyzed, and also formulates scientific conclusions.*

Keywords: *museum, state museum, tourism industry, tourists, employees, stored objects, exposition, exhibit, revenue.*

Enter

The museum field is one of the important directions of the socio-cultural life of modern society, which is undergoing serious changes. Museums have become an intellectual component of the creative industries, along with the performing arts, gallery business, fashion, crafts, publishing, and other traditional cultural institutions.

Creative industry is an innovative sector of the post-industrial economy based on a new concept of socio-economic development, which considers cultural resources and creativity as the most important raw material resource and the most valuable economic product.

Due to the "immeasurable" effect recognized by all experts, modern museums are a real competitor to the leading fields of creative industries, actively influencing the change of the quality of life, the formation of cultural identity, the development of pluralism and a tolerant environment in society.

Museums form an innovative field around themselves, develop and implement special projects to support creative clusters or become an integral part of them.

At the same time, museums enter the highly competitive environment by introducing programs aimed at the development of recreational functions into their activities, demanding the need to compete for visitors both in a narrow environment and in the entertainment sector in general. This has led to the fact that museums have begun to introduce flexibility and enterprise, mobility - search for new resources, new partners, media technologies and communications into museum practice, which were not characteristic of them before.

Museum business is gradually becoming a rapidly developing field of science, art, business, and culture. Changes in legislation, taxes and legislation create opportunities and incentives to adapt to modern conditions of economic activity.

In this regard, the development of new technologies plays an important role in the management and development of museums. Thanks to this, many museums effectively realize their goals in the socio-cultural environment.

Literature review

Institutional, social, economic and financial bases of organization, regulation, development and management of museums are reflected in the researches of foreign scientists [5-19]. Also, aspects of tourism development and its management, improvement of organizational and economic mechanisms, determination of its prospects, and problems of development of this field are widely covered in scientific works of scientists of many near and far foreign countries and our republic. The research work carried out in recent years directly dedicated to the development of tourism in the Republic of Karakalpakstan is noteworthy. Among these, M. O. Khalimova [16], dedicated to the eco-innovative mechanisms of the development of tourism in the Aral Bay region. We can cite scientific works of B. Adilchaev, B. Ismailov [17] dedicated to the place of guest houses in the development of rural and ecological tourism in the Republic of Karakalpakstan. But the lack of research on the role of museums in the development of tourism in the region and the importance of their management proves the relevance of the chosen research topic and the need to conduct research in this regard.

Methodology

Methods such as scientific abstraction, analysis and synthesis, comparison, and statistical analysis were used in this study.

Analysis

Today there are about 10 museums in the Republic of Karakalpakstan, among them I.V. The Savitsky State Art Museum is the most famous. This museum was opened in 1966 by the initiative of the artist I.V. Savitsky, an honored artist of Uzbekistan, People's Artist of Karakalpakstan, laureate of the Order of Merit.

In 2011, the museum received the diploma "Museum that has won the attention of tourists", and in 2016, it was recognized as one of the 7 wonders of Uzbekistan.

The museum is one of the major art centers of our country. Museum exhibitions consist of 3 sections: Karakalpakstan's ancient art (Ancient Khorezm, Kardar culture), folk art and fine art sections. In total, about 100,000 items are stored in the museum, and about 2,500,000 of them are exhibited. Chronologically, the exhibits range from

the Bronze Age to modern art. Among the most famous objects of the museum are the works of Uzbek and Russian artists of the 1920s and 1930s, called "Avangard".

The State Museum of History and Culture of the Republic of Karakalpakstan, which ranks second in the region in terms of the number of objects stored in the museum, was established as an archaeological research institute in Tortkul, the first capital of the Republic of Karakalpakstan. The first exhibition was opened on May 16, 1929. In this exhibition, Karakalpak national costumes, household goods, manuscripts, books published in Tortkol, castles and monuments created by artists are displayed. The museum started with more than 20 exhibits, and today there are more than 80,000 exhibits. In 1935, it was named the History and Local History Museum of Karakalpakstan.

"Ecology" museum branch of Moynaq District ranks third in the region in terms of revenue from one visitor. This museum was originally founded by the leprologist Eskirkepov Urinbay in 1984 in the village of Uchsoy, Moynaq district, as a local history museum. In 1994, it operated as a museum under the department of culture of Moynaq district. On the basis of the decision of the President of the Republic of Uzbekistan No. PQ-2803 dated February 28, 2017 [1], funds in the amount of 1 billion 200 million soums were allocated by the subsidiary "Urgenchtransgaz" in order to widely attract tourists to the Moynaq district and the Aral Sea, as well as to convey its long past history, nature, and its fauna and flora to the general public through a museum exposition. , the new building of the museum in Moynaq district has been completed. On October 20 of this year, on the basis of the statement of the Cabinet of Ministers of the Republic of Uzbekistan No. 07/1–426 of October 6, 2018, the opening ceremony of the "Museum of Ecology" branch of the State Museum of History and Culture of the Republic of Karakalpakstan was held in the framework of the international gastronomic festival "99 different dishes from island fish". Visitors to the exhibition hall of the museum can see the past and present life of the Aral Sea, its flora and fauna, the development of fishing in the Moynak district, photographs of the activities of the fish cannery, the works of color painters F.Yu.

"Aral Denizi" museum branch of Moynaq district ranks first in the region in terms of revenue from one visitor on average. In addition to the Aral Sea and marine nature, this museum contains books and photographs related to the history of the Moynaq fish canning plant, which provided employment to many people in the Moynaq district. The interior of the museum building is in the form of a black house, and in this hall in the form of a black house, visitors to the museum and tourists can watch videos about the history of the "Aral Sea". Currently, the museum has several maritime history exhibits. The museum is located near the open-air "Ship Cemetery" in Moynaq district.

According to the number of visitors, the State Museum of the History of Karakalpak Literature named after Berdak ranks third in the region. In order to celebrate the 170th anniversary of the son of the great thinker of the Karakalpak people, the wise poet Berdak Gargabai, the Berdak National Museum was established in the city of Nukus under the Karakalpak State University named after Berdak in accordance with the decision No. 220 [3] of the Cabinet of Ministers of the Republic of Uzbekistan adopted on May 20, 1998. The museum started its activity on March 1, 2002.

In accordance with the decision No. 206 of the Cabinet of Ministers of the Republic of Uzbekistan dated April 13, 2021 [4] and the decision No. 122 of the Council of Ministers of the Republic of Karakalpakstan dated April 15, 2021, Berdaq National Museum was reorganized under the name of Berdak State Museum of the History of Karakalpak Literature.

The total area of the museum is 1.26 ha, it consists of three floors and has one large dome and six small domes. The project of the museum was designed by the famous architect O. Toreniyazov, laureate of the state award named after Berdak.

This blessed place is enriched with exhibits that reflect the literary life of our people, the history of classical literature, and its creators, starting from the history of Karakalpak literature in ancient times until the period of independence.

A total of 99,840 museum objects are stored in the I.V. Savitsky State Art Museum of the Republic of Karakalpakstan, of which 55,122 are the main fund, 32,871 are scientific auxiliary funds, and 11,847 are temporarily stored fund items. 12,995 items are in repair condition. Currently, 736 exhibits are placed in the exhibition hall (Table 1).

In the State Museum of History and Culture of the Republic of Karakalpakstan and his A total of 83,479 museum objects are stored in 3 branches (Muynoq Ecology Museum, Muynoq Aral Sea History Museum and Ellikkala District Archeology and History Museum), of which 32,779 are the main fund, 32,779 are the scientific auxiliary fund, 17,921 are temporary storage fund items, and 2,266 are items under repair. Currently, 2,022 items of the museum are on display.

A total of 10,469 museum objects are stored in Berdak State Museum of the History of Karakalpak Literature, of which 6,659 are the main fund, 2,032 are scientific auxiliary funds, and 1,778 are temporary storage funds. 3500 of them are listed under repair. Currently, 825 museum items are on display.

Table 1.

Information about the objects stored in some state museums of the Republic of Karakalpakstan in 2022¹

N o	The type of objects in the museum	State Art Museum of the Republic of Karakalpakstan named after I.V. Savitsky	State Museum of History and Culture of the Republic of Karakalpakstan	Karakalpak Literature History State Museum named after Berdak
1.	The number of objects stored in the museum	99 840	83 479	10469
2.	Number of main funds	55 122	32,779	6659
3.	Number of scientific support funds	32 871	32,779	2032
4.	The number of temporary storage items	11,847	17,921	1778
5.	Number of items in repair condition	12995	2266	3500
6.	The number of exhibits (expositions) poured into the hall	736	2022	825

If we analyze the number of employees and their qualifications, the State Art Museum named after I.V. Savitsky of the Republic of Karakalpakstan is leading in all the listed indicators (except for the specialized staff and administrative management staff). In particular, a total of 157 employees are employed in this museum, of which 91 (that is, 57.9 percent of the total number of employees) are technical employees, 56 (35.7 percent) are scientific and creative employees, 13 are administrative management employees, and 6 are specialist employees (Table 2).

¹Compiled by the author based on the data of the Statistics Department of the Republic of Karakalpakstan

Table 2.

Information about the number of employees and their qualifications working in some state museums of the Republic of Karakalpakstan in 2022¹

No	Type and qualification of employees	State Art Museum of the Republic of Karakalpakstan named after I.V. Savitsky	State Museum of History and Culture of the Republic of Karakalpakstan	Karakalpak Literature History State Museum named after Berdak
1.	Number of employees	157	136	28
2.	Number of administrative staff	13	22	4
3.	The number of scientific and creative employees	56	24	4
4.	Number of specialist staff	6	18	14.5
5.	Number of technical staff	91	72	4
6.	Number of employees with academic degrees	2	load	load
7.	Number of employees awarded with state awards	2	load	1
8.	The number of employees who have improved their qualifications in the last 3 years	3	load	1

It should be noted that The qualifications of the staff working in the I.V. Savitsky state art museum of the Republic of Karakalpakstan are higher than in other museums.

In the State Museum of History and Culture of the Republic of Karakalpakstan, the total number of employees is 136, more than half of them, ie 72 are technical employees, and the other half are administrative management, scientific-creative and specialist employees.

In contrast to the above-mentioned museums, half (14.5) of the total number of employees (28) in the State Museum of the History of Karakalpak Literature named

¹Compiled by the author based on the data of the Statistics Department of the Republic of Karakalpakstan

after Berdak are specialists, of which 1 was awarded with state awards and 1 improved their qualifications in the last 3 years.

If we evaluate the direct contribution of museums to the field of tourism, the State Art Museum named after I.V. Savitsky of the Republic of Karakalpakstan is attractive for tourists. In particular, in 2022, a total of 76,742 tourists visited this place, of which 8,858 (11.5 percent) were foreign tourists. The State Museum of History and Culture of the Republic of Karakalpakstan is on the next place, which was visited by a total of 31,484 tourists, of which 355 (1.1 percent) were foreign tourists. Of the total number of visitors, 42 (0.4 percent) visited the State Museum of the History of Karakalpak Literature named after Berdak, 4,641 (9.0 percent) Muynok Ecology Museum, 877 (24.6 percent) Aral Sea History Museum, 21 (0.8 percent) Ellikkala District Museum of Archeology and History (Table 3).

Table 3.

Information about visitors to the state museums of the Republic of Karakalpakstan and their income during 2022¹

No	Name of the museum	Number of visitors, person			Total revenue, million soums	Average one revenue from visitors, soum		
		Total	From this:			Total	From this:	
			Foreign	Local			Foreign	Local
1.	State Art Museum of the Republic of Karakalpakstan named after I.V. Savitsky	76 742	8858	67 884	812 420 520	10586.4	91716.0	11967.8
2.	State Museum of History and Culture of the Republic of Karakalpakstan	31484	355	31129	65,507,556	2080.7	184528.3	2104.4
3.	Muynok Museum of Ecology	4641	421	4220	22,494,000	4846.8	53429.9	5330.3
4.	Aral Sea History Museum	3561	877	2684	40,820,000	11463.1	46545.0	15208.6
5.	Museum of Archeology and History of Ellikkala district	2554	21	2533	3,797,000	1486.7	180809.5	1499.0
6.	Karakalpak Literature History State Museum named after Berdak	10400	42	10358	13,097,187	1259.3	311837.8	1264.5
Total		129 382	10,574	118 808	958 136 263	31723.0	868867	37375

¹Compiled by the author based on the data of the Statistics Department of the Republic of Karakalpakstan

As the number of visitors to the museums increases, so does the income from them. Indeed, in 2022, the revenue received from visitors by the I.V. Savitsky State Art Museum of the Republic of Karakalpakstan will be 812,420,520 soums (84.8 percent of the total revenue received by the analyzed museums), the State Museum of History and Culture of the Republic of Karakalpakstan, the Museum of the History of the Aral Sea, the Muynok Museum of Ecology, the State Museum of the History of Karakalpak Literature named after Berdak and Ellikkal' In the Museum of Archeology and History of District A, this indicator is 6.8 percent, respectively; 4.2 percent; 2.3 percent; It was 1.4 percent and 0.4 percent.

If we calculate the average income from one foreign visitor to the museum, the State Museum of the History of Karakalpak Literature named after Berdak takes the lead in this regard (311837 soums). The average income from local visitors is the highest (15,208.6 soums) for the Museum of the History of the Aral Sea.

In general, the conducted research showed that the established and developing museums in the region make a significant contribution to the growth of domestic and foreign tourism in the region. This trend will continue in the future. Because the feeling of appreciating any kind of history, studying it through museums, and the desire to improve one's knowledge is increasing.

Summary

1. Museums are closely related to the social and spiritual life and history of the people. Museums are the biography of the people in certain periods. It describes the process of formation and development of a certain nation as a nation or the ancient history of a region and the social life that has continued to this day. In this sense, the state museums, which give the region a unique look, are among the museums that introduce the cultural and literary history of our nation to future generations.

2. The results of the analysis of employees working in state museums operating in the Republic of Karakalpakstan showed that More than half of the total number of employees work in the I.V. Savitsky State Art Museum of the Republic of Karakalpakstan and the State Museum of History and Culture of the Republic of Karakalpakstan and its branches, and in the State Museum of the History of Karakalpak Literature named after Berdak - specialists. This directly depends on the number of objects stored in the museum, including main funds, scientific auxiliary funds, temporarily stored objects, objects under repair, and the number of exhibits (expositions) placed in the hall.

3. Analyzes have shown that there is a direct relationship between the number of visitors and the amount of income from them. In particular, the State Art Museum of the Republic of Karakalpakstan named after I.V. Savitsky has the largest number of

visitors and, accordingly, the largest income from tourists. Also, the analysis showed that the number of specialist employees is directly related to the volume of income from one visitor to the museum. In particular, half of the total number of employees in Berdak State Museum of Karakalpak Literature History was made up of specialists, and the average income from foreign visitors was 311837 soums. It is a bit more than other museums.

4. The results of the analysis can be used in the future to improve the mechanisms of further development and management of the tourism industry in the region, to further increase the role of museums in this direction, to develop and implement targeted programs and measures for the full use of the existing and hidden potential of museums and the entire region, which increases the scientific value of the research.

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XITOIY HARBIY TERMINI VA BIRIKMALARINING O‘ZIGA XOSLIGI

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ANNOTATSIYA: *Ushbu maqolada Xitoy tilidagi harbiy so‘zi hamda uning ishtirokidagi ba‘zi termin va iboralarining kelib chiqishi, o‘ziga xos jihatlari haqida so‘z yuritilgan. Nazariy jihatdan, mudofaa tafakkuri bir necha tarixiy bosqichlarda rivojlanib, shu kungacha harbiy sohalarga oid fanlarda bir qancha ta‘limotlar yaratildi. Jumladan, “Milliy xavfsizlik”, “Umumiy xavfsizlik”, “Kichik urushlar nazariyasi”, “Mudofaani ta‘minlashda tizimli yondashuv”, “Zamonaviy urushlar nazariyasi”, “Barqarorlikni ta‘minlashda harbiy kuch”, “Yumshoq kuch”, “Aqlli kuch”, “Ulkan strategiya”, “Katta strategiya” kabi ta‘limotlar shular jumlasidandir. Har bir soha terminologiyasi tizimli va mukammal terminlarning bo‘lishini taqozo etadi. Ilmiy- texnik va xorijiy adabiyotlarda, maxsus terminologik lug‘atlarda til omillariga to‘la rioya qilinmay, har bir tilning imkoniyatlarini hisobga olmay tarjima jarayonida ulardan noo‘rin foydalanish tilning barcha terminologik tizimlarida kuzatilayotgan jiddiy qusurlaridandir. Bunday vaziyatlar harbiy va siyosiy sohalar uchun juda jiddiy masala hisoblanadi. Demak harbiy soha terminologiyasi tilshunoslarga mukammal, izchil o‘rganish talabini qo‘ygan. Mudofaa uchun zamon talabi bo‘lgan “harbiy til” ni ilmiy tomonlarini o‘rganib, tinchlikni saqlashda hissa qo‘shish har bir soha vakilining sharaflı burchidir.*

Kalit so‘zlar: *Xitoy tili, tilshunoslik, semantika, harbiy soha atamaları.*

ABSTRACT: *This article discusses the origin and specific aspects of the Chinese word military, terms and expressions involving the word military. Theoretically, defense thinking has developed in several historical stages, so many doctrines have been created in military science. Among them are the doctrines of national security, common security, small war theory, systematic approach to stability, modern war theory, military power to ensure stability, soft power, smart power, high strategy, grand strategy. The terminology of every field requires a systematic and perfect terminology. In scientific- technical and foreign literature, in special terminological dictionaries, language factors are not fully observed, their incorrect use without taking into account the capabilities of each language in the translation process is one of the serious defects observed in all terminological systems. Such*

situations are a very serious issue for the military and political spheres. Therefore, the terminology of the military sphere requires perfect and consistent study by linguists. Studying the scientific aspects of the “military language”, which is the demand of the time for defense, and contributing to the maintenance of peace, is the honorable duty of the representative of every field.

Keywords: Chinese language, linguistics, semantics, military terms.

KIRISH: Xitoy tilidagi harbiy terminlar insoniyat tarixi qadar ming yilliklarga borib taqaladi desak adashmaymiz. O‘zbek tilshunoslari tomonidan xitoy harbiy sohasida ilmiy ishlar hajmi, ko‘lami to‘laqonli emasligi va lingvistik tarjimalarga murojaatlarning kamligi oldimizga katta nazariy, amaliy o‘rganishni dolzarb qilib qo‘ymoqda. Bugungi kunda globalizatsiya va integratsiya jarayonlarning to‘xtovsiz o‘zgarishi, rivojlanishi sababli harbiy sohalarni tizim sifatida murakkablashib borayotganligini kuzatishimiz mumkin. Bu esa olimlar va mutaxassis-ekspertlar orasida jahon hamjamiyati kelajak istiqbollari haqida turli xil fikr va xulosalarni yuzaga keltirmoqda. Ana shunday murakkab va muhim ahamiyat kasb etuvchi mavzulardan biri hozirda jahon diqqat markazida turgan ulkan salohiyatga ega Xitoy davlati, uning istiqbollari, harbiy salohiyati haqida desak, xato qilmagan bo‘lamiz. Xitoy nafaqat jahonda aholi soniga ko‘ra hamda qishloq xo‘jaligi, sanoat mahsulotlari qiymatiga ko‘ra, balki harbiy sohada ham yetakchi o‘rinda turadi. Xitoy tili dunyo tillari qatorida e‘tirof etib kelinayotgan, hamda iqtisodiy, siyosiy rivoji sabab ko‘p millatlar tarafidan yanada yorqin va mukammal o‘rganilayotgan tillar safidadir. Shu sabab xitoy terminologiyasi sohalarga aniq ajratilgan holda o‘rganilib kelinmoqda. Xitoy milliy mudofaa va harbiy qurilishining hikoyasi keng qamrovli, aniq va to‘liq bo‘lib, yangi davrning kuchli harbiy sanoatining uch o‘lchovli rasmini taqdim etish qiyin. Milliy mudofaa va armiya qurilishining kaliti sifatida beriladigan ma‘lumotlar Xitoy armiyasining asosini ko‘rsata olmasada, u haqida chuqurroq o‘rganish va tushunishga yordam beradi. O‘zbekiston o‘z tinchligini ta‘minlash maqsadida 2017 –yil noyabrda mamlakat sanoatining import o‘rnini bosuvchi, zamonaviy, raqobatbardosh, eksportbop harbiy qurollarni ishlab chiqarish uchun Mudofaa sanoati davlat qo‘mitasi tashkil etildi. Bugungi kunga kelib, harbiy atamalarning mukammal o‘rganilishi xavfsizligimizni ta‘minlash va harbiy-siyosiy tushunmovchilik, tarjimadagi g‘alisliklar hamda xatoliklarni oldini olishga ulkan hissa qo‘shadi. Xitoy harbiy ishlab chiqaruvchi texnikalari zamonaviyligi, hamyonbopligi, turli ta‘riflar, takliflari sabab Mudofaa sanoati davlat qo‘mitasi tomonidan hamkor sifatida ko‘rilishi mumkinligini hisobga olgan holda, xitoy harbiy terminlari ustida mukammal ishlarni amalga oshirishni oldimizga ko‘ndalang qo‘ymoqda.

ADABIYOTLAR TAHLILI VA METODOLOGIYASI: Fan tili millatning umumadabiy tili asosida shakllanadi va rivojlanadi. Shu bois fan, ilm tili poydevorini umumadabiy tilning leksikasi, soʻz yasalishi va grammatikasi tashkil qiladi. X. Xyuellning qayd etishiga koʻra, terminologiya muayyan fanga oid terminlar yoki texnika sohasida qoʻllanadigan soʻzlar yigʻindisidir. Biz terminlar maʼnosini qayd etish orqali ular ifodalaydigan tushunchalarni ham qayd etamiz¹. Termin soʻzini turlicha tushunish mavjud. Chunonchi, mantiqshunos(logik)lar uchun termin-aniq obektga tegishli tavsif (yoki tavsiflar) yigʻindisini nazarda tutuvchi va unda tatbiq etiluvchi soʻz hisoblanadi. Har qanday tildagi istalgan soʻz termin boʻlishi mumkin. Fan va texnikada termin-sunʼiy oʻylab topilgan yoki tabiiy tildan olingan maxsus soʻz sanaladi. Bunday soʻzlarning qoʻllanish sohasi u yoki bu ilmiy maktab vakillari tomonidan aniqlashtiriladi yoxud chegaralanadi. Umumtil terminlaridan farqli oʻlaroq, ilm-fan, texnikaga xos terminlar iyerarxik birliklar sifatida terminologik sistemalarga birlashadi, ular oʻz maʼnolariga faqat ayni sistema ichida erishadi, bu sistemada ularga mantiqiy (tushunchaga oid) terminologik maydon mos keladi. Fandagi har qanday rivojlanish, taraqqiyot ilmiy terminlarning yuzaga chiqishi yoki oydinlashishidan darak beradi². Xitoy tili terminlarida harbiy soʻzi koʻp qoʻllaniladigan termin boʻlib, bu 军 terminning maʼnosi :

1. Qurolli kuchlar (armed forces), armiya (an army), qoʻshinlar (troops)
2. Korpus(Corps)
3. Harbiy(Military)
4. Shartli (contingent) kabilarni anglatadi. Ayna shu ieroglifning oʻzida shuncha lugʻaviy maʼno aks etishi bu soʻzning kengroq doirada ishlatilishiga asos boʻla olgan. Masalan :

军事的 – harbiy ish, 军人- harbiy kishi, 军队- armiya qoʻshini, 陆军- piyoda askar, 解放军 - xalq ozodlik armiyasi, 参军- armiya safiha kirmoq, 裁军- qurolsizlanish.

Ushbu ieroglif ishtirokida birikmalar ham juda koʻp boʻlib, bu birikmalar ham armiya va qurolli kuchlarga oid soʻzlar mazmunini aks ettirishga xizmat qilgan.

军事特种技术- harbiy (maxsus) texnologiya

军用机场 – harbiy aerodrom

¹ Whewell 1967

² H.Dadaboyevning “Tarixiy harbiy terminlar lugʻati” Toshkent, 2007

军事科学院- harbiy akademiya

军事行动 – harbiy operatsiya

军事术语- harbiy atama(atamashunoslik)

军事史料学- harbiy tarixiy manbashunoslik

军 so‘zi ishtirok etgan har qanday jumla , so‘z, birikma aynan harbiy sohaga oid termin ekanligining tasdig‘idir. Tahlil jarayonida ierogliflarning so‘zdagi ma’no berish hodisasi yaqqol namoyon bo‘lishini ko‘rish mumkin. Hozirda o‘zbek tiliga chetdan kirgan harbiy so‘zlar asosan ruscha harbiy so‘zlar tahlil qilingani sabab ozgina ma’lumotlar berishni lozim topdik. Murakkab qo‘shma terminning komponentlaridan biri o‘zbekcha so‘z bilan almashtiriladi (yoxud kalkalanadi

(shlem-kaska), (samolyot –mishen),

(vozdushno-desantniy (strelok –radist), (mina-lovushka), odamamfibiya (chelovek-amfibiya), (kilovatt-chas),

(shkola – internat), (alfa-luchi), (alfa –raspad),

(gamma – luchi), (depozitniy schyot),

(fyuchersniye sdelki), (elektronnaya plata)

va h.k. Bunga o‘xshash terminlarning so‘z tartibi o‘zbek tiliga o‘zlashish chog‘ida saqlanib qoladi. Murakkab qo‘shma terminning komponentlaridan biri o‘zbek tilidagi mutanosib so‘z bilan almashtiriladi (yoki kalka yo‘li bilan tarjima qilinadi). Bunday holatda murakkab qo‘shma terminlarning so‘z tartibi o‘zbek tilida o‘zgaradi:

(samolyot-perexvatchik),

(samolyot-narushitel), (samolyotraketanosets),

(poet-demokrat) va h.k. Murakkab qo‘shma terminlarning har ikki

komponenti o‘zbekcha ekvivalenti bilan almashtiriladi (yoxud kalkalanadi). Bunday vaziyatda o‘zlashma terminning so‘z tartibi o‘zgarishga uchramaydi:

(yama-lovushka), (vzlyotno-posadochniy),

(voyenno-vozdushniy), (voyenno-morskoy),

(voyenno-polevoy (obshestvenno-ekonomicheskoy) va

h.k. Ayni holat o‘zlashma termin-birikmalarni kalkalashda ham aks etadi:

(gosudarstvenniy dolg), (platyojnoye

izvesheniye) (platyojniy poryadok),

(normativno-pravoviye dokumenti) va h.k. O‘zlashma murakkab qo‘shma

terminlarning har ikki komponenti o‘zbekcha mutanosibi bilan almashtiriladi (yoxud kalkalanadi), bunda murakkab qo‘shma terminlarning so‘z tartibi o‘zgaradi:

(soldat-spetsialist), (strelok-navodchik
(lyotchik-istrebitel lyotchik-nablyudatel),
(lyotchik-ispitatel) va h.k

MUHOKAMA: Hozirgi o‘zbek tili terminologiyasida kalkalash yo‘li bilan yangi termin yasash masalasiga alohida diqqat qaratiladi. Ruscha-baynalmilal terminlarni to‘la yoki qisman tarjima qilish usuli bilan hosil qilingan o‘zbek tili terminlari mavjud terminologiya tizimining yana ham kengayishi va boyishida muhim ahamiyat kasb etadi. O‘zbek adabiy tili xorijiy so‘z va terminlarni o‘zlashtirish jarayonida ularni nafaqat tayyor, asl holda qabul qildi, balki kalkalash usuliga tayangan tarzda to‘laligicha yoxud qisman tarjama qilish yo‘lidan bordi. XX asrning boshlarida ko‘pgina ruscha-baynalmilal terminlar o‘zbek tiliga o‘girilgan edi.¹

XULOSA: Bugungi kunda mudofaa va xavfsizlikni ta‘minlash amaliyoti kogitologik² yondashuvni taqozo etmoqda, chunki xavf va tahdidlar intellektuallashib bormoqda.³ xitoy olimlaridan Yuan Wei. “O‘zbekcha-xitoycha va xitoycha –o‘zbekcha harbiy-diplomatik atamalarining izohli lug‘ati” kabi lug‘atlarini misol tariqasida ko‘rishimiz mumkin va bundan xulosa shuki, xitoy olimlari mustaqil izlanuvchi sifatida o‘zbek harbiy terminologiyasining boyishiga o‘z hissalarini qo‘shmoqda. Zero zamonaviy dunyoda Xitoy Xalq Respublikasi xitoy tilshunosligida harbiy soha bo‘yicha olib borilgan ilmiy tadqiqotlarda ham, o‘zbek tilshunosligida ham xitoy tili lug‘at boyligining muhim qismini tashkil etuvchi, harbiy- siyosiy munosabatlarni ifodalovchi harbiy atamalar tadqiq etilmoqda.⁴

ADABIYOTLAR RO‘YXATI

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- 2 S.Hashimova Xitoy tilida so‘z yashalishi汉语构词法
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² Lotincha cogitio- tafakkurlash, fikr yuritish, yununcha logos – ta‘limot

³ “HARBIY ATAMALARNING YANGI IZOHLI LUG‘ATI” (2020) –Toshkent; Innovatsiya -Ziyo

⁴ <https://doi.org/10.5281/zenodo.6554405>

INGLIZ TILINI O'RGANISH MOTIVATSIYASINI OSHIRISHDAGI INTERFAOL TA'LIM USULLARINING AHAMIYATI

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Annotatsiya: Maqolada xorijiy tillarni o'qitishda o'qitishning interfaol shakllaridan talabalarning uni o'rganishga bo'lgan qiziqishini oshirish vositasi sifatida foydalanish ko'rsatilgan. Ta'riflangan interfaol texnologiyalar chet tilini o'rgatishda tilga yo'naltirilmagan fakultet talabalari uchun qo'llaniladi.

Kalit so'zlar: interaktiv metodologiya, motivatsiya, ingliz tili, muloqot.

ВАЖНОСТЬ ИНТЕРАКТИВНЫХ МЕТОДОВ ОБУЧЕНИЯ В ПОВЫШЕНИИ МОТИВАЦИИ К ИЗУЧЕНИЮ АНГЛИЙСКОГО ЯЗЫКА

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Аннотация: В статье показано использование интерактивных форм обучения в обучении иностранному языку как средство повышения интереса учащихся к его изучению. Описанные интерактивные технологии используются в обучении иностранному языку студентов неязыковых факультетов.

Ключевые слова: интерактивная методика, мотивация, английский язык, общение.

THE IMPORTANCE OF INTERACTIVE EDUCATIONAL METHODS IN INCREASING THE MOTIVATION TO LEARN ENGLISH

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Annotation: The article shows the use of interactive forms of teaching in foreign language teaching as a means of increasing students' interest in learning it. The described interactive technologies are used in foreign language teaching for non-language faculty students.

Key words: interactive methodology, motivation, English language, communication.

Yoshlarni tez o'zgarib borayotgan axborot jamiyati, yangi bilimlarning paydo bo'lish jarayoni muttasil jadallashib borayotgan, yangi kasblarga muntazam ehtiyoj sezayotgan, uzluksiz kasbiy bilimlarga ega bo'lish dunyosida hayotga tayyorlash hozirgi zamonning asosiy ustuvor yo'nalishlaridan biridir. So'nggi global, geosiyosiy va iqtisodiy o'zgarishlar ingliz tilini o'qitishga yangi talablarni qo'yimoqda. Chet tilida ravon so'zlasha oladigan mutaxassislariga bo'lgan ehtiyojning ortib borishi chet tilini o'qitish yo'nalishini biroz qayta ko'rib chiqishga olib kelmoqda.

Har qanday tilni xususan ingliz tilini o'rganishda o'quv motivatsiyasini shakllantirish shaxsni rivojlantirish va shakllantirish masalalarini hal qilishdir. Talabalarning aqliy faoliyatini rag'batlantiradigan interfaol o'qitish usullaridan foydalanib, talabalarning chet tilini o'rganishga bo'lgan motivatsiyasini sezilarli darajada oshirishingiz mumkin. O'quv motivatsiyasi muammosi pedagogikada asosiy muammolardan hisoblanadi va o'quv jarayonining barcha ishtirokchilari: talabalar va o'qituvchilar uchun dolzarbdir. Motivatsion soha kognitiv, intellektual sohadan ko'ra ko'proq dinamikdir. Motivatsiyadagi o'zgarishlar tezda sodir bo'ladi va bu kuchli faollik va intilish bilan ajralib turadigan ko'plab muammolarga to'la bo'ladi. Agar u nazorat qilinmasa, u darhol pasayadi, motiv o'z samaradorligini yo'qotadi.

"Motivatsiya - bu shaxsni faoliyatga undaydigan, faoliyatning chegaralari va shakllarini belgilovchi va ushbu faoliyatga ma'lum maqsadlarga erishishga yo'naltirilgan yo'nalishni beradigan ichki va tashqi harakatlantiruvchi kuchlar yig'indisidir".¹ "Motivatsiya" odatda odamlar yoki hayvonlarning ma'lum bir vaqtda ma'lum bir xatti-harakatni boshlashi, davom ettirishi yoki tugatishini tushuntiradigan narsa sifatida aniqlanadi.² Motivatsiyaning inson xulq-atvoriga ta'siri ko'plab omillarga bog'liq bo'lib, asosan shaxsiydir va inson faoliyatining teskari aloqalari ta'sirida o'zgarish qobiliyatiga ega.³

Agar ta'lim jarayoni talabaning shaxsiy qiziqishiga, uning ehtiyojlari va shaxsiy tajribasiga, fikrlash va o'zini o'zi baholashga asoslangan bo'lsa, yuqori motivatsiya paydo bo'ladi. Interfaol o'qitish usullarini professional tarzda tatbiq etish eng kam vaqt va mablag' sarflagan holda eng yaxshi natijalarga erishish imkonini beradi. Ish amaliyotida metodlarni qo'llash natijasida o'quvchilar diqqat bilan tinglashlari, kuzatishlari, amaliy mashqlarni bajarishlari mumkin. Qachonki, talaba tushunishga majburlab emas, balki o'z yo'lida harakat qilsa, u o'zi tomonidan qabul qilinadi, mustahkamlanadi va keyingi hayotida qo'llaniladi. Qiziqishni uyg'otish, o'rganishga

¹ Виханский О. С., Наумов А. И. Менеджмент: Учебник. – 3-е изд. – М.: Гардарики, 1999. – С. 528.

² "Motivation: State, Trait, or Both", *Motivation, Effort, and the Neural Network Model*, 2020 — 93–101 bet. DOI:10.1007/978-3-030-58724-6_8. ISBN 978-3-030-58724-6.

³ Rasulov, Erkin Madraimovich. "ELEKTRON PORTFOLIO TALABANING KASBIY VA IJODIY FAOLIYATLARINI RIVOJLANTIRISH VOSITASI SIFATIDA." *Ta'lim faoliyatida innovatsion rivojlanish* 2.13 (2023): 41-46.

o'rgatish uchun shunday shart-sharoitlarni yaratish zarur. Interfaol usullar darslarni qiziqarli va samarali o'tkazishga yordam beradi. Ulardan foydalangan holda o'quvchilar fikrlashni, bilimdan foydalanishni, jamoada ishlashni o'rganadilar, fanga qiziqishni shakllantiradilar. O'qitishning interfaol usullaridan foydalanishga asoslangan ta'lim jarayoni barcha ishtirokchilarni istisnosiz o'quv jarayoniga kiritishni hisobga olgan holda tashkil etiladi.¹

Bugungi kunda asosiy metodik yangiliklar o'qitishning interfaol usullaridan foydalanish bilan bog'liq. "Interaktiv" atamasi inglizcha "interact" so'zidan kelib chiqqan bo'lib, "Inter" – "o'zaro", "act" – "harakat qilmoq" ma'nosini anglatadi.

Interaktivlik - o'zaro muloqot qilish yoki suhbat rejimida bo'lish, kimdir (odam) yoki biror narsa (masalan, kompyuter) bilan muloqot qilish qobiliyatini anglatadi. Demak, interfaol ta'limda eng avvalo o'quvchi o'rtasidagi o'zaro aloqa amalga oshiriladi.

Ingliz tilini o'qitishning interfaol usullari an'anaviy darslarga qaraganda ancha samarali. Interfaol dars jarayonida o'qituvchi va o'quvchilar teng sharoitda, bir saviyada bo'ladi. Interfaol darslarda o'qituvchi materialni o'rgatmaydi, balki muhokamaning faol ishtirokchisiga aylanadi, uni to'g'ri yo'nalishga yo'naltiradi. Har qanday interaktiv darslar inson uchun foydalidir, chunki ular o'z fikrini bildirishga va o'z nuqtai nazarini himoya qilishga o'rgatadi.²

Ingliz tilini o'qitishning interfaol usullari talabalarga nafaqat ma'lumot almashishga, balki ingliz tilida amaliy muloqot ko'nikmalariga ega bo'lishga, o'z fikrlarini shakllantirishga, tezkor munosabatda bo'lishga va suhbatdoshning gaplariga javob berishga o'rgatadi. Bunday darslarda o'qituvchi endi shunchaki rahbar emas, balki kerakli so'zni tezda taklif qilish, xatoni tuzatish qobiliyatiga ega yordamchidir. Ingliz tilini o'qitishning interfaol usullari chet tilini o'rganish jarayonini sezilarli darajada tezlashtiradi.

- o'quvchilarning nutq faoliyatining har xil turlari bo'yicha nutq kompetentsiyasini rivojlantirish uchun sharoit yaratish, bu o'zaro tushunishga, o'zaro ta'sirga, umumiy masalalarni birgalikda hal qilishga olib keladi.

Vazifa - har bir darsni qiziqarli o'tkazish va uning bilimga qiziqishini rivojlantirish, o'quvchilarni o'quv jarayonida faol ishtirok etishga undash.

¹ Хархенова А. Ф. "Интерактивные формы обучения как условие повышения мотивации к изучению английского языка" ВЕСТНИК БУРЯТСКОГО ГОСУДАРСТВЕННОГО УНИВЕРСИТЕТА 4/2015

² Rasulova, Dilafruzxon. "LINGVOKULTUROLOGIYA TIL VA MADANIYAT FANI SIFATIDA RIVOJLANISHI." *Scienceweb academic papers collection* (2023).

Keyingi yillarda chet tili o'qituvchilari o'quv qo'llanmalarini tanlashda, mazmun-mohiyatini va dastur talablarini amalga oshirish yo'llarini ijodiy tushunishda ancha mustaqillikka erishdilar.

Ingliz tilini o'qitishning zamonaviy jarayonida turli xil usullar mavjudligini e'tirof etgan holda, shuni ta'kidlash kerakki, asosiy o'rinni o'qitishga talabaga yo'naltirilgan yondashuvga asoslangan usul va texnologiyalar egallaydi, ular:

- o'quvchi o'zini qulay qiladigan muhitni yaratish; talabaning qiziqishlarini rag'batlantirish, uning chet tilini amaliyotda qo'llash istagini, shuningdek, o'rganishga bo'lgan ehtiyojini rivojlantirish, shu bilan fanni o'zlashtirishda muvaffaqiyatga erishish imkonini beradi;

- o'quvchining shaxsiyatiga, uning his-tuyg'ulariga ta'sir qilish, uning haqiqiy ehtiyojlari bilan bog'lash, nutqini, kognitiv, ijodiy qobiliyatlari va imkoniyatlarini rag'batlantirish;

- talabani faollashtirish, uni ta'lim jarayonining bosh qahramoniga aylantirish, ushbu jarayonning boshqa ishtirokchilari bilan faol munosabatda bo'lish;

- o'qituvchi markaziy shaxs bo'lmagan vaziyatlarni yaratish; talaba ingliz tilini o'rganish o'qituvchi tomonidan qo'yilgan usullar va o'quv qurollari bilan emas, balki uning shaxsiyati va ehtiyojlari bilan ko'proq bog'liqligini tushunishi kerak;

- o'zining jismoniy, intellektual va hissiy imkoniyatlari darajasida mustaqil ishlashga o'rgatish - buning natijasida ta'lim jarayonining farqlanishi va individuallashtirilishini ta'minlash;

- guruhdagi ishning turli shakllarini hisobga olish: individual, guruh, jamoaviy, o'quvchilarning faolligini, ularning mustaqilligi va ijodkorligini to'liq rag'batlantirish.¹

Yuqoridagi barcha jihatlar o'quv materialini o'zlashtirish jarayonida tashqi muloqot orqali shaxslararo o'zaro munosabatlarni o'rnatish bilan bog'liq yangi imkoniyatlar ochadigan o'qitishning interfaol shakllari va usullaridan foydalanishda amalga oshirilishi mumkin. Guruhdagi talabalar o'rtasida shaxslararo munosabatlar muqarrar ravishda paydo bo'ladi va ularning ta'lim faoliyatining muvaffaqiyati ko'p jihatdan ular qanday bo'lishiga bog'liq.

Bugungi kunda ular ko'proq va tez-tez chet tilining kommunikativ kompetentsiyasini shakllantirish haqida gapirmoqdalar.² Bunday kompetentsiyani shakllantirish dastlab hayotiylikni, tabiiylikni, vaziyatlarni hissiy modellashtirishni nazarda tutadi. Yangi vazifalar chet tilini bilish darajasiga qo'yiladigan talablarni

¹ Панина Т. С., Вавилова Л. Н. Современные способы активации обучения. – М.: Академия, 2008. – С.176.

² Зимняя И. А. Ключевые компетентности как результативно-целевая основа компетентностного подхода в образовании. – М.: Исследовательский центр проблем качества подготовки специалистов, 2004. – С. 40.

o'zgartirishni, materialning mazmunini tanlash va tashkil etishda yangi yondashuvlarni belgilashni, nazoratning tegishli shakl va turlaridan foydalanishni nazarda tutadi.

Ushbu muammolarni hal qilishda zamonaviy insonning multimedia o'quv qurollari bilan axborot-kommunikatsiya texnologiyalariga ega bo'lishi asosiy rol o'ynaydi. Shu sababli, axborot texnologiyalaridan qanday foydalanishni bilgan kishi zamonaviy dunyoda muvaffaqiyatli muloqot qila oladi.

Kompyuter motivatsiyani oshirish, kuchli til ko'nikmalarini shakllantirish va ingliz tilini bilishni yaxshilash vositasi sifatida qaraladi. Kompyuter o'quvchiga idrokning uchta kanalidan foydalanishga imkon beradi: eshitish, vizual va kinestetik, bu aslida o'rganilayotgan materialni o'zlashtirish hajmi va kuchini oshirishga imkon beradi, o'quvchilarning o'quv jarayonidagi mavqeini sezilarli darajada oshiradi. Talabalarning bilim faolligi va fanga bo'lgan qiziqishini saqlab qoladi, shuningdek, mustaqil faoliyat maydonini kengaytiradi, har bir talaba uchun shaxsiy qiziqarli vaziyatlarni yaratishga imkon beradi. Internetdan virtual makonga cho'mish vositasi sifatida foydalanish imkonini beradi.

Ingliz tilidagi multimediali o'qitish dasturlarida o'quvchilarning bilim va ko'nikmalarini tanishtirish, o'rgatish va nazorat qilish uchun turli metodik usullardan foydalaniladi. Multimedia dasturlarini qo'llash klassik o'qitish usullarini istisno qilmaydi, balki ular bilan o'rganishning barcha bosqichlarida uyg'unlashadi.

Kompyuterdan foydalanish nafaqat o'rganish samaradorligini ko'p marta oshirish, balki talabalarni ingliz tilini mustaqil ravishda o'rganishga undash imkonini beradi. Bunday darslar interfaol multimedia komponentini o'z ichiga oladi, bu esa o'quvchilarni o'quv jarayoniga ko'proq jalb qilish imkonini beradi, o'rganilayotgan fanga qiziqishini oshirishga, materialni yaxshiroq o'zlashtirishga yordam beradi.

Interfaol yondashuvning ba'zi printsiplari:

I. "Ishbilarmonlik o'yini". Guruhlar tuziladi va har bir guruh bitta vazifani oladi, bu ular ustida ishlayotgan kattaroq mavzuning kichik vazifasidir. Ayrim guruhlarining birgalikdagi ishi natijasida butun materialni o'zlashtirishga erishiladi. Shunday qilib, guruh boshidanoq, go'yo ikki tomonlama vazifani bajaradi: akademik - kognitiv, ijodiy maqsadga erishish, ijtimoiy yoki ijtimoiy-psixologik - muayyan muloqot madaniyati vazifalarini bajarish jarayonida amalga oshirish va o'qituvchining roli nazoratdir. Ushbu parametr grammatikani o'rganishda, yangi material bilan ishlashda qo'llaniladi.

II. Talabalarning guruhlardagi tadqiqot ishlari talabalarni interfaol faoliyatga jalb qilishning navbatdagi usuldir. Asosiy e'tibor o'z-o'zini ish bilan ta'minlashga qaratilgan. Talabalar yakka yoki guruhlarda ishlaydi. Ular umumiy mavzuning kichik qismini tanlaydilar. Umumiy hisobot birgalikda tuzilishi va u taqdim etilishi kerak.

III. Talabanning o'qituvchi sifatidagi faoliyati. Talabalar ma'lum yangi grammatik mavzularni tayyorlaydilar va sinfda o'qituvchi vazifasini bajaradilar.

IV. Filmlarni asl nusxada tomosha qilish, ingliz tilidagi matnni asl nusxada tahlil qilish ham chet tilini o'rganishning interfaol usullari hisoblanadi.

Yuqoridagi keltirilgan usullar, til o'rganish motivatsiyasini oshirishda eng samarali hisoblanadi.

Shunday qilib, interfaol ta'limning maqsadi o'qituvchi tomonidan talabanning mustaqil ravishda bilimlarni kashf etishi va egallashi uchun sharoitlarni shakllantirishdir.

Xulosa qilib aytadigan bo'lsak, interfaol ta'lim usullari talabalarning ingliz tilini o'rganishga bo'lgan motivatsiyasini oshirishda hal qiluvchi rol o'ynaydi. O'yinlar, munozaralar va guruhlarda ishlash kabi qiziqarli tadbirlarni o'z ichiga olgan holda, o'qituvchilar talabalar o'rtasida faol ishtirok etish va hamkorlikni rivojlantiruvchi dinamik va rag'batlantiruvchi o'quv muhitini yaratishi mumkin. Bu, o'z navbatida, ularning o'ziga bo'lgan ishonchini oshirishga, til ko'nikmalarini yaxshilashga va o'quv jarayonidan umumiy zavqlanishlarini oshirishga yordam beradi. Shunday ekan, o'qituvchilar tilni samarali o'rganish va o'quvchilar muvaffaqiyatini ta'minlash vositasi sifatida interfaol o'qitish usullarini qo'llashlari zarur.

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FIBONACHCHI SONLARINING XOSSALARI VA TADBIQLARI

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ANNOTATSIYA

Maqolada Fibonachchi sonlarining xossalari isbotlari va ushbu xossalardan kelib chiqadigan bir qancha natijalar keltirilgan. Fibonachchi sonlarining hayotga va qiziqarli matematika tadbirlari to‘g‘risida yozilgan.

KALIT SO‘ZLAR: *Fibonachchi sonlari, rekkurent munosabat, oltin kesim, katta kesim, kichik kesim.*

PROPERTIES AND APPLICATIONS OF FIBONACCI NUMBERS

ABSTRACT

The article presents proofs of properties of Fibonacci numbers and several results that follow from these properties. Written about real-life and interesting mathematical applications of Fibonacci numbers.

KEYWORDS: *Fibonacci numbers, recurrence relation, golden ratio, major ratio, minor ratio.*

KIRISH

Ma‘lumki, $u_1 = u_2 = 1$ bo‘lgan holda $u_n = u_{n-1} + u_{n-2}$ ($n \geq 3$) rekkurent tenglik vositasida aniqlangan ketma-ketlik Fibonachchi qatori, uning hadlari esa Fibonachchi sonlari deb ataladi. Fibonachchi sonlari iborasini XIX asrda Eduard Lyuka tomonidan qiziqarli matematikaga bag‘ishlangan asarlarda uchratish mumkin. Fibonachchi (bu so‘z italyanча “filius Bonacci” so‘zlaridan qisqartirilib tuzilgan bo‘lib, Bonachchining o‘g‘li ma‘nosini anglatadi) Italiyadagi Piza shahrida XII-XIII asrlarda yashagan Leonardo Pizan-skiyning laqabidir. Bonachchi Italiya va Jazoirda savdo-sotiq bilan shug‘ullangan. Leonardo boshlang‘ich ma‘lumotni Ja-zoirda olgan bo‘lib. u o‘zining arab o‘qituvchilaridan hind pozitsion o‘nlik sanoq tizimi va nolni o‘rgangan edi.

ADABIYOTLAR TAHLILI VA METODOLOGIYA

Quyida Fibonachchi sonlarining xossalari va metodologiyasini keltiramiz.

1-xossa. $u_1 + u_2 + u_3 + \dots + u_n = u_{n+2} - 1$

Ya'ni $u_3 - u_2 + u_4 - u_3 + \dots + u_{n+1} - u_n + u_{n+2} - u_{n+1} = u_{n+2} - 1$

2-xossa. $u_1 + u_3 + u_5 + \dots + u_{2n-1} = u_2 + (u_4 - u_2) + (u_6 - u_4) + \dots + (u_{2n} - u_{2n-2}) = u_{2n}$

3-xossa. $u_2 + u_4 + u_6 + \dots + u_{2n} = (u_1 + u_2 + u_3 + \dots + u_{2n}) - (u_1 + u_3 + u_5 + \dots + u_{2n-1}) = u_{2n+2} - 1 - u_{2n} = u_{2n+1} - 1.$

4-xossa. $u_1 - u_2 + u_3 - u_4 + \dots + (-1)^{n+1}u_n = (-1)^{n+1}u_{n-1} + 1$

5-xossa. $u_1^2 + u_2^2 + \dots + u_n^2 = u_1u_2 + u_2(u_3 - u_1) + u_3(u_4 - u_2) + \dots + u_n(u_{n+1} - u_{n-1}) = u_nu_{n+1}$

6-xossa. $u_n^2 - u_{n-1}u_{n+1} = (-1)^{n+1}$

Ya'ni matematik induksiya metodini qo'llab,

$$u_n^2 = u_{n-1}u_{n+1} + (-1)^{n+1}$$

$$u_n^2 + u_nu_{n+1} = u_nu_{n+1} + u_{n-1}u_{n+1} + (-1)^{n+1}$$

$$u_n(u_n + u_{n+1}) = u_{n+1}(u_n + u_{n-1}) + (-1)^{n+1}$$

$$u_nu_{n+2} = u_{n+1}^2 + (-1)^{n+1}$$

$$u_{n+1}^2 = u_nu_{n+2} + (-1)^n.$$

7-xossa. $u_1u_2 + u_2u_3 + u_3u_4 + \dots + u_{2n-1}u_{2n} = u_{2n}^2$

$$u_2(u_1 + u_3) + u_4(u_3 + u_5) + \dots + u_{2n-1}(u_{2n-2} + u_{2n}) =$$

$$= (u_3 - u_1)(u_1 + u_3) + (u_5 - u_3)(u_3 + u_5) + \dots$$

$$\dots + (u_{2n} - u_{2n-2})(u_{2n-2} + u_{2n}) = u_3^2 - u_1^2 + u_5^2 - u_3^2 + u_7^2 - u_5^2 + \dots + u_{2n}^2 - u_{2n-2}^2 = u_{2n}^2$$

8-xossa. $u_1u_2 + u_2u_3 + u_3u_4 + \dots + u_{2n}u_{2n+1} = u_{2n+1}^2 - 1$

9-xossa. $nu_1 + (n-1)u_2 + (n-2)u_3 + \dots + 2u_{n-1} + u_n =$

$$= (u_1 + u_2 + u_3 + \dots + u_n) + (u_1 + u_2 + u_3 + \dots + u_{n-1}) + (u_1 + u_2 + u_3 +$$

$$+ \dots + u_{n-2}) + \dots + u_1 = u_{n+2} - 1 + u_{n+1} - 1 + u_n - 1 + u_{n-1} - 1 + u_1 =$$

$$= u_{n+4} - (n + 3)$$

$$10\text{-xossa. } u_1 + 2u_2 + 3u_3 + \dots + nu_n = (n + 1)(u_1 + u_2 + u_3 + \dots + u_n) - (nu_1 + (n - 1)u_2 + (n - 2)u_3 + \dots + 2u_{n-1} + u_n) =$$

$$= (n + 1)(u_{n+2} - 1) - (u_{n+4} - (n + 3)) = nu_{n+2} - u_{n-3} + 2$$

$$11\text{-xossa. } u_n = \sum_{k=1}^n C_{n-k-1}^k$$

$$12\text{-xossa. } u_n = \frac{1}{\sqrt{5}} \left[\left(\frac{1+\sqrt{5}}{2} \right)^n - \left(\frac{1-\sqrt{5}}{2} \right)^n \right]. [1]$$

NATIJARLAR

$$u_{n+2}^2 - u_{n+1}^2 = u_n u_{n+3}$$

Chunki

$$u_{n+2}^2 - u_{n+1}^2 = (u_{n+2} - u_{n+1})(u_{n+2} + u_{n+1}) = u_n u_{n+3}.$$

Xuddi shunday

$$u_{n+m} = u_{n-1}u_m + u_n u_{m+1}$$

Bundan

$$u_{n+m} = u_{n+1}u_{m+1} + u_{n-1}u_{m-1}$$

XULOSA

Ko‘plab tabiiy va hayotiy masalalarni yechimida Fibonachchi sonlarining o‘rni beqiyos ekanligini ko‘rish mumkin. Bundan tashqari Fibonachchi sonlari oltin kesim bilan ham bog‘liq. Berilgan kesmaning oltin kesimi deb uni shunday ikki qismga ajratish tushuniladiki. bu yerda butun kesma uzunligining katta qism uzunligiga nisbati va katta qism uzunligining kichik qism uzunligiga nisbati o‘zaro tengdir. Bu nisbatning qiymati α_1 ga teng boiishini aniqlash qiyin emas. Qiziqarli tomoni shundaki,

$$\lim_{n \rightarrow \infty} \frac{u_{n+1}}{u_n} = \alpha_1$$

bo‘ladi.

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SANOAT OQOVA SUVLARINI XROM (III) DAN TOZALASHDA pH MUHITINING TA'SIRI

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***Annotatsiya:** Muhit ko'rsatkichi pH ga bog'liq holda sanoat korxonalaridan hosil bo'ladigan ishlab chiqarish oqova suvlaridagi xrom (III) va metall ionlari pH muhitining har xil qiymatida kam eriydigan birikmalarini hosil qilishi o'rganilgan. Shunday qilib, ko'p birikmali tizimlardan kam eriydigan metall birikmalarini elektroflotasiya qilish texnologiyasini ishlab chiqishda maqbul holatlarni tanlash oddiy emas, balki muhim vazifalardan biri hisoblanadi.*

***Annotation:** It has been studied that production from pH industrial enterprises, depending on the environmental indicator, produces low-soluble compounds of chromium (III) and metal ions in wastewater at different values of the pH environment. Thus, in the development of technology for electro flotation of metal compounds with low solubility from multi-compound systems, the choice of optimal states is one of the important tasks, and do not simple.*

***Kalit so'zlar:** pH, elektroflotatsiya, ishqor, fosfat, karbonat, reagentlar kislota, asos, metal ionlari, (pH, electroflotation, alkaline, phosphate, carbonate, reagents, acid, oxide, metal ions).*

Zamon talabidan kelib chiqib, ishlab chiqarish jarayonlarini, chorvachilik majmualarini, qishloq xo'jalik va aholining kunlik ehtiyojlarini qondirish maqsadida, har xil turdagi sanoat korxonalarining rivojlanishi natijasida, atrof muhitni toza ozoda saqlash, korxonalardan hosil bo'ladigan oqova suvlar bilan atrof muhitni ifloslantirmaslik maqsadida, mahsulot ishlab chiqarish korxonalaridan hosil bo'ladigan ishlab chiqarish oqova suvlarini tozalash masalalari hozirgi kunda dolzarb bo'lib bormoqda.

Hozirgi kunda, sanoat korxonasi oqova suvini tozalashda, eng yangi texnologiyalar bilan ta'minlanish holati yetarli darajada yuqori emas. Amaldagi

inshootlar har doim ham suv havzalariga tashlanadigan sanoat korxonasi oqova suv, standart talabiga javob bermaydi.

Keyingi yillarda elektro – kimyoviy, membrana, sorbsiya va boshqa usullar yordamida sanoat korxonasi oqova suvlarini tozalash va qayta ishlatishning tobora samarali usullari ishlab chiqilmoqda va ishlab chiqarishga joriy etilmoqda.

Shu nuqtai nazardan sanoat korxonalarining ishlab chiqarish sohasidan hosil bo‘ladigan sanoat oqova suvlarini tozalashda muammolar tug‘ilishi sababli har xil turdagi tozalash qurilmalari va inshootlarini qo‘llashda asosiy e‘tibor kam xarajatli balki ixcham qurilma ham bo‘lishiga qaratilishi zarur.

Dispers fazalarni shakllantirish, sanoat korxonasining oqova suvidan metall ionlarini elektroflotasiyalash yo‘li bilan ajratish jarayonining hal qiluvchi bosqichlaridan biridir. Ionlarni dispers shaklga o‘tkazish, eritmalarga noorganik reagentlarni, masalan, ishqor, fosfat yoki karbonatlarni qo‘shish orqali amalga oshirish mumkin, ular metall ionlari bilan reaksiyaga kirishib, kam eriydigan metall birikmalarni hosil qiladi.

Metall ionlarini ajratib olish usullaridan biri, ularni kislota – asosli reagentlar yordamida (ya’ni pH ning muhit qiymatini tartibga solish orqali) kam eriydigan birikmalar sifatida ajratishdan iboratdir, bu esa boshqa narsalar qatorida olinadigan birikmalarni qayta ishlatishga imkon beradi.

Purde diagrammasini tahlil qilish shuni ko‘rsatadiki, pH muhitining darajasiga qarab, metall ionlari, kam eriydigan birikma yoki eruvchan birikma va erkin ionlar shaklida mavjud bo‘ladi. Olingan birikmalarning holati, olinadigan metallning valentlik holati bilan belgilanadi va muhitning potensialiga bog‘liq [2, 5].

pH muhiti o‘zgarganda, siz bilganingizdek, suv, kislota, asos va metall gidrooksid birikmalarining muvozanati ham o‘zgaradi.

Shu sababli elektroflotasiyalik tozalash jarayonini o‘tkazish uchun pH muhitining qiymatini tanlashda, qo‘llaniladigan asosiy mezon, bu hosil bo‘lgan dispers faza zarralarining minimal eruvchanligi bo‘lib, bu oqova suvlardan metall ionlarini maksimal darajada to‘liq ajratishga yordam beradi.

Shu bilan birga, pH muhitining qiymati, dispers birikma zarralarining yuza xossasiga, asosan o‘lchami va zaryadiga ta’sir qilishi mumkin. Ma’lumki, yuza xossasi elektroflotasiya jarayoniga ikkita asosiy omil orqali ta’sir qilishi mumkin [2].

1. zarrachalarning elektrod gaz pufakchalari bilan o‘zaro ta’sirlarining samaradorligi;
2. koagulyasiya jarayonlarining samaradorligi va barqaror flota birikmalarining shakllanishi.

Adabiyotdagi ma'lumotlarni tahlil qilish shuni ko'rsatadiki, pH 7 – 11 sohasidagi ko'plab oksidlar va gidro oksidlarda hosil qiluvchi qatlamning potentsiali to'liq qoplanadi, ya'ni barcha qarshi ionlar adsorbsion qatlamda joylashgan. Bunday holatda ζ – potentsial holatga aylanadi, izoelektrik soha ko'zatiladi, unda elektroflotasiya orqali qattiq faza zarralarini to'liqroq ajratish mumkin.

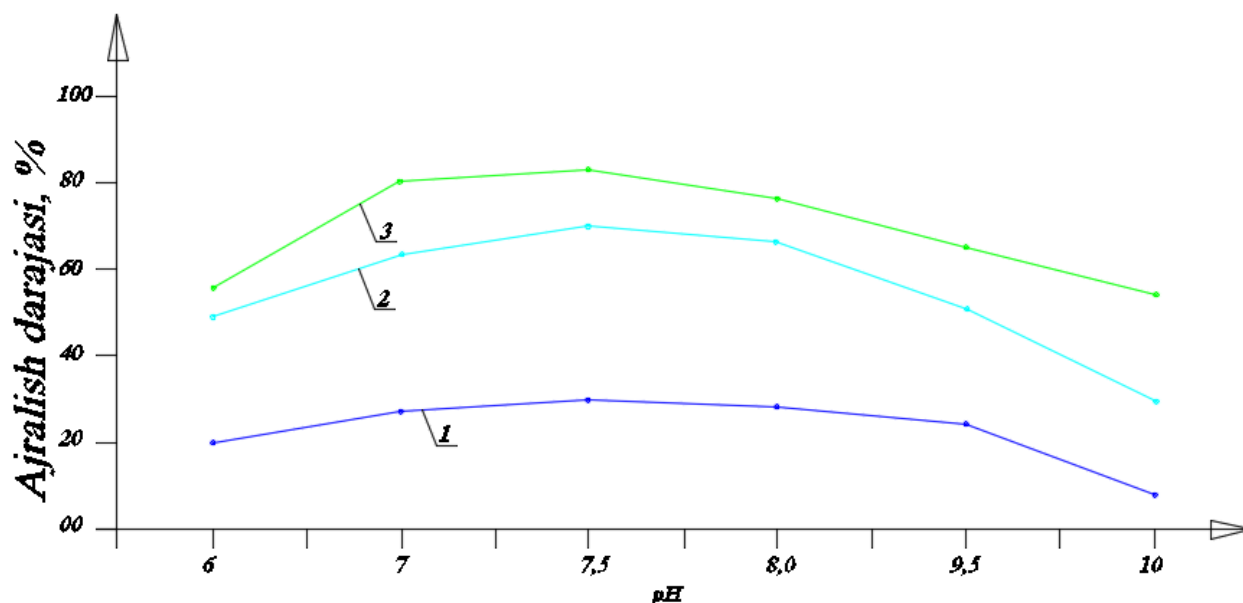
Boshqa tomondan, ko'p holatlarda zarralar o'lchami dispers faza zarralarini ajratib olish samaradorligida hal qiluvchi ahamiyat o'ynashi ma'lum (ba'zi holatlarda keskin manfiy zaryadga ega zarralar bundan mustasno) [1, 2].

Shu sababli, kam eriydigan xrom (*III*) birikmalarining eruvchanligi, dispersiya tavsifi va zarracha zaryadining suvli eritmalardagi elektroflotasiya faolligiga ta'sirini tahlil qilish va elektroflotasiyali tozalash jarayonining samaradorligiga maksimal ta'sir ko'rsatadigan omillarni aniqlash dolzarb bo'lib qolmoqda.

pH muhiti 7 – 8 bo'lganda, xrom (*III*) ning 95 % dan ortig'i kam eriydi, bu esa oqova suvlarni elektroflotasiya yo'li bilan tozalashga imkon beradi. Eng kam qoldiq ulushiga pH 7,8 da erishiladi va 0,05 mg/l ni tashkil qiladi. pH qiymatlari 9 ga ko'tarilganda, filtratdagi xrom (*III*) ning qoldiq ulushi keskin oshadi.

Eritmaning pH qiymatini 5 dan 7,5 gacha oshirish, zarrachalarning o'rtacha diametrini (d_{sr}) mos ravishda 7 dan 13,5 mikrongacha oshirishga olib kelishi aniqlandi. Zarrachalar o'lchami 10 mikrondan kichik bo'lgan mayda dispers faza miqdori 88 % dan 34 % gacha kamayadi. Eritmaning pH qiymatini 10 gacha oshirish d_{sr} qiymatining 5 mikrongacha pasayishga va maydi dispers fazalarning umumiy miqdorini 70 % gacha oshirishga olib keladi.

Shunday qilib, kam eriydigan xrom (*III*) birikmasining hosil bo'lishi va ularning dispersligiga pH muhitning ta'sir qilishi darajasi aniqlandi. Kam eriydigan xrom (*III*) birikmasining dispers fazasining eng to'liq shakllanishi $pH \approx 7,8$ da ko'zotildi, bunda zarrachalar yuzasining ζ - potentsiali nolga yaqin va o'rtacha o'lchami 13,5 mikronni tashkil qiladi.



Rasm – 1. Kam eriydigan xrom (III) birikmasini ajratish jarayonining $i_{ob} = 0,2$ A/l, pH muhiti va jarayon davomiyligiga bog‘liqligi: 1 – 5 daqiqa; 2 – 10 daqiqa; 3 – 15 daqiqa.

Eritmaning pH muhitiga qarab, kam eriydigan xrom (III) birikmaning elektroflotasionli harakati o‘rganildi. Kam eriydigan xrom (III) birikmasini elektroflotasiyalash yo‘li bilan eritmadan ajratib olish jarayonining kinetik tavsiflari $i_{ob} = 0,2$ A/l bo‘lganda pH 6 dan 10 gacha bo‘lganda tekshirishlar olib borilgan natijalar quyidagi rasmda keltirilgan.

Eng yuqori darajadagi elektroflotasionli faollik $pH = 7-8$ da ko‘zatilishi aniqlandi. Bu holat, pH ning qiymati $Cr(OH)_3$ zarralarini izoelektrik holatining pH qiymatlariga juda yaqin bo‘lganligi bilan bog‘liq va ma’lumki, cho‘kmalar elektroflotasionli ajratishning maksimal darajasi, qoida asosida, cho‘kmalar hosil qiluvchi zarralarning izoelektrik holati sohasida ko‘zatildi [5].

Bir so‘z bilan aytganda, kam eriydigan xrom birikmalarini, sanoat korxonada oqova suvlaridan elektroflotasionli tozalashda pH muhitining ta’siri katta ekanligi yuqorida qarab o‘tilgan tekshirishlar natijasidan ma’lum bo‘ldi. Shuni aytish kerakki nafaqat xrom balki og‘ir metall ionlarini ham bu usulda tozalashni qo‘llash maqsadga muvofiq va shu sababli biz taklif qilayotgan tozalash usuli har tomonlama qo‘lay deb hisoblaymiz.

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СИНТЕЗ ЛАГОХИЛЕНА С ОРТО-БРОМБЕНЗОЙНОЙ КИСЛОТОЙ

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АННОТАЦИЯ

С помощью ИК- и УФ-спектроскопии изучено строение вещества, образующегося при взаимодействии дитерпеноида лагохилена с орто-бромбензойной кислотой.

Ключевые слова: *дитерпеноид лагохилена, о-бромбензойная кислота, реакция этерификации, бензол, растворитель.*

REACTION OF LAGOXYLIN WITH ORTHO-BROMOBENZOIC ACID

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ABSTRACT

The structure of the substance formed by the reaction of diterpenoid Lagoxiline with ortho-bromobenzoic acid was studied using IR and UV spectroscopy.

Keywords: *Lagochilin diterpenoids, o-bromo benzoic acid, etherification reaction, benzene, solvent.*

Природные соединения, выделенные из растений, обладают относительно высокой биологической активностью, и особое место среди таких соединений занимают терпеноиды и их производные. Растения вида *Lagochilus* имеют большую практическую ценность благодаря своим лечебным свойствам. Они с древних времен входят в число эффективных кровоостанавливающих лекарственных растений на Востоке и применяются как действенное лекарство при различных кровотечениях. Основным действующим веществом растения *Lagochilus* является четырехатомный спирт-лагохиленовый дитерпеноид. Синтез

лагохилина и его различных производных и определение их биологической активности, создание на их основе эффективных препаратов с гемостатической активностью являются актуальными темами.

Целью реакции дитерпеноида лагохилена с о-бромбензойной кислотой является образование водорастворимых соединений лагохилена.

Экспериментальная часть

Реакцию этерификации лагохилена о-бромбензойной кислотой проводили в бензольном растворителе. По сравнению с лагохиленом количество углекислого вещества получено в 4 раза больше. Основной целью этого является получение тетрабромбензоата лагохилена. Исходные вещества, взятые на электронных аналитических весах, помещали в колбу вместимостью 100 мл и растворяли в 10 мл бензола. Колбу с реакционной смесью нагревали при 80 °С в течение 8 часов с помощью магнитной мешалки. Процесс реакции контролировали каждые 30 мин с помощью YuQX. Теоретически в составе полученного продукта реакции, помимо тетрапроизводного, присутствуют также вещества, содержащие -моно-, -ди-, -трибромбензоат в небольшом количестве. Для выделения из них тетрапродукта использовали метод колоночной хроматографии. Al₂O₃ получали в виде силикагеля. В этом случае система представляет собой бензол:ацетон 3:1.

После завершения реакции смесь очищали от водорастворимых добавок 10%-ным раствором Na₂CO₃, а оставшийся органический растворитель удаляли из системы с помощью роторного испарителя. Оказалось, что выделенное вещество представляет собой маслянистое вещество красновато-коричневого цвета, хорошо растворимое в органических растворителях ацетоне, бензоле, хлороформе, диэтиловом эфире и плохо растворимое в воде.

Общее уравнение процесса выглядит следующим образом:

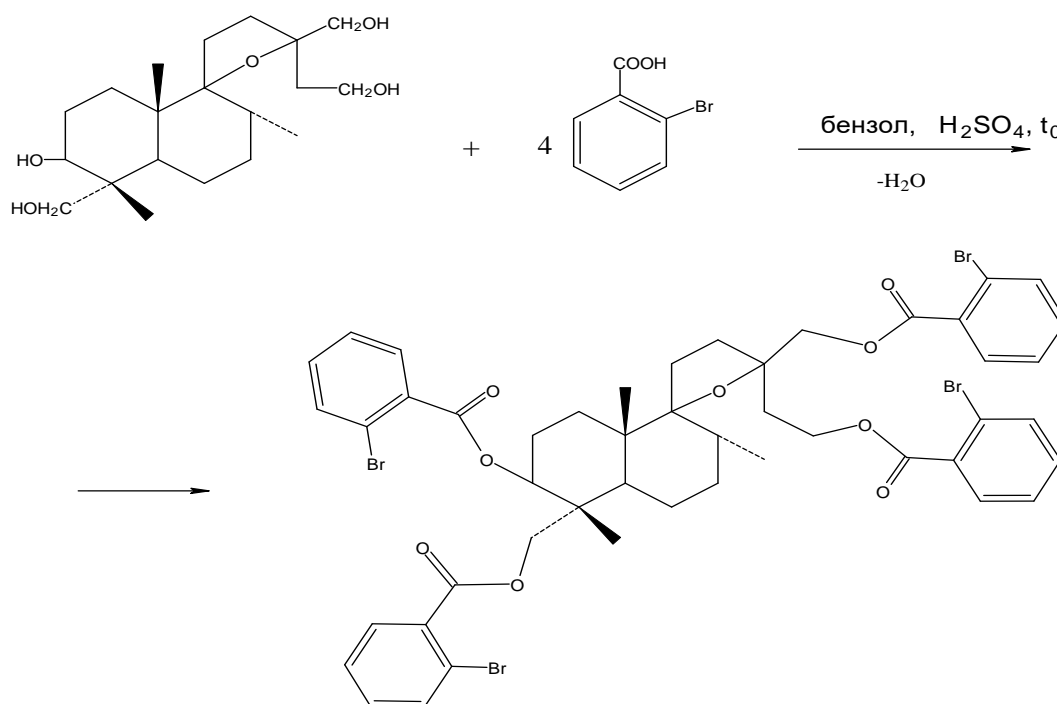


Рисунок 1. Химическая схема о-бромбензойной кислоты с лагоксилином.

Также были сняты и проанализированы ИК-спектры полученного вещества.

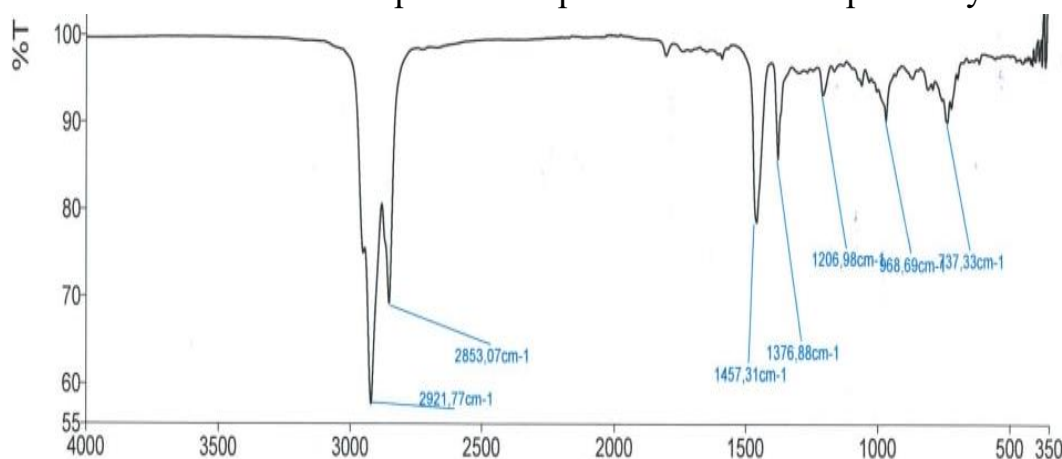


Рис. 2. Эфирный ИК-спектр лагохилена с о-бромбензойной кислотой

Спектральный анализ выявил симметричные валентные колебания метиленовых групп (CH_2) в области 2853 см^{-1} . Наблюдаемый сигнал в области 2921 см^{-1} можно проанализировать по колебаниям связи C-H в алкильных фрагментах в диапазоне $3000\text{-}2840 \text{ см}^{-1}$, что является сигналом, данным этой связью.

Здесь снова наблюдаются два деформационных колебания в метильной группе: симметричное деформационное колебание ($\delta_s \text{CH}_3$) в области 1376 см^{-1} и асимметричное деформационное колебание ($\delta_{as} \text{CH}_3$), наблюдаемое в области 1457 см^{-1} .

Связь сложного эфира C-O находится в диапазоне $1300\text{-}1000 \text{ см}^{-1}$, что в нашем случае соответствует частоте валентных колебаний 1206 см^{-1} .

Деформационные колебания связей С-Н в бензольном кольце внеплоскостны в диапазоне 900-675 см^{-1} , колебания в обертонах наблюдаются в областях 2000-1650 см^{-1} .

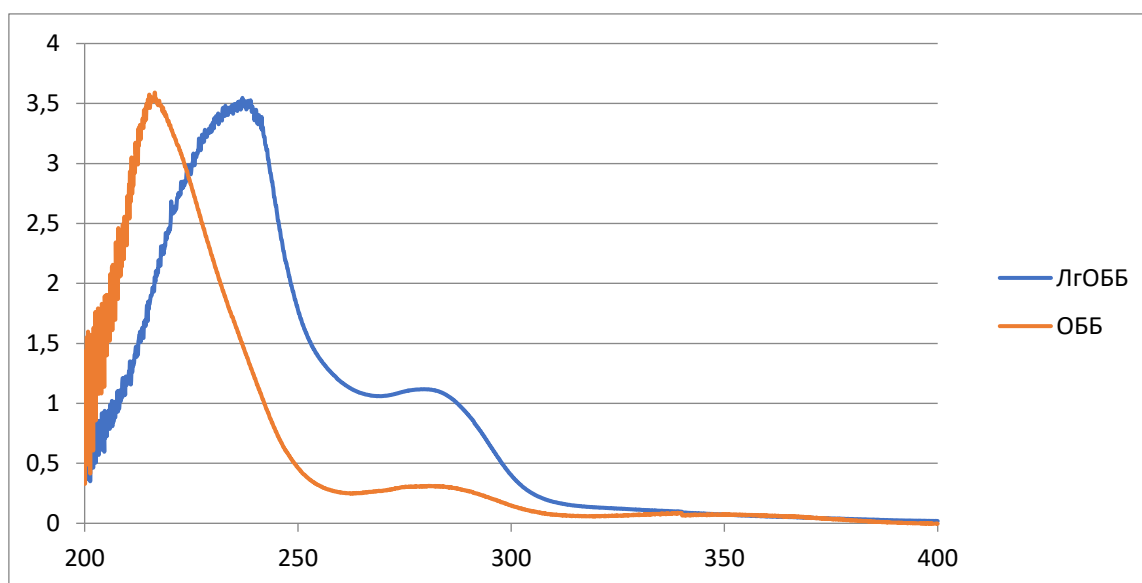


Рисунок 3. УФ-спектр эфира лагоксилина с ОББ

Как видно на приведенной выше диаграмме, интенсивный максимум поглощения, соответствующий переходу $n \rightarrow \pi^*$ в УФ-спектре ОББ, появляется в системе с 85% спиртом при длинах волн 216 нм. Одновременно с «батохромным» сдвигом при 238 нм в УФ-спектре эфира ЛгОББ наблюдался и «гиперхромный» эффект. На основании наблюдаемых батохромных сдвигов в УФ-спектре и увеличения оптической плотности за счет образования нового продукта в результате химической реакции, т. е. «гиперхромного» эффекта, можно заключить, что эфир лагоксилина с о-бромбензойной кислотой образовалась -бромбензойная кислота.

Эфир, образуемый лагохиленом с о-бромбензойной кислотой, также изучался высокоэффективной жидкостной хроматографией. Это выглядит следующим образом:

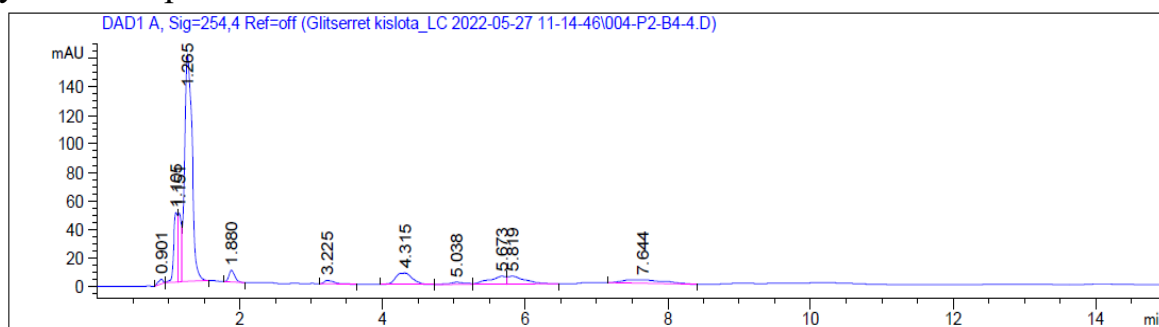


Рисунок 4. Хроматограмма высокоэффективная жидкостная хроматография эфира лагохилен с о-бромбензойной кислотой

Можно видеть, что эфир лагохилена, образованный о-бромбензойной кислотой, проявлялся с высоким пиком при 1,26 мин при длине волны 272 нм. Структура лагохилена не может быть проанализирована с помощью высокоэффективная жидкостная хроматография. Но мы видим, что поглощение происходит за счет ароматического кольца в нашем продукте. Наша ароматическая угольная кислота, вступившая в реакцию, появляется в этих сигналах с более высоким пиком раньше, чем образовавшийся продукт.

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MUSIQA O'QITUVCHILARDA LOYIHAGA ASOSLANGAN O'QITISH KOMPETENTLIGINI RIVOJLANTIRISHDAGI MUHIM KO'NIKMALAR MAZMUNI

Rasulova Maftuna Nasimboy qizi

Samarqand viloyati pedagoglarni yangi metodikalarga o'rgatish milliy markazi o'qituvchisi

***Annotatsiya.** Ushbu maqolada musiqa madaniyati fani o'qituvchilarini yangi metodikalarga o'rgatishda loyihaga asoslangan ta'lim texnologiyalaridan foydalanishning ahamiyati, loyihaga asoslangan ta'lim texnologiyalarini ta'lim dasturiga bog'lashda o'qituvchidan talab qilinadigan ko'nikmalar mazmuni haqida bayon qilingan.*

***Kalit so'zlar.** Loyiha, pbl, ta'lim texnologiyalari, kreativlik, bashoratlash, rejalashtirish, tanqidiy fikrlash, analitik fikrlash, muammolarga yechim toppish haqidagi bilimlar, time-menejment, hamkorlik.*

***Abstract.** In this article, use project-based educational technologies in training music culture teachers in new methodologies, describe the content required from the teacher in connection with the technological educational program.*

***Keywords.** Project, pbl, educational technologies, creativity, prediction, planning, critical thinking, analytical thinking, knowledge about finding solutions to problems, time-management, cooperation.*

***Абстрактный.** В данной статье используются проектные образовательные технологии в обучении учителей музыкальной культуры новым методикам, описывается содержание, требуемое от учителя в связи с программой технологического образования.*

***Ключевые слова.** Проект, пбл, образовательные технологии, креативность, прогнозирование, планирование, критическое мышление, аналитическое мышление, знания о поиске решений проблем, тайм-менеджмент, сотрудничество.*

Musiqa o'qituvchilarining loyihaga asoslangan o'qitish kompetentligini rivojlantirish uchun kelajakda ko'rsatiladigan muammolar va talablarni unutmaslik kerak. Bunday loyihalar o'qituvchilarni musiqa olib borish prosessiga yangicha

hamkorlik keltirish, qo'llab-quvvatlash, ishtirok etish, ishlashga motivasiya berish, tahrirlash va tarqatish bilan bog'liq bo'lishi mumkin. O'qituvchilarning loyihaga asoslangan o'qitish kompetentligini rivojlantirish uchun ularga kelgan talablarni o'rganish va ularni amalga oshirish imkoniyatini berish kerak. Misol uchun, musiqa o'qituvchilari loyihalarni tayyorlashda o'zlarining o'quvchilarining talablari, maqsadlari va musiqa ko'rsatkichlari haqida ma'lumot olishlari mumkin. Buning uchun ular o'quvchilar bilan muloqotda tushunchali savollar berish, ularni tahrirlashga va o'zlarining ishlariga hamyonlik keltirish uchun ishtirok etmoq kerak.

O'qituvchilar loyihaga asoslangan o'qitish kompetentligini rivojlantirish uchun ijtimoiy tarmoqlardan foydalanish imkoniyatini ta'minlash kerak. Misol uchun, onlayn forumlar, bloglar va so'zlashuv guruxlari orqali musiqa o'qituvchilari ishtirokchilar bilan bog'liq ijtimoiy tajribalarni almashtirish va boshqarish imkoniyatini topishadi. Loyihalarga asoslangan o'qitish kompetentligini rivojlantirish uchun musiqa o'qituvchilari o'zlarining sahifalarini va bloglarini yaratish imkoniyatini berish kerak. Ular bu yo'nalishda ishlarini tarqatadi, yangicha ideyalarni baholaydi va hammasiga munosabat qiladi. Bunday loyihalar musiqa o'qituvchilariga ishlarini tahrirlashda, yangicha ma'lumot olishda va hamma bilan muloqotda ishtirok etadi.

Sodda qilib aytganda, musiqa o'qituvchilarining loyihaga asoslangan o'qitish kompetentligini rivojlantirish uchun ularning talablarini tushunmaslik, ijtimoiy tarmoqlardan foydalanish, o'zlarining sahifalarini yaratish va o'quvchilar bilan muloqotda ishtirok etmoq kerak. Bular musiqa o'qituvchilariga yangicha hamyonlik keltirish, ishlashga motivasiya berish va kompetentligini rivojlantirish imkoniyatini beradi.

Hozirgi davrda har bir o'qituvchi egallashi lozim bo'lgan eng muhim ko'nikmalardan biri darslarni ta'lim texnologiyalari asosida tashkil qilish va o'tkaza olish ko'nikmasidir. O'z tarkibiga ko'ra bu ko'nikma anchagina murakkabdir. Ba'zi o'qituvchilar loyihaga asoslangan o'qitish texnologiyasidan foydalanishni afzal ko'rmasligi mumkin. Buning asosiy sabablari sifatida o'qituvchilarda sinfni nazorat qilish va har bir daqiqani rejalashtirish bo'yicha bilimlarning yetarli emasligidan yuzaga keladigan xavotirdir. Loyiha asosida o'qitishning asosiy g'oyasi shundaki, real muammolar o'qituvchilarning qiziqishini o'ziga jalb qiladi va o'qituvchilar yangi bilimlarni egallashlari va muammolarni hal qilishda qo'llashlari bilan jiddiy fikr yuritadilar. O'qituvchi yordamchi rolini o'ynaydi, o'qituvchilar bilan foydali savollar tuzish, mazmunli vazifalarni tuzish, bilimlarni rivojlantirish va ijtimoiy ko'nikmalarga murabbiylik qilish hamda o'qituvchilar tajribasidan o'rgangan narsalarini sinchkovlik bilan baholash. Odatiy loyihalar hal qilish uchun muammo (maktab hovuzidagi ifloslanishni kamaytirishning eng yaxshi usuli qanday?) yoki tekshirish uchun hodisani

(yomg'ir nima sabab bo'ladi?) taqdim etadi. Pbl o'quv dasturidagi asosiy mavzular uchun ma'qullash usuli sifatida ma'ruza, darslik va ish daftarida olib boriladigan faoliyat va so'rov kabi boshqa an'anaviy o'qitish modellari o'rnini egallaydi. Bu o'qituvchilarga turish va haqiqiy ma'lumotlarni yetkazib berishdan ko'ra, chuqurroq tushunishni osonlashtirish va baholashga imkon beradigan o'quv qo'llanmasi. Pbl o'qituvchilarning muammolarini hal qilish va ijodiy mahsulot ishlab chiqarishni qasddan rivojlantirib, asosiy tushunchalarni chuqurroq anglash va tanqidiy fikrlash kabi 21-asrning muhim o'quv ko'nikmalarini o'zlashtirishga imkon beradi. O'qituvchilar o'qituvchilarni loyihalash jarayonlaridan o'rganish uchun o'qituvchilar o'qituvchilarni o'rganishga rahbarlik qilishganda o'qituvchilar faol ravishda raqamli tadqiqotchilar va o'zlarining bilimlarini baholovchi bo'lishadi. Shu nuqtai nazardan, pbl - bu o'qituvchilarning butun birlik davomida bajarishi yoki bajarishi bo'yicha mustaqil ravishda o'rganish birliklari. Pbl shunchaki dars yoki birlik oxirida qolib ketgan "faoliyat" (loyiha) emas. Loyihaga asoslangan ta'lim (pbl) bu uslubiy strategiyadir. O'qituvchilar savollar yoki muammolarni hal qilishga asoslangan bir qator vazifalarni amalga oshiradilar. Tinglovchilar jarayon orqali tergov yoki avtonom tarzda hamda ular o'rtasida yuqori darajadagi hamkorlik bilan ijod qilishadi, ular boshqa hamkasblariga taqdim etiladigan yakuniy mahsulotni ishlab chiqarishadi. Loyiha asosida o'qitishning afzalliklaridan biri bu fanlararo tabiatning o'zaro bog'liqligi, shuningdek, bitta loyihada bir nechta yechim bo'lishi mumkin. Tinglovchilar muammolarni hal qilishda o'zlarining strategiyalari va yondashuvlarini erkin tanlaydilar, bu ularning keng dunyoqarashiga ta'sir qiladi. Faol ta'limni amalga oshirish mumkin bo'lgan loyiha asosida o'rganish mantiqan har qanday o'quv intizomiga to'g'ri keladi. O'qituvchilar hamkasblari bilan o'zaro hamkorlikda ishlashlari kerak, ehtimol yanada chuqurroq loyihalarda ishlash ularda loyihalash ko'nikmalarini shakllantiradi. Loyihalarni hal qilish bilan shug'ullanadigan o'qituvchilar muammolarni hal qilish, aloqa, faol tinglash, rejalashtirish yoki o'zini o'zi baholash kabi muhim ahamiyatga ega bo'lgan qobiliyatlarni o'zlashtiradilar. Bu jamoaviylikning ma'nosini ta'kidlaydi. Bir-birini to'ldiruvchi usulda o'qituvchilar o'zlarining bilimlarini nazorat qilishadi. Boshqa muhim hissalar ijodkorlik va tasavvurni rag'batlantiradi. Bundan tashqari, qiyinchilik tug'dirib, takomillashtirish ruhi har bir insonda o'zlarining mukammallik standartlari doirasida ishlaydi. Loyiha asosida o'rganishga yaqinlashganda, quyidagi kabi bir qator elementlar zarur loyiha mavzusi o'qituvchilar uchun dolzarbdir. Biz ularga madaniy, jismoniy, ekologik meros muhiti va boshqalar to'g'risida savol bera olamiz. Ularni ushbu loyiha uchun rag'batlantirish uchun ular kontekstni tushunishlari, ushbu turdagi loyihalarni ishlab chiqish muhimligini tushunishlari va bu haqida aytib berishlari kerak. Yana bir muhim

element baholash mezonlari bo'ladi, ular bilan o'rganish va loyihaning o'zi yaxshiroq aniqlanishi mumkin. Tadbirlarda o'qituvchilar loyiha davomida murojaat qilishlarini o'rganish muhim, ularni o'qituvchi boshqarishi yoki yakka tartibda yoki jamoaviy ravishda boshqarishi kerak. Yakuniy mahsulot, bu fosh etilishi kerak bo'lgan natija. Shuningdek, o'qituvchilardan loyihani o'z-o'zini baholashlari so'ralishi mumkin.

Keng tarqalgan stereotip shuni ko'rsatadiki, PBL o'qituvchisi shunchaki loyihani boshlaydi va keyin talabalarga ishlashga ruxsat berish uchun orqaga qadam qo'yadi va faqat kerak bo'lganda ko'rsatmalar beradi. To'g'ri, PBL bilan tajribaga ega bo'lgan katta yoshdagi talabalarga maksimal darajada avtonomiya berilishi kerak. Ammo bu ideal va aslida ko'pchilik talabalar o'qituvchining yordamiga muhtoj bo'ladi. Shunday qilib tegishli darajadagi avtonomiyani ta'minlash asosiy qoida bo'lishi kerak. PBL yangi o'qituvchisi PBL faxriysi bilan nima qila olishi o'rtasida ham farqlar mavjud. PBL bo'yicha tajribaga ega bo'lgan o'qituvchi ba'zi loyihalarda o'qituvchilarga katta ovoz va tanlash huquqini berishi mumkin, ularga hammualliflar, hammualliflar va hammualliflar sifatida qarashadi. Umuman olganda, biz PBL bo'yicha tajribasiz yoki talabalari yangi bo'lgan o'qituvchilarga loyihalarni rejalashtirish va rahbarlik qilishda etakchi rol o'ynashni maslahat beramiz. Ammo hatto PBL faxriysi ham talabalar, mavzu, mahsulotlar va boshqa ko'plab omillarga qarab, ba'zi loyihalar uchun yoki loyihaning turli nuqtalarida kamroq talaba ovozi va tanlovi mos kelishi mumkin. PBL kontekstida baholash an'anaviy o'qitishda mavjud bo'lgan ko'plab amaliyotlarni o'z ichiga oladi, lekin u o'qituvchilardan eng yaxshi tanish bo'lishi mumkin bo'lgan topshiriqlar, viktorinalar, testlar va boshqa vositalardan tashqariga chiqishni talab qiladi. "Muvozanatli baholash" tushunchalari o'qituvchi va o'qituvchini ta'lim maqsadiga erishish jarayoni haqida xabardor qilish uchun foydalaniladigan formativ baholash va yakuniy baholash zarurligini ta'kidlaydi - nima bo'lganligi to'g'risida xulosa chiqarish uchun foydalaniladi. o'rgangan. Loyihada ikkalasi ham muhim. PBLda yig'indiviy baholash, shakllantiruvchi kabi, an'anaviy va ko'plab o'qituvchilar uchun yangi amaliyotlarning kombinatsiyasidir. An'anaviy o'quv bo'limida, masalan, o'qituvchi test topshirishi yoki o'qituvchi nimani nazarda tutganligini bilish uchun talabalardan insho yozishni so'rashi mumkin. Loyihada ushbu vositalar, ayniqsa, kontent bilimi va kontseptual tushunishni baholash uchun o'z o'rniga ega bo'lishi mumkin, ammo jamoa tomonidan yaratilgan mahsulot va talabalarning tanqidiy fikrlash/muammolarni hal qilish, hamkorlik va o'z-o'zini ishlatish qobiliyatini yakuniy baholash ham mavjud. - boshqaruv qobiliyatlari. Buning uchun o'qituvchilar va talabalar mezonlarga asoslangan rubrikalardan foydalanishlari kerak. O'qituvchilarning PBLni amalga oshirish tajribasi. O'qituvchilar PBL dan foydalanishning dastlabki va davomli samaradorligi jihatidan farq qiladi va ko'pincha

PBLni amalga oshirish qiyinligi haqida xabar beradi. O'qituvchilar tengdoshlari, murabbiylari va maktab rahbarlarining ko'magida o'zlarining amaliy ko'nikmalari va ishonchlarini oshirishlari mumkin. PBL bo'yicha malakali bo'lgach, ko'pchilik o'qituvchilar uning qiymatini ko'radilar va undan foydalanishni davom ettirishni xohlashadi. Bak Institutining o'z tadqiqotlarida o'qituvchilarning PBL dan foydalanishdagi turli xil samaradorligini hujjatlashtirdi. (Maksvell va boshq., 2005) va tadqiqotchilar PBL ko'pincha kontentni qamrab olish, o'z standartlari va taxminlari bilan muvofiqlashtirish, rejalashtirish va vaqtdan foydalanishda qiyinchilik tug'dirishini ta'kidladilar. baholash va jamoani boshqarish (Marks va boshq., 1994; Marks va boshq., 1997; Tomas, 2000). O'qituvchilar PBLni birinchi marta qo'llashda qiyinchiliklarga duch kelishi mumkin bo'lsa-da, ular odatda tengdoshlari, maktab rahbarlari va resurslari yordamida o'z qiyinchiliklarini hal qilish imkoniga ega bo'lgach, o'zgaruvchiga aylanadilar. Misol uchun, u duch kelgan qiyinchiliklarni tasvirlab bergandan so'ng, fan o'qituvchisi o'zining PBLga o'tishini tasvirlab berdi: Loyihaga asoslangan fan bilan bo'lgan tajribam meni o'qituvchilar yutuqlarining yangi o'lchovlari bilan tanishtirdi.

O'qituvchi dars mazmuni va mavzusiga ko'ra darsda qo'llanadigan texnologiyani tanlaydi, bunda asosiy e'tibor, maqsad aniq natijaga erishishga qaratiladi. Albatta bu o'rinda o'qituvchilarning bilish saviyasi, qiziqishi va intilishlari mavjud shart - sharoit hisobga olinadi. Masalan, magnitofonda musiqiy asarni eshitish, so'ngra munozara, doira stol atrofida jamoaviy tarzda uni tahlil qilish, erkin munozara asosida asar haqida (nazariy, badiiy-matn) kerakli ma'lumotlarni o'zlashtirish mumkin. Shuningdek, ko'rgazmali vositalar, tarqatma materiallar, turli adabiyotlar, axborot manbalardan ijodiy foydalanish mumkin. O'qituvchi bilan bir qatorda o'qitish jarayoni oldindan loyihalashtirish zarur. Bu jarayonda o'qituvchi o'quv materialining mazmuni, sinf imkoniyatini, hisobga oladi-o'qituvchilarni dars faoliyatini markaziga asosiy harakatlantiruvchi kuchga aylantirish kerak [1]. Darsni yaxshi natijaga olib kela oladigan darajada loyihalashtirish uchun o'qituvchi tomonidan bo'lajak darsni texnologik xaritasini tuzib olishi katta ahamiyatga egadir, chunki darsning texnologik xaritasi har bir mavzu, har bir mashg'ulot xususiyatidan o'qituvchilarning imkoniyat va ehtiyojidan kelib chiqqan holda tuziladi. Zamonaviy musiqa madaniyati darslarini badiiy - pedagogik asar deb hisoblash mumkin. Chunki uni o'qituvchi o'z individual ijodidan va tajribasidan kelib chiqqan holda yaratadi. Darsning kompozitsiyasi va dramaturgiyasi, uning badiiy - pedagogik g'oyasi, maqsad va vazifalari, shakllari, metodik usullari va texnologiyalari ham o'qituvchilarda musiqaga, o'quv materiallariga qiziqishni o'stirish, ularga musiqa san'ati va madaniyatining ma'naviy mazmunini

singdirish, zamonaviy musiqali ijodiy faoliyatni anglashi - bularning hammasi o'qituvchining ijodiy yondashuvchanligining mahsuli hisoblanadi.

Xulosa o'rnida, dars jarayonlarida PBLdan foydalanish bu bizning tajribamizga xosdir. PBL istiqbolini ham, PBLni muvaffaqiyatga olib keladigan rejalashtirish, boshqarish va baholash ko'nikmalarini rivojlantirish uchun biroz vaqt kerak bo'ladi. PBL kunduzgi seminarlarda o'zlashtirilmaydi, lekin sinab ko'rishni, tengdoshlar va murabbiylar bilan muammolarni hal qilishni, nima ishlagan va nima bo'lmagani haqida fikr yuritishni va uni yana sinab ko'rishni talab qiladi. Aksariyat o'qituvchilar PBL sayohatini harakatga arziydi deb bilishadi.

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SHAXSGA YO‘NALTIRILGAN TA‘LIM VA AXLOQIY MEZONLARNING AXBOROTLASHGAN JAMIYAT TARAQQIYOTIDA AKS ETISHI

Turapov Voxid Mamadiyorovich

Samarqand viloyati pedagoglarni yangi metodikalarga o‘rgatish milliy markazi
Aniq va tabiiy fanlar metodikasi kafedrasini o‘qituvchisi

Annotatsiya: Ushbu maqolada shaxsiy ta‘lim va etik kriteriyalari, insonning shaxsiy rivojlanishini va etikasini oshirishga xizmat qiladigan asosiy standartlar haqida so‘z boradi. Bu standartlar insonning ma‘naviyatini, adolat va huquqni ta‘minlash, sog‘liqni saqlash, tarbiya, innovatsiyalar, ijtimoiy soliqlash, ishga kirish va ommaviy axborot vositalari bilan bog‘liq bo‘lishini o‘z ichiga oladi. Shaxsiy ta‘lim va etik kriteriyalar insonning intellektual potensialini va axborot madaniyatini rivojlantirishga yordam beradi. Axborot jamoasi esa ma‘lumot manbalarining barcha tashkilotchilari va o‘zaro aloqadorliklarini ifodalaydi.

Kalit so‘zlar: Ma‘naviyat, inson, shaxs, jamiyat, ma‘naviy salohiyat, yetuklik, axborotlashgan jamiyat, texnika, texnologiya, axloqiy mezonlar

Abstract: This article talks about personal education and ethical criteria, the basic standards that serve to increase the personal development and ethics of a person. These standards include human morality, justice and rights, health care, education, innovation, social taxation, employment and the media. Personal education and ethical criteria help to develop human intellectual potential and information culture. And the information team represents all the organizers and interactions of information sources.

Key words: Spirituality, man, person, society, spiritual potential, maturity, information society, technology, technology, ethical criteria

Аннотация: В данной статье говорится о личностном воспитании и этических критериях, основных нормах, которые служат повышению личностного развития и нравственности человека. Эти стандарты включают человеческую мораль, справедливость и права, здравоохранение, образование, инновации, социальное налогообложение, занятость и средства массовой информации. Личностное воспитание и этические критерии способствуют развитию интеллектуального потенциала и информационной культуры человека. А информационная команда представляет всех организаторов и взаимодействий источников информации.

Ключевые слова: Духовность, человек, личность, общество, духовный потенциал, зрелость, информационное общество, технология, технология, этические критерии.

Shaxsga yo'naltirilgan ta'lim va axloqiy mezonlarning axborotlashgan jamiyat taraqqiyotida aks etishi muhim masala hisoblanadi. Bunday mezonlar shaxsiy rivojlanish, ijtimoiy soliqlanish, ish bilan ta'minlanish, salomatlikni saqlash va boshqa ko'plab jamiyatiy foydalanish sferalariga ko'p tomonlama effekt beradi.

Ta'lim mezonlari bilan birgalikda, shaxsning ma'naviy va intellektual rivojlanishi ya'ni oliy ta'lim, me'mori, ilmiy-tadqiqotiy ishlarga yondashish tartibiga munosabatli bo'ladi. Shaxsga yangi bilim va umumiy qobiliyatlarni o'rganish, ma'naviy-ma'rifiy tarbiyalash, ijtimoiy va iqtisodiy yangiliklarga moslashuvchi ma'lumotlarni olish imkoniyati yaratadi. Bundan tashqari, ta'lim mezonlari shaxsning ijtimoiy bilan tarbiyaviy, iqtisodiy va siyosiy faoliyatini qo'llab-quvvatlaydi. Axloqiy mezonlar esa, shaxsning axloqiy rivojlanishi, etika va madaniyatini yanada oshiradi. Axloqiy mezonlarning borishi bilan, insoniy xulqu va etika ko'rinishi yanada yaxshilanadi. Bu effekt ajralib boriladi, chunki shaxs axloqiy mezonlar orqali o'zining jamiyatda o'rtacha xayotini hamda boshqalar bilan hamkorlikni yaxshilashtiradi. Axborot manbalari shu mezonlarni jamiyatga aks etadi. Jurnallar, kitoblar, veb-saytlar, televizion va radio kanallari kabi axborot vositalari orqali shaxsga yo'naltirilgan ta'lim va axloqiy mezonlar haqida ma'lumot berish, ta'lim va tarbiyalash masalalarini ko'rsatish, shaxsning ijtimoiy faoliyatiga o'z vaqtida ta'sir etadi. Bundan tashqari, axborot manbalari orqali jamiyatning axloqiy mezonlarga boshqaruv, iqtisodiyat, siyosat va boshqa sohalarida yangiliklarni tarqatish asosan axamiyat kasb etishadi.

Shu bilan birgalikda, shaxsga yo'naltirilgan ta'lim va axloqiy mezonlarning axborotlashgan jamiyat taraqqiyotida aks etishi, shaxsning shuur-ma'rifiy, ijtimoiy, iqtisodiy va siyosiy rivojlanishiga ta'sir etadi. Bundan kelib chiqib, shaxslarning ma'naviy va intellektual potentsiallarini yanada oshirish, axloqiy mezonlarni yaxshilash, jamiyatda tashkil etiladigan faoliyatlarni rivojlantirish uchun axborot vositalarining roli juda muhim edi.

Bugungi kunda hayotimizning turli sohalarida axborot kommunikatsiya va kompyuter texnologiyalarining kirib kelishi va jadal rivojlanish yo'liga o'tishi jamiyatimizga ijobiy ta'sir qilmoqda. Natijada insoniyat axborotlashish sohasida inkilobiy o'zgarishlar davrini boshidan kechirmokda. Dunyoda umumiy axborotlashgan hamjamiyat shakllanmoqda. Bu o'zgarishlar asosini axborotlashtirish, telekommunikatsiya va kompyuter texnologiyalari konferentsiyasi negizida axborotni uzatish va iste'molchiga yetkazib berishning eng zamonaviy va samarali vositalari dunyoga kelayotganini tashkil etadi. Oqibatda XXI asr –axborotlashgan jamiyat asri deb e'tirof etilmoqda.

Shaxs jamiyatning madaniy taraqqiyotida aqli va idroki bilan millat an'ana, turmush tarzi va tajribasini davom ettiradi. Shu sababli "shaxs" fenomeni jamiyat

tarqqiyotining har bir bosqichida tadqiqot markazida turgan. Sharq diyorida shaxs fenomeni axloqiy, ma'naviy, ma'rifiy me'yorlar orqali tushunilgan va yuksak ma'naviyatga ega qadriyat sifatida qabul qilingan. Inson shaxs sifatida barkamollikka intiladi. Uning atrof muxitga munosabatida va ijodiy faoliyatida namoyon bo'ladigan ijtimoiy ahamiyatga molik o'zgarishlar qilish layoqati shaxsning faolligi hisoblanadi. Bunday layoqatida biz shaxsning mustaqil fikrlashi, qarashlarida o'z nuqtai nazarini ximoya qila olishi, so'zi bilan ishi birligida ifodalanadigan xayotiy pozitsiyasi ko'rinadi.

Axborotlashgan jamiyat – ijtimoiy-iqtisodiy rivojlanish, eng avvalo, axborotni ishlab chiqarish, unga “ishlov berish”, saqlash va jamiyat a'zolariga yetkazishga bog'liq ekanini anglatadigan tushuncha. Jamiyatni axborotlashtirish jarayoni hozirgi kunda global xususiyatga ega bo'lib, ilmiy-texnikaviy va ijtimoiy-iqtisodiy rivojlanishning o'zagini tashkil etmoqda. Axborotlashgan jamiyat konsepsiyasi bugungi ilm-fanda muhim ahamiyat kasb etmoqda. U industrial (O.Kont, J.Mill va boshqalar) va postindustrial (R.Aron, U.Rostou va boshqalar) jamiyat konsepsiyasi o'rnini egallamoqda. Jamiyatni axborotlashtirish o'z bosqichlariga ega. Birinchi bosqich – jamiyatni elektronlashtirish. Bu bosqich yarim o'tkazgichlarni amalga joriy etish bilan bog'liq sof texnik jarayonlarni o'z ichiga oladi. Navbatdagi – jamiyatni kompyuterlashtirish bosqichida eng yangi kommunikatsiyalar yordamida axborotlashtirishning texnik negizi shakllanadi. Jamiyatni axborotlashtirish bosqichi, o'z mohiyatiga ko'ra, inson va jamiyat manfaatlarini yo'lida axborot ishlab chiqarish va undan foydalanish bilan bog'liq ijtimoiy-texnik va ijtimoiy-madaniy jarayondir.

Zamonaviy axborot texnologiyalari, xususan, internet jamiyatning barcha sohalariga shiddat bilan kirib kelayapti. Internet tarmog'ining imkoniyatlari naqadar keng va cheksizligi bugun barchaga ayon, u gazeta, radio va hatto televideniedan ham kuchliroq ta'sirga ega, axborot oqimi juda keng. Lekin uning o'ziga yarasha boshqa jihatlari ham mavjud, ya'ni, internetning ijtimoiy tarkibi turfa xil ekanligi qator salbiy holatlarni o'zida namoyon etib, bu o'z o'rnida qator muammolarni keltirib chiqarmoqda. Kishilik jamiyatida ijtimoiy-siyosiy, madaniy, milliy, etnik va boshqa omillarning muvozanati muayyan darajada mavjud bo'lsa hamki, internet tarmog'ida bunday tenglikni ko'rib bo'lmaydi. Bunday holat ma'naviy va milliy an'analarga to'g'ri kelmaydigan, virtual olamning o'zigagina xos bo'lgan internet “madaniyat”ni yuzaga keltirib chiqardi. Tarmoq ichida insoniyatga qarshi, yoshlarga qarshi tajovuzlarni ko'rish mumkin. Internet nazoratsizlik tufayli giyohvand moddalarini targ'ib etib, axloqsizlik, zo'ravonlik, qotillik va terrorchilikka da'vat etuvchi g'oyalar bilan sug'orilgan resurslar to'lib-toshgan tajovuzkor axborot makoniga aylanib bormoqda. Tabiiyki, hali axborotga “o'ch bo'lgan” aholi kirib kelayotgan axborotni

saralamay turib, “iste’mol” qila boshlaydi. Ular hali yaxshi va yomon, kerakli va keraksiz axborotning farqiga bormasdan, bir so‘z bilan aytganda, aholida xolis axborot oqimidan noxolisini ajratib olish uchun idrok shakllanib ulgurmagani edi. Shuning asorati hozirgi kunda, ayniqsa, sezilmoqda. Bu ba’zan yoshlarimizda har qanday axborotni mutloq haqiqat sifatida qabul qilinishini keltirib chiqarmoqda. Endilikda ijtimoiy muhitda yangi axborot jamiyatini yaratish maqsadi muloqot jarayoniga o‘ziga xos xususiyatlar va o‘zgarishlarni olib keldi. Axborotning qimmatliligi shaxsning sub’ektiv xulq-atvoriga ega ekanligi bilan izohlanadi. Agar inson maqsadiga yerishsa, u holda foydalanilgan axborot e’tiborga olinmaydi va o‘z qiymatini yo‘qotadi. Shuni ham yodda tutish kerakki, qadriyatlar turlicha. Qiymat - bu ma’lumotning shaxsga maqsadga erishish yo‘lini tanlash jarayonida foydalanishga imkon beradigan xususiyatidir. Bu fikrlarni umumlashtirgan holda aytish mumkinki, jamiyatda qadriyatga ega bo‘lgan ma’lumotlardan tashqari, umuman qadrsiz yoki salbiy qiymatga ega bo‘lgan ma’lumotlar ham mavjud. “Axborotlashgan jamiyat rivojlanishining muhim qismi sifatida quyidagi xususiyatlar bilan tavsiflanadi: maqsadga erishish uchun axborotni tanlash imkonini beruvchi axborotning qiymati; ma’lum bir vaziyatga bo‘lgan ehtiyojni belgilaydigan ma’lumotlarning foydaliligi; ma’lum vaqt davomida ma’lumotlarning buzilishi”

Bugungi yoshlarning aksariyati asosiy axborot manbai sifatida internetga murojaat qilishadi. Lekin ularda axborot immuniteti shakllanmagan mish-mishlar dunyosi bo‘lmish “Internet” orqali ma’naviyatga salbiy ta’sir vujudga kelishi mumkin. Nega ta’sir qiladi? Balki yoshlar ma’naviyatining yetarli darajada shakllanmaganligi emasmikan? Bugungi kunda yoshlarimiz – turli xil G‘arb seriallari ta’sirida, milliy qahramonlarimiz jasoratidan bexabar o‘sayotganligi sababli ma’naviyatga chuqur e’tibor qaratmas ekanmiz, ularning zehni o‘tkir, dunyo bilimlarini egallagan bo‘lishlariga qaramasdan, Vatan manfaati yo‘lida xizmat qilishlariga, begona g‘oyalarga berilmasligiga kafolat ham berolmaymiz. Ularni eng avvalo Vatanga e’tiqodni, urf-odat va qadriyatimizga sadoqatli qilib tarbiyalasak, istalgan buzg‘unchi axborotlarga nisbatan mafkuraviy immuniteti shakllanadi, deb o‘ylaymiz.

Xulosa qilib aytadigan bo‘lsak, Axborot jamiyatida shaxsning axborot madaniyatining shakllanishi uning axborotga bo‘lgan ehtiyojini qondirish, muvaffaqiyatga erishish imkoniyatlarini ro‘yobga chiqarish, jamiyat hayotida faol ishtirok etishini ta’minlaydi. Shu o‘rinda davlatimiz rahbarining quyidagi so‘zlarini orqali fikrlarimizga yakuni sifatida keltrishini lozim deb bildik: “Hamma islohotlarni, hamma harakatlarni jamiyat bilan birga qilamiz. Hammamiz bir kuch, bir qudrat bo‘lib xalqimizga xizmat qilishimiz kerak” Hamma islohotlarni, hamma harakatlarni jamiyat bilan birga qilamiz. Axborot oqimining tarqalish tezligi ortgan va avj olgan bugungi

zamonda ommaviy axborot vositalari davlat hayotida asosiy o‘rin egallamoqda. Ijtimoiy tuzilmada axborot jamiyatning muhim ijtimoiy quroli hisoblanadi. Ular fuqarolarning o‘z huquq va erkinliklarini bilish, o‘z g‘oyalari va manfaatlarini himoya qilish, kundalik voqealar haqida o‘z fikrini shakllantirish imkonini beruvchi muhim institutlardan biridir.

Foydalanilgan adabiyotlar ro‘yxati

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NAVOIY ASARLARIGA XALQONA QARASHLAR VA DINIY TASAVVURLARNING TA'SIRI

Nargiza Mahmudova

FarDU mustaqil izlanuvchisi

***Annotatsiya.** Ushbu maqolada Navoiyning xalq og'zali ijodiddan ilhomlangan holda hamda, diniy-ma'rifiy, falsafiy-irfoniy qarashlari mutafakkirning deyarli barcha asarlarida mujassamligi, mazmun-mohiyati haqida so'z yuritiladi.*

***Kalit so'zlar:** Islom dini, farz, iymon, zakot, doston, shariyat, ilm, ma'rifat, xalq og'zaki ijodi.*

***Аннотация.** В данной статье говорится о том, что религиозно-просветительские, философско-просветительские взгляды Навои, вдохновленные устным народным творчеством, воплощены практически во всех произведениях мыслителя.*

***Ключевые слова и выражения:** религия ислама, фард, вера, закят, эпос, шариат, наука, просвещение, устное народное творчество.*

***Annotation.** This article is inspired by the folk-oral creativity of Navoi and talks about the embodiment, meaning and essence of religious-educational, philosophical-Iranian views in almost all works of the thinker.*

***Key word and expressions:** Islam religion, duty, faith, zakat, saga, Sharia, knowledge, enlightenment, folklore.*

Kirish. Badiiy adabiyotda diniy tushunchalar va tasavvurlarning ibtidoiy ko'rinishlari yozma adabiyotdan ancha ilgari paydo bo'lgan. Bu o'zbek xalq og'zaki ijodida o'z aksini topgan bo'lib, keyinchalik yozma adabiyotning maydonga kelishi uchun zamin hozirlagan. Xalq yaratgan asarlar o'zining g'oyaviyligi, chuqur xalqchilligi, til boyligi va badiiyligi bilan ajralib turadi. U xalqning yengilmas irodasini, kelajakka bo'lgan ishonchini, haqiqat, adolat, tinchlik va baxt haqidagi tasavvurlarini yaqqol aks ettiradi.

Adabiyotlar tahlili va metodologiya. Maqolada Alisher Navoiyning asarlarida diniy-ma'rifiy va xalqona qarashlari tahlilga tortilgan va qiyosiy-tipologik, biografik metodlardan foydalanilgan.

Muhokama. Navoiy xalq og‘zaki ijodidan ilhomlangani uning bir qator asarlarida yaqqol seziladi. “Alpomish” dostonida Hakimbek zakot haqida otasiga ma’lumot beradi va u ukasidan zakot talab qiladi. Xuddi shu zakot mavzusi Navoiyning bir necha asarlarida kuzatiladi. Masalan, “Munshaot” asaridagi 55-maktub^{xv}da zakot haqida shunday deyiladi “Zakotni shar’ va hukm yo’suni bila zakotchilar alardin mustaxlas qilsalar. Zakotchilar ishidan tavochi moh-bamoh, balki hafta-bahafta vuquf topib, arzg‘a yetkursalar. Juzviy jarima qilg‘anini kulliy siyosat qilisa, bok yo‘qdur, to bu ovoza olam-olam mamolikga yoyilsa ,tujjorning ruju’i ko‘prak bo‘lsa”. Navoiy bu so‘zlari bilan agar zakotchilar kichik bir xatolikka yo‘l qo‘ysa ham, unga katta jazo berilsin, toki buning ovozasini olamga yoyilsin-da, zakot beruvchilarning tijoratga va boshqa kasblarga qiziqishlari ko‘payaversin. Bu mavzuni “Vaqfiya” asarida ham: “Jonim naqdi ul Tengrig‘a zakotim...”,^{xv} deya ta’kidlaydi.

“Farhod va Shirin”dagi Shirin, “Saddi Iskandariy”dagi Chin lo‘bati (Chin go‘zali) singari qahramonlar “Alpomish”dagi Oybarchin obrazini esga soladi. So‘zlarimizga isbot sifatida esa, Barchin, Chin lo‘bati va Shirinni qiyoslaymiz. Barchin Alpomishni kutib hech kimga turmushga chiqmaydi, ya’ni sevgisiga sadoqat, vafo bilan o‘z yorini kutadi va alplarning sovchilariga ro‘y xush bermaydi:

*Xabar borsa, bek Alpomish kelmaymi,
Holing bilib tog‘ri yursang bo‘lmaymi?!
Kelsa, kelar Qo‘ng‘irotdan Alpomish.
Kelmasa, men taqdirimdan ko‘rarman,
Erkak libosini o‘zim kiyarman,
Bor kuchimni bilagimga jiyarman,
Qirq mingini bir deb sanab qirarman.
Meni olmoq hadding bormi badbaxtlar!
Mungluq dema, men kesarman boshingni
Sulatay, dushmanlar, gavda loshingni^{xv}.*

Xuddi shunday dushmanlarga bosh egmaslik, jang sahnasi “Saddi Iskandariy” asaridagi Chin lo‘bati va vahshiylar xaylidan chiqqan bir pahlavon bilan bo‘lgan kurashda Chin lo‘batining yengishi va uni asirga olib Iskandarning oldiga keltishidir. So‘ngra, Iskandar qo‘shinidan asirga olingan o‘n uch pahlavon ozod etiladi, bundan xursand bo‘lgan Iskandar Chin lo‘batini o‘z haramiga oladi.

Shirin go‘zalligi bilangina tillarda doston bo‘lmaydi, balki aql, fahm-farosatda ham beqiyos, bunyodkorlik, ilm ma’rifat homiysi ham edi. Shirinning hayosi, sadoqati, jasorati, ilmu ma’rifati “Bitildi dard ila bir turfa maktub, Demay har satreki, har lafzi

marg‘ub” deya ta‘riflangan, oshig‘iga yozgan ma‘noli, mazmundor birgina maktubidayoq yaqqol namoyon bo‘ladi. U o‘zining nozik hislarini sidqu sadoqati, mardligini xalq dostonlaridagi alp qizlar, ya‘ni Barchindek jasorat bilan ifoda etadi:

*Sharafdin bo‘lg‘on ermishsen Sulaymon,
Mening birla unutmahdu paymon!
Chu sen tortding Sulaymonliq maqomin,
Demon qil manga Bilqis ehtiromin.
Agar Bilqisdek yoru azizing,
Bo‘la olmon, ham o‘lg‘aymen kanizing.
Bir ish Bilqisliqqa bo‘lsa mone’,
Sulaymong‘a Pari ham keldi tobe’.
Agar Bilqis bo‘lmoq yo‘qsa haddim,
Pariliqdin xud o‘lmas qilsa raddim^{xv}.*

Mazkur maktub necha yillarki, ko‘ngillarni zabt etganligi uning haqiqiy oshiqning chin nolalari ekanligidadir. Bu maktubning har bir satri alohida tahlil va talqin qilinsa ham Shirinning siymosi bus-butun gavdalanadi. Uning axloqiy go‘zallikdagi yuksak martabasi ham to‘laqonli his qilinadi.

Farhod ham Alpomish kabi Qur‘onni maktab yoshida yod olgani, Alpomishdek zukko bo‘lgani va dunyoga kelishi ham ilohiylashtirilganini, u ham yoriga sadoqatli va vafodor bo‘lganini hisobga olganimizda Navoiy Farhod obrazini Alpomishdan ilhomlanib asarga kiritgan degan fikrga kelishimiz mumkin.

Chunki asarda bosh qahramon bo‘lmish Farhodning tavalludidan ilohiy ishqqa oshnoligi tasviri alohida e‘tirof etilgan: “Anga farzona Farhod ism qo‘ydi, Hurufi ma‘xazin besh qism qo‘ydi. Firoqi rashku hajru oh ila dard, Birar harf ibtidodin aylabon fard”. Navoiy Farhod nomining arab yozuvidagi harflariga ramziy ta‘rif berib, u firoq, rashk, hajr, oh va darddan iborat deydi. Negaki ilohiy ishq egasi Haq va o‘zi orasida to‘siq bo‘lib turgan o‘tkinchi dunyo hoyu havaslaridan qutilguncha shu iztiroblarni chekishi shart bo‘ladi. Alisher Navoiy xamsanavislikda yangilik sifatida olib kirgan Farhod obrazini ham jismoniy, ham ma‘naviy jihatdan barkamol tarzda yaratadi. Uni suvrat va siyratda birday go‘zal tasvirleydi. Farhodning qanchalik uquvli, ilm va o‘qishga havasi balandligiga Navoiy urg‘u beradi. Bir yoshida emaklashni ham qo‘yib birato‘la yurib ketadi, uch yoshda o‘n yashar bolani eslatadi, buni ko‘rib otasi unga ilmi teran ustoz tayinlaydi. Farhod ta‘limining birinchi kuniyoq otasiga abjad hisobini o‘rganganligini hadya qiladi:

*Agar bir qatla ko‘rdi har saboqni ,
Yana ochmoq yo‘q erdi ul varoqni^{xv}.*

Farhod uchun har qaysi darsni bir marta ko‘rish yetarli, u sahifani qayta ochishga hojat yo‘q erdi. Uch oy ichida savodi raso bo‘lib, birinchi yiliyoq Qur‘onni yod oladi, o‘n yoshida harbiy bilimlarni egallaydi.

Shu singari Alpomish ham maktabga borib xat-savod chiqarib Qur‘onni yodlaydi va mullo bo‘ladi. “Hakimbek maktabda o‘qib yurib yetti yoshga kirdi. Burro savodi chiqib, xat o‘qib-yozadigan mulla bo‘ldi^{xv}. Shuning uchun yaxshilig‘ va yomonlig‘ haqida, savob va gunoh haqida so‘zlaydi va gaplarining orasida zakot haqida otasiga aytadi. Alpomish bunday ma‘lumotlarni aytmaguncha Boybo‘ri savob, gunoh va zakot haqida xabardor bo‘lgan, lekin o‘g‘li hali yosh bo‘la turib bunday ma‘lumotlarni teran va aniq otasiga yetkaza olgani Boybo‘riga judayam qattiq ta‘sir qiladi. Shuning uchun tezda Boysarining oldiga elchi jo‘natadi.

Natijalar. Navoiy ijodiga xalq og‘zaki ijodidagi diniy qarashlar ifodasi samarali ta‘sir ko‘rsatgan. Milsiz iste‘dod bilan insonga, elga xizmat qilish, uning baxt-saodati uchun kurash birga mujassamlanib, uni tafakkur va san‘at cho‘qqisiga ko‘tardi. Navoiy xalqqa, xalqning ijodiy kuch-qudratiga, uning san‘atkorlik dahosiga cheksiz mehr qo‘ydi, undan ma‘naviy, ma‘rifiy va badiiy ilhom va fayz oldi, xalq tilining boyligi va sehrlovchi kuchi Alisher Navoiy asarlarini yanada ko‘rkliroq va jozibaliroq qildi. Alisher Navoiy ijodi turkiy adabiyotning eng yuksak cho‘qqisidir. Chunki hech kim unga qadar bu tilda bunchalik „ko‘p va xo‘b“ (Bobur iborasi) yozmagan edi. Aytish mumkinki, undan keyingi salkam olti yuz yil ichida hali hech kim u kabi ko‘p va yaxshi yozgan emas. Navoiy barcha turkiy xalqlarning mushtarak siymosidir.

Adabiyotshunos olim Najmiddin Komilov aytganidek, “Navoiy oddiy ertakchi shoir emas, uning har bir ifoda obrazi, lavha va tamsillarida muayyan umumfalsafiy, diniy-ilohiy va xalqona ma‘no bor^{xv}. Chunki, Navoiy har bir asarini o‘zigacha bo‘lgan og‘zaki va yozma adabiyotga tayangan holda yozadi. Chunki xalq og‘zaki adabiyotining deyarli har bir namunasida diniy qarashlar aks-sadosi sezilib turadi.

Xulosa. Ko‘rinadiki, Alisher Navoiy o‘z vaqtida xalq og‘zaki ijodi namunalari bilan ham, diniy qarashlar va e‘tiqodiy tushunchalar borasida ham chuqur bilimga ega bo‘lgan. Va ayni damda, ana shu bilim, ko‘nikmalarni o‘z asarlariga singdira olgan va ommaga ham tushunarli, sodda, xalqona usullarda yetkaza olgan. Bunday qarashlar va uslublar ulug‘ siymoning deyarli, barcha asarlarida kuzatildai.

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SUN'YI INTELLEKT YORDAMIDA ISHLAB CHIQLILGAN ZAMONAVIY TEKNOLOGIYALARNING TAHLILI

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ANNOTATSIYA

Sun'iy intellekt (SI) bizning yashash, ishlash sharoitimizda va o'zaro munosabatlarimizda inqilob yasadi. SI texnologiyasi rivojlanishda davom etar ekan, uning nima ekanligini, turli SI tizimlari qanday ishlashini va ularning maqsadlari, ijobiy va salbiy tomonlarini tushunish juda muhimdir. Algoritmalar sehrli kuchga ega emas va inson aralashuvisiz yo'q joydan qaror qabul qila olmaydi. Agar siz yuqori sifatli moslashtirilgan ma'lumotlarni taqdim qilmasangiz, hatto eng yetuk algoritm ham sizga mukammal natijani bermaydi. Ushbu maqolada sun'iy intellekt dunyosi va turli toifadagi bir nechta mashhur sun'iy intellekt xizmatlarini, jumladan, tabiiy tilni qayta ishlash (natural language processing), computer vision va sog'liqni saqlashda sun'iy intellekt vositalari keltiriladi.

Kalit so'zlar: *sun'iy intellekt, NLP, Siri, Alexa, Google Assistant, ChatGPT, Google Translate, DeepL, Microsoft Translator, Kompyuter Vision, Clearview AI, Amazon Rekognition, Microsoft Azure Face API, Google Cloud Vision API, IBM Watson Visual Recognition, OpenCV.*

ABSTRACT

Artificial Intelligence (AI) has revolutionized the way we live, work and interact. As AI technology continues to evolve, it is important to understand what AI is, how different AI services work, and their purposes, pros and cons. Algorithms do not have magical powers and cannot make decisions out of nowhere without human intervention. Even the most sophisticated algorithm won't give you a perfect result if you don't provide high-quality customized data. This article introduces the world of artificial intelligence and several popular AI services in different categories, including natural language processing, computer vision, and AI tools in healthcare.

Keywords: *Artificial Intelligence, NLP, Siri, Alexa, Google Assistant, ChatGPT, Google Translate, DeepL, Microsoft Translator, Computer Vision, Clearview AI, Amazon Rekognition, Microsoft Azure Face API, Google Cloud Vision API, IBM Watson Visual Recognition, OpenCV.*

KIRISH

Bugungi kunda sun'iy intellekt (SI) va uning asosida yaratilgan texnologiyalar juda keng ko'lamda qo'llanilmoqda. Ushbu texnologiyalar bir nechta sohalarda ishlatilishi mumkin, shu jumladan tibbiyot, ta'lim, turizm, huquq, tizorat, va boshqa sohalarda. Bu maqolada SI va uning asosida yaratilgan texnologiyalar haqida umumiy tushuncha, ularning ishlash prinsiplari, ularning o'rni turli sohalarda ko'rinishi, ularning muammolari va kelajakda ularga oid e'tiroflar haqida batafsil bayon qilinadi.

Sun'iy intellekt - bu kompyuter dasturlarining, asosan ma'lumotlar analizini, tahlil qilishni va umumiy yorliqlarni ko'rsatishni o'rganuvchi texnologiya. U o'zining o'ziga xos tizim va algoritmlari bilan ko'plab ma'lumotlar, statistik ma'lumotlar, axborotlar va hujjatlarni yig'ib olib, ulardan narsalarni aniqlash va natijalarni ko'rsatish orqali faoliyat ko'rsatadi. Sun'iy intellekt, tadbirkorlik, tibbiyot, ta'lim va boshqa ko'plab sohalarda foydalaniladi. Sun'iy intellektga asoslangan dasturlar kelajakda o'zi o'rganishi va mustaqil qarorlar qabul qilishi uchun kirish ma'lumotlariga muhtoj. Ya'ni kerakli algortimlar va kodlar o'qitilishi lozim.

ADABIYOTLAR TAHLILI

Tabiiy tilni qayta ishlash (NLP) bo'yicha "Speech and Language Processing" by Dan Jurafsky and James H. Martin kitobi keltirilgan. Ushbu adabiyot NLP asoslari va texnologiyalarini o'rganish uchun katta qo'llanma hisoblanadi. Bu tabiiy tillarni tahlil qilish, matn sintaksisini va semantikasini aniqlash, ma'lumotlarni tahlil qilish, matn tuzish va ko'chirish kabi asosiy mavzularni qamrab o'tadi. "Foundations of Statistical Natural Language Processing" by Christopher D. Manning and Hinrich Schütze - bu adabiyot, NLP asoslari, shuningdek, statistik ma'lumotlarni qo'llash, til modellari va algoritmlari kabi qo'shimcha mavzularni tahlil qiladi. Kompyuter vision bo'yicha "Computer Vision: Algorithms and Applications" by Richard Szeliski - bu kitob, CV asosiy konseptlari, algoritmlari va amaliyotda xizmat qilish uchun CV tizimlarini yaratishga doir tushunchalarni ko'rsatadi. "Hands-On Computer Vision with TensorFlow 2" by Benjamin Planche. TensorFlow 2 kutubxonasi asosida CV tizimlarini yaratishni o'rganishga yordam beradi. CV asosiy algoritmlarini, ob'ektlarni aniqlash, hisoblash va boshqa ko'nikmalarni tushunishga imkon beradi. "Deep Learning for Computer Vision" by Rajalingappaa Shanmugamani - bu CV uchun deep learning (kichik ko'pincha o'qilgan sinovlarda yuzaga kelgan tizimlar) asosiy konseptlarini tushunishga yordam beradi va CV algoritmlarini, ob'ektlarni aniqlash,

hisoblash, rasmlar orasidagi chekishlar va boshqa ko'nikmalarni tushunishda deep learning tizimlarini qo'llashga imkon beradi. Sog'liqni saqlashda sun'iy intellekt texnologiyalari bo'yicha esa quyidagi adabiyotlardan foydalanildi: "Artificial Intelligence in Healthcare" by Adam Bohr and Gil Alterovitz - bu SI tizimlarining tibbiyot sohasidagi foydalanishini ko'rsatadi. Bunda SI asosiy konseptlari, texnologiyalari va tibbiyot sohasidagi foydalanishlari ta'riflangan. "Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again" by Eric Topol - bu SI tizimlarining tibbiyot sohasidagi foydalanishini o'rganishga yordam beradi. Adabiyotda SI asosiy konseptlari, tibbiyot sohasidagi foydalanishlari, yashirin talablar va siyosat konseptlari ta'riflangan. "AI in Healthcare: Building a Successful Business Model" by Anthony Chang – ushbu adabiyot SI tizimlarini tibbiyot sohasidagi biznes modelini yaratishga yordam beradi va SI asosiy konseptlari, biznes modellari va tibbiyot sohasidagi foydalanishlari ta'riflangan.

NATIJARLAR

Sun'iy intellekt texnologiyalari va xizmatlari:

1. Tabiiy tilni qayta ishlash (NLP). NLP - bu SIning kichik sohasi bo'lib, u kompyuterlarga inson tilini tushunish va qayta ishlash imkonini berishga qaratilgan. Ba'zi mashhur NLP xizmatlariga quyidagilar kiradi:

a) Chatbotlar va virtual yordamchilar. Bular shaxsiy yordam ko'rsatish, vazifalarni boshqarish, savollarga javob berish va muloqotni osonlashtirish orqali inson va kompyuter o'zaro ta'sirini yaxshilashga yordam beradi. Chatbotlar foydalanuvchi kiritishini tushunish, tegishli ma'lumotlarni ajratib olish va tegishli javoblarni yaratish uchun NLP va mashinani o'rganish algoritmlaridan foydalanadi. Misol uchun Siri, Alexa, Google Assistant va ChatGPT ham chatbotlar va virtual yordamchilar hisoblanadi.

Siri Apple tomonidan ishlab chiqilgan, ovoz yordamchisi hisoblanadi va iOS, iPadOS, watchOS, macOS va tvOSda ishlatiladi. Siri, foydalanuvchilar ovoz orqali, xabarlar yuborish, qo'ng'iroq qilish, ko'ngillariga qarab musiqa ijro etish, savollar va boshqalar kabi bir nechta vazifalarni bajarish uchun ishlatiladi. Alexa, Amazon tomonidan ishlab chiqilgan, xizmat hisoblanadi va Amazon Echo, Echo Dot, Echo Show, Echo Plus va boshqa qurilmalarda ishlatiladi.

Alexa, ovoz orqali foydalanuvchilar, savollariga javob berish, musiqa ijro etish, film va seriallarni ko'rish, joyni ochish, buyurtma berish va boshqalar kabi bir nechta amallarni bajarish uchun ishlatiladi. Google Assistant, Google tomonidan ishlab chiqilgan, mobil qurilmalar, Google Home va boshqa qurilmalarda ishlatiladi.

Google Assistant, foydalanuvchilar, savollari va qidiruvlari uchun javob berish, tayyor ma'lumotlarni topish, xabarlar va tadbirlarni o'tkazish, qo'ng'iroq qilish, musiqa ijro etish va boshqalar kabi vazifalarni bajarish uchun ishlatiladi.

ChatGPT esa, sun'iy intellektning bir turi hisoblanadi va o'qituvchilar, marketing xizmati ishlab chiqaruvchilari va boshqa tashkilotlar tomonidan ishlatiladi. ChatGPT matn yordamchisi hisoblanadi va foydalanuvchilarga bir nechta so'ralgan savollarga javob bera oladi. Shuningdek, ChatGPT, foydalanuvchilarga boshqa savollar va javoblar berish, hujjatlarni ko'rish, turli xizmatlarga buyurtma berish ma'lumotlar qidirish va boshqalar kabi amallarni bajarish uchun ham ishlatiladi.

Bu chatbotlar va virtual yordamchilar, o'ziga xos imkoniyatlar va xizmatlarga ega. Siri, Alexa va Google Assistant ovoz orqali foydalanilishi mumkin bo'lgan xizmatlardir. Shuningdek ChatGPT esa yozuv orqali foydalanilishi mumkin bo'lgan xizmatdir. Barchasi qo'shma sifatida foydalanuvchilar uchun qulayliklar va samarali xizmatlar taqdim etishda muhim rol o'ynaydi. Ustun tomonlari shundan iboratki, foydalanuvchi tajribasi va mijozlarni qo'llab-quvvatlashni yaxshilash, nogironligi bo'lgan odamlarning foydalanish imkoniyatini yaxshilash, takroriy vazifalarni avtomatlashtirish orqali vaqtni tejash imkoniyatining mavjudligidadir. Kamchiliklari sifatida murakkab yoki noaniq so'rovlarni tushunish, cheklangan ma'lumotlarni to'plash va ishlatish bilan bog'liq maxfiylik muammolaridir.[1]

b) Mashina tarjimasi (Machine Translation). Mashina tarjimasining maqsadi til to'siqlarini bartaraf etish va turli tillarda so'zlashuvchilar o'rtasida uzluksiz muloqotni ta'minlashdan iborat. Misol sifatida Google Translate, DeepL va Microsoft Translatorelarni olish mumkin. Google Translate, sun'iy intellekt va tarjima texnologiyalaridan foydalanib, matnning bir tilidan boshqa tilga tarjima qilishni ta'minlaydigan bir xizmat hisoblanadi. Bu xizmat, bir necha tilda, shuningdek, yozuv, gap va hattoki rasmi matnlarni ham o'qish va tarjima qilishga yordam beradi.

Google Translate, yirik ma'lumotlar bazasi, sun'iy intellekt va tarjima modellari bilan ishlaydi. Bu modellar, tilni tahlil qilish, so'zlar, jumlar va gaplarni alohida tahlil qilish, so'zlar va ularning tarjima qilinishi, tarjima qilish va tayyor bo'lishi kabi amallarni amalga oshirishda yordam beradi. Google Translate, bir nechta tilni o'rganib chiqqan tarjima modellariga ega, bu ularni keng doirada sinash va baholash orqali, eng yaxshi tarjima natijalarini aniqlash uchun yaxshi tarzda ishlab chiqilgan. Bunda, Google, tarjima qilingan matnlarni, qo'shimcha tahlil va taxmin qilish algoritmlari bilan boshqaradi, shuningdek, ma'lumotlarni ko'proq yaxshi tahlil qilish uchun, matnlarni tahlil qilishda ham foydalanadi. Google Translate, dunyodagi bir nechta tilga tarjima qilishda juda yaxshi natijalar ko'rsatadi va foydalanuvchilar uchun qulay va samarali xizmat sifatida qaraladi.

DeepL va Microsoft Translator ham tarjima xizmatlari hisoblanadi va sun'iy intellekt (SI) va tarjima texnologiyalaridan foydalanishadi. DeepL bir tilni boshqa tilga tarjima qilishda yuqori sifatli tarjima natijalari ko'rsatish uchun, bir nechta SI model va tizimlaridan foydalanadi. Bu modellar, matnning asl nusxasini tahlil qilish, matnning tushuntirilishi, tarjima qilish va tuzatish, tarjima qilingan matnni tahlil qilish va tarjima modellari ishlab chiqishda yordam beradi.

Microsoft Translator shuningdek, bir nechta tilni qamrab olgan va dunyoda keng o'ylangan xizmat hisoblanadi. U yuqori sifatli tarjima natijalari ko'rsatish uchun tili tahlil qilish va tarjima modellari bilan ishlaydi. Microsoft Translator, matnlarni tahlil qilish uchun tili (asosiy o'zgaruvchilar, morfolojik tahlil, til nusxasining tahlili kabi) qo'shimcha tahlil qilish algoritmlaridan ham foydalanadi. Microsoft, tahlil va tarjima natijalarini baholash uchun boshqa xizmatlar bilan solishtirish uchun "Human Parity" baholash modelini ham ishlab chiqishdi.

Ko'pincha, DeepL va Microsoft Translator, yuqori sifatli tarjima natijalari ko'rsatishda samarali xizmatlar hisoblanadi. Shuningdek, har bir tilni tahlil qilishda va tarjima modellari ishlab chiqishda foydalaniladigan xususiyatlar, ularning o'zaro solishtirilishida farq qiladi.

Mashina tarjimasining ustun tomonlari global aloqa va hamkorlikni osonlashtiradi, inson tarjimonlariga bo'lgan ehtiyojni kamaytiradi, SI yutuqlari orqali doimiy takomillashtirish amalga oshiriladi. Kamchiliklari esa iboralar yoki murakkab jumlar uchun noto'g'ri tarjimalar va kontekstga oid tarjimalar bilan xatoliklar bo'lishi mumkin.[2]

2. Kompyuter Vision. Kompyuterni vision mashinalarga dunyodagi vizual ma'lumotlarni tushunish va sharhlash imkonini beradi. Ba'zi mashhur kompyuter vision xizmatlariga quyidagilar kiradi:

a) Yuzni tanib olish. Kompyuter Vision, yoki CV, kompyuterlarning ko'rgan narsalar, obyektlar va tasvirlar bo'yicha o'rganish va tushunishni ta'minlashda qo'llanadigan sun'iy intellektning bir turi hisoblanadi. Yuzni tanib olish, CVning asosiy vazifalaridan biri hisoblanadi va yuz tanish va tasvirlarni avtomatik ravishda tasdiq qilish imkoniyatini ta'minlaydi. Yuzni tanib olish tizimlari, tasvirlar yoki videolardagi har qanday obyekt yoki insonning yuzini aniqlash uchun murakkab algoritmlar va ma'lumotlar analizi yordamida ishlaydi. Bu tizimlar, tasvirlarni olish, ma'lumotlar olish, obyekt yoki insonni aniqlash va tasvirni tushunish uchun ma'lumotlarni tahlil qilish kabi qadamlarni o'tkazadi. Yuzni tanib olish tizimlarining ularning ishlash prinsiplari turli bo'lib, ba'zilar tizimni o'rganish, ba'zilar esa boshqa maqsadlarga xizmat qilish uchun tasarlanaadi. Misol uchun, FaceID, Apple tomonidan ishlab chiqilgan bir yuzni tanib olish tizimidir, u iPhone va iPad Proda ishlatiladi. Bu

tizim, foydalanuvchining yuzini aniqlash uchun tasavvur qilinayotgan 30 ta nuqta va ulardan tasavvur qilingan talabga asoslangan algoritmlarni qo‘llaydi. Boshqa tizimlar esa, boshqa maqsadlarga mo‘ljallangan va sayohat, tijorat, sotuv, tibbiyot va boshqalar kabi turli sohalarda ishlatilishi mumkin bo‘lgan yuzni tanib olish tizimlaridir. Yuzni tanib olish tizimlari, insonlarning yuzi va tasvirlari hisobidagi xususiyatlarni va qo‘llanish usullarini o‘rganish orqali rivojlantirilmoqda. Bu yordamda, tasvirlar yoki videolar o‘rganiladi va o‘rganilgan ma‘lumotlar, yangi tizimlarni tuzish uchun foydalaniladi. Yuzni tanib olish tizimlari, odamlarga, tijoratga, tibbiyotga va boshqa ko‘plab sohalarda qo‘llaniladi. Masalan: Clearview AI, Amazon Rekognition va Microsoft Azure Face API larni olishimiz mumkin.

Clearview AI xavfsizlik xizmatlari uchun tasvirlangan yuzni tanib olish tizimi hisoblanadi. Bu tizim, millyonlab odamning tasvirini saqlash va ulardan foydalanish orqali xavfsizlik sohasida ishlovchi organlar uchun yuz aniqlash imkonini ta‘minlaydi.

Amazon Recognition, Amazon tomonidan ishlab chiqilgan tizim hisoblanadi va tijorat, meditsina va xavfsizlik sohalari kabi turli sohalarda qo‘llaniladi. Bu tizim yuzni aniqlash, yuz tanish va yuzni tasdiq qilish kabi imkoniyatlarni ta‘minlaydi.

Microsoft Azure Face API, Microsoft tomonidan ishlab chiqilgan tizim hisoblanadi va yuzni tanib olish, yuzni aniqlash va yuzni tasdiq qilish uchun ishlatiladi. Bu tizim tijorat, xavfsizlik va turli sohalarda qo‘llaniladi.

Bu tizimlar, tasvirlarni olish, ma‘lumotlar olish, obyekt yoki insonni aniqlash va tasvirni tushunish uchun ma‘lumotlarni tahlil qilish kabi qadamlarni o‘tkazadi. Bunday tizimlar odatda keng xizmat ko‘rsatish uchun mahsulot sotib olish, shaxsiy identifikatsiya va xavfsizlik sohalari kabi turli maqsadlar uchun foydalaniladi. Ushbu tizimlarning ustun tomonlari kengaytirilgan xavfsizlik va kuzatuv imkoniyatlari, oddiylashtirilgan autentifikatsiya jarayonlari, shaxsiylashtirilgan marketing va reklamadan iborat. Kamchiliklari sifatida maxfiylik muammolari va mumkin bo‘lgan noto‘g‘ri foydalanish, yuzni tanib olish algoritmlaridagi noxushliklar, huquqiy va axloqiy muammolarni keltirish mumkin.[3]

b) Tasvir va video tahlili. Bu tizimlarning maqsadi turli xil ilovalar, jumladan avtonom transport vositalari, sog‘liqni saqlash va ishlab chiqarish uchun tasvirlar va videolar ichidagi ob‘ektlarni avtomatik aniqlash, tasniflash va tahlil qilishdan iborat. Ushbu tizim tasvir va video tahlil xizmatlari vizual ma‘lumotlardan mazmunli ma‘lumotlarni olish uchun chuqur o‘rganish algoritmlaridan foydalanish asosida ishlaydi. Tasvir va video tahlili, kompyuter visioning muhim yo‘nalishlari hisoblanadi va foydalanuvchilar uchun turli maqsadlar uchun qulay bo‘lishi mumkin. Bu yo‘nalishda Google Cloud Vision API, IBM Watson Visual Recognition va OpenCV kabi turli tahlil tizimlari mavjud.

Google Cloud Vision API tasvir tahlili va yozuvni tasdiq qilish uchun yordam beruvchi yopiq platforma hisoblanadi. Bu tizim, tasvirni tahlil qilish va tasvirda turgan narsalarni tanib olish, tasvirda yozuvni aniqlash, tasvirlarni qidirish va tasvirning tarkibini tushunish kabi imkoniyatlarni ta'minlaydi.

IBM Watson Visual Recognition, IBM tomonidan ishlab chiqilgan va tasvir tahlili uchun xizmat qiladigan tizim hisoblanadi. Bu tizim, tasvirlarni olish va o'zaro taqqoslash, yuzni aniqlash, obyektlarni aniqlash, tasvirda turgan ranglarni aniqlash va turli sohalarda xizmat ko'rsatish uchun imkoniyatlarni ta'minlaydi.

OpenCV tasvir va video tahliliga hissasi hisoblanadi va ochiq manba kodidir. Bu tizim, tasvirlarni olish, obyektlarni aniqlash, tasvirni sifatli ko'rsatish va turli algoritmik operatsiyalar uchun imkoniyatlar ta'minlaydi.

Bu tizimlar, turli sohalarda tahlil va tushuntirish uchun qo'llaniladi. Masalan, turli tashqi xususiyatlarga ega bo'lgan obyektlarni aniqlash va tasvirlardagi yozuvni tasdiq qilish uchun foydalaniladi. Bunday tizimlar, xavfsizlik sohalari, tibbiyot, avtomobil sanoati va tijorat kabi turli sohalarda ham muhim hisoblanadi. Ular foydalanuvchilar tomonidan tasvir va videolarni tahlil qilishda xavfsizlikni ta'minlashga yordam berishadi, shuningdek, bu tizimlarning foydalanishiga oid huquqlar va to'g'risida yaxshi ko'rsatmalar bilish ham muhimdir.

Ushbu tizimning afzalliklari shundan iboratki, turli sohalarda samaradorlik va aniqlik yaxshilandi, ma'lumotlarga asoslangan qarorlar qabul qilishni osonlashtiradi, SI tomonidan yaratilgan kontent orqali ijodiy jarayonlarni yaxshilaydi. Kamchiliklari esa yuqori hisoblash kuchi talablari, algoritmik natijalardagi potentsial noaniqliklardan iborat.[4,5]

3. Sog'liqni saqlashda sun'iy intellekt. Sun'iy intellekt sog'liqni saqlash sohasida sezilarli yutuqlarga erishdi, diagnostikadan tortib dori-darmonlarni kashf qilishgacha bo'lgan turli xil ilovalar. Ba'zi taniqli sog'liqni saqlash SI xizmatlariga quyidagilar kiradi:

a) Tibbiy tasvirlash va diagnostika. Misol uchun Aidoc, Zebra Medical Vision va PathAllarni keltirish mumkin. Bularning maqsadi diagnostika aniqligini oshirish, jarayonni tezlashtirish va inson xatolarini kamaytirish. Ushbu tizimlar SI algoritmlari kasalliklar yoki tibbiy sharoitlarni ko'rsatishi mumkin bo'lgan naqsh va anormalliklarni aniqlash uchun rentgen nurlari yoki MRI kabi tibbiy tasvirlarni tahlil qiladi. Bu xizmatning ustun tomonlari yaxshilangan diagnostika aniqligi va erta aniqlash, tibbiyot xodimlari uchun ish yukining kamayishi va shaxsiylashtirilgan davolash rejalarini. Kamchiliklari o'quv ma'lumotlarining sifatiga bog'liqlik, algoritmik tarafkashliklar va axloqiy tashvishlar va SIga potentsial haddan tashqari bog'liqlikni aytish mumkin. Bu esainson tajribasining pasayishiga olib keladi.

b) Dori vositalarini topish va ishlab chiqish. Bularga DeepMind’s AlphaFold, Atomwise va Insilico Medicinlarni misol qilishimiz mumkin. Buning maqsadi dori vositalarini topish jarayonini tezlashtirish, xarajatlarni kamaytirish va yangi dori vositalarining muvaffaqiyat darajasini oshirish. Bular SI algoritmlari potentsial dori nomzodlarini aniqlash, ularning samaradorligini bashorat qilish va kimyoviy tuzilmalarini optimallashtirish uchun katta ma’lumotlar to’plamini tahlil qiladi.[6,7]

Ushbu texnologiyaning afzalliklari tezroq va samaraliroq dori topish jarayoni, farmatsevtika kompaniyalari va bemorlar uchun xarajatlarni kamaytirish va noyob yoki murakkab kasalliklarni davolashning yangi usullarini kashf qilish imkoniyatlaridan iborat. Kamchiliklari sifatida murakkab biologik tizimlar haqida cheklangan tushuncha, intellektual mulk va ma’lumotlarni almashish bilan bog’liq muammolar va SI tomonidan boshqariladigan dori vositalarini ishlab chiqishda tartibga solish muammolarini keltirish mumkin.

MUHOKAMA

1-jadval. Sun’iy intellekt texnologiyalari tahlili

Foydalaniladigan sohasi	Faoliyati	Misollar	Afzalliklari	Kamchiliklari
Tabiiy tilni qayta ishlash	Chatbotlar va virtual yordamchilar	Siri, Alexa, Google Assistant va ChatGPT	- Foydalanuvchi tajribasi va mijozlarni qo’llab-quvvatlashni yaxshilash - Nogironligi bo’lgan odamlarning foydalanish imkoniyatini yaxshilash - Takroriy vazifalarni avtomatlashtirish orqali vaqtni tejash	- Murakkab yoki noaniq so’rovlarni tushunish cheklangan - Ma’lumotlarni to’plash va ishlatish bilan bog’liq maxfiylik muammolari
	Mashina tarjimasi (Machine Translation)	Google Translate, DeepL va Microsoft Translator	- Global aloqa va hamkorlikni osonlashtiradi - Inson tarjimonlariga bo’lgan ehtiyojni kamaytiradi - SI yutuqlari orqali doimiy takomillashtirish	- Idiomatik iboralar yoki murakkab jumlar uchun noto’g’ri tarjimalar - Kontekstga oid tarjimalar bilan kurashishi mumkin
Kompyuter Vision	Yuzni tanib olish	Clearview AI, Amazon Rekognition va Microsoft Azure Face API	- Kengaytirilgan xavfsizlik va kuzatuv imkoniyatlari - Oddiyashtirilgan autentifikatsiya jarayonlari - Shaxsiylashtirilgan marketing va reklama	- Maxfiylik muammolari va mumkin bo’lgan noto’g’ri foydalanish - Yuzni tanib olish algoritmlaridagi noxushliklar

				- Huquqiy va axloqiy muammolar
	Tasvir va video tahlili	Google Cloud Vision API, IBM Watson Visual Recognition va OpenCV	- Turli sohalarda samaradorlik va aniqlik yaxshilandi - Ma'lumotlarga asoslangan qarorlar qabul qilishni osonlashtiradi - SI tomonidan yaratilgan kontent orqali ijodiy jarayonlarni yaxshilaydi	- Yuqori hisoblash kuchi talablari - Algoritmik natijalardagi potentsial noaniqliklar
Sog'liqni saqlash	Tibbiy tasvirlash va diagnostika	Aidoc, Zebra Medical Vision va PathAI	- Yaxshilangan diagnostika aniqligi va erta aniqlash - Tibbiyot xodimlari uchun ish yukining kamayishi - Shaxsiylashtirilgan davolash rejaları	- O'quv ma'lumotlarining sifatiga bog'liqlik - Algoritmik tarafkashliklar va axloqiy tashvishlar - SIga potentsial haddan tashqari bog'liqlik, bu inson tajribasining pasayishiga olib keladi
	Dori vositalarini topish va ishlab chiqish	DeepMind's AlphaFold, Atomwise va Insilico Medicine	- Tezroq va samaraliroq dori topish jarayoni - Farmatsevtika kompaniyalari va bemorlar uchun xarajatlarni kamaytirish - Noyob yoki murakkab kasalliklarni davolashning yangi usullarini kashf qilish imkoniyati	- Murakkab biologik tizimlar haqida cheklangan tushuncha - Intellektual mulk va ma'lumotlarni almashish bilan bog'liq muammolar - SI tomonidan boshqariladigan dori vositalarini ishlab chiqishda tartibga solish muammolari

XULOSA

Sun'iy intellekt hayotimizning turli jabhalariga kirib bordi, innovatsion yechimlarni taklif qildi va sanoatni o'zgartirdi. Tabiiy tilni qayta ishlash, kompyuterni vision, avtonom transport vositalari va sog'liqni saqlash ilovalari kabi sun'iy intellekt xizmatlari sezilarli yutuqlarga erishgan bo'lsada, ular ham o'zlarining muammolari va tashvishlari bilan birga keladi. Sun'iy intellekt texnologiyasi rivojlanishda davom etar ekan, uning foydasini olish va tegishli axloqiy, huquqiy va ijtimoiy oqibatlarini hal qilish o'rtasida muvozanatni saqlash juda muhimdir.

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EXPLORING INNOVATIVE APPROACHES IN TEACHING SEWING TO STUDENTS

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ABSTRACT

This article delves into the realm of sewing education, exploring new methods that have emerged to enhance the teaching and learning experience for students. By adhering to the international IMRAD requirements, we examine the Introduction, Methods, Results, and Discussion pertaining to innovative approaches in sewing instruction. This research aims to shed light on how these new techniques can revolutionize the way sewing is taught and foster a lifelong love for this timeless craft.

Keywords: *sewing, design, students, working, creativity, styles.*

1. Introduction:

Sewing is an invaluable skill that not only allows individuals to express their creativity but also equips them with practical knowledge in a world where fast fashion dominates. Traditional methods of teaching sewing have often relied on rote memorization and repetitive practice. However, as technology advances and educational approaches evolve, it becomes essential to explore innovative teaching methods that engage students and nurture their passion for this craft.

In principal, the approach to task and lesson design of Internet-based reading materials should follow the same guidelines suggested in the literature on reading methodology.

2. Methods:

To identify new methods of teaching sewing, a comprehensive literature review was conducted involving studies from various educational institutions worldwide. The criteria for selection included innovative teaching techniques that incorporate modern technology, interactive learning platforms, collaboration, and hands-on experiences.

Based on the teachers' daily recorded feedback, they were usually able to successfully achieve their course goals. They chose to use a variety of guiding strategies when introducing complex concepts to the students.

Many renowned researchers and scholars have largely discussed the contribution of education system or teaching style to students' intellectual skills, but little attention has been given to the influences of a leadership style on students' skills. Our study fills this gap by exploring the impacts of both leadership style and teaching style on the development of intellectual skills in the students. Similarly, this study is an exception in the literature because it aims at elaborating on the mediating influences of the educational environment between teaching style and leadership style.

Through informal observations and evaluations we observed that tactile feedback was very effective and provided superior interactive experience. We also discovered that sleeve provides most natural, neutral and socially acceptable user experience.

3. Results:

The analysis revealed several emerging approaches in teaching sewing:

a) Digital platforms: Online classes and tutorials utilizing multimedia resources such as videos and interactive diagrams offer students an engaging way to learn at their own pace.

b) Project-based learning: Assigning real-life projects enables students to apply theoretical knowledge practically while fostering problem-solving skills.

c) Collaborative learning: Group activities encourage peer-to-peer interaction, allowing students to learn from each other's mistakes, share ideas, and develop teamwork skills.

d) Use of augmented reality (AR): AR applications can provide virtual environments where students can experiment with designs before executing them physically.

e) Tailored feedback: Incorporating personalized feedback helps students understand their strengths and weaknesses while encouraging growth and improvement.

4. Discussion:

The results demonstrate the potential of these new teaching methods to transform sewing education. By adapting to students' diverse learning styles, these approaches can enhance engagement, creativity, and critical thinking. The use of digital platforms and AR technology also aligns with the current generation's affinity for technology, making sewing education more accessible and appealing.

Moreover, project-based learning and collaborative activities foster a sense of community and teamwork among students. By working together to solve problems and share ideas, students develop practical skills while building their confidence in sewing.

While these innovative methods offer promising opportunities for teaching sewing, it is essential to recognize the importance of maintaining a balance between traditional techniques and modern approaches. Traditional methods should not be disregarded entirely, as they provide a solid foundation in fundamental sewing techniques.

Conclusion:

Incorporating new methods in teaching sewing can revolutionize the way this craft is learned. By embracing digital platforms, project-based learning, collaboration, augmented reality, and tailored feedback, educators can foster a vibrant learning environment that nurtures students' creativity while equipping them with valuable skills for the future.

As we move forward in an ever-evolving world, it is crucial to adapt our teaching strategies to meet the needs of modern learners. By embracing innovation in sewing education, we empower students with the tools they need to explore their passion for this timeless craft and embark on a lifelong journey of creativity.

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MAKTAB O'QUVCHILARINING MATEMATIKA FANIDA GEOGEBRA ANIMATSIYALARIDAN FOYDALANISHNING SAMARADORLIGI

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***Annotatsiya:** GeoGebra matematikani o'rganishda keng tarqalgan dinamik tahrirlovchi dasturdir. Bu dastur matematikaning turli konseptlarini o'rganishda vizual effektlarni ishlatadi va animatsiyalar yordamida grafiklarni va shakllarni o'zgartirishga imkon beradi. Animatsiyalar yordamida talabalar o'zlarini tasavvur qilish va matematik asoslar orasida bog'lanishni o'rganishadi. Bunday vizual ta'sir talabalar o'rtasida matematik bilimlarni tushunish qobiliyatini oshirib, ularga amaliy va konseptual jihatdan tasavvur qilishga yordam beradi. Bu maqolada, matematika fanida GeoGebra animatsiyalaridan foydalanishning talabalar va o'qituvchilar uchun samaradorligi va ta'siri haqida ilmiy tahlilni ko'ramiz.*

***Kalit so'zlar:** GeoGebra, matematikani o'qish va o'qitish, animatsiya*

ЭФФЕКТИВНОСТЬ ИСПОЛЬЗОВАНИЯ АНИМАЦИЙ GEOGEBRA В ОБУЧЕНИИ МАТЕМАТИКЕ ДЛЯ ШКОЛЬНЫХ УЧЕНИКОВ

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***Аннотация:** GeoGebra широко используемая динамическая редакционная система в обучении математике. Эта программа использует визуальные эффекты и анимацию для изучения различных математических концепций, позволяя изменять графики и фигуры с помощью анимации. Анимации помогают учащимся представить себе и понять взаимосвязь между математическими основами. Такое визуальное воздействие улучшает их способность понимать математические науки и способствует более глубокому пониманию как*

практических, так и концептуальных аспектов. В данной статье рассматривается научный анализ эффективности и воздействия использования анимации GeoGebra в обучении математике для учащихся и преподавателей.

Ключевые слова: GeoGebra, обучение и преподавание математики, анимация.

THE EFFECTIVENESS OF USING GEOGEBRA ANIMATIONS IN MATHEMATICS LEARNING FOR SCHOOL STUDENTS

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Abstract: *GeoGebra is a widely used dynamic editing software in learning mathematics. This program utilizes visual effects and animations to facilitate the understanding of various mathematical concepts, allowing for the manipulation of graphs and shapes through animation. Through animations, students are able to visualize themselves and learn to connect between mathematical principles. Such visual impact enhances students' ability to comprehend mathematical sciences among them, aiding both practical and conceptual understanding. In this article, we explore the effectiveness and impact of utilizing GeoGebra animations in the teaching and learning of mathematics for students and educators.*

Keywords: *GeoGebra, teaching and learning mathematics, animation.*

KIRISH.

Raqamli ta'lim asrida texnologiya ta'limning integral qismi bo'lib, talabalarning o'rganish va o'qituvchilarining o'qitish usullarini o'zgartirishga majbur qilmoqda. Har xil ta'lim vositalari ichida GeoGebra dasturi algebra, geometriya, va statistikani mukammal birlashtiruvchi, kuchli dastur sifatida ajralib turadi. GeoGebra tasavvur qilish ko'nikmalarini rivojlantiradi va abstraktdan aniq fikrlashga o'tishni ta'minlaydi. GeoGebra dasturidan foydalanadigan talabalar algebraik tushunchalarni tushunishda yaxshi natijalarga erishishmoqda va ularni amaliy hayotga qo'llashlarida qiyinchilik tug'dirmayapti.

Dinamik dasturi bilan matematikani o'rganish va o'qitish

GeoGebra talabalarni matematikaga qiziqtirish va matematik konseptlarni chuqurroq tushunishda muhim omil hisoblanib, o'qituvchilar hamda o'qituvchilarni

informatika fani bilan integratsiyalangan holda darsni olib borishda yordam beradi. GeoGebra o'quvchilarga matematik g'oyalarni o'rganish va tahlil qilish imkoniyatini beradi. Shuningdek, geometriya ta'limida GeoGebradan foydalanish orqali fanni oson o'rganishni rag'batlantiradi va o'quvchilarni o'rganish jarayonida faol ishtirok qilishga undaydi. Ta'lim oluvchilar geometriya fanini o'rganishga motivatsiya va qiziqish darajasini oshiradilar, bu esa o'rganish natijalarini yaxshilaydi. Shu sababli ilm-fan olamidagi izlanuvchilar va o'qituvchilar GeoGebra dasturi maktablarda matematikani o'rganish va o'qitishda o'quvchilarga psixologik va pedagogik ta'sirining ahamiyati katta ekanligiga e'tibor qaratganlar.

ADABIYOTLAR TAHLILI:

Hozirgi kunda ta'lim tizimi zamonaviy axborot va kommunikatsion texnologiyalar bilan uzviy bog'liqligi va bunday vositalardan o'quv-tarbiya jarayonida samarali foydalanishga katta e'tibor berishga qaratilayotganligi ta'lim tizimida zamon talablariga javob beradigan yangi o'quv-pedagogik dasturlar yaratish masalasini qo'yimoqda. Shunga ko'ra algebra va geometriya fanlarida ham bir nechta kompyuter dasturlaridan foydalanib kelinmoqda. Shulardan eng foydalilaridan biri GeoGebra dasturiy ta'minoti bo'lib, u matematika o'rganish va o'qitishda interfaol dars o'tishda samarali natijalarni bera oladi [1].

Matematik tushunchalarni tasavvur qilishda, o'quvchilarning ongli ravishda muammoni tushunishda GeoGebraning roli ahamiyatli. Chunki GeoGebra animatsiyalari abstrakt matematik tushunchalarni dinamik tasvirlarga aylantirishda muhim ahamiyatga ega. GeoGebra animatsiyalari ta'lim o'qituvchilarga interaktiv tasvirlar yaratish imkonini beradi va nazariy tushunchalarni amaliy "ko'ra olish"ni amalga oshiradi [2]. Matematika fanini kompyuter dasturlari bilan integratsiyalab o'qitish va o'rganishda ko'plab tadqiqotlar natijalariga ko'ra GeoGebra animatsiyalari ko'plab qiyin matematik konseptlarni tushunishda vizual va dinamik ta'lim tajribasi yaratish orqali o'quvchilar tushunchalarini yaxshilashga yordam beradi.

Matematika fanini o'qitish jarayonida ta'lim oluvchilarning algebraik va geometrik ko'nikma va malakalarini rivojlantirish muammosini tadqiq etgan Emaikwu, S. O., Iji, C. O., & Abari, M. T. va Doğan, M., & İçel, R. ^{xv}lar o'quvchilarda tasavvur qilish qobiliyatini rivojlantirishning muhim omillaridan biri animatsiya bo'lib, maktab yoshdagi bolalar harakatni tez eslab qolishiga asoslanib, o'quv faoliyati mehnat va o'yin faoliyatlari bilan o'zaro aloqadorlikda o'quvchilarda ko'nikma va malakalarni shakllantirish jarayonida yetakchi o'rinda bo'lishini ta'kidlaydi. Bunda esa GeoGebra animatsiyalaridan foydalanish oson va qulay.

Matematikani o'qitish jarayonida axborot–kommunikatsiya texnologiyalaridan foydalanish, maxsus dasturiy tizimlarni joriy etish masalalari Enger, A. J., & Searle, D. Galbraith, P., & Haines, C. ^{xv} tomonidan tadqiq etilgan.

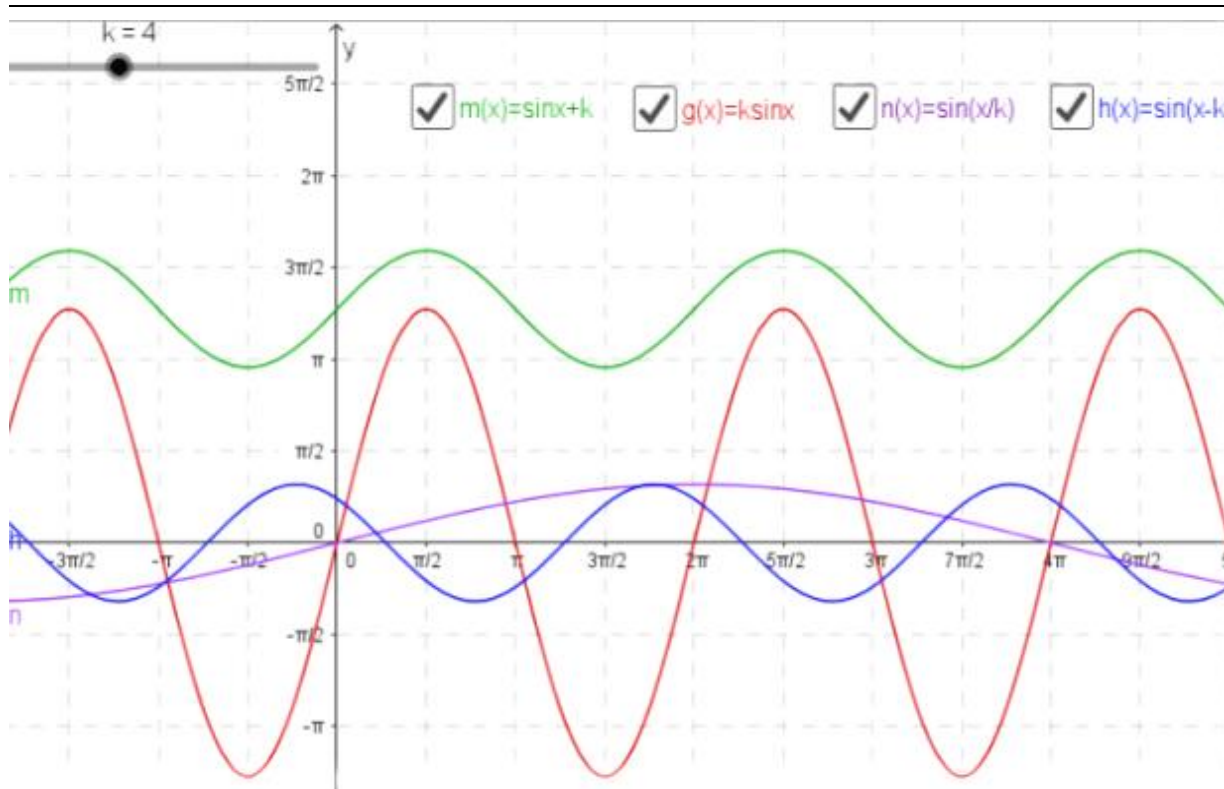
TADQIQOT METODOLOGIYASI.

Maqolada kompyuter dasturi yordamida umumta'lim maktablari o'quvchilariga matematika fanini integrallab o'rgatish muhokama qilinadi. Xususan, shunday turdagi dasturlardan biri bo'lgan Geogebra dasturining animatsiyalardan foydalanish metodik xususiyatlari tavsiflanadi. Shu dastur yordamida fanni o'zlashtirish va funksiyalarning grafiklari hamda grafik chizmalarni tasavvurda shakllantira olish ko'nikmalari tahlil qilinadi.

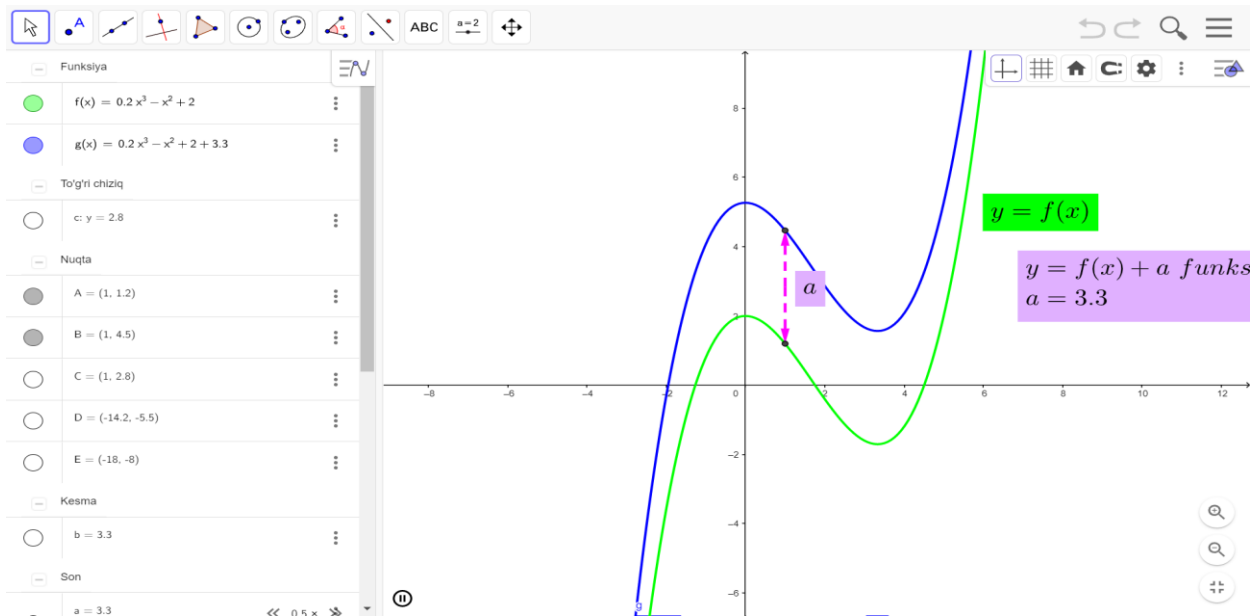
TAHLILLAR VA NATIJALAR.

Hozirgi zamonaviy kompyuterlar ta'lim tizimining barcha sohalariga jadal sur'atlar bilan kirib kelganligi, ular imkoniyatlaridan unumli foydalangan holda o'quvchilarning o'quv materiallarini o'zlashtirish samaradorligini oshirishga e'tibor berish kerakligini ko'rsatmoqda. Shu jumladan, Lepmann T., Albre J., larning tadqiqot ishlarida zamonaviy axborot texnologiyalariga asoslangan o'quv-tarbiya jarayonini rivojlantirish uchun o'qituvchi-o'quvchi-kompyuter uchligining o'quv faoliyatidagi o'rni va bosqichlarini tahlil qilish zarur ekanligi ta'kidlangan [3].

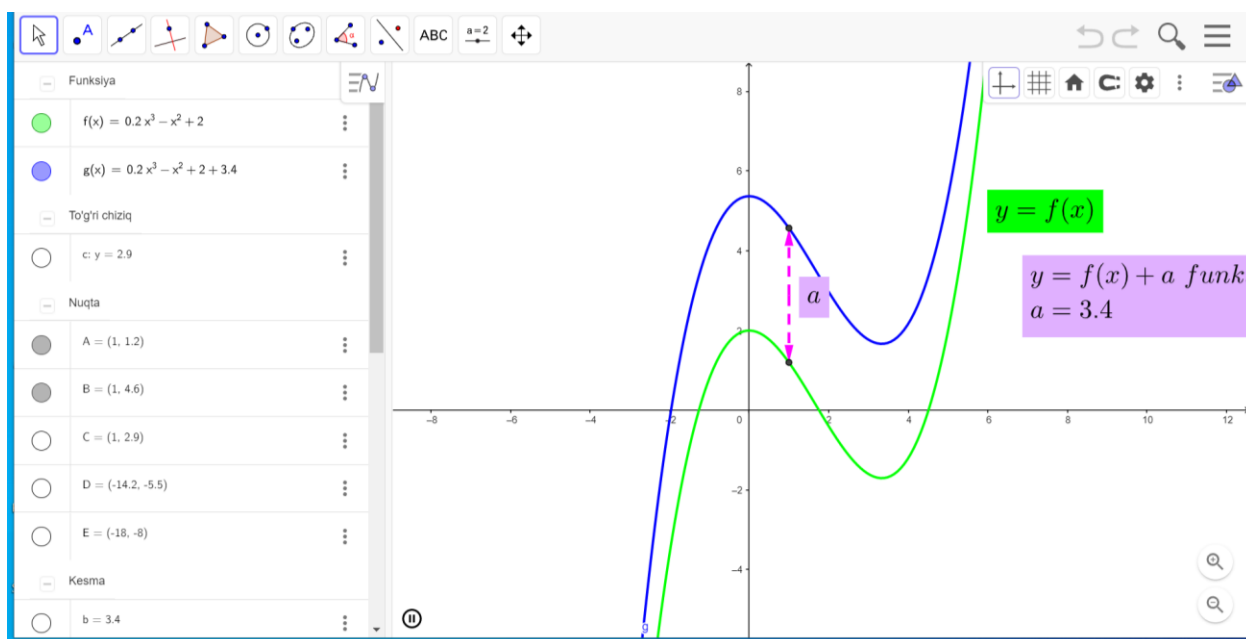
Matematika fanini o'qitishda yangi texnologiyalardan foydalanish o'qitish jarayonini o'zgartiradi va o'quvchilarning o'zini-o'zi rivojlantirishiga imkon beradi. GeoGebra dasturi shu maqsadda foydalaniladigan dinamik tahrirlovchi dastur sifatida bilinadi. Matematika fanini GeoGebra dasturi yordamida o'qitishning an'anaviy o'qitish metodikasiga nisbatan samaradorligi ko'p yillardan beri kuzatib kelinmoqda. Ayniqsa animatsiyalar o'quvchilarga matematik javoblarni amalda ko'rishga imkon beradi, ularga tushunarsiz bo'lgan qiyin konseptlarni tushunishga ham yordam beradi. Misol uchun, funksiyaning grafigini parameterlarni o'zgartirish orqali tasvirlash, funksiyalar va ularning grafiklari orasidagi munosabatlarni tushunishni oshiradi (1-rasm va 2-a, b rasmlar). GeoGebraning grafik tasvirlari o'quvchilarga abstrakt matematik tushunchalarni tasavvur qilishda yordam beradi. Grafiklarda va shakllarda o'zgarishlarni real vaqtda kuzatib borish orqali o'quvchilar matematik g'oyalarni chuqur tushunishni boshlaydi (3-a, b rasmlar).



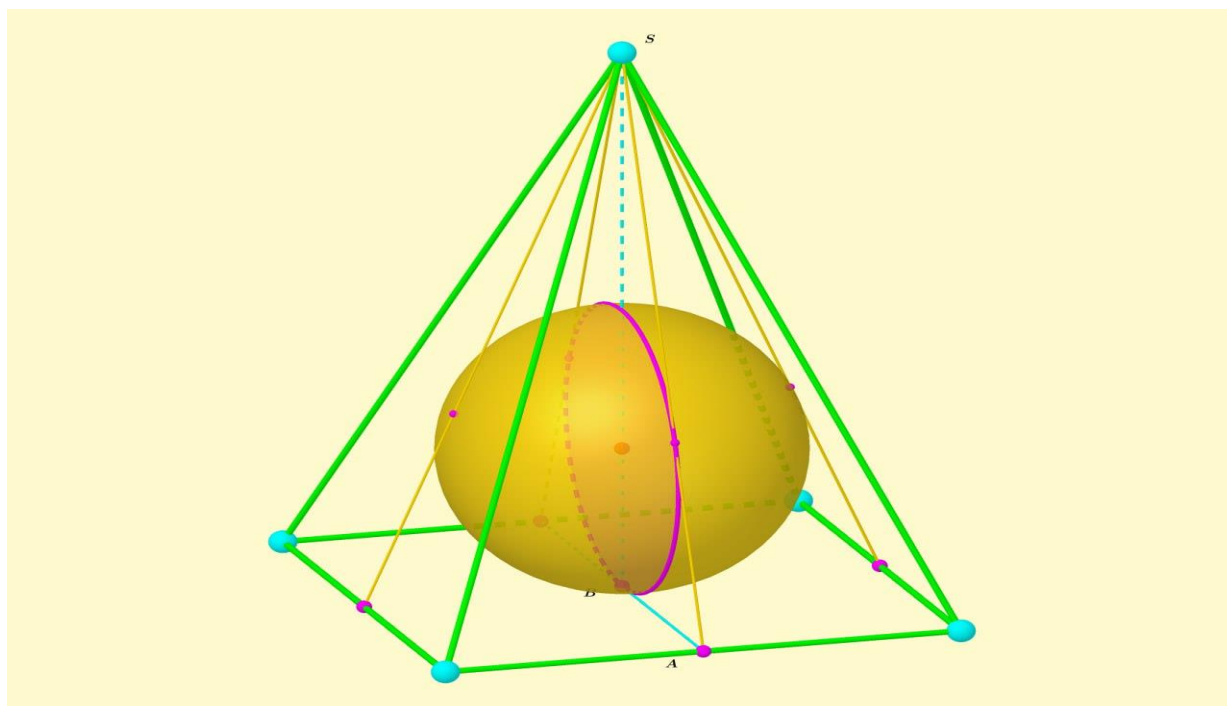
1-rasm. $y = \sin x$ funksiya grafigining parametrlarining o'zgarishi.



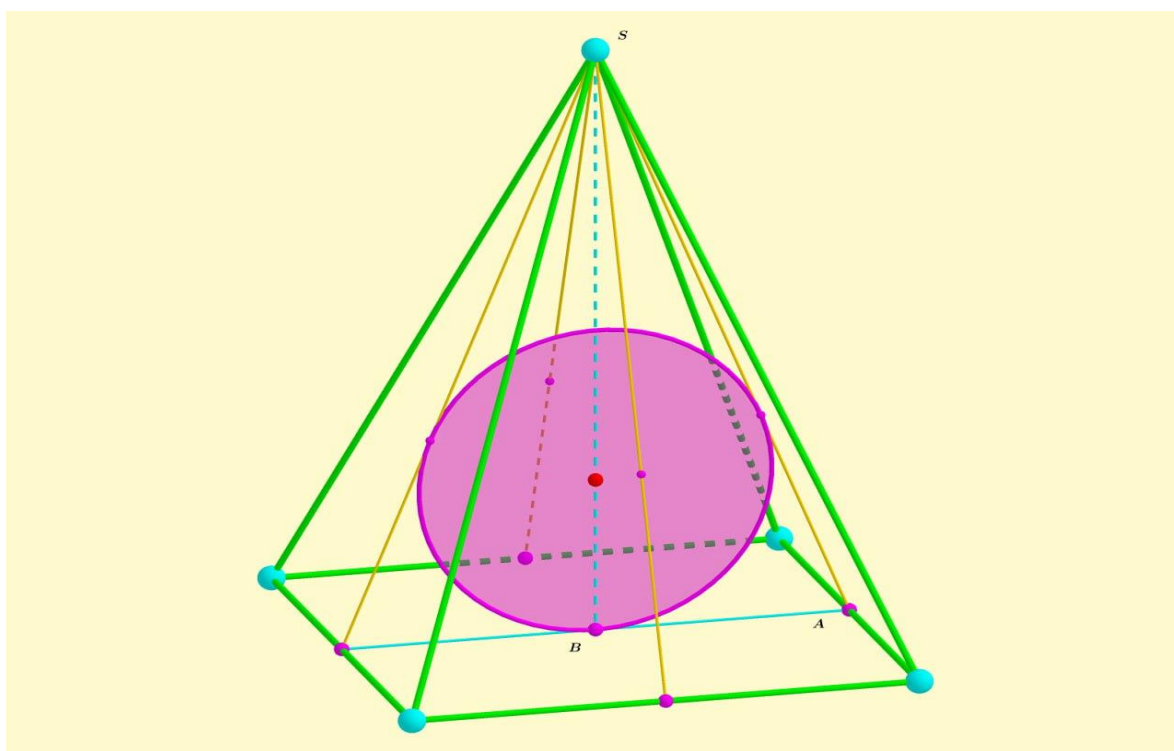
2a-rasm. $y=f(x)$ va $y=f(x)+a$ funksiya $a=3.3$



2b-rasm. $y=f(x)$ va $y=f(x)+a$ funksiya $a=3.4$



3-a rasm. Piramidaga ichki chizilgan shar



3-b rasm. Piramidaga ichki chizilgan sharning apofemasi bo'yicha kesimi.

Matematika fanini o'qitish – o'rganishda GeoGebraning hissasi

Umumta'lim maktablarida asosan o'qituvchining dars o'tishi o'quvchilarga axborot berishi, o'quvchilarning qabul qilayotgan bilimni to'plashi va xotirasida saqlashi bilan belgilanib, u an'anaviy metod hisoblanadi.

Velichova fikriga ko'ra, "bilim" tushunchasining asl mohiyati xotirada saqlanuvchi axborot sifatida qaraladi [4].

O'quvchilar esa dars jarayonida matematikada ayniqsa harakatni yaxshi eslab qoladilar. Shunga ko'ra GeoGebra animatsiyalari yordamida darsni olib borsa, o'quvchilar o'rganilgan dars materiallarini xotirasida yaxshi eslab qoladi va oson o'zlashtiradi. Buni 3-a, b rasmlar orqali ham yaqqol ko'rish mumkin, chunki stereometriya bo'limida asosan boladan tasavvur qilish qobiliyati tekshiriladi.

Ta'limda texnologiyalardan foydalanishning umumiy xarakteristikasi ta'limning reproduktiv darajasi sifati misolida qaraladi. Ma'lumki, reproduktiv ta'lim o'quvchilarning yod olingan va o'zlashtirgan bilimlariga tayanadi.

Geogebra imkoniyatlari algebraik va geometrik tushunchalar bilan uyg'unlashib, matematik isbotlashlar va munosabatlarni aniqlashda eng maqbul dasturlardan biri bo'lib, bunda o'quvchilarning ijodiy fikrlash qobiliyatlarini rivojlantirishga yordam beradi. Misol uchun Geogebra'dagi interaktiv 3D shakllari va yuzalarini tasavvur qilish qog'ozdagi statik 2D rasmlardan ko'ra tushunarliroq. Buni

3-a, b rasmlarda ko'rsatilganidek ko'pyoqlarga ichki chizilgan shakllarning kesim yuzalarini tasavvur qilish, tushunish hamda muammoni qanday hal qilish masalalari oson o'rganiladi.

Qisqa qilib aytganda, GeoGebra dasturidagi animatsiyalardan foydalanish matematika fanida o'rganish jarayonini samarali usulga aylantiradi. Animatsiyalar yordamida talabalar o'ziga xos tushuncha olishadi va shunday qilib, o'rganish natijalari yaxshilanadi. O'quvchilar va o'qituvchilar animatsiyalardan foydalanish orqali matematika fanida o'rganish jarayonini o'z-o'zidan yashirin, qiziqarli va tushunadigan qilishadi. GeoGebra animatsiyalari matematika ta'limida innovatsion yondashuv bo'lib, talabalar va o'qituvchilarni matematika fanini o'rganish va o'qitishda yaratuvchi va qiziqarli usul sifatida qo'llashga imkon beradi.

XULOSA VA TAVSIYALAR

Animatsiyalar matematika fanini o'rganish jarayonida o'quvchilarning tushunchalarini kuchaytirishda ahamiyatli rol o'ynaydi. GeoGebra dasturida yaratilgan animatsiyalar, abstrakt matematik konseptlarni vizual va dinamik shaklda tasvirlash imkonini beradi. Animatsiyalarni o'rganish jarayonida o'quvchilar matematika bilan bog'liq tushunchalarini o'rganishga qiziqishlarini oshirishadi. Animatsiyalar ta'limda e'tiborli va tushunarsiz ma'lumotlarni tushunishga yordam beradi va o'quvchilar tezroq o'rganishga mavaffaq bo'ladilar.

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