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## AMERICAN NOVELLA IN S.FITZGERALD WORKS

Master of Al Bukhary university

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**Abstract.** *F. Scott Fitzgerald, a prominent American author of the 20th century, is best known for his novels such as "The Great Gatsby" and "Tender Is the Night." However, he also wrote several novellas that are worth exploring. One of his notable novellas is "The Diamond as Big as the Ritz," which tells the story of a young man who discovers a family with a secret that leads to unimaginable wealth. Another well-known novella by Fitzgerald is "May Day," which is set in New York City during the post-World War I era and explores themes of class struggle and disillusionment. These novellas showcase Fitzgerald's skill in capturing the essence of the American experience and are essential reads for fans of his work.*

**Keywords:** *Fitzgerald, fantastic, novel, Gatsby*

### Introduction

Despite the tumultuous nature of his life experiences and a life filled with the unexpected, Francis Scott Fitzgerald rose above all to become one of the greatest ever authors ever in English literature due to his unique style and techniques that attracted people towards his writings and endeared them to him. He redefined and laid a foundation for a new writing style. Most of his writings had been a crucial reflection of his actual true-life encounters and experiences. He presented them with an allegorical quality that made them pleasing and accurate. His novels and stories often portrayed aspects of mental illnesses, marital problems, materialism, and alcoholism that are minor plots portrayed clearly. He often relayed his message through similes, rhetoric, diction, and also syntax.





Fitzgerald's ability to present and portray character traits while also using literacy devices effectively made his work unique. This study examines the style and literacy depiction of Fitzgerald and portrays doer the rest of his life and the narratives written by him.

### **Style**

The beloved nature of the work of Fitzgerald also originates from the high intellect that he portrayed in his works. He had once remarked that " the test of a first rate intelligence is the ability to hold two opposed ideas in mind at the same time, and still retain the ability to function." (Antolin, 112). This effect was portrayed in his works, including *The Great Gatsby*, *Tender is the Night*, and also the unfinished novel *The Last Tycoon*. The double vision intellect perspective portrays itself in most of Fitzgerald's work and makes it stand out. He had a way of enabling the reader to be emotionally attached in a sensual ecstasy yet still retain the ability to stand back and objectively criticize it on an intellectual level. Throughout his career and writings, Fitzgerald is also known to have expressed and grown this polarity increasing, developing it over subsequent books, and by the time of his last novel, there was a great difference between it and the first novel.

The major themes in the works of Fitzgerald portrayed quest for resolving conflicts or tensions where the ideas or character embodied in on the major character ( the protagonist) overshadowed the other characters and wins. This is seen throughout as in the side of Paradise, Amory Blaine is portrayed as a youthful hero with good looks and intelligence on a quest. In *The Beautiful and Damned*, Anthony Patch has blessed whit a beautiful wife, a multimillionaire grandfather, and is youthful. Lastly, in the *Great Gatsby*, Jay Gatsby possesses power had attained new heights of wealth, and has good looks. Fitzgerald had a knack for portraying some specific traits in his works. These were "good looks, physical beauty, youthfulness, wealth and also romance" (Antolin, 114). These



were all opposed to age, ugliness, lost potential, and also poverty. These conflicts play a significant role in the development of his plots and how his fictional narratives play out.

Fitzgerald's writings also differed extensively in content and popularity. This is as evidenced from his writings in the novels to his articles in the Saturday Evening Post. This was way below his status as a writer and made him ashamed to write for. One of his downfalls was marked by his collection *I'd Die for you* portrays a fascinating narrative with multiple stabbings at the same story. It was written at a time when Fitzgerald was at his lowest times, near the end of his life with "his wife institutionalized and the flashy lifestyle he had, having caught up to his drying up pocket." (Breitwieser, 363) The stories had differed from what he had been initially known for as they felt "hasty and flawed." This was against the wants of the readers during the depression that wanted cheerful tales. The earlier tales he had written had been filled with satire that had clearly depicted his talent.

His earliest story *I.O.U* had even been run on multiple platforms, including the New Yorker and even Yale University, and he paid quite handsomely for it.

Fitzgerald's later years were in shambles, and his writing lost the standard he had initially raised himself to. Also, many of his fictional tales featured strong young, and resourced female characters that were a rising popular figure in the 20th century. This included nurses who played subservient roles as flirtatious women who were in pursuit of eligible men. As seen in his "Offside play." "Fitzgerald captures a young woman who is attracted to a young football star at Yale after being let down by her fiancée." (Breitwieser, 370) Despite the hugely entertaining storyline and appeal to audiences, it was not the standard that appealed to the Saturday Evening Post. Many of his others stories and narratives would depict narrations marred with painful endings. Consequently, his journey to Hollywood too did not materialize as his attempts to incorporate action-packed scenes into his style only backfired. The struggles that Fitzgerald went through in



support of his affluent lifestyle represent a struggling writer in his later years, a sharp contrast to his earlier years when his works sold off shelves in record-breaking numbers. This would also replicate after he died.

Many authors have clearly seen a divide between the early literary style that Fitzgerald portrayed and that of his later works. According to O'Toole (n.p.), the art and career-defining work of Fitzgerald is divided into two specific extremes. This is evident in the *Great Gatsby*, where he brought the two extremes together to light up the literature universe with one of the greatest novels of all time. The intellectual honesty that Fitzgerald portrays in *Gatsby* points out a core aspect that he has all along pushed against. He prompts and insists that money has its limitations. The initial view of money being a means of perfection was a perspective that he learned to later on dismiss. He had for a long time been an author that appealed to the masses by separating the power of money from the destructive power it had on the personalities of people. It was as if the moneyed autocracy he craved in his real-life had spilled over to his literary works.

Even his work, *Tender Is the Night*, where he was supposedly expected to reflect on the uncertainty and instability of the rich, who for him were the elite class, he still adorned them, attributing courage, honor, and inner security to them. The alluring force of money had forced him into shifting his definition of the aristocracy to the extent that it became to him a moral rather than a material state. O'Toole (n.p.) insists that his earlier novels might have had a little of this effect, but it is in his later works that the moral corruption got out of his and. His works later showed that he was a writer who had been gifted with a satiric eye but could not sustain it. His later works are filled with the display of flaws that are simply described as "carelessness and illiteracies" despite his unfailing ear for language that best makes fiction worthwhile. Fitzgerald's works would have been itself entirely a pacesetter in American fiction had he maintained the consistency of the force he had initially.



### **The Great Gatsby**

It would not be appropriate to analyze Fitzgerald's literature style and work without analyzing *The Great Gatsby* and the influence it has on literature. Fitzgerald's work is firmly cemented in his greatest work, *The Great Gatsby*. The novel was the most legendary of his works, and even before its completion, his publisher had known that it would be one of the greatest novels in shaping literature. The novel explores a war between the old rich and the new self-made riches that was the definition of the American dream. It explores an angle of the American dream that only a few have the courage to explore (Fitzgerald). However, this was marred by the rumors of precarious activities, including the possibility of illegal activities.

It is an aspect that the old resistance used to justify the illegitimacy of the new rich. There is a Great War between the desire to attain change versus resistance to change. Fitzgerald is able to present them both in a manner that makes them both appealing, and the audience wants to side with both. Other great themes that are seen throughout the book include the myths of social class mobility, societal gender expectations, excess riches, and also reckless youth.

The novel's greatest achievement was Fitzgerald's ability to consummate and incorporate all the aspects that were the major topics of the century, including sex, cars, alcohol, the stock market, the flappers, and gangsters (Tredell). It ignores the poetic form of narration, and it adopts a prose form, a form that shapes and dictates how writing would later change to adopt from the old poetic style. This form is nonetheless capable of capturing the reader, luring them in, and not even a single line is deemed as inappropriate or not containing a proper construct. It all shapes the novels into one of the finest ever written prose forms. The events and the storytelling also reflect on a timeless aspect. It reflects on a still culture and conventional practices that are still evident today, reflecting how timeless *The Great Gatsby* is and will continue to be almost a century later.



## Conclusion

Overly, the works of Fitzgerald had a significant influence over writing, and the authors of this age are greatly influenced by him. His unique style led to writers seeking to try and adapt to it as to appeal to the masses. History still recognizes his work as one of the greatest ever novels. He brought out a unique combination of fiction, narration, language, and style to develop one of the greatest ever styles that for years will continue been and serve as his greatest achievements. However, little research has been conducted over the years to establish his contributions to literature and the impact that he has had. More research would help understand and comprehend what made his style unique and what improvement can be done to revive the genre of fictional narration that has become almost phased out over the years.

## References

1. [The Saturday Evening Post](#) (англ.). archive. Дата обращения: 2012-26-12.
2. The Saturday Evening Post. Дата обращения: 26 декабря 2021. [Архивировано](#) 26 декабря 2021 года.
3. Trimalchio: An Early Version of The Great Gatsby (2000) | [ISBN 9780521402378](#)
4. The Great Gatsby: An Edition of the Manuscript (2018) | [ISBN 9781108426800](#)
5. <https://akniga.org/author/%D0%A4%D0%B8%D1%86%D0%B4%D0%B6%D0%B5%D1%80%D0%>



## РОЛЬ ДОШКОЛЬНОЕ ОБРАЗОВАНИЕ В ЖИЗНИ ЧЕЛОВЕКА

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**Аннотация:** Всем известно, что ранний возраст – это самый чувствительный период в жизни человека. Он характеризуется быстрыми изменениями в физическом, языковом, социальном и эмоциональном развитии. В данной статье рассматриваются роль дошкольного образования в жизни человека.

**Ключевые слова:** дошкольное образование, знания, умения и навыки, мышление, память, внимание, воображение и речь.

### **Введение**

Дошкольное образование было и остаётся одним из самых важных звеньев в цепи образовательных этапов социальной жизни в целом, а также в жизни каждого отдельного человека [1].

Фундамент всей образовательной системы является дошкольное образование, так как именно здесь закладываются основы личности, определяющие характер будущего развития ребенка. На этапе дошкольного возраста необходимо создать условия для максимального раскрытия индивидуального возрастного потенциала ребенка, необходимо создать условия для развития функционально грамотной личности – человека, способного решать любые жизненные задачи (проблемы), используя для этого приобретаемые в течение всей жизни знания, умения и навыки.



Ребёнок должен получить право стать субъектом собственной жизнедеятельности, увидеть свой второй потенциал, поверить в свои силы, научиться быть успешным в деятельности. Это в значительной мере облегчит ребенку переход из детского сада в школу, сохранит и разовьёт интерес к познанию в условиях школьного обучения. Актуальность и целесообразность создания данной образовательной программы. Созданием данной образовательной программы послужил социальный запрос родителей и школы. Интеллектуальная готовность ребенка (наряду с эмоциональной психологической готовностью) является приоритетной для успешного обучения в школе, успешного взаимодействия со сверстниками и взрослыми. Отличие данной дополнительной образовательной программы от других программ. Образовательная программа «Подготовка детей к школе» отличается от других программ тем, что основной задачей ставит задачу формирования потребности ребенка в познании, что является необходимым условием полноценного развития ребенка и играет неоценимую роль в формировании детской личности. Включение в программу игр по укреплению психосоматического и психофизиологического здоровья детей, традиционных и нетрадиционных методов совместной деятельности направленных на интеллектуальное развитие и не используемых в основных образовательных программах, также считаем отличительной чертой данной образовательной программы.

Значительное, решающее развитие мозга происходит до достижения ребёнком шести – семилетнего возраста, и особенно в первые три года жизни, когда формируются основные нейронные связи. При этом дети младшего возраста весьма уязвимы. Плохой уход, лишения, недоедание, отсутствие внимания и насилие негативно воздействуют на ребёнка и травмируют его, и зачастую необратимо.

Если воспитание и образование детей дошкольного возраста



организовано грамотно, у ребёнка своевременно формируются базовые качества личности (мышление, память, внимание, воображение и речь). Именно они позволяют ребёнку успешно обучаться не только в начальной школе, но и на последующих ступенях развития. Иными словами, то, что мы получили в дошкольном возрасте, оказывает влияние на нашу дальнейшую жизнь. [1].

Если сравнивать государственный стандарт дошкольного образования с иными образовательными стандартами, можно отметить то, что он не подразумевает прохождение обучаемыми промежуточных и итоговых аттестаций на предмет соответствия их ЗУН требованиям государственного стандарта образования.

В его основу легли не только технические аспекты педагогики в отношении дошкольного детства, но и прочная идеологическая база. Его значимость была рассмотрена гораздо шире, как важнейшая составляющая не только культуры полезности, но и культуры достоинства [3].

Изменение педагогического воздействия с одностороннего влияния «педагог-ребёнок» на более многогранное и объёмное взаимодействие в системе «ребёнок – взрослые – сверстники» предполагает установление новой психодидактической парадигмы в дошкольном образовании. Нельзя сказать, что эта точка зрения на дошкольное образование является новой, но признание её как единственно верной на уровне государственного стандарта образования, повлечёт глубокие конструктивные изменения в деятельности дошкольной организации [6].

Основные направления в развитии дошкольного образования формируются, развиваются и функционируют в соответствии с основными задачами модернизации образования, которое рассматривается сегодня как важный стратегический источник развития современного общества и





является одним из приоритетных национальных проектов. Развитие дошкольного образования, как в традиционных, так и в новых формах, является одной из главных задач государства.

Дошкольное образование является первой ступенью образования. В дошкольных образовательных учреждениях создаются условия для воспитания и развития ребёнка. Здесь закладывается фундамент будущей жизни человека, обеспечивается личностное, интеллектуальное, физическое, художественно-эстетическое и творческое развитие детей дошкольного возраста. В этом возрасте формируются первичные духовные ценности, мировидение и широкая сфера интересов ребенка. Становление его личностной культуры означает развитие опыта ценностного отношения к миру в процессе приобщения к культуре, тому уникальному пространству, которое для ребёнка является его малой родиной.

В детском коллективе ребёнок приобретает бесценный опыт человеческих взаимоотношений со сверстниками. Так в дошкольной организации происходит воспитание целостной личности, становление жизненной позиции, форм взаимоотношения с окружающим миром [2].

Проблем в сфере дошкольного образования много. С одной стороны – это недостаток внимания к данному вопросу на политическом уровне. С другой – это, конечно же, финансово-экономический кризис, который по-прежнему оказывает серьёзное влияние на формирование национальных бюджетов.

Здесь необходимо понять главное: дошкольное образование (от 0 до 6 лет) – залог процветания и благосостояния наций. Кроме того, не следует забывать, что вложенные средства окупаются, когда человек достигает зрелого возраста.

Поэтому воспитание и образование для детей младшего возраста должно быть общедоступным и качественным [5].



Национальные правительства, на которых лежит основная ответственность за выполнение образовательных задач, должны создать такие условия, чтобы каждый ребёнок мог достичь адекватного уровня развития до начала обучения в школе. Качество зависит от: соответствующих возрасту учебных программ, наличие игровых возможностей, книг и других учебных материалов, социальных стимулов, здравоохранения, питания и санитарии. Необходимо и достаточное количество педагогов, которые прошли подготовку для занятий с детьми на различных уровнях.

Научные исследования показывают, что дети, получившие качественное воспитание в дошкольном возрасте, как правило, продолжают образование в высших учебных заведениях. Они не только находят работу, но и получают более высокую заработную плату. Соответственно, они накапливают сбережения и вносят больший вклад в систему социального обеспечения. Поэтому забота о дошкольном образовании детей ограждает их от нужды и криминальных рисков в будущем [4].

Эта тема зачастую не затрагивается в проектах национального развития. Сложность очевидна – эта задача относится к компетенции различных министерств, ведомств и организаций. Многие страны не принимают необходимых мер на политическом уровне для воспитания и образования детей в возрасте до трёх лет, хотя эта проблема стоит наиболее остро. Очевидно и то, что правительства уделяют мало внимания в дошкольном возрасте и гендерному паритету.

Сегодня мир переходит от концепции «Бытие определяет сознание» к определению того, что «Сознание определяет бытие», страшится и опасается понимания этого факта, но стоит перед неизбежностью признания его в качестве нового краеугольного камня своего существования [2].

В Казахстане воспитанию и образованию детей дошкольного возраста



уделяется серьёзное внимание. Во – первых, каждый гражданин Казахстана имеет право на общедоступное дошкольное образование. Во – вторых, разработаны соответствующие правовые акты на региональном и местном уровнях, и касаются они различных аспектов образования. В – третьих, существует разнообразная сеть образовательных дошкольных учреждений – общеразвивающие, компенсирующие, комбинированные, которые соответствуют различным особенностям развития ребёнка.

Система дошкольного образования рассматривается сегодня как один из факторов укрепления и сохранения здоровья детей. Нельзя ожидать увеличения рождаемости, не предоставив гарантий того, что ребёнок будет устроен в детский сад и там за ним будет обеспечен должный уход, в том числе с точки зрения организации питания и физической подготовки [4].

Образование — это и есть постоянная задача человека, являющегося частицей Мироздания. Поэтому главная форма существования человечества на планете должна быть не в виде общества потребления, а в виде общества образования. Поэтому образование и самообразование — есть главнейшие задачи каждого человека, появляющегося в этом мире в результате рождения.[5]

### Список литературы

1. Изергина К.П., Преснякова Л.С., Иншакова Т.В. Наш «взрослый» детский сад-М.: Просвещение, 1991
2. Логинова В.И., Саморукова П.Г. и др. Лабораторный практикум по дошкольной педагогике и методикам. М.: Просвещение, 1981
3. Мальшакова В. Поиск новых подходов // Дошкольное воспитание №11 за 1990 г.



4. Омаров А.М Социальное управление. Некоторые вопросы теории и практики Алматы. «Жеті-жар?ы»,1996
5. Сухомлинский В.А. Сто советов учителю. М.: 1984г



## VARIETIES OF BEEF AND CULINARY CHARACTERISTICS

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**Abstract:** Provide an understanding of the characteristics of beef and its use. Elucidating the energy and value of meat, the method of deodorization, boiling, frying, steaming, and all other heat treatment methods. It consists of clarifying the advantages of cooking and consumption with what products.

**Keywords:** meat, loin, fat, muscle tissue, breast, thigh, shoulder, back, thigh, leg, rump, etc.

**The relevance of the topic:** Beef is, without exaggeration, the most popular and healthy meat we eat. It is not very fatty, so it is a dietary product and has several important properties. Meat provides the human body with digestible animal proteins, fats, and carbohydrates. 100 g of boiled meat included in a person's daily diet provides 200 calories. This is already half of the amount of



protein needed by the body. Nutrients of meat are concentrated mainly in its muscle tissue, to a lesser extent in fatty tissue, and very little in connective tissue. Therefore, the less connective tissue in meat, the higher its nutritional value. Today, cattle are raised on natural pastures in almost all countries of the world: Holland, New Zealand, Denmark, Argentina, Italy, Uzbekistan, Ukraine, and, of course, Russia. Both large enterprises and farms are engaged in agriculture. The only country where it is forbidden to eat cows is India - where the animal is considered sacred.

**Classification of cattle:** Cattle are divided into several categories: dairy, beef, and dual purpose. The most popular meat breeds: are Kazakh white head, Hereford, Aberdeen-Angus, Kalmyk, and Shorthorn, combined cattle: Simmental, Swiss, Kostroma, and other breeds. In beef carcasses, the optimal ratio between meat and fat (more precisely, between protein and fat) is 1: 1, in pork - 1: 2.5 . The quality of meat depends not only on the total amount of fat but also on the location of its concentration. Adipose tissues are mainly located on the surface of the meat and are not evaluated from the point of view of cooking. The highest quality, juicy, and tender meat with layers of fat inside the muscle is called marble meat. Marble beef is famous for its nutritional value - this category is represented by the meat of young calves up to 18-20 months. Meat is widely used in cooking and is the basis of many traditional dishes today. We will tell you in our article. In addition, depending on the age of the cattle and the fat content of the product, three categories are distinguished: first, second, and third, which is called lean beef. You can see what category the meat belongs to by the seal.

Although different countries cut meat in different ways, three types are still traditionally distinguished:

- High grade includes back, chest, buttock, buttock, shoulder, and thigh.
- The first type includes: the shoulder blade, chest, and side
- The second type includes the neck, tail, front, the lower part of the legs



from the jumping joint, and back caps.



In total, it is divided into 10 to 14 pieces, and each of them has its characteristics and purpose in cooking. The chemical composition and nutritional value of meat affect its anatomical origin because, in different parts (cuts) of the same carcass, the main tissues have different proportions and different characteristics. Thus, in terms of the total amount of protein, fat, and moisture, the meat of the back, loin, and back parts of the carcass does not differ from the meat of the front parts - shoulder, breast, and shoulder. Leg meat has a higher total protein content and less fat than other meats. The location of the part in the meat has a greater influence on the biological properties of proteins. Forequarter cuts contained more incomplete protein than rear cuts, but significantly less than lower limb cuts.

**Culinary feature of beef:** The best meat for processing in the kitchen is meat with 17% protein, 20% fat, 62% water, and 1% ash. Different types of meat differ in their chemical composition and calorie content. According to scientific data, the highest-calorie meat is lamb (142-351 calories) and pork (130-406 calories). The nutritional value of beef is 105-285 calories, horse meat - 162. Beef (17.5-21.0 percent), followed by lamb (15.3- 20 percent) and pork (14.5-21.6 percent).



Beef is an important supplier of protein and amino acids, has a high nutritional value, is quickly digested, and gives a feeling of fullness without blocking the body with various "wastes". The product is useful due to its high mineral content, rich in zinc and iron. It is the basis of a healthy menu and is indispensable in the diet of athletes, children, pregnant and lactating women, as well as in therapeutic and dietary nutrition. Veal meat is more highly valued, it is softer, has less coarse fiber, and the fat layer is represented by unsaturated fatty acids. Beef is useful after operations, during significant blood loss, restoration, and maintenance of immunity.

Beef has a distinct meaty taste and a pleasant aroma of meat and milk. Older cattle have a stronger smell, color, and taste. But anything can change the taste of the product: animal breed, age, feed, storage conditions, and correct organization of the washing technique are of great importance. As the age and fatness of animals increases, the amount of moisture and protein in the meat decreases, the amount of fat increases, and the amount of calories increases. The meat of well-fed animals is characterized by the necessary composition and quality of proteins and fats. The amount of glycogen in the muscles also decreases dramatically. The chemical composition and calorie content of meat depends on the animal's fatness. Type I lamb meat contains 13.9 percent protein, and 16 percent fat, and the nutritional value is 206 calories, while beef contains 15.2, 9.9, and 154 calories, respectively. The nutritional value of fatty pork reaches 381 calories. Compared to lean veal, it has 4 times the nutritional value considering





that it has only 74 calories. The nutritional value of pork (245 calories) is higher than grade I beef (154 calories), grade II lamb (151 calories), and even lean veal (131 calories). The nutritional value of the meat of older animals is much higher than that of young animals, due to the presence of a large amount of complete proteins. However, after cooking, the meat of a young animal is softer and easier to digest. Therefore, young animal meat is used to prepare dishes that require short heat treatment - kebabs, and natural cutlets. Therefore, choosing quality meat is a responsible process. In appearance, it should be elastic, bright, and have a natural red color. The oil is soft, almost without films. If the product does not have a natural smell, it means that the meat is of poor quality or not fresh at all. You should not freeze beef, the flavor and aroma will become less intense during the freezing process and then completely disappear.



Beef is widely used in the food industry and cooking. Meat is very suitable for heat treatment, frying, boiling, baking, marinating, grilling, drying, smoking, and all other types of processing. The composition of boiled meat largely depends on the fat content of the animal and the amount of fat in individual pieces. Estimated cooking losses range from 1.6 percent (thin beef) to 54.5 percent (large beef), averaging 15 to 35 percent by weight. The chemical composition of raw and cooked meat is different. Boiled meat has a high protein content. Raw beef has an average of 21 percent protein, boiled beef has 30 percent, veal has 22 and 27 percent, lamb has 19 and 26 percent, and pork has it will be 14 and 18 percent. The amount of fat in boiled beef, veal, and lamb is slightly higher than in raw



meat (1-2%). The amount of fat in raw pork is 31 percent, and in cooked pork is 38.7 percent. The amount of ash in cooked meat is slightly reduced (0.1-0.2%). When frying meat, the front part of the breast is well-fried. Beef is very tough meat, so it is recommended to use different marinades. To get a rich broth, you need to boil the meat in cold water. To preserve the maximum amount of substances, the meat should be put in boiling water and cooked for about 1.5 hours.

Before cooking beef, it is recommended to remove it from the refrigerator in advance so that the meat can rest at room temperature. Prick the meat with a skewer to check for doneness. If the juice is red, the meat is bloody, if it is pink, the meat is medium-rare. Clear juice indicates that the meat is well cooked. After cooking, leave the meat for 10 minutes, so that the juices are evenly distributed, and only then cut. When cooking beef, you can add sour cream or mayonnaise, which will make the meat juicy and tender. Other cooks just add soda. However, this method requires the use of a vessel with high walls, as baking soda will boil when it comes into contact with hot water. It is recommended to use kiwi as a softener. To do this, you need to cut the beef into pieces and then mix it with the peeled fruits. After exactly fifteen minutes, the meat product should be removed from the fruit and subjected to further cooking. To make the meat tender, you can completely soak the beef in kefir and put it in the refrigerator overnight.

**Deodorizing Beef:** Four proven methods are recommended for deodorizing beef:

**Wine.** Place a piece of beef in a deep dish, fill it with red wine, and add rosemary and thyme. Put the container with meat in the refrigerator for an hour. When the time is up, remove the beef from the wine and continue cooking.

**Mustard.** To do this, you need to generously coat the beef with mustard, put it in a bowl, and put it in the refrigerator for several hours. Then the meat should be washed under running water and the delicacy used for further production.



Potassium permanganate. You need to make a light pink solution, dip the beef in it, and put it in the refrigerator for one hundred and twenty minutes. Then the product should be washed under water.

Chamomile decoction. First, you need to prepare chamomile, and then you need to filter the broth. Then put the beef in clean broth, add a little sugar, and leave for about twenty minutes. Then the meat should be washed in salted water.

Summary: Delicious meatballs, meatballs, dumplings, sausages, and other dishes are prepared from ground beef. It makes excellent first courses, clear broths, and soups. For them, you can use parts of the shoulder and ribs, ham, ham on the bone, and sugar bone. Great cutlets, gimbal meat, and kebabs are prepared from breast and thigh meat. Meat often becomes a component of delicious salads. Beef can be served with grains, pasta, and vegetables. It goes well with spices: coriander, cumin, bay leaf, black and red pepper. In a word, beef is the most convenient meat for daily consumption.

### List of used literature

1. S. Qazaqova. (2022)Turli konstitusiyadagi simmental zotli sigirlar yelinining morfofunktsional xususiyatlari. Innovative Development in Educational Activities. 134-139.
2. SO Kazakova, NP Roziboev (2022)Characteristics milk production of cows with different body composition World Bulletin of Management and Law. 35-38.
3. S.O.Kazakova, S.D.Bahodirov. (2023)Mamlakatimizda go'sht kanservalari ishlab chiqarishning xozirgi holati va rivojlanishi. Agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali. 136-141



4. Qo‘ziyev, I. Q., Fayzullayev, O. B., To‘xtayev, O. B., & Boymatov, O. S. (2022). Ozuqa bazasini mustahkamlashda senaj tayyorlashning ahamiyati. agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali, 844-847.
5. Ro‘ziboyev, N. R., To‘xtayev, O. B., & Aknazarov, D. K. (2022). qo‘ychilikda seleksiya-naslchilik ishlari. agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali, 855-860.
6. Yusupov, S. Yu., Razimuradov, R. R., & Tuxtayev, O. B. (2020). rannevozzrastnoye ispolzovaniye yarochek v karakulevodstve. In Doklady TSXA (pp. 622-624).
7. Mamatrizayev, N. A., Xikmatov, X. I., & Tuxtayev, O. B. (2020). Pervonachalnye rezultaty ispolzovaniya baranov-proizvoditeley afganskooy populyasii. Aktualnyye problemy sovremennoy nauki, (5), 164-166.
8. <https://skovorodnik.ru/meat>
9. <https://xcook.info/product>
10. <https://receptov.net>



## NEURO-LINGUISTIC CLASSIFICATION OF EUPHEMIC EXPRESSIONS AND WORDS IN CONTEMPRORY ENGLISH AND UZBEK LANGUAGES

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### **Annotation**

This article explores some similarities and differences of using euphemisms in different spheres of society by male and female members . The two sexes - men and women - are not only biologically diverse, but also have their differences in language use. This article presents a lexical-semantic classification of euphemisms of female sexuality in Uzbek, and analyzes each of the euphemic agents in each group.

**Key words:**Euphemism , gender, male, female.

### **Intruduction**

The word euphemism came from Greek origin where eu ‘well’ and phēmē ‘speaking’ form a compound that means ‘the use of auspicious words’. Euphemisms come handy whenever we cannot say what we really mean because what we really mean is verboten, offensive, or simply sounds jarring. Definitions of euphemism are many. The Oxford English Dictionary (OED, <http://www.oed.com/>) defines euphemism as (1) “That figure of speech which consists in the substitution of a word or expression of comparatively favourable implication or less unpleasant associations, instead of the harsher or more offensive one that would more precisely designate what is intended”, and (2) “An instance of this figure; a less distasteful word or phrase used as a substitute for something harsher or more offensive.” Allan and Burridge (1991: 11) define euphemism as “an alternative to a dispreferred expression, in order to avoid possible loss of face: either one’s own face or, through giving offense, that of the



audience, or of some third party.” Cameron (1995: 73) defines euphemism as “a term used deliberately to avoid or soften the negative associations of words that deal directly with taboo subjects.” Burrige (2012: 66) defines euphemisms as “sweet-sounding, or at least inoffensive, alternatives for expressions that speakers or writers prefer not to use in executing a particular communicative intention on a given occasion.” Lutz (2000: 231) defines euphemism as “an inoffensive or positive word or phrase designed to avoid a harsh, unpleasant, or distasteful reality.” Hughes (2006: 151) defines euphemism as “the use of deliberately indirect, conventionally imprecise, or socially ‘comfortable’ ways of referring to taboo, embarrassing, or unpleasant topics.” Brain (1979: 83) characterizes euphemism as a verbal instrument of overcompensation that involves “a reluctance to face reality.”

### **Literature Review**

Evolution of society shows that biologically the strength of men and the vulnerability of women towards them is an indisputable fact. Therefore, the significant differences between them are reflected in the language of the two sexes. According to A.N. Prudivus's classification, euphemisms appeared before and created convenience in human speech (Mantellini, 2015; Pistrick & Mal'cev, 1998; Razakov Sh & Shakhgunova, 2001).

Based on the works of A.N Prudivus, S.G.Ter-Minasova, and Lobanova LP, political euphemisms are divided into the following types:

- 1) euphemisms that represent people with physical or mental deficits (physical defects, mental and mental deficiencies, age, appearance, etc.);
- 2) sexual euphemisms (sex, sexual minority);
- 3) ethnic euphemisms (race, nationality);
- 4) social euphemisms (property status, authoritative professions, economics, religion, etc.);
- 5) commercial euphemisms and b.



The researcher G.A Vildanova notes that from the analysis of the euphemistic vocabulary dictionary, the concept of "woman" and related to it is important in the system of euphemisms. Some researchers believe that the notion of "feminine" itself is euphemized [1].

The Interpretation Dictionary of the Uzbek language also states that "woman" is generally of the opposite sex and expresses the concept of "wife" and "wife". M: My wife does the yard in the summer and winter: she does the laundry, sweeps the house, bakes, and beds (Oybek, Selected works). Ahmed gasped at the brigade's shoulders and looked at his wife. (S. Nurov, Narvon). This shows that the concept of "woman" is itself an euphemized word [5]. From this definition, we can see that in the Uzbek language the word itself is gendered.

At home I told my wife everything. Our woman did not believe before (T. Murod, "Fields from my Father," p. 131) (wife).

It was true that they did not take a girl from your own (T. Murod, "Fields from My Father," p. 134) (wife).

In these examples, the word "woman" is a euphemism used as a substitute for the word "woman," and is a sign of speech culture.

Roger Holder noted in the dictionary of euphemisms the weaker sex - women, in short, the weaker family (race), the weaker part of the family, while simultaneously calling it both euphemisms and dysphasia, because it is politically a chauvinistic term. At the same time, the phrase emphasizes that most women take it as frustrating.

Researcher G.A Vildanova lists several thematic groups of the "female" euphemistic thesaurus:

1. Euphemisms expressing natural and physical and psychological features;
2. Euphemisms that hide disability;
3. Euphemisms related to the "beauty industry" (cosmetology, plastic



surgery, etc.);

4. Physiological processes and euphemisms defining body parts;
5. Euphemisms representing professional names [1].

### **Result and Discussion**

The researcher included lexical units representing the physical, psychological, and physical characteristics of euphemisms, which represent women's behavior, appearance, age, education, and marital status. Women are traditionally evaded, taking into account their weaknesses and weaknesses. Euphemisms that make up this group account for 17.6% of the total euphemisms studied. Studies have shown that there are a lot of euphemisms that define women as “easily accessible” or “easy”(Clark, Huxley, & Mountford, 2010; Newswire, 2012; Ryan, Wilson, & Kain, 2002; Todd et al., 2009).

Lexical-semantic classification of euphemisms for female sexuality in Uzbek:

1. Euphemisms that represent the moral, emotional and intellectual qualities of women
2. Euphemisms of female age
3. Euphemisms that represent the appearance of women
4. Euphemism related to female body parts
5. Euphemisms that represent women's occupations
6. Euphemism related to women's disease

We will focus on euphemisms that represent the moral, emotional and intellectual qualities of women.

Can a single woman, in particular, adapt to society? (Freedom, September 26, 2018) (husbandless)

In social life, family conditions and living conditions of people do not differ. There are a number of women in the society who are old but unmarried





or divorced, whose husbands have died, and the words that apply to them must be very careful. The "single woman" euphemism used above applies to non-married women and helps to smoothly convey an uncomfortable notion.

"Are you open?" "There's a nice guy, what do you say?" She didn't even want to answer, and nodded away at us. (talk) (husbandless)

The expression "open" in this example is euphemistic and serves to describe the concept of "landless". However, it should not be used in the manner of the Uzbek speech in the form of open, dysfunctional.

Holder says there are many euphemisms for the notion of "jazz". This is because a woman living with a man out of wedlock has been criticized by society. Men try to hide it through left-handed wife, little wife, lover, secretary, nephew, female-friendly euphemisms [1].

This time he did not want to abandon the "ready-made" thing. He escorted him home to Chorsu (U.Khoshimov, "There is a light, there is a shadow", p. 275) (play)

On the contrary, when the engine was running, that person came out from under his feet.

In these examples, the talk shows that euphemisms of soul and willingness are used in the sense of "play." It is well known that there are women in the community who are lighthearted. But to call them dysfunction directly does not fit the label of speech. Therefore, it is necessary to change the name to a more sophisticated unit, namely euphemism (Kalpakjian & Schmid, 2014; Khan & Ghai, 1979; Lamers & Khamzina, 2010; Phillips & Jones, 2006).

Unfortunately, there are girls who are involved in "shameful business". (talk) (prostitution)

The discourse contains an euphemism of "disgraceful work," in which the morally weak and immoral girls and women have become "tradesmen" and are used to express the meaning of "prostitution", which is the plague of society.



When we buy an old girl, her family gives us a soul! And he answered and said unto them, <https://www.iqbol.uz/> (pillow)

Older girls are "pixelated". Perhaps because of this, my parents are ready to send their daughter out early so as not to have a daughter like so and so. <https://www.iqbol.uz> (old girl)

The "old girl" euphemisms applied to unmarried older girls have helped to ease the name of the negative.

If euphemism is applied to virgins, "virgin", "virgin", "girl", euphemisms of "sinful", "rape", "victim" and "lost" are applied to unmarried women.

The girl, who claimed to be a virgin, gave birth to a baby boy (<https://aniq.uz>).

A girl from the Taylak district of Samarkand region committed suicide after being violated (Post, July 15).

In Chinese, the following euphemisms are used: a strangled woman, a sex worker, or a black woman, and so on.

In recent years, the word "Miss" (young lady) has been used as a synonym for euphemisms. Therefore, in the case of young girls, the term is now used with the last name [4].

The study by G.A Vildanova shows that euphemisms, which explain the feelings and intellectual qualities of women, are very small (2.3%). Women who have been rejected by society are subject to euphemisms such as "living at the expense of others" and "lifestyle dependent."

In support of the stereotype about the lack of intelligence in beautiful women, Roger Holder cites euphemisms of discourse and real dolls (attractive women).

While all the aesthetic and ethical laws prohibit direct speaking about sexual matters in modern Russian and Chinese languages, euphemisms are widely used.



When it comes to intimate relationships, women can use a lot of terms instead of the word "whore". M: "Who is a whore, whore?" The boy asked his mother, who was sitting in the window. "This is a woman who spends most of her time in the male community," said Ada Anatolyevna (Mk-Ural, 2001). The Russian dictionary of euphemisms also provides the following examples: night butterflies, lady, cheerleader, street woman, love band, freelance professional, mass woman, victim of a vibrant society, lightweight woman, and so on. M: She was totally free and belonged to the type of female servants of love (I. Bunin) [4].

Research shows that many of the above-mentioned words do not always serve as euphemisms. We can only understand that such lexical units have euphemisms.

Euphemisms of female age. It is well known that euphemisms that characterize age are a painful spot for many women. In this regard, it is proposed that any woman under the age of fifty be called a "girl" [Holder 2003: 164]. In fiction we often find words such as blue hair and gray hair referring to an older woman with white hair.

In front of the table in front of the table was a doctor with a gray-haired doctor. (O.Hashimov "Spring does not return", p. 21) (old)

A woman with gray hair went to the drugstore and asked the drug dealer, "Is there anything with blonde hair?" The salesman replied, "Yes, lady, I have a deep respect for white hair!"

His legs were sore, his waist was weak, and when his eyes were gone, he gave us a stick. (old) ( )

It is we who celebrate our success on our deathbed as we prepare for our final destination. (dying) ( )

High levels of protein, vitamins A, D, B and B12 can be found in eggs, as well as leukemia and zeaksanthin, which prevents sight disorders in elderly



people. (Old) <https://www.bbc.com/uzbek/world-44347241>

Generally, artists who have no value in their lifetime and who have reached the age of fifty become more productive in their fifties. (old) (Bukhara, February 27, 2013)

As he gets older, his life experience increases and he becomes more skilled at housework. <https://www.iqbol.uz> (old)

In the above examples, euphemisms such as blonde hair, gray hair, waist power, light bulging, preparing for the final destination, are applied to older women (Connell, 2006; Razakov Sh & Shakhgunova, 2001).

In English, the terms "spring" and "chick" are used with a bit of humor and ironic to describe the age of women. M: "Hey," he grumbled, "you're not a spring chicken." [Collins1986: 330]

Generally, such euphemisms are a very small group, accounting for 0.7% of gender-friendly euphemisms [1].

As can be seen from the examples, most of the euphemisms that represent age do not discriminate against gender. These euphemisms can be easily applied to women and men. Because sex does not play an important role in it.

Euphemisms that represent the appearance of women. Euphemisms, which emphasize the attractiveness of women, are often used by men to hide the interests of a particular woman and help them to a certain extent (Henderson, Roberts, Bogan, Rubin, & Semenza, 1998).

The euphemisms that portray women's attractiveness and marital status are a minority, suggesting that they are inferior in modern society.

It is worth noting that most of these evaluations are usually related to irony and comic situations. For example, "bedded goods" (about unmarried women who can't get married), "fishing flotilla" (about girls of marriage age who are going abroad in search of land) [1].

At the same time, it should be noted that there are also women who do not



have feminine dignity, and, on the contrary, there are no women who dream of "overload". J. Nienen and K. Silver agree that it is appropriate to use euphemisms such as "thin", "cane", "thin", "hip".

Generation and use of gendered euphemisms are often associated with commercial reasons, and the desire to engage a particular product without offending the consumer. They should be able to politely describe the "full" women's clothing and show the miracle of the manufacturers (Neaman & Silver 1995: 39-40) [1].

Euphemisms related to women's beauty are a very relevant topic at the moment. Because beauty makes women to undergo any cosmetic procedures. For example, they are ready to do anything to improve their face, skin, hairstyles, and so on. However, not every woman admits that her beauty is the result of the work of cosmetologists. They cover the disadvantages of cosmetics and fall into the category of "looking after" women.

Even if that sloppy face didn't come to the waiter, he would have come home right (U. Hashimov, "There Is Light, Shadow," p. 274) .

The entire woman gazed at the flowers straight and proudly rising from the cold ground through the stream of word-combs, and the appearance of wonder was striking. (World Literature, 2015, issue 5) (fat)

They should not be too strong or full, and then they should be in good shape. (fat, fat)

In the examples "euphemisms" and "full" euphemisms served to give "fat" meaning. Obviously, overweight is usually not a sign of beauty. For this reason, the speaker "refrains" from using the word, and it is necessary for euphemistic units to express its meaning.

The wife, on the other hand, is a poor man, unlucky. (<https://oliysud.uz/en/>) (ugly)

The camouflage euphemisms are used in place of the word "ugly" to



ensure that the idea is conveyed in a way that is not boring.

According to experts, the cause of shininess is not the absence of hair on the head, but of new hair that has grown instead of shedding hair. (talk) (cal)

"The preservation of the same number of base cells, even in the hairs of the hair, gives hope to reactivate them," said Costarelis.  
[https://www.bbc.com/enbek/science\\_technology](https://www.bbc.com/enbek/science_technology)

Illustrations in the examples and haired euphemisms are used in place of the words "cal" and "humpback" and convey the meaning in a softer way.

In order to apply the stereotype that beautiful women are often smarter, Roger uses euphemisms such as "puppets", "beautiful but stupid women."

At the same time, we often find the word "blonde" (yellow-haired woman) used to refer to an attractive but stupid, ignorant woman. "Yellow" is associated with adventures and dangerous situations. M: Greta can hang herself! And I won't put my neck in jeopardy for any yellow.

There are also cases where Uzbeks have a negative attitude towards blonde hair. It is stereotyped that light-colored women dye their hair.

Unfortunately, blonde hair is suitable only for those born with blond hair. Artificial blonde hair transforms beautiful girls into ordinary and unattractive girls <https://daryo.uz/k>

The word "blind" has euphemized the word "ugly."

As the examples show, euphemisms that characterize women are often associated with weight and appearance.

Euphemisms related to female body parts. To address female external organs, euphemisms such as cats, kittens, and pink kittens are used [3].

In Russian folklore there is also the use of euphemistic expressions. The genital organs in the human body are often found in frequencies spoken in Russian. M: in women - anterior, lower, lower position (location and nature of the genital organ).



For example, female organs and their parts, the genital organ (the gate of life or the gate of life), pregnancy (expectant female), sexually transmitted disease (contagious disease), and so on. [3]

The word "breast", "breast" are used for euphemisms such as "breast", "thrust", "good life", "baby food source".

Purple, for you - my breast is free, Get out of the sky! (Chulpon)

Euphemisms such as "shameful place" and "there" are used to describe the female genitalia.

Therefore, gender euphemisms related to female genitalia, although small in language, are a common occurrence, and their use in speech is a sign of multiculturalism.

Euphemisms representing women's occupations. Euphemism (Greek: euphorism - "goodness") is a neutral or descriptive expression in terms of meaning and emotion, and are substitutes for words that are obscene and inaccurate.

In certain words, people who are at risk are found in taboos (taboo words). Pilots, paratroopers, circus artists, for example, are afraid to use the word "last." Instead, "edge" (or "one more time" is indirectly used in the circus to use the "last", "ending" or "be") units - for example, "edge flight." They also try to substitute the word "death" with "bony" and "nose-free" expressions. While gold miners use "yellow metal" instead of "gold", the same report is made of gold, as a special investigation gives a definitive conclusion on the nature and character of the seized material and is illegal before the decision to accept yellow metal as gold.

That's my job. We provide services that are in great demand. " Don't get married to a frustrated billionaire.

In this context, the phrase "service that is in great demand" is understood to be a broker and a subsidiary. It is well-known that in society, women often



find themselves in the process of finding a wife and a husband.

They will continue to do so secretly in search of easy income.

The euphemisms of “easy-to-earn” refer to the profession of prostitution.

For sweeping women, the names of occupants, such as "cleaning", "maid", "midwife" and "obstetrician" for women giving birth, indicate that they have been evacuated.

The “junior health worker” euphemism applies to housekeepers in hospitals.

G.A Valdanova argues that some of the political professions of women can be transformed into euphemisms. M: Pink collar workers (very low-wage workers).

In the scholarly study, socially acceptable occupations, along with politically euphemistic names, account for 6%, indicating that there is a socio-educational taboo in this area [1].

Hence, there are gender euphemisms for the expression of certain professions that are feminine in public life, which facilitate the softening of the profession's name.

Euphemisms related to women's disease. Metritis for women diseases ([metra - uterus] - inflammation of the uterus), endometritis (inflammation of the uterus, endometrium), endometriosis (cervical tube, sperm closure, reduction of permeability, immunological problems and implantation) such as adnexitis (inflammation of the uterus and ovaries), mastitis (inflammation of the human breast; most commonly in pregnant women and pregnant women). The scientific name is euphemistic.

Menstruation is characterized by the following polite euphemisms: aunt's visit, a color television, a red army, a holiday, the moon, and so on.

Hence, the names of women-related illnesses are euphemisms, and their Latin names serve to prevent danger, that is, to convey information without





worrying about the patient's heart.

### **Conclusion**

Men and women differ not only in biological terms, but also in the use and use of language and speech units. After all, physiological differences also cause speech disorders.

As the portrait of a man and a woman is realized through his speech, euphemisms that are peculiar to them and used in their speech can also be traced to genetics. Thus, feminine euphemisms are subdivided into specific themes and show the existence of a "female" and "male" group in society through language factors.

The above groups can be continued. This is because the classification is diverse. The results of the study showed that euphemisms, which represent the moral, emotional and intellectual qualities of women, are more than euphemisms that represent age, appearance, body parts, occupations and disease.

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### **References**

- 1) Isakovna, T. N. (2017). The Symbol of Mirror and its Main Poetic Functions in Fairy Tales. *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 6(2), 7-11.
- 2) Hoshimova, N. A. (2020). Ingliz va o'zbek tillarining funksional uslublari. *Молодой ученый*, (19), 584-585.



- 3) Mamajanova, M. (2021). MODEL CONCEPT MODELING IN LINGUISTICS TYPES OF LINGUISTIC MODELS. Экономика и социум, (1-1), 160-163.
- 4) Azamovna, A. M. (2022). Tilshunoslikda Va Badiiy Asarda “Nuqtai Nazar” Tushunchasi. Miasto Przyszłości, 29, 398-399.
- 5) Ахмадалиева, Г. (2021). Teaching reading strategies in ELT. Общество и инновации, 2(5/S), 166-170.
- 6) Qochqorova, Z. (2022). ИНГЛИЗ ВА ЎЗБЕК ТИЛЛАРИДА “ТЎЙ” КОНЦЕПТИ ВЕРБАЛИЗАТОРЛАРИНИНГ КОММУНИКАТИВ–ПРАГМАТИК ТУРЛАРИ ҚИЁСИЙ ТАҲЛИЛИ. Science and innovation, 1(B8), 605-611.
- 7) Sofiyanur, M. (2022). Necessity of Euphemisms in Various Spheres and Ways of Creating Them. American Journal of Social and Humanitarian Research, 3(6), 94-98.
- 8) Makhmudovna, K. G. (2022). Creative Strategies to Improve Vocabulary Teaching. *American Journal of Social and Humanitarian Research*, 3(10), 259-261.
- 9) Mirzayev, A., & Oripova, S. (2022). COMMUNICATIVE METHOD–A NEW APPROACH IN THE PRACTICE OF TEACHING FOREIGN LANGUAGE. Science and innovation, 1(B6), 778-783.
- 10) Ismoilova, G. (2021). FRAZEOLOGIK BIRLIKLAR KLASSIFIKATSIYASI. *Журнал иностранных языков и лингвистики*, 2(2).
- 11) Abdumetaljonovna, P. S. (2022). Main Characteristics of Advertising Discourse in Modern Linguistics. Texas Journal of Multidisciplinary Studies, 9, 173-176.



12) Абдухалимова, С. (2022). THE CONCEPT AND CONTENT OF INTERCULTURAL DISCOURSE. МЕЖДУНАРОДНЫЙ ЖУРНАЛ ИСКУССТВО СЛОВА, 5(4).

13) Охуннов, А. О. О. (2021). INGLIZ VA O'ZBEK TILLARIDA UNDOV SO'ZLAR (INTERJECTION) NING IFODALANISHI. *Academic research in educational sciences*, 2(12), 401-406.

14) Gafurova, N. I. (2021). Structural-semantic classification of construction terms in English and Uzbek languages. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(5), 571-575.

15) Bahridinov, M. M., Turgunov, D. B., & Tojiboyev, I. M. (2020). SOME PROBLEMS OF LEXICAL INVESTIGATION OF THE NOVEL ULYSSES BY JAMES JOYCE. *Scientific Bulletin of Namangan State University*, 2(1), 208-212.

16) Abdullayevna, K. N. (2022). Aphorisms in Different Language Systeme Linguoculturological Research. *American Journal of Social and Humanitarian Research*, 3(6), 325-328.



## TEACHING LISTENING IN PRIMARY SCHOOL: CHALLENGES, STRATEGIES AND BEST PRACTICES

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**Annotation.** The article investigates the ways and possible issues that can be encountered in terms of teaching and improving listening as a skill in primary education. The author discusses possible effective means to tackle those particular problems in developing listening comprehension together with providing efficient strategies with relevant examples as well.

**Key words:** listening comprehension, pre-listening activities, while-listening activities, post-listening activities, explicit instruction.

Listening is a crucial skill that students need to develop in order to succeed academically and beyond. In primary school, students are still developing their language skills, and listening plays a critical role in this process. However, teaching listening in primary school is not as straightforward as it may seem. It requires careful planning, effective strategies, and a deep understanding of students' needs and abilities. In this article, we will explore various strategies for teaching listening in primary school, the challenges that teachers may face, and best practices that can help them overcome these challenges.

### **Strategies for Teaching Listening in Primary School**

#### **Pre-Listening Activities**

Pre-listening activities are essential for preparing students for the listening tasks. These activities can help activate students' prior knowledge and build their interest in the topic. Examples of pre-listening activities include brainstorming,



previewing the text or audio, predicting, and setting the purpose for listening.

In a study by Vandergrift and Baker (2015), pre-listening activities were found to significantly improve students' listening comprehension. The researchers also found that the effectiveness of pre-listening activities depends on the type of activity and the complexity of the listening task.

### **Listening Tasks**

Listening tasks should be designed to match the students' level of proficiency and challenge them appropriately. They should also be authentic, meaning that they should resemble real-life situations as much as possible. Examples of listening tasks include gap-filling, multiple-choice questions, note-taking, and summarizing.

In a study by Brown and Yule (2014), it was found that authentic listening tasks significantly improved students' listening comprehension compared to non-authentic tasks. The researchers also found that the level of difficulty of the listening task should be carefully chosen to match the students' level of proficiency.

### **Post-Listening Activities**

Post-listening activities are designed to help students consolidate what they have learned from the listening task. Examples of post-listening activities include discussion, role-playing, writing, and reflection.

In a study by Goh and Kwah (2017), post-listening activities were found to significantly improve students' listening comprehension and motivation. The researchers also found that the effectiveness of post-listening activities depends on the type of activity and the students' level of proficiency.

### **Explicit Instruction**

Explicit instruction refers to directly teaching students the skills and strategies they need to become effective listeners. Examples of explicit instruction include teaching vocabulary, phonetics, and comprehension strategies.



In a study by Vandergrift and Tafaghodtari (2010), explicit instruction was found to significantly improve students' listening comprehension and metacognitive awareness. The researchers also found that explicit instruction should be integrated into the listening task and should be focused on the students' needs and abilities.

### **Challenges in Teaching Listening in Primary School**

#### **Limited Attention Span**

Primary school students typically have a limited attention span, which can make it challenging for them to stay focused during extended listening tasks. Teachers need to design listening tasks that are engaging and interactive to keep students motivated and interested.

In a study by Lee and Kim (2014), it was found that interactive listening tasks, such as games and songs, significantly improved students' attention and motivation. The researchers also found that the level of challenge of the task should be carefully chosen to match the students' level of proficiency.

#### **Limited Vocabulary**

Primary school students may have limited vocabulary, which can make it challenging for them to understand the listening task. Teachers need to provide explicit vocabulary instruction and use vocabulary that is appropriate for the students' level of proficiency.

In a study by Nation and Newton (2009), it was found that explicit vocabulary instruction significantly improved students' listening comprehension. The researchers also found that teachers should use a variety of vocabulary learning strategies, such as using context clues and teaching word families.

#### **Limited Background Knowledge**

Primary school students may have limited background knowledge about the topic of the listening task, which can make it challenging for them to understand the task. Teachers need to provide pre-listening activities that activate students'



prior knowledge and build their interest in the topic.

In a study by Vandergrift and Baker (2015), it was found that pre-listening activities significantly improved students' listening comprehension. The researchers also found that the level of complexity of the listening task should be carefully chosen to match the students' level of background knowledge.

### **Best Practices for Teaching Listening in Primary School**

#### **Differentiate Instruction**

Teachers need to differentiate instruction to meet the diverse needs and abilities of their students. They can use various strategies, such as grouping, scaffolding, and providing individualized feedback.

In a study by Tomlinson (2014), it was found that differentiated instruction significantly improved students' listening comprehension and motivation. The researcher also found that teachers should use multiple measures to assess students' needs and abilities and adjust their instruction accordingly.

#### **Use Technology**

Technology can be a powerful tool for teaching listening in primary school. Teachers can use various tools, such as podcasts, videos, and interactive games, to provide students with engaging and authentic listening tasks.

In a study by Warschauer and Liaw (2011), it was found that technology-enhanced listening tasks significantly improved students' listening comprehension and motivation. The researchers also found that teachers should provide clear instructions and scaffolding to help students navigate the technology.

#### **Provide Feedback**

Teachers need to provide timely and constructive feedback to help students improve their listening skills. Feedback can be provided in various forms, such as verbal feedback, written feedback, and peer feedback.

In a study by Vandergrift and Tafaghodtari (2010), it was found that feedback significantly improved students' listening comprehension and



metacognitive awareness. The researchers also found that feedback should be specific, clear, and focused on the students' needs and abilities.

Teaching listening in primary school is a complex and challenging task that requires careful planning, effective strategies, and a deep understanding of students' needs and abilities. Pre-listening activities, listening tasks, post-listening activities, and explicit instruction are effective strategies for teaching listening. However, teachers may face challenges such as limited attention span, limited vocabulary, and limited background knowledge. To overcome these challenges, teachers can use best practices such as differentiating instruction, using technology, and providing feedback. By using these strategies and best practices, teachers can help their students develop the critical listening skills they need to succeed academically and beyond.

#### **LIST OF USED LITERATURE:**

1. Brown, G., & Yule, G. (2014). *Teaching the Spoken Language*. Cambridge University Press.
2. Goh, C. C. M., & Kwah, P. F. (2017). Learner perceptions of listening comprehension tasks: A study of Chinese primary school students. *Language Teaching Research*, 21(6), 711-727.
3. Lee, H. S., & Kim, H. J. (2014). The effects of interactive listening instruction on EFL learners' listening comprehension and motivation. *Language Teaching Research*, 18(4), 499-519.
4. Nation, I. S. P., & Newton, J. (2009). *Teaching ESL/EFL Listening and Speaking*. Routledge.
5. Tomlinson, C. A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners*. ASCD.
6. Vandergrift, L., & Baker, S. (2015). The effect of pre-listening activities on listening comprehension. *ELT Journal*, 69(1), 1-12.





7. Vandergrift, L., & Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make a difference: An empirical study. *Language Learning*, 60(2), 470-497.
8. Warschauer, M., & Liaw, M. L. (2011). Emerging technologies in distance language learning. In Hinkel, E. (Ed.), *Handbook of Research in Second Language Teaching and Learning* (pp. 683-699). Routledge.



## INFLUENCE OF EDUCATIONAL INSTITUTION MANAGEMENT ON THE QUALITY AND EFFICIENCY OF EDUCATION

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**Annotation:** In this article, opinions are expressed about management, the culture of management of an educational institution and its impact on the quality and effectiveness of education.

**Key words:** management, management culture, educational quality, educational effectiveness.

The quality of education is the actuality of acquired knowledge and concrete conditions and applications for the achievement of concrete goals and the improvement of quality. The quality of knowledge is determined by the fundamental nature, depth and relevance of work after graduation.

The question of how to improve the quality of education in a higher education institution or how to turn it into a successful educational institution is considered one of the problems today. Until now, there has been no universal tool for measuring the quality of education. However, a number of indicators such as successful universities cannot be ignored.

Firstly, it is the presence of clear goals and development plans that are open and understandable to every university employee. Secondly, this is the integrity of the educational task, which means effective cooperation between all departments of the university, as well as mutual cooperation between teachers and students.

V-tertik are qualified teaching staff who regularly improve their qualifications. Also, the effectiveness of higher education can be measured by the



availability of educational programs, large libraries, computers and other sources of information that students need. Recently, due to the increased attention of the state to improving the quality of education, more and more attention is paid to modern technologies that are used at the university and help to achieve the maximum positive synergistic effect.

To improve the quality of education, higher education assignments must have clear goals and ways of achieving them. In fact, the main goal of all training sessions is the same - to provide the country with qualified specialists. But achieving these goals may be entirely possible only by overcoming a number of problems, for example: regular growth and constant updating of information for teaching students, reducing classroom time for the educational process, and uniform standards for student training. It is necessary to comply, to work taking into account one's own interests, capabilities and personal interests, that is, the teacher must structure the educational process in such a way as to take into account all these features. This can only be achieved through the introduction of automated higher education management systems in the organization of the educational process. This helps each student find an individual approach, track it and regulate the time for elimination. Most higher education institutions offer three forms of study: full-time, part-time and distance learning. And if during full-time study the student is in constant direct communication with the applicant, receives questions and advice, then with full-time and distance learning there are no such opportunities. Such students study subjects on their own, find answers and must engage in learning material. However, questions often remain, and the teacher's advice becomes necessary. For such students, it is important to get advice from a teacher and receive assignments to complete independently via information technology, the Internet, without personal meetings. In addition, constant contact with higher education is necessary to increase motivation for learning, control the student's feelings in



front of the teacher, and create a systematic approach to the entire educational process. The process is organized in such a way that it can be easily constructed and provides access to educational information and activities. It is necessary to gradually create an information space in the field of higher education. This helps to respond in a timely manner and correct inconsistencies with the set automation goals. According to various existing models, quality systems and higher education institutions depend on various factors. As a result of the quality of specialist training, the quality of higher education graduates and the educational process, this has led to a decline in the reputation of the higher education system at the national and international levels. Izvestny ob'ektivnye and sub'ektivnye prichiny slojivsheysya situatsii:

- this is a significant decrease in real wages
- salaries of higher education teachers - which led to the departure of qualified, highly qualified employees

teaching staff - natural old age, lack of motivation to work, enough time to ensure the quality of new work, youth of staff, declining level of training.

- in connection with unnecessary compensation of financial resources by drivers “on the other side”; The collapse of the economy associated with the economic crisis, rising unemployment and, as a result, lack of motivation for education.

Theoretical and practical approaches to the formation of systemic quality of education.

Training in the higher education system was basically aimed at obtaining relevant knowledge. The state educational standard and training programs were aimed at mastering special organizational didactic units of Zaedets, general directions, and the international educational community. Thus, the current situation in higher education institutions cannot be called positive. Therefore, it is necessary to evaluate the activities of universities based on the main list of



approved accreditation indicators for state regulation of education and comprehensive control of educational institutions.

Increasing the knowledge and competence of managers in managing an educational institution, management culture and its democratization is one of the pressing issues of a modern market economy. Before we talk about managing an institution, what is management itself? We need to answer such questions.

Management is recognized as a factor in the management of educational participants in the educational process and educational system; it is an activity inherent in any society and arising from the need for life and livelihood. Management culture means that the exercise leader controls himself in any situation, is calm and courteous, makes decisions and manages, having a deep understanding of pedagogical and psychological knowledge. The management of an educational institution, as well as the manager's attitude towards his subordinate employees, and the participation of employees in decision making have a significant impact on the quality and effectiveness of education in this institution. After all, one of the main rules of management is to put quality at the forefront. In fact, quality is an important aspect of the work process, it affects the well-being of stakeholders, in short, it serves to satisfy their needs. Quality ensures the mobilization of all resources for the efforts of participants in the labor process.

The attitude of the head of the institution towards employees, that is, encouraging them in the right place, correct assessment of their achievements, serves to increase the employee's energy for work and professional activities. This, in turn, ensures that the lesson taught by the teacher is comprehensively consistent and rich. The quality and innovation of the lessons taught by the teacher are of great importance in increasing the speed of student learning and the rating of the educational institution. Quality in management undoubtedly means efficiency. Because these two concepts - quality and efficiency - are



relevant concepts that complement each other in education management. In particular, efficiency means the ability to achieve the desired result in educational management.

The teaching profession has been formed, and management, that is, pedagogical management, is being formed along with it. The consistent implementation of management in each educational institution testifies to the managerial ethics of the leader, administrative and economic activities, as well as theoretical and practical knowledge of ethics and practical recommendations aimed at the quality implementation of the educational process.

In conclusion, it can be noted that the use of foreign experience in improving the quality of higher education, the use of foreign experience in the system for assessing the quality of education is a system of educational activities. The use of foreign experience in assessing the quality of education is the construction of an “Education System” that has high strategic potential, is able to quickly adapt to changes in the external environment, is competitive in the long term, and consistently achieves high results. . . In modern market conditions, education quality management is becoming increasingly important. To achieve success in education, it is necessary to have certain competitive advantages, work in an attractive system and, of course, apply the foreign experience of Uzbekistan and regularly improve it in order to improve the quality of education. Educational management studies the management of an educational institution and, without a doubt, covers educational processes. If an educational institution is fairly managed by the leader and decisions are made taking into account the views of the staff, this will certainly have a significant impact on the quality and effectiveness of education. This is reflected in student performance and staff performance.

#### References.



1. 1. Xamidovna, Mamayusupova Iroda. "EVACUATION OF THE LEVEL OF CONFLICTS IN CONFLICT SITUATIONS BETWEEN ADOLESCENTS." *Confrencea* 1.1 (2023): 23-27.  
<https://confrencea.org/index.php/confrenceas/article/view/372/375>
2. Khamidovna, Mamayusupova Iroda. "MASTERY OF MANAGING PEDAGOGICAL COMMUNICATION STUDY, GENERALIZATION AND DISSEMINATION OF ADVANCED PEDAGOGICAL EXPERIENCE." *Galaxy International Interdisciplinary Research Journal* 10.12 (2022): 1217-1222.  
<https://internationaljournals.co.in/index.php/giirj/article/view/4627/4322>
3. Khamidovna M. I. CAUSES OF FAMILY CONFLICTS //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 12. – C. 870-872.  
<https://internationaljournals.co.in/index.php/giirj/article/view/3156/2907>
4. PF – 5847 – net. Concept of systemic development of the Republic of Uzbekistan until 2030. 08.10.2019
5. Deyatlov V. A. Current issues in personnel management. -Moscow, 2001.-69.
6. Garayeva A.K. The ever-increasing role of information technologies and the higher education system // Distance and virtual learning -2011 No. 6 p.45-50.
7. Plaksiy S.I. Quality indicators of higher education // Knowledge. Understanding. Qualification. Information and humanitarian portal. 2004.
8. Nurmurodov T.I. Experience of N.D.K.I in the integration of science, education and production. Prospects for the development of higher education: Collection-T.: E-LINE PRESS LLC, 2013.
9. Vahabov A. and the second. Foreign investment. -T., publishing house "Finance". 2010.-324 st.



10. Israilov B.I. increasing the role of economic intermediaries in the development of innovative corporate cooperation in the education system

11. Shoyusupova N., Ataniyazova M.B. Personnel management. Tashkent-2016. Page 22

12. Educational management. Qdpi Educational and methodological complex. Page 69

13. Khodzhiakhmedov G` and others. Quality control. Tashkent-2012. Page 5

14. Shoyusupova N., Ataniyazova M.B. Personnel management. Tashkent-2016. Page 26

15. Akhliddinov R., Saidov Kh and others. Independence and education. - Tashkent: "Shark", 2001.

16. Yuldosheva D. Didactic foundations for setting educational goals based on the national personnel training program. - T.: Science, 2006.

17. <https://gejournal.net/index.php/IJSSIR/article/view/1456/1358>

18. <https://internationaljournals.co.in/index.php/giirj/article/view/3004>

19. <https://internationaljournals.co.in/index.php/giirj/article/view/3262>

20. <https://internationaljournals.co.in/index.php/giirj/article/view/3263>





**USE OF MODERN MULTIMEDIA TECHNOLOGIES IN THE  
DEVELOPMENT OF TECHNOLOGICAL PROCESSES OF SERVICE TO  
CUSTOMERS THROUGH MAIL COMMUNICATION**

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**Annotation:** In the article, the multimedia technological processes of the postal communication tool, the essence of using advanced multimedia technologies in providing services to customers in the postal communication tool, the description of the modern multimedia services provided by the postal communication tool, the order of providing the postal communication tool services, etc. are scientifically presented by the author. analyzed, classified the factors that cause problems in the processes of providing services to customers in the mail communication tool, and also developed recommendations for further improvement of the services of the mail communication tool using modern multimedia technologies. The author based his opinions scientifically in order to eliminate various conflicts on these issues.

**Key words:** Mail, e-mail, electronic digital signature, e-mail, information communication technologies, multimedia, e-document, electronic payment, e-commerce, interactive services, internet network, single portal.

As a result of the consistent implementation of reforms in the field of informatization, the development of modern multimedia information and communication technologies and telecommunication systems and their widespread implementation in life, based on the tasks set for all sectors and government bodies of our republic, is achieved.

It will be possible to achieve the intended goal through the use of modern



multimedia technologies and the improvement of existing tools for the provision of postal services that meet the requirements of today. The relevance of multimedia information and communication technologies in further improving the services provided is incomparable. Currently, the Uzbekistan Post JSC and its regional branches, as well as in postal networks and communication departments, are widely implementing multimedia information and communication technologies.

Adopted by the President of the Republic of Uzbekistan in recent years in order to establish a multi-sectoral information industry in our country, wide introduction of modern multimedia technologies and multimedia information and communication technologies in various sectors of the economy, as well as to provide quality services in the field of postal communication. Several decrees and decrees and government decisions indicate the importance of quality customer service in the postal service.

The decision PQ-4921 of the President of our country on December 14, 2020 on measures to fundamentally improve the system of providing postal communication services indicates that the development of postal communication is supported from the legal point of view.

Today, the postal communication system is an important sector that has its own infrastructure for the delivery of goods, banking, finance and government services, as well as letters and postal shipments at the international level and in the regions of the country.

As a result of not taking enough measures to develop the network of the National operator of Uzbekistan Post over the past periods, a number of shortcomings and problems that are expected to be solved have accumulated.

The fact that Uzbekistan Post JSC took low places in the global rating of the Postal Development Index of the Universal Postal Union indicates that there are many issues that need to be implemented in this regard.



In order to eliminate existing problems in postal communication, fundamentally improve the system of providing postal communication services, introduce modern multimedia technologies in the field, fully automate the activity of providing postal communication services, in order to include our country in the first 50 in the global ranking of postal development index the aforementioned decision was taken.

The main goal of the development of the field of postal communication tools is to fully meet the needs of customers for the transmission of various forms of information through the full use of modern multimedia technologies and the achievements of multimedia information and communication technologies, and to provide the industry with services based on new information technologies. is to turn the provider into a national operator.

We must not forget that the development of information and communication technologies affects the level of competitiveness of the country, allows to collect a large amount of information and generalize it, and opens wide opportunities for organizing management at a strategic level.

Based on world trends, in many countries, modernization of the field of postal communication is aimed at automating and mechanizing the production processes of providing postal communication services, as well as developing new types of services using information and communication technologies.

Automation based on the complex mechanization of production processes in the field of postal communication, the introduction of modern multimedia technologies into the technological processes of customer service is one of the main means of increasing labor productivity and increasing production efficiency.

Today, according to the Law adopted by the President of our country:

First of all - introduction of the final address service in cooperation with local and foreign companies engaged in the provision of postal and courier services, improvement of the traditional services of the postal communication



medium, their digitization, and information technologies for the processes of receiving, tracking and delivering shipments. and the introduction of systems was determined. Provision of modern multimedia services to the population, business and state agencies and doubling of the number of hybrid mail delivery and reception services was set.

In the second place, it was decided to create an information system of the electronic trading platform, which provides the opportunity to sell products of local manufacturers online and deliver them to customers, to establish logistics centers, and to establish and develop services that include storage and delivery of goods.

In the third place - accepting payments online through postal communication facilities, at least 1,000 post offices of the republic, doubling the types of financial services in remote areas, in particular, the acceptance of payments from residents, and the provision of banking services on the basis of outsourcing. set to capture.

Nowadays, one of the frequently raised issues in social networks is the issue of providing the population with fast, high-quality and cheap internet. Based on this, I will also give information about the activities carried out by the Ministry in this direction. In the year of development of science, enlightenment and digital economy of 2020, a number of large projects were implemented in the field of information and communication technologies.

In order to provide the population with high-quality Internet, 19 thousand kilometers of optical fiber communication lines were built to the planned objects in 2020 as part of the construction project of optical fiber communication lines. This creates ample opportunities for the use of new and modern multimedia technologies in the provision of postal services.

In this era of the development of our time, the place of the mobile communication tool is taking an increasingly deep place. It would be appropriate



to focus on providing postal communication services through mobile applications and the Internet. In particular, in 2020, 4,500 base stations were built and put into operation and 3,000 base stations were modernized in order to develop the mobile communication network. As a result, the level of coverage of the republic's settlements with mobile communication devices has reached 97%, and the level of broadband connection to the mobile Internet network has reached 87%. Taking this into account, it is necessary to implement postal communication services based on modern technologies.

In the address of the head of our country to the parliament, a number of tasks were defined for the wide introduction of the digital economy in all areas, the sustainable development of digitization in all directions. In particular, relevant agencies were instructed to develop a new version of the Laws on Postal Communication. It should be noted that effective work was done in this regard in a short period of time.

On August 23, 2007, the Cabinet of Ministers of the Republic of Uzbekistan adopted Resolution No. 181 "On further improvement of cooperation of state and economic administration, local government authorities with legal entities and individuals using information and communication technologies." With this decision, the Regulation on interactive state services using multimedia information and communication technologies and the register of basic interactive state services were approved. May 4, 2011 Resolution No. 126 "On measures to introduce and use a single protected e-mail and electronic document circulation system in the executive apparatus of the Cabinet of Ministers, state and economic management, local government bodies" done. Based on the decision, electronic information exchange between the Cabinet of Ministers and state administration bodies, local government agencies is provided only through the "E-XAT" protected e-mail and the "E-document" electronic document circulation system.

One of the main shortcomings of the postal communication tool today is



that it cannot target modern multimedia technologies. Due to the rapid development of multimedia information and communication technologies on the basis of large-scale reforms carried out in our country during the years of independence, it has a significant impact on the Republic of Uzbekistan's rightful place in the global information community. Currently, information technology enters our daily work activities at lightning speed, keeping documents and ensuring their confidentiality is the main problem of every organization.

The amount of investments involved in multimedia information and communication technologies in all sectors of our republic is the proof of our opinion that the amount of net profit of state administration bodies and enterprises analyzed over the last years has increased. International experience shows that the use of multimedia information and communication technologies in public administration makes it possible to increase productivity by an average of 20% due to the reduction of time spent on interaction, processing and searching of information. During the implementation of state reforms, the economic management and government bodies are actively mastering and widely introducing information technologies.

It is known that nowadays everyone wants to do their work quickly and conveniently through a mobile communication tool. Therefore, it is necessary to organize the services in the field of postal communication in a manner worthy of this demand.

The following are the tasks that should be carried out in order to expand the activities of the postal communication tool in the electronic commerce market:

- creation of a system that enables online sales and delivery of products of local manufacturers to customers, as well as their export of goods;
- concluding contracts with entrepreneurs on placing products developed by entrepreneurs on the national online trading platform;
- introduction of a complex system in order to develop the Internet-



commerce sector;

- organization of logistics centers that allow the owners of online trading platforms to store their products, that is, to solve the problem of warehouses and to quickly pack the products purchased through the online trading platform and deliver them to customers.

It will be possible to increase the efficiency of internet commerce through postal communication by carrying out the above works.

In addition, the following should be implemented in order to provide quality service to customers based on the introduction of modern multimedia technologies.

Including:

- solving the Internet problem in postal communication facilities and providing them with modern multimedia computer equipment and mobile devices;
- introduction of an automated information system that allows receiving, sorting and online tracking of mail;
- increasing the speed of data transmission in postal communication facilities;
- to study the activities of postal operators of foreign countries and to introduce them to the post office of Uzbekistan and to implement cooperation on the exchange of shipments;
- exchange of experience and development of cooperation in the field of using new technologies with designated postal operators of foreign countries;
- organization of education and training courses for service employees on the basis of information and communication technologies;
- organization of seminars and roundtable discussions for managers and specialists of postal communication enterprises based on the study of foreign best practices in e-commerce and logistics issues;
- placing information about the products of entrepreneurs and craftsmen on



the online trading platform;

- creation of a logistics center for online stores, including storage and delivery of goods;
- establishing cooperation with local and foreign online stores;
- establishment of Mobile Communication Departments in order to bring postal communication services closer to the population.

The above-mentioned issues are necessary issues that should be implemented by means of postal communication. It is urgent to implement these issues in order to ensure the future and financial stability of the postal communication tool.

In 2020, Uzbekistan Post JSC carried out international mail exchange with more than 100 countries of the world, and the largest volume of mail exchange was between Russia, Ukraine, the USA, Germany and the United Arab Emirates [6].

Postal communication enterprises provide more than two hundred different postal communication services to consumers - residents and the national economy (long-distance and international letter sending, delivery, reception, parcels, parcels, telephone conversations, reception and delivery of telegrams giving, etc.).

In the provision of postal services, the working hours of communication media departments and the time, beginning and end of working with customers are determined by the Joint Stock Company in agreement with the authorities. A mailbox is placed for the convenience of residents, so that they can send ordinary letters and postcards from the city, railway, airport and other settlements at any time. Each mailbox shows its number, how many times a day correspondence is received, and what day it is not received. In this regard, it is advisable to act according to the customer's demand.

The automated system is created on the basis of a thin client system with centralized database management and software management capabilities based on





WEB technology. The international electronic money transfers of the Universal Postal Union of the automated system are connected to the "IFS light" system, which opens the door of great opportunities to the postal communication tool.

Using this system, it is possible to make local and international money transfers. This creates a basis for increasing the efficiency of the money transfer service and providing services based on new modern multimedia information technologies.

With the launch of the electronic money transfer system, the technological process of postal money transfers has been fully automated. In this case, the process from the time of receiving the money transfer from the client to the payment is automated. In order to increase competitiveness in the postal service market, a program for the implementation of an automated information system of electronic money transfers was developed, and now it is necessary to improve this program based on the introduction of information and communication technologies and new technologies.

The Ministry of Development of Information Technologies and Communications of the Republic of Uzbekistan implements bilateral cooperation of the Republic of Uzbekistan in the field of information technologies and communications with other countries and international organizations in the field.

By becoming a member of the Universal Postal Union, the Republic of Uzbekistan gained the following opportunities:

Using the World Postal Convention and additional agreements, establishing uniform international postal communication tools and participating in international postal exchanges;

Organization of postal cooperation with the Union member states.

In order to perform these tasks in a high-quality way, what is necessary for the postal communication tool is to adapt to the requirements of this time and integrate with advanced technologies.



Bilateral cooperation with foreign countries. Currently, the Ministry of Information Technology and Communications Development of the Republic of Uzbekistan cooperates with the Republic of Korea, the People's Republic of China, Japan, India, Singapore, Malaysia, Germany, Switzerland, the USA and many other countries that are achieving advanced results in the field. established strong communication tools. Within the framework of regional cooperation in the field of communications established between CIS member countries, effective cooperation in the field has been established.

The basis of international cooperation is the establishment of international agreements, agreements and legal documents in the field of communications, information and telecommunications. Technically, the development of enterprises directly depends on the improvement of their management methods. At the same time, it is necessary to take into account not only the solvency of the population in one or another region, but also social traditions and specific features of the living environment.

The use of foreign experience in introducing new services in the field of postal communications, following the path taken by developed countries is one of the most effective directions for the development of the field of communications.

Let's take the Russian post as an example. The post of Russia is considered a comprehensive and highly developed industry and provides services to all segments of the population. Russian Post has implemented the online system of pochta market, which provides customers with a number of services.

Russian Post has introduced a system of online subscription to newspapers and magazines, which allows customers to subscribe to or order newspapers and magazines from their homes or workplaces.

Implementation of the services of Russian Post such as Pochta market service and online subscription in Uzbekistan Post JSC will lead to an increase in the number of customers of the postal communication service and an increase in



the scope of income.

The introduction of new types of customer service on the basis of information communication technologies provides the future perspective of the postal communication industry.

The Ministry of Information Technologies and Communications Development of the Republic of Uzbekistan is the body responsible for forming and maintaining the Unified Register of operators and providers of postal communication tools. Therefore, the fate and future activity of the postal communication tool is in the hands of this ministry.

The single register is maintained electronically in the online mode, the business entities that carry out the sending and delivery of mail and courier shipments have the status of the operator or provider of the postal communication tool in the established order from the day of their entry into the Single Register. .

Benefits established by law on customs fees for goods entering the Republic of Uzbekistan through international mail and courier shipments are applied only to operators and providers included in the Unified Register.

The costs of the creation and implementation of the information system of the Unified Register of operators and providers of postal communications are financed from the funds of the Fund for the Development of Information and Communication Technologies.

According to the regulation on the procedure for forming and maintaining the Unified Register of operators and providers of postal communication, the main tasks and directions of maintaining the Unified Register of operators and providers of postal communication are as follows:

creation of a single electronic data bank on operators and providers of postal communication tools providing postal and courier services;

Formation of a database on the state and potential of the market of postal communication services in the Republic of Uzbekistan;



to determine the priorities for the effective development of the market of postal communication services, as well as to evaluate the state of the current legislation and develop proposals for improvement;

conducting systematic monitoring to ensure compliance with regulatory legal documents and postal security requirements in the field;

development of postal communication services and assistance in providing high-quality and competitive services.

The introduction of new types of customer service on the basis of information communication technologies provides the future perspective of the postal communication industry.

It is desirable to improve the postal service using the experiences of the Italian Post (Poste Italiane), which is considered the leader in terms of the reputation of the postal service and the level of customer service among European countries.

The Poste Italiane group of companies combines four business lines: Postal Services, Postal Bank, Express Delivery and Courier Services.

In addition, I believe that along with the development of information and communication technologies in the field of postal services, it is necessary to pay serious attention to issues such as increasing the capacity of personnel. Because no matter how advanced technology is the enterprise, if the workers cannot use the existing technologies enough, the created opportunities will not give their results.

Comprehensive plans should be developed to implement this issue. For example, training courses should be opened in regional branches of JSC "Uzbekistan Post" in order to improve the qualifications of employees, and training of employees should be carried out based on the schedule. The issue of improving skills is also of urgent importance.



## REFERENCES

1. Xamidovna, Mamayusupova Iroda. "EVACUATION OF THE LEVEL OF CONFLICTS IN CONFLICT SITUATIONS BETWEEN ADOLESCENTS." Conferencea 1.1 (2023): 23-27. <https://conferencea.org/index.php/conferenceas/article/view/372/375>
2. Khamidovna, Mamayusupova Iroda. "MASTERY OF MANAGING PEDAGOGICAL COMMUNICATION STUDY, GENERALIZATION AND DISSEMINATION OF ADVANCED PEDAGOGICAL EXPERIENCE." Galaxy International Interdisciplinary Research Journal 10.12 (2022): 1217-1222. <https://internationaljournals.co.in/index.php/giirj/article/view/4627/4322>
3. Khamidovna M. I. CAUSES OF FAMILY CONFLICTS //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 12. – C. 870-872. <https://internationaljournals.co.in/index.php/giirj/article/view/3156/2907>
4. O'zbekiston Respublikasining «Elektron raqamli imzo to'g'risida»gi Qonuni. Toshkent shahri, 2003 yil 11 dekabr, O'RQ № 562-II son.
5. O'zbekiston Respublikasining «Axborot erkinligi printsiplari va kafolatlari to'g'risida»gi Qonuni Toshkent shahri, 2002 yil 12 dekabr, O'RQ № 439-II son.
6. O'zbekiston Respublikasi Prezidentining «Komp'yuterlashtirishni yanada rivojlantirish va axborot-kommunikatsiya texnologiyalarini joriy etish chora-tadbirlari to'g'risida»gi qarori. Toshkent shahri, 2002 yil 6 iyun № 200-son.
7. <https://internationaljournals.co.in/index.php/giirj/article/view/3004>
8. <https://internationaljournals.co.in/index.php/giirj/article/view/3262>
9. <https://internationaljournals.co.in/index.php/giirj/article/view/3263>



## IMPROVING THE PEDAGOGICAL THINKING OF UNIVERSITY STUDENTS BASED ON THE PEDAGOGICAL VIEWS OF EASTERN STUDENTS

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**Abstract:** the article reflects the views of Eastern scientists on improving the pedagogical thinking of students of higher educational institutions based on the literary heritage of Abu Hasr Farabi, Al-Khorezmi, Beruni and Ibn Sina.

**Key words:** pedagogical thinking, teaching, learning, professional experience, Muhammad ibn Musa al-Khorezmi, Abu Nasr Farabi, Abu Raihan Beruni, Abu Ali ibn Sina.

### INTRODUCTION

Pedagogical thinking is a generalized reflection and creative modification of the objective features of the pedagogical process, features of pedagogical phenomena, goals and objectives of teaching and upbringing, as well as modeling of the processes of teaching and upbringing, determined by professional experience. One of the ways to improve the pedagogical thinking of university students is the effective use of the pedagogical views of Eastern scientists in the system of taught subjects. Among the scientists of the East, our great ancestors, such as Muhammad ibn Musa al-Khorezmi, Abu Nasr Farabi, Abu Raikhan Beruni, Abu Ali ibn Sina, with their scientific and creative heritage not only contributed to the knowledge of their people, but also to the high level of science throughout the world who conquered the peaks.

### LITERATURE ANALYSIS

President Shavkat Mirziyoyev said: "If we look at history, we will see that our Motherland, located at the intersection of the Great Silk Road, has been one of



the centers of high civilization and culture since time immemorial. The rich scientific and cultural heritage of our people, ancient stone inscriptions, priceless architectural monuments, rare manuscripts, and various antiques testify to the deep roots of the three-thousand-year history of our statehood.

The famous orientalist J. Sarton called the first half of the 11th century Beruni a period in the history of world science. He was considered the first world sage of his time. Famous scientist S.P. Tolstov dedicated his monograph “In the Footsteps of the Ancient Khorezmian Civilization” to Abu Rayhan al-Beruni from Khorezm.

Academician V. R. Rosen evaluates Beruni’s work “India” as “there is no work equal to it among all the scientific literature of the East and West in antiquity and the Middle Ages.”

Indian scholar Hamid Reza, speaking about the scholar Beruni, said: “No medieval or modern author could so successfully understand the complex problems of Indian culture as Abu Rayhan Beruni.”

S. P. Tolstov, A. A. Freiman, M. Aripov on the history of education. O'.Aleuov, Kh.Boboev, A.Zunnunov, B.Kadirov, S.Nishonova, Kh.Tillashev. K. Khoshimov. O. Gasanboeva, J. Gasanboev. Human perfection of encyclopedist scientists, features of pedagogical phenomena, goals of teaching and education in the research of Z. Nuritdinova, E. Torakulov, S. Ragimov, Kh. Khomidov, K. Nosirov, F. Babazhev, N. Makhmudova and tasks, as well as their opinions on issues of modeling educational processes, determined by professional experience, in modern language.

#### *RESEARCH METHODOLOGY*

*The article discusses the pedagogical views of Eastern scientists on improving the pedagogical thinking of university students. The pedagogical views of Eastern scientists are described. The pedagogical views of Eastern scientists are analyzed and these approaches are studied.*



### ANALYSIS AND RESULTS

*The encyclopedist Allama Muhammad al-Khorezmi synthesized the basic ideas, principles and methods of scientific knowledge of his time. He paid attention to students' independent acquisition of scientific knowledge. Khorezmi paid great attention to the student's personal observations and the use of acquired knowledge. In doing so, he highly valued the skills and abilities of those who seek knowledge to gather scientific sources, express them, and explain what they observed. For example, in the work "Al-kitab al-mukhtasar fi lisb al-jabr wal-l muqabala," he divides scholars into three groups: He can bequeath it to his successors. The other interprets the works of her predecessors and thereby alleviates difficulties. , opens what is closed, illuminates the path and makes it more understandable. Or he is a person who finds fault in some books and collects scattered ones, he has a good opinion of those who came before him, he is not arrogant and is not proud of what he has done.* The encyclopedist Abu Nasr Farabi expressed his opinion on the procedure for acquiring knowledge in his work "Happiness - about achieving happiness." He stated that the first thing to study is the science that needs to be known, this is the science of the foundations of the universe. After studying it, it is necessary to study the natural sciences, the structure and shape of natural bodies, and knowledge about the sky. After this, the science of living nature, plants and animals is mainly studied. Farabi says that a person cannot achieve perfection on his own. He needs to be in contact with other people, their help or relationships. In his opinion, it is important that the educational process is organized by an experienced teacher and educator. Because not everyone can experience happiness and events on their own. For this he needs a teacher. Farabi says this can be achieved through proper education. Because purposeful upbringing and training makes a person perfect both intellectually and morally, in particular, a person correctly assimilates the laws of nature and society and leads the right way





of life, behaves correctly with others, and follows the rules of society. Therefore, Farabi believes that the main task of education is to educate a mature person capable of satisfying the needs of society and serving this society. Beruni, an encyclopedist, considers man to be the highest perfection of nature. He divides all moral qualities of a person's mental image into 2 types: good and bad. Reflecting on human and moral education, Beruni says: "Man is given reason to improve the earth and manage it, therefore every person must have high morals." Intellectual education, says Beruni, develops a person's thinking, expands his worldview, and develops a range of thinking. This affects his sense of self. As can be seen from the above, Beruni's ideas about the formation of a perfect person are of great importance not only for his time, but also for improving modern education. After all, he proved that he possesses truly perfect human qualities, left a great spiritual legacy for future generations, proved this with his life, creativity and works. Beruni became famous as one of the encyclopedist scientists of the Eastern Renaissance.

The encyclopedist Abu Ali ibn Sina at one time paid serious attention to the issue of classification of sciences and wrote a work in this area entitled "Aksam al-ulum alakliyya" ("Classification of intellectual sciences"). The scientist of "Aqsam al-Uloom Alakliya" perceives intellectual sciences as hikmat - philosophical sciences and divides them into theoretical and practical parts. Theoretical sciences are aimed at knowing the truth, applied sciences are aimed at doing good deeds.

Theoretical philosophy is divided into 3:

- 1) lower-level sciences, i.e. natural sciences (medicine, chemistry, astrology, etc.);
- 2) intermediate level science – math. (geometry, arithmetic, astronomy, music);
- 3) science of the highest level - metaphysics (theology).



Practical philosophy consists of three parts:

- 1) morality. This part describes thoughts about one person and what his character will be like.
- 2) economics. This part shows how people relate to each other in family and household matters.
- 3) divided into policies.

This part talks about how people interact with each other on a city or country scale and how to govern the state. These categories are also divided into smaller industries. The work mentions the branch of science, Ibn Sina argues that true moral qualities and an ideal community can be achieved in this existing world, and people should live in a society based on mutual support. It states that society should be governed by fair laws adopted by mutual consent of people. All members of society must obey this law, violation of the law and injustice must be punished. He believes that if the ruler himself commits injustice, then the uprising of the people against him is correct and should be supported by society. In his reflections on morality, he pays special attention to the most necessary moral relations in the everyday activities of people, moral rules, such as modesty, honor, courage, correctness, and honesty.

Ibn Sina, with his rich and rich scientific heritage, had a great influence on the development of Eastern and Western culture in the subsequent period.

Show future teachers that the experience of using the pedagogical views of Eastern scientists in improving the pedagogical thinking of university students is a logical continuation of the organic development of pedagogical thinking and will help to understand education and training in the future. The main goal is to bring to the consciousness of young people the educational and moral views of the great thinkers Abu Nasr Farabi, Abu Rayhan Beruni, Abu Ali ibn Sina. It is expected to carry out work on organizing the educational process based on the ideas of Eastern thinkers about pedagogical thinking, that is, about education and intelligence. In this regard, it



is expected to reveal that Eastern thinkers, when cultivating the spiritual qualities of a perfect person and studying the history of mankind, took into account the intellectual, civil, spiritual and moral, physical, hardworking, economic, environmental, and aesthetic aspects. pedagogy, education, content, forms and styles, tools of these components.

## CONCLUSION

Purely pedagogical works were created during the Eastern Renaissance, and the scientific creations of scientist-teachers, who left a name with their immortal teaching about special and general methods of human development in education, retain their value to this day. The ideas and views of lexicographers on education also impressed European scientists.

## References.

1. Xamidovna, Mamayusupova Iroda. "EVACUATION OF THE LEVEL OF CONFLICTS IN CONFLICT SITUATIONS BETWEEN ADOLESCENTS." *Confrencea* 1.1 (2023): 23-27.  
<https://confrencea.org/index.php/confrenceas/article/view/372/375>
2. Khamidovna, Mamayusupova Iroda. "MASTERY OF MANAGING PEDAGOGICAL COMMUNICATION STUDY, GENERALIZATION AND DISSEMINATION OF ADVANCED PEDAGOGICAL EXPERIENCE." *Galaxy International Interdisciplinary Research Journal* 10.12 (2022): 1217-1222.  
<https://internationaljournals.co.in/index.php/giirj/article/view/4627/4322>
3. Khamidovna M. I. CAUSES OF FAMILY CONFLICTS //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 12. – C. 870-872.  
<https://internationaljournals.co.in/index.php/giirj/article/view/3156/2907>
4. Goziev E. Psychology of secondary school. T: 1997.
5. General psychology. Edited by A. V. Petrovsky. T: 1992



6. Davletshin M.G. Development of technical abilities in sleepers. T: 1991 1.
4. Barysheva T.A., Zhigalov Yu.A. Psychological and pedagogical fundamentals of developing creativity - St. Petersburg: SPGUTD, 2006.
7. Bashina T.F., Ilyin E.P. Psychology of creativity, creativity, creativity. - KPb.: Peter, 2009.
8. Mukhiddinov A.G. Speech activity in the educational process. – T.: Teacher, 1995.
9. Saidakhmedov N. Pedagogical skills and pedagogical technology. - T.: OPI, 2003.
10. Sulstonova G.A. Teaching skills. - T.: TDPU im. Nizami, 2005.
11. Gudratov T. Fundamentals of speech culture / Textbook on OO'Yu. - T.: “Teacher”, 1993.



## BASIC PRINCIPLES OF MANAGEMENT PSYCHOLOGY

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**Abstract.** This article highlights the relevance and problems of management psychology, pedagogical and psychological aspects of child psychology and economic psychology, the influence of an object on relationships, conditions for their optimization, recommendations for ensuring the effectiveness of management activities in general. described in detail.

**Key words:** management, leader, managerial qualities, leadership characteristics, management, activity, professionalism, object, subject, efficiency.

### INTRODUCTION

President Sh. As Mirziyoyev noted: “The demand for work It’s one thing to do, it’s quite another to touch people’s personalities. People do not forget that he can obey you in work, but in all other respects he has equal rights with you. ... We all know very well that our people are a noble and honest people. Our people can tolerate everything, but I repeat again and again: they cannot tolerate injustice and injustice. A real leader, a real leader, is appointed not to test people's endurance, but to create suitable conditions for them. Leaders at all levels - be it a minister or a governor, the head of a department or an organization - must be an example and example for everyone with their manners and culture.”

Our grandfather Amir Temur, speaking about his leadership qualities, said the following: “I conquered people with openness and compassion. I strove for justice and strove to be away from oppression“Truly, leadership and its correct



implementation is an art, a skill. Because this is a multifaceted and complex process. For this reason, its study and research began in ancient times and continues to this day. How many theories and doctrines have been created and are being created on this matter.

The modern theory of the art of leadership appeared in the United States. The first literature in this area was published in European countries, where the old management system began to lose its importance.

If you pay attention to modern management, then all that remains is to list the devices and equipment in the office as the most reliable and obedient control object in a modern organization. Employees, understood as objects of direct management, have become a “potential” element of a complex management process. Interacting with this “element”, constantly pushing it towards the goal, in a word, the effectiveness of today’s management largely depends on the psychological preparation of the leader. The scope of research on management improvement is so broad that at first glance it seems that it is focused on only one topic, but its diversity leads to the emergence of conflicting ideas in management science. Continuation of the idea that management has a specific aspect allows us to define the subject area of psychology, in particular, the psychology of management. Based on a series of analyses, we come to the conclusion that psychological phenomena in management can be divided into three main groups:

- The subject of management is the leader.
- The object of control is the employee.
- The relationship between the subject and the object of management.

This grouping of psychological phenomena related to management is arbitrary, and the study of each of them inevitably includes the other two. In particular, since the leader as a subject of management becomes the main subject of many studies, each of his actions implies an employee and, naturally, is interpreted within the framework of certain relationships. Even the activities of a



leader to improve his personality are defined as an internal psychological attitude, an attitude towards himself. This limitation of the subject of management, on the one hand, allows us to define our subject for the science of psychology, and on the other hand, is expressed in the formation of completely new views on the science of management. In particular, it would not be an exaggeration to say that the ideas and thoughts proposed by proponents of the phenomenological approach to management and leadership activity, in fact, were able to express not only the area and direction of research, but also the “point” of psychology. The introduction of such technical tools into the life of a modern manager gives new meaning to the issue of technological improvement of managerial professionalism. In our opinion, the issue of professionalizing management and increasing the professionalism of managers, like any other area, can only be resolved on the basis of the integration and activities of various scientific areas. We cannot deny that the concept of management psychology exists not only in organizations and enterprises, but also in a number of activity processes discussed above. It can be seen that the concept of management psychology is present not only in the activities of the manager and employees, on the contrary, this concept is present in many types of activities. It is necessary to study management by connecting it with the economic basis of society, taking into account two organizational, technical and socio-economic aspects of management. Organizational and technical management of net consumption division of labor and cooperation in preparing products to achieve value different Socio-economic management of existing production is related to relationships and defines management goals. Organizational Technical management is a type of activity that allows you to create conditions for increasing labor productivity and production efficiency.

The purpose of socio-economic management is to ensure effective work of employees.

is to create conditions for them, form a reliable national system of their



social protection, ensure employment and support low-income segments of the population. The final result of the reforms being implemented today in our country largely depends on leaders and their professional skills in management. In this regard, first of all, it is necessary to pay special attention to developing the skills of management personnel and civil servants to work with civil society institutions and people.

Such abilities and skills can only be developed through special educational activities.

possible In this regard, today the development of scientific research in the field of management and the training of management personnel is a very important issue.

We are waiting for its result. Actions aimed at specific results in this area pose pressing challenges for pedagogical and psychological science. For example, the need to select suitable candidates, to fairly assess their managerial potential and abilities when appointing management personnel to positions in various areas of management has always been an urgent problem. It will not remain the same. It is necessary to integrate the characteristics and qualities of a person, his experience, existing knowledge, skills and abilities into the professional and personal qualities characteristic of modern leaders.

## CONCLUSION

In conclusion, we note that the problem of management is widely studied in the field of psychology on the basis of various theories, concepts, approaches, positions, directions. At the same time, it is important for the higher education system that the manager and the leader are expressed in one person, and the official leader must organize the management process, maximally combining the goals of the organization with the interests of employees. possible. It is this factor, especially high qualifications in the field of profession, that serves as the basis for a leader's rise to the leadership level. Separately, it should be noted that





management psychology is recognized as a new, modern and researched direction within the branches of psychology. By introducing theoretical and practical aspects of management psychology into the life of society, it will be possible to avoid various conflict situations that may arise between teams and workers, and production will continue to grow both quantitatively and qualitatively.

### Recommendations

1. 1 Xamidovna, Mamayusupova Iroda. "EVACUATION OF THE LEVEL OF CONFLICTS IN CONFLICT SITUATIONS BETWEEN ADOLESCENTS." *Confrencea* 1.1 (2023): 23-27.

<https://confrencea.org/index.php/confrenceas/article/view/372/375>

2. Khamidovna, Mamayusupova Iroda. "MASTERY OF MANAGING PEDAGOGICAL COMMUNICATION STUDY, GENERALIZATION AND DISSEMINATION OF ADVANCED PEDAGOGICAL EXPERIENCE." *Galaxy International Interdisciplinary Research Journal* 10.12 (2022): 1217-1222.

<https://internationaljournals.co.in/index.php/giirj/article/view/4627/4322>

3. Khamidovna M. I. CAUSES OF FAMILY CONFLICTS // *Galaxy International Interdisciplinary Research Journal*. – 2022. – T. 10. – №. 12. – C. 870-872.

<https://internationaljournals.co.in/index.php/giirj/article/view/3156/2907>

4. Same source, p. 19. 5

. N. Boymurodov. *Psychology of leadership*. - Tashkent, - “Yangi asr avlod” 2016, - 132 pp. 6. N. Rakhmatullaeva, A. Kamolov. *Social management*. // *Management*. – T.: “Economics-Finance”, 2017. – 288 p.

7. I. Makhmudov. *Management professionalism: psychological analysis*. // - Tashkent: Academy Publishing House, 2011. - 304 p.

8. Kasimova D.S. *Control theory: Textbook*. - T.: Tafakkur Bostoni, 2011. -



335 p.

9. Konina N.Yu. Management in an international company: how to win the competition. - M.: TK Velby, 2018. - 560 p.

10. Ermakov V.P., Makiev Z.G. Guide for University Students. – Rostov n/a: Phoenix, 2015. – 184 p.

11. Goncharenko L.P. Management is about investment and innovation. Textbook. – M.: KNORUS, 2019. – 160 p.

12. Kane M.M., et al. Systems, methods and tools of quality management: Textbook. – St. Petersburg: Peter, 2009. – 560 p.

13. Farkhutdinov R.A. Production management: Textbook. 6th ed. - St. Petersburg: Peter, 2012. - 496 p.

14. <https://internationaljournals.co.in/index.php/giirj/article/view/3004>

15. <https://internationaljournals.co.in/index.php/giirj/article/view/3262>

16. <https://internationaljournals.co.in/index.php/giirj/article/view/3263>



## PEDAGOGICAL AND COMMUNICATIVE ABILITIES IN THE WORK OF A TEACHER

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**Abstract:** In this article, I once again emphasize the need to train future teachers as cultural individuals, armed with high pedagogical skills and technical skills. Human abilities are considered as an opportunity to acquire knowledge and skills. He deeply revealed the qualitative characteristics of abilities and features of teaching abilities.

**Key words:** abilities, ability, ability, talent, talent, pedagogical abilities, communication abilities, didactic abilities, authoritarian ability, insightful ability.

### INTRODUCTION

Achieving independence of the Republic of Uzbekistan set before institutions of public education the important task of forming citizens of a new democratic state. In our society, which is at the stage of socio-economic development, there is currently a problem of improving the training of qualified personnel for pedagogical universities, academic lyceums, vocational colleges, and schools in order to improve the activities of secondary schools. This requires paying great attention to training in higher educational institutions young specialists who meet the requirements of the time, not only with a deep study of theoretical knowledge, but at the same time with excellent human qualities, capable of going into business. and who have a thorough mastery of their work. Moreover, this requirement of the present time once again emphasizes the need to train future teachers as cultural individuals, armed with high pedagogical skills and technical skills. The years of independence are literally socio-economic and



cultural for the Republic of Uzbekistan.determining development prospects, carrying out large-scale reforms in order to take a worthy place among the countries of the world community. Studying the experience of developed countries of the world, taking into account local conditions, economic and intellectual resources, carrying out fundamental reforms in all spheres of society ensures the achievement of new achievements. Although established international cooperation in various fields has yielded results, strengthening national independence in all aspects, enriching the achievements achieved, and quickly eliminating existing shortcomings requires special dedication, enthusiasm, courage and determination from members of society.

### MAIN CONCLUSIONS AND RESULTS

Teaching teaching first appeared in the mid-19th century. Desterverg was the first to talk about teaching skills and perceptual abilities and draw attention to this issue. He drew attention to the strength of pedagogical skill, pedagogical tact and rigor. Liberty. He put forward the concept of a teacher's ability to acquire knowledge. Then, in the second half of the 19th century, P. G. Redkin put forward the concept of "moral ability." This idea was continued by K. D. Ushinsky: "The most important way to educate a person is conviction, and a person's faith can only be influenced by conviction." L.N. Tolstoy said: "For education to be successful, people who educate must be able to educate themselves without stopping." Based on his experience, A. S. Makarenko says that "if everyone works hard, if he is demanding of himself, he can be a good teacher."Abilities are present in all people, and they are not the same, one has high, another has average and low. To work successfully, every teacher must have teaching skills. The owner of pedagogical skill spends little effort and achieves great results. Abilities appear and develop in the process of activity. Abilities are those psychological characteristics of a person on which knowledge, skills and abilities depend, but these characteristics themselves do not relate to this



knowledge, skills and abilities. Human abilities are only the ability to acquire knowledge and skills. Whether this knowledge and skills will be acquired or burdened depends on many circumstances. A child's musical ability does not guarantee that he will become a musician. For a child to become a musician, he must have a special education, perseverance, good health, a musical instrument, sheet music and other conditions. Without this, the ability may not develop and fade away. A serious mistake for a teacher would be to hastily draw a conclusion, without serious testing, that the student has the necessary skills and system of competencies, as well as solid knowledge and working methods. There are many people who were not recognized by others for their abilities as children and later became famous because of those abilities. Effective and successful organization of the pedagogical process depends on the pedagogical skill of the teacher. One source explains the concept of "ability" as follows: an individual psychological characteristic that makes it easy for a person to master any activity. Abilities are divided into two groups in the form of general and special abilities. "General abilities are manifested in the main types of personal activities, and special abilities are considered to be those that are manifested in certain types of professional activities (mathematical, technical, musical, visual arts, literature (poetry and prose), physical training, etc.). abilities... One of the leading characteristics of abilities is to creatively imagine the essence of things and events. Pedagogical abilities are properties that are important for ensuring the rational organization and conduct of pedagogical activities by the teacher, the effective implementation of practical tasks. The priority signs of pedagogical abilities are:

- pedagogical tact (the teacher's compliance with existing ethical principles and rules of conduct in communication with students, organized in various forms of activity,
- having the skills to correctly compare them);



- pedagogical observation (the teacher's ability to notice even the simplest features characteristic of students);

- love for students (love them, show kindness to them, share your inner experiences, feelings, dreams, aspirations, take care of them in difficult situations);

- the need to transfer knowledge (as a teacher, he strives to transfer the knowledge he has to students)

F. N. Gonobolin considers it important for a teacher to demonstrate the following skills:

- ability to understand the student;- the ability to present materials that can be mastered by young, psychologically all students;

- ability to develop students' interests;

- organization skills;

- pedagogical tact;

- have the opportunity to see the results of your work, etc.

V. A. Krutetsky, generalizing the abilities inherent in a teacher, shows that their types are as follows

#### Main types

Didactic abilities – the ability to clearly, clearly and accessibly explain educational material, arouse students' interest in subjects, and develop independent thinking skills.

Academic skills - mathematics, physics, biology, chemistry, native language, literature, history, etc. ability to master the basics of science

Perceptual abilities - the ability to penetrate into the inner world of a person, psychological observation, the ability to understand the subtleties associated with the student's temporary mental states.

Speech abilities are a person's ability to clearly and clearly express their feelings through speech, as well as facial expressions and



pantomime. Organizational skills – the ability to organize a team of students, the ability to unite a team, the ability to properly organize teaching activities.

Authoritarian ability is the ability to create the opportunity to gain authority among students by influencing them emotionally and voluntarily.

Communicative ability - the ability to communicate with students, find an effective way to communicate with them, the presence of pedagogical tact that connects mutual pedagogical communication in accordance with the goal. expressive ability. Even low hearing or lack of hearing cannot significantly impede the development of professional musical abilities. The problem of quantitative measurement of abilities in psychology has a long history. At the end of the 19th and beginning of the 20th centuries, a number of psychologists (Kettel, Theremin, Spearman, etc.) proposed determining students' abilities under the influence of requirements related to the need to make a career. choice of government specialties. Abilities can be general or special. By studying the specific psychological characteristics of various abilities, we discover that these abilities are not one, but many. It is possible to distinguish general qualities that meet the requirements of a given type of activity, and special qualities that meet somewhat narrower areas of this activity. In some people these general qualities are expressed in a Yorkian manner. For example, Ibn Sina was a doctor, writer, musician, mathematician, etc. Hamza Hakimzoda Niyazi was a playwright, poet, composer, teacher and public figure. For some people, virtues belong to specific activities. For example, the ability to draw, write, draw. A high level of development of abilities is called talent. Talent is a set of abilities that allows a person to successfully, independently and originally perform any complex work. Talent, like ability, consists of the ability to achieve a high level of creativity and significant success.

Here we are in first place in Uzbek wrestling and one of the first places in boxing. All these are wedges of time. Talent is the sum of abilities, their totality.



An isolated, individual ability, even if it has reached a very high level of development and is clearly expressed, cannot be equated with talent. Although the development of abilities depends on natural conditions, which are not necessarily the same among different people, the connection between talent goals and abilities mentioned above shows that abilities are not simply a gift of nature, but a product of personal history. If in animals the achievements of the previous generation are transmitted to the next generation mainly through hereditary morphological changes in the body, then humanity is realized in this socio-historical way, i.e. through craft, language, works of art, etc. A factor indicating whether a person's ability to perform a certain activity, whether he feels a burden or not, is considered a learning method. Where educational methodology is weak, there are claims that ability is key. It is common knowledge that the methodology is constantly being improved, which leads to a narrowing of the range of “key capabilities”. The problem of forming abilities and talents is of great social and national importance. Due to the fact that the structure of the totality of mental qualities realized as abilities is determined by a single and separate activity need, it is necessary to express this in a unique way for each type of activity. Interest is considered one of the important psychological aspects of personality, in which the individual character of a person is directly laid down. Curiosity directly plays an important role in people's worldviews, beliefs, ideals, that is, their highest goals, good intentions, dreams and hopes, and serves to ensure their success. on the level of knowledge. Curiosity, as a motive, creates a creative approach to various forms of activity to understand the wonderful aspects of existence, master the fundamentals of science, forms a responsible attitude to work and study, and creates psychological conditions for the formation of hard work and determination. , and the indomitable will in each individual person creates. When approaching, based on the psychological nature of interest, interest plays the role of desire, activity, internal motivation and source of need satisfaction.





## CONCLUSION

Thus, from the very beginning, when issues of personal education were put on the agenda for the development of human society, social demands were put forward regarding the formation of a category of persons responsible for the education and upbringing of children, their ability to meet certain requirements. social needs of both individuals and professionals, as well as to acquire professional skills. Introducing students to social needs, developing their pedagogical skills and professional skills is one of the important tasks. The basics of pedagogical skills are studied. Thus, the need to withstand strong competition in the labor market under market conditions encourages each specialist to develop professional competence and inherent qualities. In lexical terms it means “abilities,” and in substantive terms it means “effective use of theoretical knowledge in activities, the ability to demonstrate a high level of professional skills, abilities and talents.” In particular, on the basis of teacher-specific professional competence, such qualities as social, special (psychological, methodological, informational, creative, innovative and communicative), personal, technological and ultimate competence are reflected. A number of studies, in particular by A.K. Markova and B. Nazarova, note the structural foundations of pedagogical competence. Teacher's profession competence of the pedagogical (educational and educational) process effectively, ensures a successful organization. To acquire professional competence, a teacher must pay attention to consistent self-development. The “Individual Development Program” is useful for teachers in self-development. Indeed, in this program, the qualities of competence that the teacher possesses, and the qualities that need to be developed, BCM can be expressed clearly and objectively.

## References.

1. 1 Xamidovna, Mamayusupova Iroda. "EVACUATION OF THE LEVEL OF CONFLICTS IN CONFLICT SITUATIONS BETWEEN



ADOLESCENTS." Confrencea 1.1 (2023): 23-27.

<https://confrencea.org/index.php/confrenceas/article/view/372/375>

2. Khamidovna, Mamayusupova Iroda. "MASTERY OF MANAGING PEDAGOGICAL COMMUNICATION STUDY, GENERALIZATION AND DISSEMINATION OF ADVANCED PEDAGOGICAL EXPERIENCE." Galaxy International Interdisciplinary Research Journal 10.12 (2022): 1217-1222.

<https://internationaljournals.co.in/index.php/giirj/article/view/4627/4322>

3. Khamidovna M. I. CAUSES OF FAMILY CONFLICTS //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 12. – C. 870-872.

<https://internationaljournals.co.in/index.php/giirj/article/view/3156/2907>

5. Bashina T.F., Ilyin E.P. Psychology of creativity, creativity, creativity. - KPb.: Peter, 2009.

6. Mukhiddinov A.G. Speech activity in the educational process. – T.: Teacher, 1995.

7. Saidakhmedov N. Pedagogical skills and pedagogical technology. - T.: OPI, 2003.

8. Sulstonova G.A. Teaching skills. - T.: TDPU im. Nizami, 2005.

9. Gudratov T. Fundamentals of speech culture / Textbook on OO'Yu. - T.: "Teacher", 1993.

10. Khusanov B., Gulomov V. Cultural culture / Textbook. - T.: "Economics-finance", 2009.



## USE OF MODERN TECHNOLOGIES IN SOLVING TEXT PROBLEMS

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**Abstract:** The article discusses the use of modern technologies in solving textual problems, the use of modular technologies in teaching mathematics, and gives methodological recommendations.

**Keywords:** Pedagogy, technology, module, ICT, knowledge, skills, competence, consolidation, computer technology, Educational materials, schematic approach.

Teachers should have a deep knowledge of mathematics using various methods of teaching at the elementary level in order to expand the theoretical knowledge of school mathematics, develop logical thinking skills, form the basis of mathematics, deepen their understanding, increase students' creative research, independent work. . Today, the main issue is the quality of education, and an effective way to improve the quality of education is the use of various technologies in the education system.

There are many modern teaching technologies that are widely used in teaching mathematics at the primary school level and some of them are:

- the technology of combining didactic units (PM Erdniyev) helps to master direct and inverse operations and operations at the same time, and a set of exercises based on the principle of consolidation helps to consciously and firmly acquire knowledge helps to master;

- the problem-based technology of teaching mathematics (R.G. Khazankin)



allows students to check the correctness of the problem by using the methods of solving problems and checking each other;

- developmental educational technology (LS Vygotsky, L.V. Zankov, DB Elkonin, V.V. Davydov) developmental training system aimed at accelerated, intensive, comprehensive development of a person in accordance with all qualities;

- Modular teaching technology (V.M. Monakhov) can design and create the educational process in accordance with the purpose;

- computer technology of teaching, mastering computer work techniques, active participation in class, individual work, personal assistance;

- problematic educational technology;

- teaching technology on reference signals (V.F. Shatalov) grouping theory and practice in the form of blocks, mastering theoretical materials in class in the form of summary schemes, information summaries, independent research, homework;

- preliminary preparation of the first part of the acquired knowledge with explained management

- training (S.N. Lisenkova); "Development of critical thinking through reading and writing" is one of the new technologies that realizes the creative potential of modern requirements in order to increase the level of knowledge of students, that is, the quality of education.

With the help of this technology, you can solve the following problems during the lesson:

- development of students' critical thinking;

- active participation in thinking; - increasing responsibility for acquiring knowledge. Several STO strategies can be used in mathematics lessons: "Association", "Venn diagram", "Five-line poem", "Pair, group, individual work", "Extensive lecture". In recent years, the use of new pedagogical technologies,



computers, electronic textbooks, interactive whiteboards in accordance with modern trends in daily lessons has been effective.

The educational system is carried out through electronic communication, information exchange, Internet, e-mail, teleconferences, online classes. The peculiarity of the use of new technologies is that they allow students to engage in creative work independently or together, search, see the results of their work, self-criticize and enjoy their achievements. gives the opportunity to get E-textbook for teachers is an open methodological system that is constantly evolving. Each teacher can fill it with materials from their pedagogical practice and further improve it. Electronic textbooks have a great role in the rational development of educational materials. Theoretical topics are widely disclosed in electronic textbooks. If the theoretical material is supplemented with various drawings in the form of graphic images, schematic approaches, then the process of reading, imagining, understanding and strengthening theoretical knowledge in the brain will be more effective.

Modular teaching - ensures independence of education in terms of knowledge content, learning speed, ability to work independently, teaching methods and styles. And "module" is the main tool of the modular program, which is a didactically developed knowledge, skill, skill and a certain content unit of its instruction, or selected education to achieve the level determined by the action program. lim data. (planned future results). In other words, a measure of human self-development. In general, the word "module" means "content and technology of teaching". Electronic textbooks are based on this modular technology, which is presented as a volume of educational material that "content of the module" gives its content. The learning content of each class is divided into modules, and each topic is presented sequentially and systematically. By working with interactive tasks in the electronic textbook, students expand their knowledge of the lesson, learn to work independently and creatively. Performs test tasks to independently



check his knowledge.

The use of modular technologies in the teaching of mathematics forms skills and competencies necessary for personal development and creativity. Effective use of new ICT in the classroom:

- gives the student the opportunity to think freely;
- Mind - develops the game;
- increases creative activity;
- collective action
- educates to action;
- improves language skills;
- Enhances soul searching.

As President Sh. Mirziyoyev noted, "in today's world, young people are in great need of new education related to information technologies according to international standards" - it is important to optimize the educational process and increase its effectiveness. The process of informatization of education makes great demands on science teachers in the field of wide use of new information technologies.

In short, with the help of new technologies, it is possible to increase the knowledge of students and improve the quality of education. School is the support and cornerstone of any nation, it contributes to the all-round growth, spiritual and cultural development of any nation. There are many modern teaching technologies that are widely used in teaching and working on text problems at the primary school level.

#### **REFERENCES:**

1. Ахмедов, Б. А. (2021). Задачи обеспечения надежности кластерных систем в непрерывной образовательной среде. Eurasian Education Science and Innovation Journal, 1(22), 15-19.



2. Akhmedov, B. A., Shuhkrat, K, (2020). Cluster methods of learning English using information technology. *Scientific Progress*, 1(2), 40-43.
3. Akhmedov, B. A., Majidov, J. M. (2021). Practical ways to learn and use the educational cluster. *Экономика и социум*, 2(81).
4. Akhmedov, B. A. (2021). Cluster methods for the development of thinking of students of informatics. *Academy*, 3(66), 13-14.
5. Akhmedov, B. A. (2021). Innovative cluster model for improving the quality of education. *Academic Research in Educational Sciences*, 2(3), 528-534.
6. Ахмедов, Б. А. (2021). Динамическая идентификация надежности корпоративных вычислительных кластерных систем. *Academic Research in Educational Sciences*, 2(3), 495-499.
7. Majidov, J. M., Akhmedov, B. A. (2021). Use of multimedia technologies as a means of increasing students motivation to learn a foreign language. *Ekonomika i sotsium*, 3(82).
8. Akhmedov, B. A. (2021). Information technologies in Cluster systems: a competence approach. *Universum: технические науки*, 4 (85).
9. Kudratilloev, N. A., Akhmedov, B. A. (2021). Application of communication-cluster technologies in pedagogical institutions: interactive methods of processing graphic data. *Scientific Progress*, 1(5), 191- 198.
10. Kudratilloev, N. A., Akhmedov, B. A. (2021). Methods of use of web-applications on the basis of innovative methods. *Ekonomika i sotsium*, 3(82).
11. Yusupov, M., Akhmedov, B. A., & Karpova, O. V. (2020). Numerical simulation of nonlinear vibrations of discrete mass with harmonic force perturbation. *Acta of Turin Polytechnic University in Tashkent*, 10 (4), 71-75.
12. Ахмедов, Б.А., Якубов, М. С., Карпова, О. В., Рахмонова, Г.С., & Хасанова, С. Х. (2020). Геймификация образовательного процесса кластерный подход. *INTERCONF*, 2 (38), 371-378.



13. Ахмедов, Б. А. (2020). О развитии навыков интерактивных онлайн-курсов в дистанционных условиях современного общества (модель-программа для преподавателей образовательных учреждений). *Universum: технические науки*, 12-1 (81).

14. Мухамедов, Ф. И., & Ахмедов, Б. А. (2020). Инновацион “Klaster mobile” иловаси. *Academic Research in Educational Sciences*, 1 (3), 140-145.

15. Shomurotov, S. S. O. (2021). The Need for Formation of Knowledge on the Effective Use of Water Resources in Young People in the Process of Globalization. (in the Example of the Aral Sea). *International Journal of Human Computing Studies*, 3(2), 89-91.

16. SHOMUROTOV, S. S. O. (2021, April). FIRST STEPS FOR MODERNIZATION OF WATER FARMING IN THE REPUBLIC: ACHIEVEMENTS AND CHALLENGES. In *Euro-Asia Conferences* (Vol. 4, No. 1, pp. 152-155).

17. Shomurotov, S. S. O. (2021, February). Some Environmental Problems Related To Land And Water Resources In Uzbekistan. In *International Scientific and Current Research Conferences* (pp. 39-41).

18. SHOMUROTOV, S. S. O. Construction and Changes in Canals and Pumping Stations in Uzbekistan. *JournalNX*, 7(1), 262-266.

19. Шомуротов, Ш. (2021). Историческое значение реформ, осуществляемых в водной системе Узбекистана. *Общество и инновации*, 2(3/S), 458-465.

20. Шомуротов, Ш. (2021). Ўзбекистон сув хўжалиги тизимида амалга оширилган ислохотларнинг тарихий аҳамияти. *Общество и инновации*, 2(3/S), 458-465.

21. Shomurotov, S. S. O. (2022). О ‘Zbekistonda Suvdan Foydalanuvchilar Uyushmalarining Tashkil Qilinishi Va Faoliyatida Yuzaga Kelayotgan Muammolari. *Miasto Przyszłości*, 29, 216-220.





22. Shomurotov, S. S. O. (2022). Measures Taken to Develop the Irrigation System in the Country. *Miasto Przyszłości*, 29, 207-209.

23. Nizamova, S. H. "The Role of Pedagogical Games in the Personal Development of Primary School Students." *International Journal of Innovative Research in Science, Engineering and Technology*.

24. Nizamova, Sh U., and Munosibxon Ganieva. "Didactic Basics of Teaching Elementary School Technology Science." *International Journal of Innovative Research in Science, Engineering and Technology*.

25. NIZAMOVA, SHAHNOZA, and MUNIRA AKBAROVA. "LEXICAL-SEMANTIC ANALYSIS OF SOME NICKNAMES." *THEORETICAL & APPLIED SCIENCE Учредители: Теоретическая и прикладная наука* 10: 563-565.

26. Nizami, Shahnaza Obeydullaevna, and Rovshan Surobjonovna Egamova. "Improving the Efficiency of Extracurricular Work in Technology Lessons in Elementary Grades." *International Journal of Innovative Research in Science, Engineering and Technology*.

27. Ubaydullaevna, N. S., Mehmonalievich, T. A., Mamirovna, H. K., & Nosirovna, N. D. ON THE PRINCIPLES OF CATEGORIZATION OF WORDS.

28. Nizamova, S. H. The Role of Pedagogical Games in the Personal Development of Primary School Students. *International Journal of Innovative Research in Science, Engineering and Technology*.

29. Nizamova, S., & Turakhojayeva, A. (2023). "MAJOLIS UN-NAFOIS" BY A. NAVOYI IS ONE OF THE IMPORTANT SOURCES OF UZBEKIN NICKNAMES.

30. Shakhnoza, N., & Sevara, O. (2022). LINGUISTIC ANALYSIS OF PSEUDONYMS OF UZBEK WOMEN IN THE FIELD OF CREATIVITY AND ART. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE &*



INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429, 11(10), 294-298.

31. Nizamova, S. U., & Solijonova, D. (2023). BOSHLANG 'ICH SINFLARDA O'QUVCHILARIDA MUVAFFAQIYATGA ERISHISHGA INTILISH MOTIVINI SHAXSNING USTUVOR XUSUSIYATI SIFATIDA. *THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD*, 2(6), 46-50.

32. Nizamova, S., & Jo'rayeva, D. (2023). AMALDAGI 3-SINF ONA TILI VA O'QISH SAVODXONLIGI DARSLIGI VA ESKI DARSLIK ORASIDAGI FARQLI JIHATLAR. *Results of National Scientific Research International Journal*, 2(6), 54-57.

33. Nizomova, S., & Salimova, M. (2023). BOSHLANG 'ICH SINFLARDA SO'Z TURKUMLARINI O'RGATISH METODIKASI. *Results of National Scientific Research International Journal*, 2(6), 45-53.

34. Abdulkhayeva, M. The Role of Dictations in the Development of Students' Written Speech in the First Class. *International Journal of Innovative Research in Science, Engineering and Technology*.

35. Musharrafa, A. (2023). Relationship of Mother Language and Reading Literacy with Natural Science. *World of Science: Journal on Modern Research Methodologies*, 2(3), 78-82.

36. Abdulxayeva, M. (2023). ONA TILI VA O'QISH SAVODXONLIGI DARSLARIDA DIDAKTIK METODLARNING TUTGAN O'RNI. Scienceweb academic papers collection.

37. Abdulxayeva, M. (2023). O'Z DIKTANT YOKI YODDAN YOZUV DIKTANTI. *Interpretation and researches*, 1(1).

38. Akbarova, X. (2023). ASQAD MUXTOR IJODINING O'ZIGA XOSLIGI. *Interpretation and researches*, 1(1).



39. AKBAROVA, X. (2023). LINGVOPOETIKA SOHASINING VUJUDGA KELISHI VA NAZARIY MASALALARI. Comparative Turkish Dialects and Literatures, 1(3), 27-32.

40. Alijonovna, M. D., & Gozalkhan, Y. (2022). IMPLEMENTATION OF INTERDISCIPLINARITY IN THE TEACHING OF READING AND NATURAL SCIENCES. Galaxy International Interdisciplinary Research Journal, 10(12), 1628-1632.

41. Alijonovna, M. D. (2023). Terms-language wealth. INTERNATIONAL JOURNAL OF INCLUSIVE AND SUSTAINABLE EDUCATION, 2(3), 58-62.

42. Dilafruz, M. (2022). BOUNDARY ISSUE IN THE TERMINO

43. Alijonovna, M. D. (2022). THE ROLE OF TERMS IN LINGUISTICS. Spectrum Journal of Innovation, Reforms and Development, 9, 144-152.

44. BADIY MATNDA QISHLOQ XO‘JALIGIGA OID TERMINLARNING USLUBIY XOSLANISH IMKONIYATLARI

MD Alijonovna Qo'qon DPI. Ilmiy xabarlar 3, 169-174

45. Akbarova, M. (2021). FOLKLORE IN PRIMARY EDUCATION-THE LINGUISTIC FEATURES OF TEACHING PROVERBS. In Фундаментальные и прикладные научные исследования: актуальные вопросы, достижения и инновации (pp. 106-108).

46. NIZAMOVA, S., & AKBAROVA, M. LEXICAL-SEMANTIC ANALYSIS OF SOME NICKNAMES. THEORETICAL & APPLIED SCIENCE Учредители: Теоретическая и прикладная наука, (10), 563-565.

47. AKBAROVA, M. BADIY MATNDA UCHRAYDIGAN G ‘AYRIODATIY BIRIKMALARNING LINGVOPOETIK XUSUSIYATLARI. Comparative Turkish Dialects and Literatures, 1(2), 25-31.

48. Shavkatovna, A. M., & Nurjahon, M. (2023). BADIY MATNDA UCHRAYDIGAN GAYRIODATIY BIRIKMALARNING MORFOLOGIK XUSUSIYATLARI. Ustozlar uchun, 15(1), 266-270.



49. Shavkatovna, A. M. (2023). G'AYRIODATIY BIRIKMALARNING BADIY MATNDA LINGVOPOETIK AKTUALLASHUVI. *Journal of Integrated Education and Research*, 2(3), 129-132.

50. Shavkatovna, A. M. (2023). Morphological Characteristics of Unusual Compounds Found in Literary Text. *World of Science: Journal on Modern Research Methodologies*, 2(3), 83-88.

51. Shavkatovna, A. M. (2023). Morphological Characteristics of Unusual Compounds Found in Literary Text. *World of Science: Journal on Modern Research Methodologies*, 2(3), 83-88.

52. Shavkatovna, A. M., & Sultonova, Y. N. (2023). BADIY MATN LINGVOPOETIKASIDA GAYRIODATIY BIRIKMALARNING AHAMIYATI. *Ustozlar uchun*, 15(1), 271-276.

53. Akbarova, M. S. (2022). LINGUOPOETIC FEATURES OF UNUSUAL COMPOUNDS IN THE LITERARY TEXT. *CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES*, 3(05), 73-76.

54. Akbarova, M. S. Features of Linguopoetic Analysis of Literary Text. *International Journal of Innovative Research in Science, Engineering and Technology*.

55. Shavkatovna, A. M., & Nurjahon, M. (2023). BADIY MATNDA UCHRAYDIGAN GAYRIODATIY BIRIKMALARNING MORFOLOGIK XUSUSIYATLARI. *Ustozlar uchun*, 15(1), 266-270.

56. 1. Nizomiddinova, D., & Vasilakhon, I. (2020, June). ABOUT COMBINED TOPONYMS IN THE FORM "OT+ VERB" AND "VERB+ OT". In *Archive of Conferences* (Vol. 1, No. 1, pp. 128-129).

57. 2. Nosirovna, N. D. (2022). ABOUT SOME ANTHROPOONYMS OF FERGANA VALLEY. *Galaxy International Interdisciplinary Research Journal*, 10(12), 1124-1131.



58. 3. Nosirovna, N. D. (2022). Regarding the Study of the Simple Names of the Fergana Region According to the Morphological Structure. *INTERNATIONAL JOURNAL OF INCLUSIVE AND SUSTAINABLE EDUCATION*, 1(5), 82-85.

59. 4. Nosirovna, N. D. (2022). Anthrotoponyms are a priceless treasure of our language, a monument of our history. *Emergent: Journal of Educational Discoveries and Lifelong Learning (EJEDL)*, 3(02), 16-19.

60. 5. Nizomiddinova, D., & Vasilakhon, I. (2020, June). ABOUT COMBINED TOPONYMS IN THE FORM "OT+ VERB" AND "VERB+ OT". In *Archive of Conferences* (Vol. 1, No. 1, pp. 128-129).

61. 6. Ubaydullaevna, N. S., Mehmonalievich, T. A., Mamirovna, H. K., & Nosirovna, N. D. ON THE PRINCIPLES OF CATEGORIZATION OF WORDS.

62. Tolipov, R., & Yusupov, M. (2022). THE ROLE AND IMPORTANCE OF THE FORM OF EDUCATION IN IMPROVING THE EFFECTIVENESS OF THE LESSON. *Galaxy International Interdisciplinary Research Journal*, 10(12), 1633-1637.

63. Yusupov, M. M. (2021). Educational practice as a tool in the formation of professional competence of future primary education teachers. *International Journal on Orange Technologies*, 3(4), 301-305.

64. Nizamova, S. U., Isakov, S. Z., & Yusupov, M. M. (2022). Historical And Linguistic Study Of Uzbek Nicknames. *Journal of Positive School Psychology*, 150-158.

65. Yusupov, M. M. (2022). The issue of scientific and methodological support of students during the period of continuous educational practice. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 7.429, 11(09), 209-213.

66. Mamadalievich, Y. M., & Mamasolievich, T. R. (2022). THE NEWSPAPER " SADOI FERGHANA " IS THE NEWSPAPER OF THE



FERGANA REGION. *Galaxy International Interdisciplinary Research Journal*, 10(12), 1236-1240.

67. Yusupov, M. M. (2022). FEATURES OF THE ORGANIZATION AND CONDUCT OF EDUCATIONAL PRACTICE OF FUTURE PRIMARY SCHOOL TEACHERS. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 7.429, 11(06), 195-200.

68. Yusupov, M. M. (2023). The Methodology of Organizing and Conducting the Learning and Meeting Activities of Future Elementary Class Teachers. *World of Science: Journal on Modern Research Methodologies*, 2(3), 50-57.

69. Muhsinjon, M. Y. (2023). IMPROVING THE PROFESSIONAL TRAINING OF FUTURE PRIMARY SCHOOL TEACHERS IN THE CONDITIONS OF MODERNIZATION OF HIGHER PEDAGOGICAL EDUCATION. *Procedia of Theoretical and Applied Sciences*, 5, 9-16.



## CLASSIFICATION AND GENERAL PROPERTIES OF ORGANIC COMPOUNDS

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**Annotation.** In "Study of the structure of organic substances used as medicinal substances and the chemical bases of their effects", students can study: the composition, structure, reaction mechanisms of medicinal substances, the changes that occur as a result of their effects, and possible positive and negative effects. So, the student should be able to perform audio-visual work, i.e. listen to the lecture and record the necessary information, familiarize himself with the case, understand the textual media, be able to summarize the information, i.e. understand its function in the organism, be able to analyze the received information and finally determine the problem being studied.

**Key words:** problem situation, research, project method, case-study method

**Introduction.** "Study of the structure and properties of biologically active substances" and "Connecting the chemical structure of biologically active substances with their spatial structure" is required to provide students with in-depth knowledge in the study of substances that are found in the body and play an important role in its life activity. Proteins, carbohydrates, nucleic acids, lipids (fats) and other biologically active substances. The activity of these substances is determined by their structure. For example, in protein synthesis, since DNA carries information, m-RNA, t-RNA and r-RNA use the information in sequence to synthesize a new protein (for example, a new type of coronavirus, COVID-19).



It is also possible to provide information to students in the direction of the 2nd issue.

It is important to understand the molecular level reactions of proteins, carbohydrates, nucleic acids, lipids, etc. found in living organisms in "Study of the structure of the substances involved in the metabolic process - proteins, carbohydrates, nucleic acids, lipids, etc. and their reactions at the molecular level." Because these substances are constantly broken down and synthesized in the process of metabolism in the organism. Studying the structure of these substances at the molecular level allows us to understand the mechanisms of their transformation and predict the changes that may occur later. So, the student will have to perform audio-visual work individually, that is, listen to the lecture and record the necessary information, get acquainted with the case, understand the textual media, be able to summarize the information, that is, understand its function in the body, be able to analyze the received information, and finally determine the problem being studied.

Step 2 (after class for lectures): Clarify the case and set the learning task is important for students. (8) questions in the discussed issues are educational tasks. Therefore, students can work individually or in a group (on the basis of textbooks, lecture texts or internet materials) to master these lectures. In this, the relevance of the problems is determined and a solution is sought, the main problem is determined, that is, the spatial structure of biologically active substances as a determinant of its activity.

Stage 3 (after the lesson for the lecture): Finding a solution to the educational task by analyzing the main problem in the case, developing ways to solve it. It is possible to work individually or in a group (based on a textbook, lecture text or internet materials) in a series of 8 questions. First, alternative solutions are developed, for example, bioregulators are studied on the Internet from the database of the following years. The possibilities and obstacles of





solving each question are analyzed. For example, the study of the spatial structure of biologically active substances may not be adequately animated in textbooks and lectures. To master this, animation materials and video materials will be necessary. These materials are available from the teacher and on the Internet.

**Conclusion.** In the higher education system, to establish close cooperation relations with the world's leading scientific and educational institutions in their fields, to introduce advanced foreign experiences into the educational process, especially to accelerate the work on training and upgrading the skills of promising pedagogues and scientific personnel in leading foreign scientific and educational institutions.

2. It is necessary for each higher medical educational institution to have a sufficient level of scientific and pedagogical potential, and it is appropriate to ensure that it meets the requirements of their awareness of the normative and legal documents being established;

3. Making wide use of foreign experiences in the training of pedagogues: increasing attention to the acquisition of knowledge about modular training, credit, the concept of rating, technology rules, principles, control process organization, interactive technologies and their effective use;

### Literature

1. МАШАРИПОВ, ОО; БЕКЧАНОВ, БГ; „ВЕСТНИК НАУКИ И ОБРАЗОВАНИЯ, ВЕСТНИК НАУКИ И ОБРАЗОВАНИЯ Учредители: Олимп,9,,84-87,,
2. Нуралиев, НА; Бектимиров, АМТ; Рахманова, СС; Машарипов, О; Машарипов, ВУ; „Методические основы разработки иммуноферментной тест-системы на основе бактериальных антигенов, Методические рекомендации.-Ургенч,,,,,2006,



3. Машарипов, О; ,Характеристика специфического антимикробного иммунитета при остром и хроническом тонзиллите,,,,,2012,автореф. дис.... кан. мед. наук Ташкент.
4. Машарипов, Отабой Олимович; ,Самые опасные глобальные инфекции на современном этапе,Вестник науки и образования,,5-1 (136),79-83,2023,ООО «Олимп»
5. Rakhimov, Bakhtiyar; Rakhimova, Feroza; Sobirova, Sabokhat; Allaberganov, Odilbek; ,Mathematical Bases Of Parallel Algorithms For The Creation Of Medical Databases,InterConf,,,,2021,
6. Saidovich, Rakhimov Bakhtiyar; Bakhtiyarovich, Saidov Atabek; Farkhodovich, Babajanov Boburbek; Ugli, Karimov Doston Alisher; Qizi, Musaeva Mukhtasar Zayirjon; ,Analysis And Using of the Features Graphics Processors for Medical Problems,Texas Journal of Medical Science,7,,105-110,2022,
7. Rakhimov, Bakhtiyar Saidovich; Saidov, Atabek Bakhtiyarovich; Allayarova, Asal Akbarovna; ,Using the Model in Cuda and Opencl for Medical Signals,International Journal on Orange Technologies,4,10,84-86,2022,Research Parks Publishing
8. Рахимов, Бахтияр Саидович; Жуманиёзов, Сардор Пирназарович,Аппаратно-ориентированный алгоритм вычисления коэффициентов в базисах J-функций,Актуальные вопросы технических наук,,,,59-62,2015,
9. Касымов, СС; Зайнидинов, ХН; Рахимов, БС; ,Применение базисных сплайнов для предварительной обработки экспериментальных данных,"Тезисы докл. XVI-Международная научная конф., Санкт",,,,,2003,
10. Рахимов, БС; ,Проектирование спецпроцессов для обработки сигналов на основе матричной диаграммы занятости,Научно-



технический журнал Ферганского политехнического  
института,4,,31,2003,

11. Рахимов, БС; , "Кусочно-полиномиальные методы на основе функций Уолша, Актуальные вопросы в области технических и социально-экономических наук", Межвузовский сб. научн. трудов. Ташкент,1,,42,2006,
12. Rakhimov, BS; Allabeganov, OR; Saidov, AB; , Processor means for the spectral analysis of medical signals on the of polynomial walsh bases epra, International Journal of Research and Development (IJRD),5,7,10-11,2020,



**CURRENT PROBLEMS OF MODERN MONETARY POLICY IN THE  
REPUBLIC OF UZBEKISTAN**

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**Abstract.** In this article, the primary problems and reforms of the financial sector are studied in detail, and the importance and updates of modern financial policy in our country are described.

**Keywords:** financial policy, social life, banking activity, inflation, modern problems, etc.

Now, inflation is one of several issues central banks are concerned about. Rapidly changing economic conditions leave less policy space, while structural forces—geopolitical fragmentation, climate change, an aging workforce, and the emergence of digital money—are making the fundamental task of monetary policy much more complex. The mandates of central banks and even their independence are coming under increasing political pressure. These new forces and other factors raise questions about what changes in the nature of monetary policy may be needed in the future. In this issue, prominent authors present their thoughts on how central bankers can navigate an increasingly complex world.

Monetary theory in economics is represented by various directions of scientific thought, and not by a single unified model. Each of these areas highlights different factors that determine inflation dynamics and recommends different policy responses. Different challenges arose at different times, and each



of them required its own approach in terms of economic policy. Now, due to a new wave of inflation, it is necessary to once again change the emphasis in monetary policy. The prevailing conceptual framework that central banks have followed since the global financial crisis that began in 2008 does not pay particular attention to the most pressing challenges ahead and fails to mitigate their potentially dire consequences in this new environment. After a long period of low interest rates and low inflation, the world economy is entering a phase characterized by high inflation and high levels of both public and private debt. Fifteen years ago, central banks saw an urgent need to incorporate concerns about financial stability and deflation into their traditional economic models and developed unconventional tools to address both issues.

While financial stability remains a concern, there are important differences between current conditions and those that have emerged since the global financial crisis.

- Government debt is currently at a high level, so any increase in interest rates to ward off inflationary threats increases the cost of servicing the debt, with immediate and significant adverse fiscal consequences for the government. It has also been clear since the onset of the COVID-19 crisis in early 2020 that fiscal policy can be a significant driver of inflation.

- Instead of deflationary pressures, most countries experience excessive inflation. This means that there is now a clear choice between monetary policy, which attempts to reduce aggregate demand by raising interest rates, and policy that seeks to promote financial stability.

- The nature and frequency of shocks have changed. In past periods, shocks were mainly caused by increases or decreases in demand, with the exception of supply shocks during the so-called stagflation of the 1970s.

There are a lot of shocks now: in terms of demand or supply, associated with idiosyncratic or systemic risks, of a transitional or permanent nature. It is difficult



to determine the true nature of these shocks in time to respond. Central bankers need to be less picky. Monetary policy requires a modified approach that is resilient to sudden and unexpected changes in the macroeconomic scenario. Measures that are effective in one macroeconomic environment may have unintended consequences when conditions suddenly change. This article will look at what major challenges central banks will face, what monetary theories will take center stage, and how central banks can avoid overconfidence and the tactics of old battles. Most importantly, the central bank must keep public opinion on its side, because the public is the main source of its strength and independence. This means that the central bank must effectively communicate the rationale for its actions to maintain public support, especially in the face of inflation caused by fiscal policy measures. The central bank ultimately maintains its dominance if it can credibly promise that it will not bail out the government by monetizing government debt in the event of default.

To address these challenges, central banks should return to a monetary policy stance in which stabilizing inflation expectations is a central priority. Policy cannot be tightened only after inflation has risen. Instead, central banks should take action as soon as the warning lights come on. Central banks must take into account both household and financial market expectations of future inflation, as these expectations shape both aggregate demand conditions and asset prices.

At the same time, the successful implementation of reforms regarding the liberalization of the foreign exchange market is closely related to the improvement of the monetary policy, the strengthening of the activities of commercial banks, and the effectiveness of measures to develop the banking system. It should be noted that the correct acceptance and support of the changes in the monetary and credit sphere by the population and business entities is of great importance in the new events that are formed during the revision of the approaches to the implementation of the economic policy. It is known to everyone



that the experience of the central banks of developed and developing countries and the results of the research of independent financial institutions show the undoubted priority of the goal of ensuring price stability in the implementation of monetary policy. The procedure and sequence of monetary policy implementation differs in different countries depending on the characteristics and structural structure of the economy. According to the current Law of the Republic of Uzbekistan "On the Central Bank of the Republic of Uzbekistan", the main goal of the Central Bank is to ensure the stability of the national currency. In this case, the concept of "national currency stability" can be interpreted in two ways, that is, the stability of the exchange rate against foreign currencies or the stability of its domestic purchasing power. The goals and main directions of the monetary and credit policy of the Central Bank, as well as the clear determination of the obligations to achieve the target indicators of inflation serve to form positive economic expectations in the society. Taking into account that the inflationary expectations of the population are largely related to the dynamics of the exchange rate in the currency market, ensuring the stability of the national currency rate in the short term is one of the important tasks of the monetary policy.

In the development of the main directions of the monetary policy for the period of 2022 and 2023-2024, first of all, it was derived from the goals of ensuring price and financial stability in the economy, reducing the inflation rate to 5% by the end of 2023. The main directions of the monetary and credit policy include the medium-term macroeconomic development forecasts of the Central Bank and the work to be carried out in the monetary and credit sector in the coming years, the measures to be taken by the Central Bank in the event of changes in external and internal economic conditions, and the implementation of the monetary policy. approaches are reflected. The world economy in 2020 due to the introduction of strict quarantine restrictions in the context of the coronavirus pandemic and the global economic crisis caused by it, a decrease in economic



activity and disruptions in the supply chain and monetary and fiscal budget experienced a significant relaxation of its policies.

### References:

1. O'zbekiston milliy ensiklopediyasi (2000-2005)  
<https://cbu.uz/uz/services/citizens/>
2. Rashidov A. IQTISODIYOTNI TARTIBGA SOLISHDA NOTARIF USULLARINING ORNI VA AHAMIYATI //Архив научных исследований. – 2022. – Т. 2. – №. 1.
3. Xiao, K., Wang, Y., Whited, T. M., & Wu, Y. (2017). Market power and monetary policy transmission: Evidence from a structural estimation. Retrieved from  
[https://scihub.tw/https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3049665](https://scihub.tw/https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3049665)
4. Pul-kredit siyosatini amalga oshirish Konsepsiyasi - O'zbekiston Respublikasi Markaziy banki <https://cbu.uz/uz/monetary-policy/concept/>
5. Snyder, T. C., & Bruce, D. (2002). Tax cuts and interest rate cuts: An empirical comparison of the effectiveness of fiscal and monetary policy. Journal of Business & Economics Research, 2(8), 1-12. Retrieved from  
<http://clutejournals.com/index.php/JBER/article/view/2906>
6. Abdulkarimov A., Rashidov A. Ma'lumotlar bazalarining–biznesni tashil etish va samaradorligini oshirishdagi roli //Zamonaviy innovatsion tadqiqotlarning dolzarb muammolari va rivojlanish tendensiyalari: yechimlar va istiqbollari. – 2022. – Т. 1. – №. 1. – С. 132-135.





## ВНЕКЛАССНАЯ РАБОТА ПО РУССКОМУ ЯЗЫКУ В НАЧАЛЬНЫХ КЛАССАХ

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**Аннотация:** в статье рассматриваются вопросы: цель и задачи, содержание, основные виды и формы, а также проведение внеклассной работы в начальных классах.

**Ключевые слова:** *учение, учебная деятельность, тема, идея, норма, знание, принцип, личность, содержание, форма, вид, индивидуальное, групповое, массовое, кружок, экскурсия, викторина, утренник, вечера, выставка, конкурс.*

Внеклассная работа – это из одна форм организации учебно-воспитательного процесса. Внеклассная деятельность способствует сближению ученика и учителя на основе увлеченности предметом, общественной работе.

Внеклассная работа по русскому языку в школе преследует ту же цель, что и уроки русского языка, - обучение речевому общению на русском языке, что предусматривает исполнение активного словаря учащихся, отработку навыков правильного произношения русских звуков, формирование умений правильного построения предложений, сообщение знаний о грамматическом строе русского языка, привитие орфографических и пунктуационных навыков и т.д. Это единство целей делает внеклассную работу серьезным дополнением к урокам русского языка.



Ведущим видом деятельности в младшем школьном возрасте становится учение, учебная деятельность, систематическое усвоение культурно-исторического опыта человечества, выраженного в системе научных знаний. В этом возрасте формируются и закладываются основы духовного и физического развития, ребенка, научно-теоретического и логического мышления, развиваются предметные и умственные действия посредством решения задач и выполнение других учебных заданий. У ребёнка развивается способность корректировать свои текущие действия в соответствии с запланированным результатом, критически оценивать итоги своей деятельности.

Целью внеклассной работы определяются ее конкретные образовательные и воспитательные задачи, основными из которых являются:

- развитие у детей интереса к предмету "Русский язык", к живому русскому языку, к речи, к литературе;
- углубление знаний о языке, получаемых на уроках, повышение качества этих знаний и языковых умений; расширение запаса знаний учащихся в области лексики, фразеологии, грамматики, стилистики русского языка и борьба за культуру устной и письменной речи;
- формирование первичных орфоэпических, орфографических и пунктуационных навыков;
- развитие устной и письменной связной речи учащихся с одновременным развитием их логического мышления,
- формирование первоначальных умений работать со словарями, привитие элементарных навыков самостоятельной работы с книгой;
- развитие самостоятельной познавательной деятельности учащихся в условиях свободной инициативы, приучение детей пользоваться



дополнительной литературой, разными материалами, развитие способности самообразования;

- развитие индивидуальных склонностей и одаренности детей, которые проявляют раннюю склонность к языковым предметам;

- развитие и совершенствование педагогических качеств личности школьников: любознательности, инициативности, трудолюбия, воли, настойчивости;

- развитие индивидуальных способностей учащихся; воспитание чувства патриотизма, формирование интернационалистского сознания, развитие нравственного и эстетического идеала и т. д., которые в совокупности составляют сущность воспитания учащихся

- воспитание у слабо успевающих учеников веры в свои силы, в возможности преодоления отставания по русскому языку.

Внеклассная работа по русскому языку является важнейшей составной частью профессиональной деятельности учителя. Не секрет, что для многих учеников русский язык не является любимым предметом. Объясняется этот факт многими причинами, в том числе и сложностью материала, подлежащего изучению. Именно поэтому главная задача внеклассной работы - развитие у школьников интереса к русскому языку и воспитание потребности изучать его. Педагогами и психологами доказано, что познавательный интерес является основным внутренним мотивом обучения, поэтому развитие познавательного интереса к русскому языку оказывается столь важным для учащихся. И развитие этого интереса нужно начинать уже в начальном звене школы. Понятно, что он развивается прежде всего на уроках, но несомненно и то, что внеклассная работа предоставляет учителю огромные возможности для того, чтобы заинтересовать учеников своим предметом, сделать его любимым.



При организации внеклассной работы в начальных классах учитель должен учитывать психологические особенности младших школьников. Это поможет ему не только грамотно построить учебный процесс, но и способствовать наиболее качественному усвоению детьми учебного материала.

Исходя из основной целей внеклассной работы по русскому языку, можно выделить частные задачи, которые решаются учителем в процессе такой деятельности:

- 1) воспитание коммуникативной культуры школьников;
- 2) расширение и углубление запаса знаний учеников и формирование лингвистической компетенции;
- 3) выявление и поддержка лингвистически одаренных учащихся;
- 4) поддержка и воспитание веры в свои силы у учеников, слабоуспевающих по русскому языку;
- 5) развитие и совершенствование психологических качеств личности школьников: любознательности, инициативности, трудолюбия, воли, настойчивости, самостоятельности в приобретении знаний.

Являясь важной составной частью методики обучения русскому языку, внеклассная работа не может не основываться на методических принципах: внимания к материи языка, понимания языковых значений, оценки выразительности речи и т. д. Общеизвестно, что существуют некоторые принципы, которые лежат в основе именно внеклассной работы по предмету. Это принцип добровольного участия школьников во внеклассных занятиях, принцип самостоятельности, предполагающий самостоятельность учащихся в подготовке и проведении мероприятий, принцип равноправного участия школьников.

Методы, которые используются во внеклассной работе по предмету, отличаются от основных методов обучения не столько содержанием,



сколько формой. Так, широко используется во внеклассной работе и слово учителя, и беседа, и самостоятельная работа ученика. Однако все эти методы используются в непринужденной обстановке, что создает атмосферу большой заинтересованности в работе.

Формы организации внеклассной работы по русскому языку разнообразны: беседа, конкурсы, викторины, игры, КВН, утренники и вечера, конференции и устные журналы, олимпиады и т. д. Многие из этих форм к настоящему времени перестали считаться пригодными лишь для внеклассной работы, и в практике преподавания русского языка все чаще учителя проводят уроки-игры, уроки-путешествия, уроки-конференции, уроки-сказки и т. д., апробированные сначала во внеклассной работе по предмету.

Одним из нейтральных вопросов организации внеклассной работы по русскому языку является определение ее содержания. В соответствии с принципом связи внеклассной работы с уроками русского языка оно соотносится с содержанием языкового и речевого материала, изучаемого по программе.

Наряду с этим на внеклассных занятиях можно рассматривать и такие вопросы, которые непосредственно не связаны с программой по русскому языку, но которые интересуют учащихся и способствуют расширению их лингвистического кругозора. Таким образом, содержание внеклассной работы по русскому языку составляют два круга вопросов:

- вопросы, связанные с программным материалом, направленные на углубление знаний учащихся по русскому языку и способствующие привитию практических навыков русской речи;
- вопросы, не связанные с учебным материалом, предусмотренные программой, способствующие расширению общего кругозора учащихся, представляющие дополнительный материал для речевой тренировки.



Первый круг вопросов достаточно широк. Он охватывает все разделы школьного курса русского языка. Тематика их в основном соответствует темам, изучаемым на уроках, но в целях пробуждения у учащихся интереса к ним формулируются они несколько иначе, например: "Сколько слов в русском языке?" (беседа о словарном богатстве языка, которую можно проводить в III или в IV классе). "В мире слов", "В музее слов" (беседы о происхождении слов), "Как рождаются новые слова?" (беседы о словарях). "Звуковые законы" (беседа об орфоэпических нормах русского языка). "Кто или что?" (беседа о существительных одушевленных и неодушевленных), "Все растет из корня" (беседа об однокоренных словах) и др. Беседы на перечисленные и подобные темы сопровождаются выполнением упражнений и задания, способствующих привитию практических навыков употребления рассматриваемого языкового материала в речи.

Второй круг вопросов отличается от первого своей новизной и информативностью. Сюда входят такие сведения, с которыми учащиеся на уроках не встречаются. Поэтому ученики младших классов с интересом слушают беседы на темы: "Как люди научились говорить?", "Почему люди говорят на разных языках?", "Русский язык на земном шаре", "Как люди научились писать?", "Языки и народы", "Говорят ли животные?" и др.

Учителю важно помнить, что в выборе и подаче этого разнообразного материала должно быть чувство меры, диктуемое возрастными особенностями учащихся. Сведения по некоторым темам могут быть даны в несколько приемов, в разных классах. В таком случае каждая последующая информация будет шагом вперед в раскрытии содержания рассматриваемого вопроса. Например, беседы из циклов "В мире слов", "В музее слов", "Почему мы так говорим?", "Правильно ли мы говорим?" могут проводиться во всех классах и не один раз в каждом классе, но содержание этих бесед каждый раз должно быть новым.



В отличие от уроков внеклассная работа по русскому языку характеризуется многообразием форм и видов. По способу подачи языкового материала выделяют устные и письменные формы; по частоте проведения - *систематические* (постоянные) и *эпизодические* (разовые); по количеству участников - индивидуальные, групповые, массовые.

Каждая из указанных форм внеклассной работы имеет несколько видов, которые отличаются друг от друга методикой проведения, объемом используемого языкового материала, характером участия школьников в работе.

Во внеклассной работе по русскому языку преобладают, особенно в младших классах, устные формы, что объясняется оперативностью устной речи и задачей развития в первую очередь устной речи.

К письменным формам внеклассной работы по русскому языку относятся стенная газета, листки русского языка, стенды. Все они характеризуются массовостью: вывешенные на видном месте, они становятся достоянием учащихся всей школы. Все остальные виды внеклассной работы по русскому языку проводятся в устной форме.

По охвату учащихся они могут быть *индивидуальными, групповыми и массовыми*. К индивидуальным видам внеклассной работы относятся; заучивание наизусть стихотворение и прозаических отрывков, работа над ролью (при подготовке инсценировок к утреннику), подбор языкового материала (эта работа выполняется преимущественно в письменной форме), чтение детских книг, сказок и некоторые другие. Все эти виды индивидуальной работы являются по существу подготовительным этапом к проведению групповых и массовых внеклассных мероприятий.

К групповым относятся следующие виды работы: кружок русского языка, экскурсии (в библиотеку, на природу, на производство и т. д.), викторины и некоторые другие. Среди них наиболее приемлемым видом



работы на начальном этапе обучения русскому языку является работа в кружке.

К массовым видам внеклассной работы относятся: утренники русского языка, праздники (например, праздник сказки, праздник детской книги и т. п.), выставки (например, выставка детских книг, выставка лучших тетрадей, детских рисунков), конкурсы (например, на лучшую тетрадь, на лучшую письменную работу, на лучшего чтеца), радиопередачи на русском языке, олимпиады, дни русского языка, кукольный театр и др.

Одни из видов работы проводятся систематически, по особому расписанию, другие - эпизодически, 1 - 2 раза в год. Например, регулярно - один раз в две недели - проводятся занятия кружка русского языка; регулярно - раз в месяц - выпускаются листки русского языка и стенная газета. Ежедневно или 1 - 2 раза в неделю организуются передачи по школьному радио на русском языке. Такие массовые виды внеклассной работы, как утренник русского языка, праздник поэзии (или другие праздники), выставка лучших тетрадей, конкурсы, проводятся обычно эпизодически, 1-2 раза в год.

При планировании внеклассной работы необходимо учитывать частоту проведения, а также методику подготовки тех или иных видов мероприятий. Планировать работу следует так, чтобы она не создавала перегрузки учащихся и в то же время обеспечивала их равномерную, регулярную работу над овладением русским языком в течение всего периода обучения в школе.

Планируя и организуя внеклассную работу с младшими школьниками, учитель должен строить её на игровой основе. Игра требует от участников сообразительности, внимания, воспитывает в детях настойчивость и выдержку, вырабатывает у них навык быстро ориентироваться и находить верное решение. Подбирая игры, надо руководствоваться тем, что, во-





первых, игровой материал должен соответствовать программе класса, во-вторых, игры должны быть массовыми, в игре желательно не иметь исполнителей и зрителей, поскольку для этого не требуется особый талант, а лишь желание играть. В игру важно вовлекать даже самых пассивных детей, что будет развивать их и приобщать к коллективу.

Внеклассные занятия в начальной школе можно проводить уже с первого класса, начиная со второго полугодия, когда дети прошли букварь и приобрели определённые навыки в чтении и письме. Занятия эти организуются со всем классом в форме "часов занимательной грамматики" продолжительностью 30 - 40 минут после уроков. Такой час проводится раз в две недели, что позволяет учителю лучше подготовиться к нему, подобрать содержательный литературный и игровой материал: сказки, шуточные рассказы и стихи, загадки, скороговорки, шарады, ребусы и т. п.

В младших классах, особенно в первом и втором, по каждой теме целесообразно проводить два-три занятия, поскольку малышам требуется значительно больше времени, чем старшеклассникам, для усвоения того, что они узнали на внеклассных занятиях. Дети любят играть в одну и ту же игру, пока не усвоят её полностью, поэтому вполне допустимо в одном и том же классе через несколько занятий повторять понравившиеся ученикам игры и упражнения. Последние проводятся в таких случаях на более сложном материале.

Кроме часов занимательной грамматики, с учащимися начальной школы можно практиковать другие формы внеклассной работы по языку, которые обычно используются в старших классах. Например, грамматические бои, викторины, КВН между параллельными или смежными классами, беседы по культуре речи, оборудование классных уголков русского языка, оформление альбомов загадок, пословиц, поговорок, собранных учащимися, и др. Помимо традиционного "Праздника



букваря", который отмечают первоклассники, следует в каждом классе 1-2 раза в год готовить и проводить утренники по русскому языку, приглашая на них ребят из других младших классов. Тематика таких утренников может быть весьма разнообразной, например: "Хорошо знай русский язык", "Слово русское родное", "Сколько у тебя слов про запас?", "Наша азбука", "Весёлое путешествие от А до Я", "Русские загадки и пословицы", "Почему мы так говорим?", "Волшебные слова", "Мы грамотными стали", "Что портит нашу речь?", "Говори и пиши правильно" и др.

Кружок - основной и наиболее распространенный вид групповой внеклассной работы. Организуется он из учащихся одного или параллельных классов; постоянный состав обычно не превышает *двадцати* человек. Что касается периодичности занятий, то в практике кружковой работы сложилась традиция проводить занятия кружка один раз в неделю. Однако, чем моложе ученики, тем меньше должны быть перерывы между занятиями. Здесь берется меньший объем материала для одного занятия, время его более ограничено, задания для самостоятельных наблюдений невелики и не столь сложны.

Вопрос о содержании кружковой работы является наиболее острым и сложным. В связи с тем, что деятельность этой формы внеклассной работы рассчитывается, как правило, на целый учебный год, перед учителем возникают разные проблемы: чем будут заниматься ученики, должны ли занятия подчиняться одной теме или допускается разнообразие тематики, какой должна быть связь с обязательной программой.

Занятия кружка, проводимые в определенной последовательности, предполагающие нацеленность и завершенность работы, требуют непременно планирования. В плане работы кружка обычно указывается последовательность тем, примерные формы и методы работы по каждой из них, виды самостоятельных заданий на период между занятиями кружка,



сроки проведения и ориентировочное количество занятий по той или иной теме.

План конкретного внеклассного занятия может содержать подробное описание всего хода работы и должен предусматривать не только последовательность этапов и виды работы, но и конкретные задания разной степени трудности, которые могут выполняться теми или иными участниками по указанию руководителя кружка и по их собственному выбору.

При всем разнообразии структуры тематического кружка сохраняются единые требования: систематичность и системность работы, внимательность формы при строго научном содержании, положительный эмоциональный фон, тематическое единство материалов, способствующих познавательной активности и самостоятельности учащихся.

Кружок любого плана, помимо обычных, будничных занятий, включает и другие: организационное, вводное, итоговое, отчетное занятие. Основным, наиболее часто встречающимся кружком является «Кружок русского языка» (или «Кружок любителей русского слова»). Стоит учитывать, что особенно на первых порах, увлекательно построенный рассказ руководителя кружка лучше достигает цели, чем неумелый ученический пересказ. Если материал детям знаком, то занятие заканчивается живой беседой. Несомненно, велика роль игр на таких занятиях. Они разряжают обстановку, снимают напряжение и повышают интерес к занятиям, несмотря на возраст детей. Игровая форма раскрепощает школьников, освобождает их мышление от формализма, дает возможность ошибаться и не быть наказанными, и в то же время, ненавязчиво "заставляет" школьников всерьез анализировать, вспоминать, обсуждать, вычленять главное.



Варианты тем для кружков настолько различны, насколько высоко желание к данному вопросу у учителей, ведущих кружки внеклассной работы по русскому языку.

Задача учителя - строить занятия кружка так, чтобы были задействованы все мыслительные операции обучаемых. Поскольку занятия кружка довольно постоянны и продолжительны во времени, учитель должен использовать различные варианты преподнесения материала и методы работы, обучая детей анализировать, формулировать собственные мысли, правильно отвечать на поставленный вопрос, слушать собеседника.

Из всех форм внеклассной работы по языку самыми массовыми являются вечера и утренники, которые как бы завершают и подытоживают работу кружка за полугодие или учебный год. Эти мероприятия имеют большое познавательное и воспитательное значение, поскольку позволяют привлечь внимание учащихся к вопросам языка, показать ребятам, что за привычными для них грамматическими правилами и упражнениями можно найти много интересного, увлекательного.

Школьники могут быть как участниками, так и зрителями вечера, а также они могут принимать участие в роли зрителей в представлениях других школ. Вечера могут быть посвящены каким-либо знаменательным событиям культурной и социальной жизни, биографии и творчеству великого человека, поворотным событиям мировой истории или истории страны изучаемого языка.

Подготовка к вечеру или утреннику, как правило, тесно связана с другими формами внеклассной работы, как массовой, так и групповой и индивидуальной. Зачастую в тематический вечер органично вписываются такие типы внеклассной работы, как конкурсы и викторины; они дают участникам вечера возможность переключиться на следующий этап представления. Связь с групповой формой внеурочной работы реализуется



при подготовке отчетного концерта, отражающего результат деятельности того или иного кружка или целого клуба. Индивидуальная форма связана со всеми остальными разновидностями внеклассной работы, т. к. навыки и умения, приобретенные индивидуально, ученики применяют во всех сферах своей деятельности.

Уместнее всего проводить вечера или утренники в первом и втором полугодиях. С целью привлечения большего количества учащихся учителя включают проведение вечера или утренника в годовой план различных школьных общественных организаций а также в школьный план. В основном учителя составляют программу, также в обязанности учителя входит проверка хода подготовки к мероприятию.

К программе проведения тематического вечера предъявляют ряд требований. Прежде всего, она должна быть разнообразной (декламация, инсценировки, песни, монтажи, интермедии, танцы, музыкальные номера). Вечер должен проходить в торжественной, праздничной обстановке. Тематика должна быть актуальной, отвечать познавательным и культурным требованиям и запросам учащихся, для которых организован вечер. Кроме того, языковой материал, на базе которого проходит вечер, должен быть не только понятным учащимся, но и обогащать их языковой опыт. Этот материал должен быть адаптирован согласно типу мероприятия, на который пал выбор организатора.

Уместна обширная предварительная работа при подготовке вечера, к примеру, ученики готовили выступления, (писателя или поэта) разучивали стихи, делали рисунки и пытались делать свой перевод стихов поэта примерно за месяц непосредственно до начала репетиций.

В начале работы продумывается идейно-тематическая основа будущего вечера, чётко определяются тема и идея. В практике эти понятия



часто недооцениваются, смешиваются, подменяются одно другим, что неминуемо сказывается на качестве сценария.

Тема - круг жизненных явлений, отобранных и освещённых автором в сценарии. Другими словами, тема - это то, о чём автор хочет рассказать участникам вечера.

Идея - основной вывод, основная мысль, авторская оценка изображаемых в сценарии событий. Идея - это то, ради чего проводится вечер. На основе идеи решаются методические вопросы.

Идея сценария, ставшая точкой зрения автора, служит стержнем для подбора документального и художественного материала, представляет конфликт, композицию, образный строй, подбор выступающих. Нечёткость идеи, как правило, оборачивается нечёткостью сценария, его основных смысловых акцентов.

Подготовку к тематическому вечеру можно условно разбить на следующие этапы:

1. Выбор даты проведения мероприятия. Чаще всего тематический вечер приурочен к окончанию полугодия. Это обусловлено тем, что к этому моменту учащиеся освоили достаточно материала для эффектного и эффективного выступления, а также необходимостью наличия времени для репетиций.

2. Отбор материала. Материал отбирается из различных источников: учебника, дополнительных пособий к учебнику, периодических изданий и других источников, которые могут быть указаны учителем или найдены учениками. Учитель контролирует отбор материала и помогает его освоить, а также адаптировать согласно выбранному жанру представления. Разумеется, введение определенного количества нового языкового материала неизбежно и даже желательно, потому что этот материал позволяет улучшать содержательную сторону речевой деятельности и тем



самым существенно обогащать индивидуально-речевой опыт учащихся в иностранном языке. Вместе с тем методически и психологически неоправданно перегружать внеклассные занятия большим количеством нового материала, потому что это снижает интерес учащихся к таким занятиям в силу его трудности, недоступности, особенно для экспрессивных видов речевой деятельности учащихся.

3. Распределение ролей. В это понятие входит и распределение функций, которые выполняют учащиеся, не участвующие непосредственно в представлении.

4. Репетиции. Репетиции считаются самым ответственным моментом подготовки мероприятия. Сначала обсуждаются общие проблемы и организационные моменты, связанные с представлением, затем следуют непосредственно репетиции, причем индивидуальные репетиции перемежаются с объединенными, коллективными.

В конце подготовительного периода проводится генеральная репетиция в полном составе в помещении, где состоится утренник или вечер. Каждая репетиция должна показывать самим учащимся степень их прогресса. Высокие требования предъявляются, прежде всего, к произношению. Важно мотивировать эту сторону подготовки к выступлению, заронить интерес учащихся в том, как они будут «звучать со сцены».

Тщательная отработка произносительной стороны позволит овладеть выразительностью речи, связанной с ее содержательно-смысловым планом. На репетициях происходят совместные поиски средств выразительности, которые позволяют передать настроение, точную интонацию и т.д. При этом в опыт учащихся постепенно вводится материал об искусстве актеров, певцов, чтецов в целом. На каждой репетиции учитель должен стремиться углубить представление учащихся о материале, над которым они работают,



создавая обстановку, при которой каждый участник будет выполнять свою роль наилучшим образом.

5. Составление подробной программы вечера или утренника. Вся проделанная работа сводится воедино в сценарий, согласно которому проходит мероприятие.

Чтобы вечер прошёл живее и интереснее, не следует делать на нём обширных докладов, основной материал по теме лучше включать в выступления ведущих. Художественная часть обычно проводится в форме литературно-музыкального монтажа, который составляется учителями и обсуждается затем комиссией по проведению вечера. Распределяя между учащимися тексты для заучивания, следует обратить особое внимание на выразительность чтения.

Проведение вечеров, как никакой другой вид работы, дает возможность выработки навыков культуры речи. Особенно большую роль вечера играют для развития произносительной культуры речи, а также навыка публичных выступлений. Именно на эту сторону работы обращают внимание лучшие учителя при подготовке вечеров и утренников.

### Литература

1. Львов М.Р., Горецкий В.Г., Сосновская О.В. Методика преподавания русского языка в начальных классах. – М., «Академия», 2007. – 348 с.
2. Панов Б. Т. Внеклассная работа по русскому языку. – М., "Просвещение", 1980, -208с.
3. Панов Г.А. Занимательные задания по русскому. – М., "Просвещение", 1964, -88с.
4. Преображенская Е.П. Кружок русского языка в школе. – М., "Просвещение", 1966, -208с.
5. Ушаков Н. Н. Внеклассные занятия по русскому языку в начальных





классах. Пособие для учителей. – М., "Просвещение", 1978

6. Ушаков Н. Н. Занимательные материалы к урокам русского языка в начальных классах. –М., «Просвещение», 1967

7. Ушаков Н. Н. О содержании внеклассной работы по русскому языку. –М., «Просвещение», 1969. -215с.



## DIRECTING INCLUSIVE EDUCATION TO PRESCHOOL EDUCATIONAL ACTIVITIES

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**Abstract:** The task of inclusive education is to provide quality education to all children, regardless of their abilities and status. At the same time, the principle of inclusiveness implies that in order to have positive mental and social development, children with disabilities should live in a family and study together with their peers in a regular school. The article focuses on inclusive education in preschool education processes. recommendations are offered.

**Key words:** preschool education, inclusive education, children with disabilities, general education, educational system, educational process.

During the past period, on the establishment of an effective system of preschool education aimed at bringing the growing generation in our country to a healthy and comprehensively mature adult, introducing effective forms and methods of education and upbringing into the educational process. extensive work has been done. At the same time, the analysis carried out, ensuring children's coverage of preschool education, filling preschool educational institutions with modern educational and methodological materials and fiction, solving the issues of attracting qualified pedagogues and management personnel to the field shows the need.

In 2020-2025, a "road map" was developed for the implementation of the concept of development of inclusive education in the public education system in 2020-2021. The target indicators for the development of the education of children



with special educational needs until 2025 have been approved. It was determined that the concept will be implemented step by step on the basis of a separate "Roadmap", which will be approved annually starting from 2022, based on the achieved results, target indicators and the main directions for the relevant period. The concept will be implemented in two stages, including:

During 2020-2022: improvement of the normative base in the field of inclusive education system; training, retraining and retraining of qualified pedagogues for the inclusive education system; strengthening the material and technical base of institutions where inclusive education is introduced, providing them with special devices (lifting devices, ramps, handrails, etc.), necessary literature, methodical manuals, equipment and supplies for training in various professions ; introduction of modern information and communication technologies and innovative projects in the field of inclusive education; creating a positive social environment among the population by explaining the right to education of children with special educational needs, the essence of inclusive education; implementation of measures aimed at preventing discrimination of children with special educational needs, negative treatment of them; introduction of the inclusive education system into the activities of individual educational institutions as an experiment; During 2023-2025:

gradually introducing the inclusive education system in other general secondary education institutions; implementation of measures aimed at ensuring the right to inclusive education of every child with special educational needs; teaching methods in inclusive education are improved and the principles of individualization are gradually introduced into the educational process; in the process of inclusive education, taking measures aimed at the spiritual and moral upbringing of students, their physical healthy and energetic formation; optimization of the number of specialized state educational institutions for



children with special educational needs was determined based on the physical and mental needs of students and the geographical location of educational institutions.

The mission of inclusive education is to provide quality education to all children, regardless of their abilities and status.

At the same time, the principle of inclusion implies that children with limited opportunities should live in a family and receive education in a normal school together with their peers in order to have a positive mental and social development. The inclusive education system means that a child in a wheelchair can study in any nearby school, if he/she has learning difficulties, he/she has special help to learn to read and write, and a child who does not attend classes ensures that appropriate support is provided to return to school.

The importance of inclusive education in the pre-school education system is the development of mental and physical feelings and actions of the child, while ensuring that children with disabilities receive quality education from an early age. What does inclusive education provide to children with disabilities?

- allows you to discover your own opportunities for yourself
- independent movement occurs through the opportunity to work together;
- worldview expands, life experience increases;
- the need and interest in studying increases;
- He begins to feel the same as everyone else;
- Opportunities that were not noticed before will be opened;
- Features such as bed rest and isolation disappear.

#### References:

1. Д.З. Ахметова, З.Г. Нигматов, Т.А. Челнокова, Г.В. Юсупова и др. Педагогика и психология инклюзивного образования: учебное пособие . – Казань, 2013



2. Буторина, О. Г. Об опыте воспитания и обучения детей с ограниченными возможностями здоровья / О. Г. Буторина // Воспитание школьников, 2010.

3. Faxriddinovna, Z. G. (2023). NUTQ NUQSONLARINI BOLA RUHIYATIGA TASIRI. *Scientific Impulse*, 1(7), 852-855.



## THE SOURCES OF THE MYSTICISM(SUFI) DOCTRINE

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**Annotation:** the article talks about the source basis of the science of Sufism along with the science of Islamic religion - the science of Sharia, the science of aqeedah (donation).

**Keywords:** science, religion, speech, recitation, science of Sharia, belief, science of charity (Tasawwuf), science of speech, monotheism.

The word "Deen" means "reckoning", "punishment", "reward" from the Arabic language [1:135]. And the word "Ilm" from the Arabic language means "a sign that distinguishes one thing from another" [2:29]. "Iqra'" in the command of Islam means "Read!", "Recite!" started with words meaning. There is a great meaning in the fact that its divine miracle is called "Qur'an", i.e. "reading" or "reading", it means that "This religion is a religion based on knowledge and enlightenment, this Word is a Word based on knowledge and enlightenment" [3:48]

The religion of Islam consists of 3 great sciences, the first of which is the science of Aqeed, the second is the science of Shariat, and the third is the science of charity.

Imam Ghazali said in his famous book "Ikhyou Ulumid-Deen": "Aqeed" is the knowledge by which monotheism is perceived and the nature and attributes of Allah subhanahu wa ta'ala are known.[4:206]

The word "Aqidah" is derived from the Arabic verb "aqada" which means "to fasten one thing to another." Islamic creed is a complex of beliefs that binds a Muslim person to certain verses. When a certain knowledge becomes a belief that



guides our thoughts, emotions and actions. Therefore, belief must be based on knowledge.[5:10]

The word Shari'at is an Arabic word that means a threshold and a place to drink water, the right path, Islamic rulings, legal rules of law, a complex of practical rulings introduced and formed on the basis of the Word of God, the Islamic legal system.

"...Shari'at is a set of norms and instructions that must be followed unconditionally, established by Allah and sent to people through our prophet Muhammad (s.a.vq)" - "Law of Allah", "Decision and order of the heavens".[6:567]

"Ehsan"(Donation) is derived from the Arabic word - kindness, sincerity, kindness, gift of something, charity. [6:586]

In the Qur'an, sincerity in fulfilling religious obligations is the opposite of hypocrisy in one of the hadiths quoted from Umar ibn Khattab (RA):

"Ehsan is to pray to God as if you were seeing him. Even if you do not see Him, pray as if He sees you. Ghazali used the term "Ehsan" together with the word "adl-adolat", which together acquired the meaning of "justice and conscience".

The word charity as a dogmatic concept forms a general religious concept along with the concepts of Islam and faith. Here, ihsan means full, unquestioning and uninterpreted acceptance of all religious beliefs, meaning deep devotion to all its precepts.

The word muhsin, meaning religious, comes from the concept of charity. In daily istilah, the term of charity is ikhlas: it means purity of heart, sincerity in thoughts and actions.

In Sufism, Ihsan is the highest stage of faith, followed by faith and then Islam, which corresponds to the concepts of Sharia-Tariqat-Haqiqat.

Ihsan is usually closely related to the concept of Sufism.

That is, it means spiritual training, purification, good behavior, self-improvement,



good morals (etc.). Muhammad (s.a.v.) and the Siddiquis - the Khulafai Rashidin, the dear servants of God who did not deviate from the path of the first Companions, were frugal, extremely pious, renounced the world, and turned to asceticism - "Sufi", and the path they followed began to be called "Tasawwuf".

Sufism is a beautiful doctrine of Sufism, and its various paths are called "sects" and "leeches". Sufism teaches us to reach the truth of the Qur'an and Sunnah and follow it with all our being.

Sufism is described in the work "Secrets of Sufism" by Muhammad Nurullah Said al-Jazari: "It is a very useful and independent science that reforms the spiritual world of a person, is the most effective for the treatment of broken hearts, and gathers a person around the truths." [7:4]

Sufism explains the meanings of "heart", "soul", "mind" and "nafs" with special care and states how a Muslim servant should treat each of them, and sets out the implementation of that statement.[8:66]

Mashayih and mystics have given various and beautiful definitions to Sufism. Below we describe some of the definitions given in the work of Hazrat Shaykh "Imagination of Sufism".

Sufism is a sect, the purpose of which is to free the heart from other than Allah, to worship the Creator sincerely, and to separate the soul from other than Him to the world of purity. Sufism is a philosophy of life that morally develops the self, which becomes reality through certain practical mathematics and sometimes leads to a sense of immersion in a higher reality. It also leads to enjoyment and intellectual enlightenment.

Sufism is a science that studies the state of the soul - good and bad, the way to purify the bad, the way to adorn the good, the mood of walking towards God and the way of escaping to Him. That is, not seeking refuge from anyone other than Himself .[8:31-32]

Sufism is to love God and to be satisfied in the way of attaining his vassal. Sufism





is a science that transcends reason. The science of Sufism is knowledge, inspiration, and discovery that comes from God. Sufism is familiarity with the unseen world. Sufism is spiritual education.

In conclusion, it can be said that the idea of Sufism is to purify the soul in order to gain the approval of God, and strive to become the owner of good morals, that is, to become moral according to the behavior of Allah and His Messenger. Human perfection can only be achieved through the preservation of the purity of the soul, which depends on taking steps to ensure the victory of the soul over the body.

Islamic Sufism is a path built directly on Islamic principles without any external influences.

#### List of used literature

- 1.Шайх Муҳаммад Содик Муҳаммад Юсуф. Қуръон ва суннатдаги илмий мўжизалар Т: 2019.
- 2.Шайх Муҳаммад Содик Муҳаммад Юсуф. Руҳий тарбия Покланиш 1-жуз. Т : 2010.
- 3.Шайх Муҳаммад Содик Муҳаммад Юсуф. Қуръон ва суннатдаги илмий мўжизалар Т : 2019.
- 4.Имом Ғаззолий. Ихёу улумид-дин Т: 2015.
- 5.Шайх Муҳаммад Содик Муҳаммад Юсуф. Ақоид илми ва унга боғлиқ масалалар Т : 2013.
- 6.Ислом. ЭнциклопедияА-Ҳ / Шайх Абдулазиз Мансур таҳрири остида Т: 2017.
- 7.Муҳаммад Нуруллоҳ Сайдо ал-Жазарий. Тасаввуф сирлари Т: 2000 .
- 8.Шайх Муҳаммад Содик Муҳаммад Юсуф. Тасаввуф ҳақида тасаввур Т: 2011.



## IRRIGATION INSTRUMENT MODERNIZATION REFORM IN UZBEKISTAN

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**Abstract:** The article analyzes the implementation of reforms in the water management system in Uzbekistan during the years of independence, special attention is paid to the rational and economical use of water resources in the irrigation system of the republic, and the modernization processes in the field are gradually improving from year to year with the help of sources. . In this regard, in order to develop the system and guarantee it legally, a number of decisions and laws were developed and the issues of their implementation were revealed.

**Key words:** water management, water resources, reclamation and irrigation, irrigation technologies, reservoir, canal and collectors, reform.

Agricultural production in the republic is directly related to water use. 55 billion per year on average for irrigation of cultivated fields in the republic. m<sup>3</sup> of water is required, and this amount of water is almost half of the total water resources consumed in Central Asian countries. At the moment, more than 80% of the water used in the agriculture of the republic flows from the territories of neighboring countries, which limits the possibility of establishing the stability of the water regime.

Therefore, the economic importance of economical use of water is very high, and it is necessary to maintain the condition of irrigation and reclamation networks for use. In this regard, I.A. Karimov's "...paying special attention to the issues of ensuring the appropriate technical condition of operating irrigation and



melioration facilities, strengthening the material and technical base of specialized water management, construction and operation organizations, equipping them with modern equipment..." The tasks set in this regard will serve as a direction in the reform of the water management system. At the same time, a number of measures have been taken to improve the water use system in recent years. In particular, according to the Decree of the President of the Republic of Uzbekistan dated March 24, 2003 No. PF-3226 "On the most important directions of deepening economic reforms in agriculture", the development of farms was set as a priority task and reforms in this regard for the purpose of further deepening, on the basis of the decision of the Cabinet of Ministers of the Republic of Uzbekistan No. 290 of June 28, 2003, important changes took place in water management, from the principle of administrative-territorial management of water resources to the principle of basin management.

As a result of priority development of farms, the water use system has become more complicated. In particular, previously, agricultural land was at the disposal of cooperative farms, and they were also responsible for providing water to the area. The fact that there are many farms that use internal canals, hydrotechnical structures and melioration techniques, properties in one farm area, as well as many farms in the area are also water consumers by growing agricultural products. its emergence naturally removes the need for the activity of the entity that regulates the relations of water use at the lower level. This issue is regulated by Water Consumer Unions (SIU) in most developed countries. It is known that the agricultural sector plays an important role in the sustainable development of our country's economy.

That is why the government of the republic pays enough attention to the development of this industry. After all, the sustainable development of the agricultural sector is directly related to the effective operation of the water management system. In particular, the investments directed to the modernization



of the industry are aimed at ensuring the future development of this industry and serving the well-being of the country's population as a leading industry. In this regard, taking into account the important role and importance of the water management system in the economy of our country, which is the core of the agro-industrial complex, technical and technological renewal of the network and radical modernization of the sector are urgent at the next stage of the ongoing organizational-structural and financial-economic reforms. became one of the issues. After all, the analyzes of the current technical condition of water management objects "... 23.5 percent of inter-farm and main canals, 17.4 percent of intra-farm irrigation networks require repair, there are 42 water replacement of 18 hydroelectric networks and modernization of hydromechanical equipment, reconstruction of 5, repair and reconstruction of 80 percent of large pumping stations, 50 percent of medium stations, and 30 percent of small stations, cleaning of nearly 19,000 km of open drains in domestic farms requires that more than 50 percent of closed drains do not work.

To eliminate the mentioned situation, to ensure the effective operation of the water management system, a large amount of financial resources will be directed. Attracting internal and external investments for this will create an opportunity to solve the situation. That is why, as First President I.A. Karimov said, "All of us need to understand a simple fact - without investments, there will be no modernization and renewal."

The implemented reforms made it possible to eliminate redundant links between the source of water and the direct consumers of water, to develop and implement the planning and distribution of water use and management on a scientific basis, and to control the targeted use of budget funds. At the same time, based on the requirements of the economic reforms implemented in the agriculture of our republic, a number of new systems have been introduced at the lowest level of water use. One of such systems is the organization of Water



Consumer Unions (SUU). SIUs are based on the decision of the Cabinet of Ministers of the Republic of Uzbekistan No. 8 of January 5, 2003 "On measures to transform agricultural enterprises into farms" and within the requirements of Article 72 of the Civil Code of the Republic of Uzbekistan was established as a non-profit, non-governmental organization, and mainly finances its activities from the fees of water consumers. "Procedure for regulation of mutual water management relations in the territory of reorganized agricultural enterprises" approved by the mentioned decision No. 8 legally regulated the voluntary association for collective use. SIUs enable the development of organizational and economic relations in the water management subsystem and serve the tasks of operating the irrigation and melioration networks owned by the former joint-stock farms, supplying the required water to the established farms in a timely manner. SIUs are primarily non-profit and non-governmental organizations formed and managed by water users who depend on specific irrigation-reclamation systems. That is, the Association of Water Consumers is an association of farms, farmers and other water consumers that carry out economic activities related to taking a certain amount of water, its effective use and discharge. Water consumers in agriculture are farmers and peasant farms and other water consumers who carry out economic and other activities related to receiving a limited amount of water, using it and internal water management objects. The purpose of establishing SIUs is to combine the technical and financial capabilities of consumers for efficient use of water in the union territory by establishing fair water distribution and efficient use of irrigation and improvement networks at the lowest level of water use in agriculture. Based on the analysis, it is necessary to establish the activities of SIUs aimed at improving the water distribution system at the lower level and the role of direct economic reforms in deepening and solving the following problems of the development of water use relations of farms directly related.

Irrigation and reclamation systems, in particular water reservoirs,



hyrotechnical facilities, irrigation facilities, canals and pumping stations, which are the object of investment activity in the water industry, ensure the activities of water management organizations. Therefore, their non-stop and non-emergency storage and continuous supply, as well as the provision of agricultural production with irrigation water based on the construction of new irrigation systems, depends on special conditions and specific characteristics of the system. is liq. Also, the technical condition of constantly moving water resources and irrigation networks, as well as the need to regularly monitor the sources of water resources formation and change, once again proves the consideration of system features.

The sources of increasing investment activity in the system are the funds allocated directly from the state budget funds, loans received from foreign financial organizations on the basis of state mediation and guarantees, and funds directly provided by foreign countries in the form of mutual economic assistance. and at the expense of technical means, funds transferred by foreign companies and organizations on the basis of contracts, and own funds of agricultural enterprises. In general, when increasing investment activity in the water industry, the following features need to be taken into account: - value is created only in the subsystem of the water industry system, the rest of the systems operate as links that serve it; - an integration process between non-governmental and non-profit organizations and farms and organizations operating with other types of ownership is created; - the development of the water management system is interested in increasing the income of water consumers. Because this situation is a source of development of SIUs for keeping irrigation systems in working order and payments for water resources supplied to water consumers under the contract.

The needs for the restoration of water infrastructure can be summarized as follows:

- 32.1 percent (22.3 thousand kilometers) of the total length of inter-farm and highway canals require reconstruction, and 23.5 percent require repair;



- more than 42.1 percent (149.5 thousand kilometers) of the intra-farm irrigation network needs reconstruction, 17.4 percent needs repair;

- 18 of the 42 water intake hydroelectric units with a capacity of 10 m<sup>3</sup> to 300 m<sup>3</sup> per second require replacement and modernization of hydromechanical equipment, and 5 hydroelectric units require reconstruction;

- most of the pumping stations serving nearly 2.1 million hectares of land have exhausted their resources, 76 out of 1130 stations are rare (>100 m<sup>3</sup>/s), 496 are average (up to 10 m<sup>3</sup>/s) and 561 are small (less than 1 m<sup>3</sup>/s) pumping stations. 80% of large pumping stations, 50% of medium stations and 30% of small stations need repair and reconstruction;

- a sharp increase in the price of energy sources and an increase in the cost of equipment has changed it in favor of runoff irrigation;

- 11 out of 27 inspected water reservoirs are almost filled with mud, and in 5, the volume of sediments is close to the height of the water discharge structures;

- about 19,000 kilometers of open drains in domestic farms require cleaning, 11,500 kilometers of open and closed drains need reconstruction and repair, no more than 50% of closed horizontal drains are working.

In such a situation, the technical resources of the infrastructure may decrease further and lead to a complicated situation.

#### REFERENCES:

1. Shomurotov, S. S. O. (2021). The Need for Formation of Knowledge on the Effective Use of Water Resources in Young People in the Process of Globalization. (in the Example of the Aral Sea). *International Journal of Human Computing Studies*, 3(2), 89-91.

2. SHOMUROTOV, S. S. O. (2021, April). FIRST STEPS FOR MODERNIZATION OF WATER FARMING IN THE REPUBLIC: ACHIEVEMENTS AND CHALLENGES. In *Euro-Asia Conferences* (Vol. 4, No. 1, pp. 152-155).



3. Shomurotov, S. S. O. (2021, February). Some Environmental Problems Related To Land And Water Resources In Uzbekistan. In *International Scientific and Current Research Conferences* (pp. 39-41).

4. SHOMUROTOV, S. S. O. Construction and Changes in Canals and Pumping Stations in Uzbekistan. *JournalNX*, 7(1), 262-266.

5. Шомуротов, Ш. (2021). Историческое значение реформ, осуществляемых в водной системе Узбекистана. *Общество и инновации*, 2(3/S), 458-465.

6. Шомуротов, Ш. (2021). Ўзбекистон сув хўжалиги тизимида амалга оширилган ислохотларнинг тарихий аҳамияти. *Общество и инновации*, 2(3/S), 458-465.

7. Shomurotov, S. S. O. (2022). O 'Zbekistonda Suvdan Foydalanuvchilar Uyushmalarining Tashkil Qilinishi Va Faoliyatida Yuzaga Kelayotgan Muammolari. *Miasto Przyszłości*, 29, 216-220.

8. Shomurotov, S. S. O. (2022). Measures Taken to Develop the Irrigation System in the Country. *Miasto Przyszłości*, 29, 207-209.

9. Abdurasulov, A. A. (2020). ORGANIZATIONAL AND PEDAGOGICAL FEATURES OF CORPORATE GOVERNANCE IN HIGHER EDUCATIONAL INSTITUTIONS OF ADVANCED FOREIGN COUNTRIES. *Scientific Bulletin of Namangan State University*, 2(9), 298-303.

10. Abdukarimovich, A. A. (2022). CORPORATE PEDAGOGICAL FOUNDATIONS OF EFFECTIVENESS OF HIGHER EDUCATION MANAGEMENT: Abdurasulov Abdullajon Abdukarimovich. *YOUTH, SCIENCE, EDUCATION: TOPICAL ISSUES, ACHIEVEMENTS AND INNOVATIONS*, 1(2), 80-85.





11. Abdugarimovich, A. A. (2022). Content of the corporate governance system, foreign experience and efficiency of its implementation. *Asian Journal of Research in Social Sciences and Humanities*, 12(5), 240-244.

12. Abdugarimovich, A. A. (2021). Problems of Power and Administrative Governance in Higher Education of Uzbekistan and the Need for Modernization of the Governance System. *Middle European Scientific Bulletin*, 11.

13. Abdugarimovich, A. A. (2022). THE EFFECTIVENESS OF THE IMPLEMENTATION OF THE CORPORATE GOVERNANCE SYSTEM IN HIGHER EDUCATIONAL INSTITUTIONS. *INNOVATIVE DEVELOPMENT IN THE GLOBAL SCIENCE*, 1(3), 120-125.

14. Abdugarimovich, A. A. (2020). METHODS OF MANAGING EMPLOYEES IN HIGHER EDUCATIONAL INSTITUTIONS ON THE BASIS OF CORPORATIVE CULTURE. *European Journal of Research and Reflection in Educational Sciences Vol*, 8(11).



## THE ROLE OF TALENT IN FORMING THE INTELLECTUAL CAPABILITIES OF PRESCHOOL CHILDREN

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**Abstract:** In the development of the intellectual potential of preschool children, the role of their innate abilities and talents is important, because our children who have innate abilities quickly learn all the educational, educational and professional teachings of adults. they get it and quickly learn it and apply it to life. This article talks about the role of talent and scientific-psychological considerations in the formation of intellectual abilities in preschool children.

**Key words:** Preschool age period, intellectual development, talent, ability, children, social environment, educator, psychologist, logical thinking.

**Introduction:** Today, the development of the intellectual potential of preschoolers is one of the urgent issues. As the President of the Republic of Uzbekistan, Shavkat Mirziyoyev, said, "Preschool education is the foundation of our tomorrow." In the development of the intellectual potential of preschool children, the role of their innate abilities and talents is important. But not all children have this ability and talent. Therefore, it is primarily the responsibility of our pedagogues and the general public, i.e., families, neighborhoods, educational institutions and managers of enterprises, organizations, and workshops, to develop abilities and improve children's talents. The main content of the concept of talent also means the concept of "ability". In our opinion, the concept of "ability" used in practice has three main parts:



First of all, ability is psychological, it has unique characteristics, it is understood as an ability that distinguishes one person from another, no one uses this expression when talking about the ability that is common to all people.

Secondly, the term ability is generally used to refer to a person who is dependent on his or her success in performing various activities, rather than referring to any different characteristics inherent in a person. For example, some people undoubtedly have their own qualities: characteristics such as squeamishness, laziness, and laziness cannot usually be called abilities, because it is not always possible to achieve success in any activity.

Thirdly, the concept of "ability" is not determined by some individuals, that is, by their knowledge or lack of knowledge. Often, the pedagogue is not very satisfied with the children's performance, but nevertheless, the child who is not learning well makes the teacher happy with the fact that he tries to master the subjects well without falling behind his peers. The pedagogue bases his displeasure on the fact that he does not deal with children enough, and comes to the conclusion that if he pays attention to the children's abilities and deals with them more, they have the ability to absorb knowledge well..

We cannot understand ability as the natural capabilities of a person, because we defined ability as "the unique psychological characteristics of each person", so it is absolutely impossible to conclude that it is a natural characteristic that exists in any person. Natural can only be anatomo-physiological features, i.e., a talent based on the development of ability, the ability itself appears as a result of continuous development.

### **Literature analysis and methodology.**

Ability is one of the most important features of the human psyche, and due to the possibility of filling these features excessively, the relative weakness of some ability even makes it impossible to successfully perform activities related to this ability. it's not. A lack of ability in one person can be a boundary between



another person.

The possibility of covering the border is different: for example, musical talent and an activity related to music or a similar field; in the absence of talent, any attempt will inevitably lead to failure..

"Talent" and "ability" have their own characteristic concepts, in which human characteristics are seen in terms of the requirements presented by any practical activity. Therefore, it is possible to talk about talent in general. Talent is said only in relation to something, some kind of activity. This is especially important when considering the question of "general talent". It is the interdependence of specific practical activities within the concept of "talent" that defines the historical character of this concept. The concept of "talent" loses its meaning when it is considered a biological characteristic. Talent, as we understand it, is included in any one or another type of activity and, without a doubt, is seriously dependent on the "successful" performance of each specific activity..

It should be noted that ability is a dynamic concept with its existence. Ability appears only in action, only in development. Psychologically, it is impossible to talk about ability as it exists before its development, and about the ability to stop developing when it reaches its full development. Because the ability must be in constant development. From this it can be concluded that ability does not appear outside of specific activities. Only we can distinguish them from each other by psychological analysis. It is impossible to conclude that the ability exists before the start of a specific activity and is used only at its end. An infant's absolute hearing ability does not exist before pitch awareness is first born. Until then, there was only a badge of talent like anatomy-physiological reality. It is not a matter of ability being manifested in activity, but of their creation in this activity. The development of ability, and any development in general, is not simple, its driving force is to deal with contradictions, therefore, at any stage of



development, there may be conflicts between abilities and interests. However, recognizing such conflicts that may be , the emergence and development of interests appear independently of ability.

In conclusion, it can be said that we do not accept the concept of ability as a natural characteristic of a person, but in many cases, based on the development of ability, we can see that some people have a natural characteristic, that is, talent. Sometimes the concept of "natural" is connected with the concept of ability in practical analysis when it is said with words like "real", "natural", "given by nature" and so on. In most cases, we understand naturalness as the ability underlying the development of talent.

#### References:

1. Askarov, A. (2022). CREATIVE THINKING IN PRESCHOOL SOCIAL PSYCHOLOGICAL ASPECTS OF DEVELOPMENT. *Science and innovation*, 1(B8), 87-91.
2. Rahimjon o'g'li, A. A. (2022). Maktabgacha Yoshdagi Bolalarning Aqliy Taraqqiyotining Rivojlanishida O 'Yin Rivojlantiruvchi Faoliyat Sifatida. *Uzbek Scholar Journal*, 5, 207-209.
3. Asqarov, A. (2022). Maktabgacha Yosh Davrda Kreativ Tafakkurni Rivojlanishining Ijtimoiy Psixologik Aspektlari. *Евразийский журнал академических исследований*, 2(6), 882-883.
4. O'G'Li, A. A. R. (2022). XOTIRANI RIVOJLANTIRISHNING O'ZIGA XOS USULLARI. *Talqin va tadqiqotlar ilmiy-uslubiy jurnali*, 1(6).
5. Kamilova, F. X. (2023). MAKTABGACHA YOSH DAVRDA MANTIQUIY VA KREATIV TAFAKKUR RIVOJLANISHINING IJTIMOIIY PSIXOLOGIK MEXANIZMLARI VA ASPEKTLARI. *Educational Research in Universal Sciences*, 2(5), 508-512.



6. o'g'li Asqarov, A. R., & Turdimatov, J. (2023). KEKSALIK DAVRIDA XOTIRA JARAYONINING O'ZIGA XOS XUSUSIYATLARINI PSIXOLOGIK ASOSLARI. *Educational Research in Universal Sciences*, 2(5), 513-516.
7. o'g'li Asqarov, A. R., & Turdimatova, E. (2023). MANTIQUIY TAFAKKURNI RIVOJLANTIRISH USULLARI. *Educational Research in Universal Sciences*, 2(5), 482-485.
8. o'g'li Asqarov, A. R., & Musayev, J. (2023). TA'LIM MUHITIDA O'QUVCHI SHAXSI XAVFSIZLIGIGA TAXDIDLAR VA ULARNI BARTARAF QILISHNING IJTIMOIIY-PSIXOLOGIK USULLARI. *GOLDEN BRAIN*, 1(15), 254-258.
9. Rahimjon o'g'li, A. A., & Baxtiyorovna, M. S. (2023). MAKTABGACHA YOSHDAGI BOLALARNING INTELLEKTUAL QOBILIIYATLARINI SHAKLLANTIRISHDA ISTE'DODNING O'RNI. *IQRO*, 3(1), 314-316.
10. Zaylobidin o'g'li, A. I. (2023). KICHIK MAKTAB YOSHDAGI O'QUVCHILARDA O'Z-O'ZINI ANGLASHDA IJTIMOIIYLASHUVNI O'ZIGA XOS XUSUSIYATLARI. *GOLDEN BRAIN*, 1(12), 94-98.
11. Ibroximjonovna, N. T. (2023). THE PROBLEM ANALYSIS OF THE PROCESS OF CREATIVE THINKING IN EDUCATION. *International journal of advanced research in education, technology and management*, 2(4).
12. Rahimjon o'g'li, A. A., & Adxam o'g'li, X. A. (2023). INKLYUZIV TA'LIM OLAYOTGAN BOLALARNI TAFAKKUR SOHASINI O'RGANISH.
13. Rahimjon o'g'li, A. A. (2022). MAKTABGACHA YOSHDAGI BOLALARDA MANTIQUIY TAFAKKUR RIVOJLANISHINING IJTIMOIIY PSIXOLOGIK MEXANIZMLARI. *SO'NGI ILMIY TADQIQOTLAR NAZARIYASI*, 5(2), 116-119.



14. Rahimjon o'g'li, A. A., & Zafarjonovna, T. U. G. (2023). INFLUENCE OF TEMPERAMENT TYPES ON EDUCATIONAL EFFICIENCY. *International journal of advanced research in education, technology and management*, 2(11).



## UNVEILING THE WONDERS OF ARTIFICIAL INTELLIGENCE: APPLICATIONS IN COMPUTATIONAL LINGUISTICS

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**Abstract:** In the rapidly advancing landscape of technology, artificial intelligence (AI) has emerged as a revolutionary force, transforming the way we interact with the world. One of the most fascinating domains where AI showcases its prowess is in science, particularly in the field of computational linguistics. This article delves into the applications of artificial intelligence in this realm, exploring how it has revolutionized language processing and analysis.

**Key words:** Artificial intelligence, NLP, interpret, and generate human-like text, problem-solving, speech recognition, and language translation.

### **Introduction**

**Understanding Artificial Intelligence:** Artificial intelligence refers to the development of computer systems that can perform tasks requiring human intelligence. These tasks include learning, problem-solving, speech recognition, and language translation. In the realm of computational linguistics, AI systems play a pivotal role in deciphering the intricacies of human language.

**Natural Language Processing (NLP):** At the heart of AI's impact on computational linguistics lies Natural Language Processing (NLP). NLP involves the interaction between computers and human language, enabling machines to understand, interpret, and generate human-like text. AI-driven NLP algorithms have significantly enhanced our ability to process and analyze vast amounts of





textual data, opening doors to new possibilities in scientific research.

**Language Translation:** One of the most noticeable applications of AI in computational linguistics is language translation. Gone are the days of relying solely on human translators; AI-powered systems now excel in translating text from one language to another with impressive accuracy. This advancement not only facilitates global communication but also expedites the dissemination of scientific knowledge across language barriers.

**Sentiment Analysis:** Understanding the sentiment behind written or spoken words is crucial in various scientific disciplines. AI algorithms can analyze and interpret the emotions expressed in text, making sentiment analysis an invaluable tool in fields like psychology, sociology, and market research. Researchers can now gauge public opinions and reactions on a massive scale, providing deeper insights into societal trends and behaviors.

**Information Extraction:** AI's prowess in information extraction has revolutionized the way scientists gather insights from large volumes of unstructured data. In computational linguistics, AI algorithms excel in extracting relevant information from texts, helping researchers identify patterns, trends, and correlations that may have otherwise remained hidden.

**Challenges and Ethical Considerations:** While the applications of AI in computational linguistics are undeniably transformative, challenges and ethical considerations persist. Issues such as bias in language models, data privacy concerns, and the ethical use of AI-generated content require careful consideration to ensure responsible and equitable integration of these technologies in scientific research.

Artificial intelligence has ushered in a new era in science, particularly in the realm of computational linguistics. From language translation to sentiment analysis and information extraction, AI applications have enhanced our ability to decipher and leverage the power of human language for scientific inquiry. As we



continue to explore the possibilities of AI, it is essential to navigate the challenges responsibly, ensuring that the benefits of these technological advancements are accessible and equitable for all.

### References:

1. Askarov, A. (2022). CREATIVE THINKING IN PRESCHOOL SOCIAL PSYCHOLOGICAL ASPECTS OF DEVELOPMENT. *Science and innovation, 1*(B8), 87-91.
2. Rahimjon o'g'li, A. A. (2022). Maktabgacha Yoshdagi Bolalarning Aqliy Taraqqiyotining Rivojlanishida O 'Yin Rivojlantiruvchi Faoliyat Sifatida. *Uzbek Scholar Journal, 5*, 207-209.
3. [COMMUNICATIVE APPROACH TO LANGUAGE TEACHING](#)
4. N Teshaboyeva, S Mamayoqubova - МОЛОДОЙ ИССЛЕДОВАТЕЛЬ: ВЫЗОВЫ И ..., 2020
5. [THE EDUCATIONAL VALUE AND PLACE OF FICTION IN LITERATURE LESSONS](#)
6. MS Obloqulovna, AM Yusupovna - PEDAGOGS jurnali, 2022
7. [HUDUDLAR RIVOJLANISHINI STRATEGIK TAHLIL QILISH VA REJALASHTIRISH METODIKASI](#)
8. MS Obloqulovna, S Izatullayeva - ... науки в современном мире: теоретические и ..., 2022
9. [PIRLS-MATNNI O'QISH VA TUSHUNISH DARAJASINI BAHOLASH](#)
10. MS Obloqulovna - PEDAGOGS jurnali, 2022
11. [MAKTABGACHA TA'LIM TASHKILOTLARIDA TASHKIL ETILADIGAN TA'LIM-TARBIYA JARAYONLARI](#)
12. MS Obloqulovna - PEDAGOGS jurnali, 2022
13. [The esland efl in the world today](#)
14. TG Berdievich, NB Mamasharifovich, MS Oblokulovna... - ACADEMICIA: An International Multidisciplinary ..., 2021
15. [Pragmatics and Its Role in Touristic Context](#)
16. NB Mamasharifovich, IL Bakhtiyarovna... - JournalNX



## INCREASING THE EFFICIENCY OF THE CLUSTERING SYSTEM OF HIGHER EDUCATIONAL INSTITUTIONS

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**Annotation:** In article, features of realization of innovative pedagogical technologies are considered. A feature specified of use of interactive forms of education. Dynamics revealed of introduction of innovative technologies is. The research conducted is of use of interactive forms of education and information and communication technologies. The interactive nature and effectiveness of use in educational practice and education of innovative technologies reveals.

**Keywords:** innovative educational technologies, innovative cluster method, interactive tutoring, information and communication technologies.

From an educational point of view, the meaning of the term “Cluster” is clearly defined. However, a large number of existing definitions are almost always understood by the educational community as one and the same (and even the concentration of different English and Russian terms is almost the same). The features of innovative education, that is, the combination and use of joint resources, as well as the results of scientific research and professional activities to improve quality, serve to develop the effectiveness of education and the activities of educational institutions in general.

Let's look at innovations in improving educational technologies and, accordingly, what innovative technologies are. It is important to understand that



innovation is associated with the creation of all kinds of innovations and is a process of implementation. The use of a certain method in the environment of development of educational technologies in universities means entering the sphere of something new, placing it in it and creating a whole series of changes. The innovative cluster method not only improves operational efficiency, but also optimizes the management system.

The main advantages of introducing the cluster approach in higher education institutions:

- development of cooperative relationships with cluster participants, including university professors and teachers and students;
- formation of a modern cooperative mentality in society when conducting scientific and research work;
- free exchange of information, formation of a unified information space;
- formation of mobility of participants in academic development and research processes (exchange of scientists, masters, students, that is, integration into a single educational space);
- consider the effective use of the best available scientific and research work;
- allows you to increase the volume of scientific work, expand it, develop the commercialization of scientific foundations, and introduce socially significant products into practice.

In the cluster method, the student or reader is forced to search because one needs to know something in order to write words related to a number of topics. So, this method encourages the student or reader to learn on his own. The advantage of the cluster method over other methods is that all knowledge on a topic is collected in a heap, and depending on this group, the topic is revealed. Below are some points to consider when implementing the cluster method.

Familiarize yourself with the rules for forming a cluster. Write the title of



the topic with keywords in the center of the chalkboard or piece of paper. It ensures the activation of knowledge, helps to freely and openly introduce new associations into the process of thinking on a topic.

Clustering is the grouping of studied objects according to the similarity of their properties. Each cluster contains similar objects, but they differ significantly from the objects included in other clusters. Dividing a set of objects into clusters makes it possible to identify patterns and knowledge, propose new hypotheses, and evaluate the information content of the properties of objects. The use of a large number of indicators in the clustering process leads to the fact that the selected clusters do not have a clear structure, therefore clustering was carried out only according to the main indicators of universities.

The cluster as a mechanism for innovative management of the development of the higher education system makes it possible to ensure the effectiveness of the activities of each educational institution included in it, including: the development of social partnership, attracting extra-budgetary funds into the education system. sphere of education, the emergence of resources for innovative training, retraining and advanced training of teaching staff, new high-quality educational results based on the continuous development of the child, make it possible to improve the image of institutions. A special place in the innovative development of regions is occupied by state classical universities, which play the role of integrators of professional education, science and culture of the region. A classical university, located in the center of the unique educational space of the region, not only fulfills an educational mission, but is also the most important social institution that can be used to form and influence the innovative infrastructure of the region.

In conclusion, I would like to emphasize that education is never isolated, and scientists, masters, and students develop it together. The development of society, the country, the world has a direct impact on the existing social situation. Procedures and mechanisms for training and retraining of personnel go back to



higher education institutions. Higher education institutions are one of the foundations that lay the foundation for scientific progress and joint development of science. It is necessary to recall that responsibility for the quality of the implementation of the cluster falls on each teaching staff working at the university. It should be noted that cluster analysis is a very convenient tool that makes it easier to perceive a large number of differences.

#### **List of used literature:**

1. Boymurodov A.Kh., Azimkulov S.N., Davlatova A.R. (2021). ADVANTAGES AND OPPORTUNITIES OF THE MODERN EDUCATION SYSTEM. Academic Research in Educational Sciences, 2(11), 1389–1395.

2. Boymurodov A.Kh., Azimkulov S.N., Davlatova A.R. (2021). ADVANTAGES AND OPPORTUNITIES OF THE MODERN EDUCATION SYSTEM. Academic Research in Educational Sciences, 2(11), 1389–1395.

3. Rakhmatov F.A., Nursaidov N.Yu., Azimkulov S.N. (2019). ANALYSIS OF PROBLEMS OF ORGANIZING THE DOCUMENT EXCHANGE PROCESS IN MEDICAL INFORMATION SYSTEMS. INNOVATIVE IDEAS IN THE CREATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES AND SOFTWARE, 1(41), 196-198.

4. Seytov A.J., Khurramov A.J., Azimkulov S.N., Shcherbaev M.R., Kudaibergenov A.A., Khasanova S.Kh. (2021). Optimal control of operating modes of pumping stations of the Karshi main canal cascades. International Journal of Advanced Research in Science, Engineering and Technology, 8(4), 17177-17185.

5. Sindarkulovna, K. S. (2023). ALOQA XIZMATLARI KO'RSATISH TIZIMINING MAMLAKAT YALPI ICHKI MAHSULOTDAGI ULUSHINI OSHIRISH. PEDAGOGS jurnali, 33(2), 37-39.

6. Sindarkulovna, K. S. (2023). KICHIK BIZNES VA XUSUSIY TADBIRKORLIK KORXONALARINI RIVOJLANTIRISHDA



INNOVATION MARKETINGDAN FOYDALANISH YO'LLARI. PEDAGOGS jurnali, 33(1), 161-163.

7. I.Tishabayeva, Z.Xatamova, N.Ibragimov, O.Xamdamova. (2023). O'ZBEKISTON TARIXI FANLARINI O'QITISHDA ZAMONAVIY PEDAGOGIK TEXNOLOGIYALARDAN FOYDALANISH MASALALARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/690>

8. Xamdamova O.M., Xatamova Z.N., Ibragimov N., Tishabaeva I. (2023). O'ZBEKISTON TA'LIMIDA UZVIY BOG'LIQLIK VA RIVOJLANTIRISH USULLARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/689>

9. Ибрагимов, Н. (2023). РАЗВИТИЕ СИСТЕМЫ КАЧЕСТВА ОБРАЗОВАНИЯ В РЕГИОНАЛЬНЫХ ВУЗАХ ДЛЯ ПОВЫШЕНИЯ ИХ КОНКУРЕНТОСПОСОБНОСТИ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1091>

10. Ибрагимов, Н. (2023). РОЛЬ СТРАТЕГИЧЕСКОГО ПЛАНИРОВАНИЯ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1116>

11. Ибрагимов, Н. (2023). СТРАТЕГИИ МАРКЕТИНГА В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1069>

12. Ибрагимов, Н. (2023). УПРАВЛЕНИЕ КАЧЕСТВОМ ОБРАЗОВАНИЯ ДЛЯ ПОВЫШЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ



ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions".

извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1068>

13. Ибрагимов Наврўзбек Кимсанбаевич, Рустамов Илхомиддин Абдуқодирович, Хатамова Зумрадхон Назиржоновна, Бурхонов Илёсхон Муҳиддинович. (2023). ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИНИ РАҚОБАТДОШЛИГИНИ БОШҚАРИШДА БИТИРУВЧИЛАРНИ ИШ БИЛАН ТАЪМИНЛАШ МАСАЛАСИ. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/688>

14. Ibragimov, N., & Kimsanbayev, A. (2023). DAVLATGA IQTISODIY XAVFSIZLIKNI ZARURLIGI: RAQAMLASHTIRISH VA TAHDIDLAR. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/796>

15. Ibragimov , N., Nabiyev , I., & Abduqodirov , A. (2023). IQTISODIY XAVFSIZLIKNI TA'MINLASH VA UNI HAR TOMONLAMA RIVOJLANTIRISH. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/793>

16. Ибрагимов, Н. (2023). РОЛЬ ИННОВАЦИЙ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1067>

17. Ibragimov Navro'zbek Kimsanbaevich (2023). THE ISSUE OF EMPLOYMENT FOR GRADUATES IN IMPROVING THE MECHANISM OF COMPETITIVENESS OF REGIONAL HIGHER EDUCATION INSTITUTIONS <https://doi.org/10.5281/zenodo.8415277>

18. Ибрагимов, Н. (2023). ИНТЕГРАЦИЯ ИНФОРМАТИКИ В УЧЕБНЫЙ ПРОЦЕСС ВУЗА: МЕТОДЫ И ПОДХОДЫ. Conference on Digital Innovation





: "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1103>

19. Ибрагимов, Н. (2023). РАЗВИТИЕ КРИТИЧЕСКОГО МЫШЛЕНИЯ СТУДЕНТОВ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1566>

20. Ибрагимов, Н. (2023). ПРИМЕНЕНИЕ АКТИВНОГО ОБУЧЕНИЯ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1567>



## SYSTEM OF CLUSTERING OF UNIVERSITIES IN THE EDUCATIONAL MARKET

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**Annotation:** The role of higher educational institutions of the Republic of Uzbekistan in the modern cluster management system and its features in the development of educational organizations are highlighted.

**Key words:** modern management, clustering system, concept, marketing goal, information and communication technologies, market structure.

Modern management - general qualification requirements for future managers and their training, as well as the effective use and application of modern knowledge and innovation, advanced foreign experience, the widespread use of information and communication technologies in the educational process of educational institutions. regular development and acquisition of one's knowledge, skills and abilities by increasing the level of intensive study of foreign languages.

Our President Sh.M. Mirziyoyev, commenting on the shortcomings in establishing quotas for admission to higher educational institutions in our country, emphasized the following: "information is presented to the Ministry of Higher Education and the Ministry of Economy. Then proposals are developed. Quotas for the training of specialists are not fully thought out. As a result, the problem of the quality of personnel and their employment is becoming more acute every



year.”

“The Higher Education System of the Republic of Uzbekistan 2030” was developed in order to determine priority areas for systemic reform of higher education in our country, modernization of higher education, development of the social sphere and economic sectors based on advanced educational technologies. The concept of “development by 2030” was determined to reach 50% by 2030.

In Western literature, the concept of a cluster was introduced into economic theory by M. Porter: “A cluster is a geographical grouping of interconnected companies, specialized suppliers, service providers, firms in related industries, as well as organizations related to their activities.” collective group.” Thus, to be a cluster, geographically related companies and groups of related organizations must operate in a certain territory, be distinguished by their common activities and complement each other.

Educational cluster is a set of interconnected vocational education institutions, united in interaction with industry and industrial enterprises; This is, first of all, a system of training, mutual learning and self-learning tools in the innovation chain “science – technology – business”, based on horizontal connections within the chain.

Transitional model of an educational cluster – (a complex of educational and scientific innovations). Main goals: to create a comprehensive system of multi-level training of specialists for enterprises based on the integration of educational institutions and employer enterprises, to ensure improved quality, to reduce the time required to train specialists and to retain graduates at enterprises. ; activation and stimulation of fundamental, research and applied scientific research focused on common problems; creation of a flexible system of professional training. Cluster training is a relatively new area of professional pedagogy, and its implementation in the educational process requires the identification of pedagogical conditions and experimental testing of the



effectiveness of the formation of a qualified specialist.

In the context of globalization of the economy of Uzbekistan, the socio-economic role of marketing in the modern university management system is increasing. Even in the management system of global research and higher educational institutions, it is necessary to properly build a marketing service, understand its theoretical basis and monitor its modern innovative development in education. Considering that marketing activity is an important concept in higher education institutions, it can be said that it is necessary to create a marketing system and monitor its activities. The main reason for this is the formation of marketing knowledge and skills in students, providing them with the necessary information. However, before defining the role of marketing in higher education institutions, it is necessary to first consider its main objectives, knowing that marketing is a necessary and integral part of all areas around us.

The recently existing concept involves expanding the sphere of higher education, improving the quality of training of highly qualified specialists, introducing digital technologies and modern methods into the educational process, and the active involvement of employers in the process of training highly qualified specialists. It also provides for the financial independence and stability of educational institutions, strengthening their material and technical support. This definition can be seen directly in the example of the higher education system. Before talking about marketing, it is necessary to determine the possibility and necessity of using marketing tools in education. It follows that managers and specialists of marketing civilization are part of a process directly related to the lifestyle of participants in market relations.

#### **List of used literature:**

1. Mirziyoyev Sh.M. Critical analysis, strict discipline and personal responsibility



should be the daily rule of every leader. /Report at an extended meeting of the Cabinet of Ministers dedicated to the main results of the socio-economic development of our country in 2016 and the most important priorities of the economic program for 2017.

2. Bazarova F.T. Marketing textbook. - T.: Economics - Finance. 2015 65 p.
3. Decree of the President of the Republic of Uzbekistan dated October 8, 2019 No. PF-5847 "On approval of the concept of development of the higher education system of the Republic of Uzbekistan until 2030"
4. Ergashkhodzhaev Sh.D., Kasimova M.S., Yusupov M.A. Marketing Basics. - T.: Economics-Finance. 2017 50 rub.
5. Sindarkulovna, K. S. (2023). ALOQA XIZMATLARI KO'RSATISH TIZIMINING MAMLAKAT YALPI ICHKI MAHSULOTDAGI ULUSHINI OSHIRISH. PEDAGOGS jurnali, 33(2), 37-39.
6. Sindarkulovna, K. S. (2023). KICHIK BIZNES VA XUSUSIY TADBIRKORLIK KORXONALARINI RIVOJLANTIRISHDA INNOVATSION MARKETINGDAN FOYDALANISH YO'LLARI. PEDAGOGS jurnali, 33(1), 161-163.
7. I.Tishabayeva, Z.Xatamova, N.Ibragimov, O.Xamdamaeva. (2023). O'ZBEKISTON TARIXI FANLARINI O'QITISHDA ZAMONAVIY PEDAGOGIK TEXNOLOGIYALARDAN FOYDALANISH MASALALARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/690>
8. Xamdamaeva O.M., Xatamova Z.N., Ibragimov N., Tishabaeva I. (2023). O'ZBEKISTON TA'LIMIDA UZVIY BOG'LIQLIK VA RIVOJLANTIRISH USULLARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/689>
9. Ибрагимов, Н. (2023). РАЗВИТИЕ СИСТЕМЫ КАЧЕСТВА



ОБРАЗОВАНИЯ В РЕГИОНАЛЬНЫХ ВУЗАХ ДЛЯ ПОВЫШЕНИЯ ИХ КОНКУРЕНТОСПОСОБНОСТИ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1091>

10. Ибрагимов, Н. (2023). РОЛЬ СТРАТЕГИЧЕСКОГО ПЛАНИРОВАНИЯ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1116>

11. Ибрагимов, Н. (2023). СТРАТЕГИИ МАРКЕТИНГА В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1069>

12. Ибрагимов, Н. (2023). УПРАВЛЕНИЕ КАЧЕСТВОМ ОБРАЗОВАНИЯ ДЛЯ ПОВЫШЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1068>

13. Ибрагимов Наврўзбек Кимсанбаевич, Рустамов Илхомиддин Абдуқодирович, Хатамова Зумрадхон Назиржоновна, Бурхонов Илёсхон Муҳиддинович. (2023). ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИНИ РАҚОБАТДОШЛИГИНИ БОШҚАРИШДА БИТИРУВЧИЛАРНИ ИШ БИЛАН ТАЪМИНЛАШ МАСАЛАСИ. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/688>

14. Ibragimov, N., & Kimsanbayev, A. (2023). DAVLATGA IQTISODIY XAVFSIZLIKNI ZARURLIGI: RAQAMLASHTIRISH VA TAHDIDLAR. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/796>



15. Ibragimov , N., Nabiyev , I., & Abduqodirov , A. (2023). IQTISODIY XAVFSIZLIKNI TA'MINLASH VA UNI HAR TOMONLAMA RIVOJLANTIRISH. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/793>
16. Ибрагимов, Н. (2023). РОЛЬ ИННОВАЦИЙ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1067>
17. Ibragimov Navro'zbek Kimsanbaevich (2023). THE ISSUE OF EMPLOYMENT FOR GRADUATES IN IMPROVING THE MECHANISM OF COMPETITIVENESS OF REGIONAL HIGHER EDUCATION INSTITUTIONS <https://doi.org/10.5281/zenodo.8415277>
18. Ибрагимов, Н. (2023). ИНТЕГРАЦИЯ ИНФОРМАТИКИ В УЧЕБНЫЙ ПРОЦЕСС ВУЗА: МЕТОДЫ И ПОДХОДЫ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1103>
19. Ибрагимов, Н. (2023). РАЗВИТИЕ КРИТИЧЕСКОГО МЫШЛЕНИЯ СТУДЕНТОВ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1566>
20. Ибрагимов, Н. (2023). ПРИМЕНЕНИЕ АКТИВНОГО ОБУЧЕНИЯ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1567>



## HEAT TRANSFER FROM A MULTILAYERED WALL

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### **Annatation**

Generally, the envelope of a structure is designed by architects to respond to many considerations including structural and aesthetic. Before the oil crisis of 1973, the energy efficiency of the envelope components was rarely considered as an important factor in the design of a building. However, standards and regulations have been developed and implemented to improve the energy efficiency of various components of building envelopes. For energy retrofit analysis, it is helpful to determine if the building was constructed or modified to meet certain energy efficiency standards. If it is the case, retrofitting of the building envelope may not be cost-effective especially for high-rise commercial buildings. However, improvements to the building envelope can be cost-effective if the building or industrial facility was built without any concern for energy efficiency such as the case with structures constructed with no insulation provided in the walls or roofs.

**Key words:** building envelope, roof, indoor, wall, cooling, heating

Where  $R_j$  = the  $R$ -value of each homogeneous layer part of the construction of the wall or roof assembly.

It includes the  $R$ -value due to convection at both inner and outer surfaces of the wall or roof obtained by Eq. (6.3).

$NL$  = the number of layers (including the convection boundary layers) that are part of the wall or roof assembly. For instance, in the wall assembly presented





in Figure 6.2,  $NL = 5$  (3 conductive layers and 2 convective layers).

The overall  $U$ -value of the wall or roof can be defined simply as the inverse of the overall  $R$ -value:

$$U_T = \frac{1}{R_T}$$

It should be noted that practitioners usually prefer to use  $R$ -values rather than  $U$ -values inasmuch as the  $U$ -values are small especially when insulation is added to the wall or roof assembly. For doors and

windows, the use of  $U$ -values is more common because these components have low  $R$ -values.

From Eq. (6.1), it is clear that in order to reduce the heat transfer from the above-grade building envelope components, its  $R$ -value should be increased or its  $U$ -value decreased. To achieve this objective, thermal insulation can be added to the building envelope. In the next section, calculation methods

of the energy savings due to addition of insulation are presented to determine the cost-effectiveness of such a measure.

To characterize the total heat transmission of the entire building, a building load coefficient (BLC) is defined to account for all the above-grade building envelope components (roofs, walls, doors, and windows):

$$BLC = \sum_{i=1}^{N_E} A_i \cdot U_{T,i} = \sum_{i=1}^{N_E} \frac{A_i}{R_{T,i}}$$

where  $A_i$  is the area of each element of the above-grade building envelope including walls, roofs, windows, and doors.

### **Infiltration Heat Loss/Gain**

Air can flow in or out of the building envelope through leaks. This process is often referred to as air infiltration or exfiltration. Thus, infiltration (and



exfiltration) is rather an uncontrolled flow of air unlike ventilation (and exhaust) for which air is moved by mechanical systems. Generally, air infiltration occurs in all buildings but is more important for smaller buildings such as detached residential buildings. In

larger buildings, air infiltration is typically less significant for two reasons:

1. The volume over the envelope surface area (from which air leakage occurs) is small for larger buildings.

2. The indoor pressure is generally maintained higher than outdoor pressure by mechanical systems in larger buildings. Typically, infiltration is considered significant for low-rise buildings and can affect energy use, thermal comfort, and especially structural damage through rusting and rotting of the building envelope materials due to the humidity transported by infiltrating or exfiltrating air. Without direct measurement, it is difficult to estimate the leakage air flow through the building envelope. There are two basic measurement

techniques that allow estimation of the infiltration characteristics for a building. These measurement techniques include fan pressurization or depressurization techniques and tracer gas techniques.

Fan pressurization/depressurization techniques are commonly known as blower door tests and allow the estimation of the volumetric air flow rate variation with the pressure difference between the outdoors and indoors of a building. Several pressure-differential values are typically considered and a correlation

is found in the form of:

$$\dot{V} = C \cdot \Delta P^n$$

where  $C$  and  $n$  are correlation coefficients determined by fitting the measured data of pressure differentials and air volumetric rates. Using the correlation of Eq. (6.7), an effective leakage area (ELA) can be determined as follows:



$$ELA = \dot{V}_{ref} \sqrt{\frac{\rho}{2 \cdot \Delta P}}$$

Using English units, the effective leakage area (in inches squared) can be estimated using a modified Eq. (6.8a) as follows:

$$ELA = 0.186 \dot{V}_{ref} \sqrt{\frac{\rho}{2 \cdot \Delta P}}$$

where  $V_{ref}$  is the reference volume air rate through the building at a reference pressure difference (between indoors and outdoors) of typically 4 Pa and obtained by extrapolation from Eq. (6.7). The ELA provides an estimate of the equivalent area of holes in the building envelope through which air leaks can occur.

To determine the building air infiltration rate under normal climatic conditions (due to wind and temperature effects), the LBL infiltration model developed by Sherman and Grimsrud (1980) is commonly used:

$$\dot{V} = ELA \cdot (f_s \cdot \Delta T + f_w \cdot v_w^2)^{1/2}$$

where  $\Delta T$  is the indoor–outdoor temperature difference,  $v_w$  is the period-average wind speed, and  $f_s$  and  $f_w$  are the stack and wind coefficients, respectively. Table 1 provides the crack coefficients for three levels of building heights. Table 2 lists the wind coefficients for various shielding classes and building heights. Blower door tests are still being used to find and repair leaks in low-rise buildings. Typically, the

leaks are found by holding a smoke source and watching where the smoke exits the house. Several weatherstripping methods are available to reduce air infiltration through the building envelope

TABLE 6.1 Stack Coefficient,  $f_s$ 

Stack Coefficient	IP Units <sup>a</sup>			SI Units <sup>b</sup>		
	House Height (Stories)			House Height (Stories)		
	One	Two	Three	One	Two	Three
	0.0150	0.0299	0.0449	0.000139	0.000278	0.000417

Source: ASHRAE, *Handbook of Fundamentals*, Atlanta, GA: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 2009.

<sup>a</sup> IP Units for  $f_s$ : (ft<sup>3</sup>/min)<sup>2</sup>/in<sup>4</sup>×°F

<sup>b</sup> SI Units for  $f_s$ : (L/sft)<sup>2</sup>/cm<sup>4</sup>×°C

TABLE 6.2 Wind Coefficient,  $f_w$ 

Shielding Class <sup>c</sup>	IP Units <sup>a</sup>			SI Units <sup>b</sup>		
	House Height (Stories)			House Height (Stories)		
	One	Two	Three	One	Two	Three
1	0.0119	0.0157	0.0184	0.000319	0.000420	0.000494
2	0.0092	0.0121	0.0143	0.000246	0.000325	0.000382
3	0.0065	0.0086	0.0101	0.000174	0.000231	0.000271
4	0.0039	0.0051	0.0060	0.000104	0.000137	0.000161
5	0.0012	0.0016	0.0018	0.000032	0.000042	0.000049

Source: ASHRAE, *Handbook of Fundamentals*, Atlanta, GA: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 2009.

<sup>a</sup> IP Units for  $f_w$ : (ft<sup>3</sup>/min)<sup>2</sup>/in<sup>4</sup>.mph

<sup>b</sup> SI Units for  $f_w$ : (L/sft)<sup>2</sup>/cm<sup>4</sup>.(m/s)<sup>2</sup>

<sup>c</sup> Description of shielding classes: 1–no obstructions or local shielding; 2–light local shielding: few obstructions, few trees, or small shed; 3– moderate local shielding: some obstructions within two house height, thick hedge, solid fence, or one neighboring house; 4– heavy shielding:

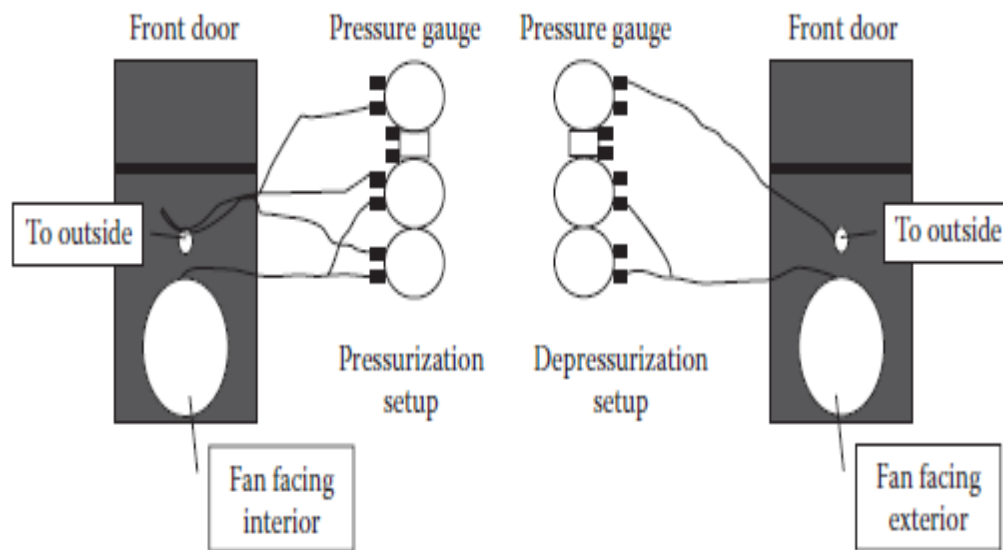
obstructions around most of perimeter, buildings or trees within 30 ft (10 m) in most directions; typical suburban shielding; 5–very heavy shielding: Large obstructions surrounding perimeter within two house heights; typical downtown shielding.

including caulking, weatherstripping, landscaping around the building to



reduce the wind effects, and installing air barriers to tighten the building envelope.

It should be mentioned, however, that the blower door technique cannot be used to determine accurately the amount of fresh air supplied to the building through either infiltration or ventilation. For this purpose, it is recommended to use the tracer gas techniques described below. In a typical blower test, the house should first be prepared. In particular, windows are closed, interior doors that are normally open are kept open, and the fireplace ash is cleaned. The main entrance door is generally used to place the blower fan to either introduce air (for the pressurization test) or extract air (for the depressurization test). The airflow rate is generally measured using a pressure gauge attached to the blower setup. The pressure gauge should first be checked to make sure that it reads zero with the fan set to off. An additional pressure gauge is used to measure the differential in pressure between the inside and outside of the house. Figure 6.3 shows the setup for both the depressurization and pressurization tests. Example 6.1 illustrates how the results of blower door tests can be used to determine the infiltration rate in a house. The results and the analysis presented in Example 6.1 are based on actual tests performed by Azerbegi, Hunsberger, and Zhou (2000).



Typical blower door setup for both pressurization and depressurization tests.

### Foundation Heat Transfer Calculations

The practice of insulating building foundations has become more common over the last few decades. However, the vast majority of existing residential buildings are not insulated. It was estimated that in 1985 less than 5 percent of the existing building stock had insulated foundations. Earth-contact heat transfer appears to be responsible for 1 to 3 quadrillion kJ of annual energy use in the United States.

This energy use is similar to the impact due to infiltration on annual cooling and heating loads in residential buildings (Claridge, 1988). In addition to the energy-saving potential, insulating building foundations can improve the thermal comfort especially for occupants of buildings with basements or earth-sheltered foundations.

Typically, the foundation heat transfer is a major part of heating/cooling loads for low-rise buildings including single-family dwellings, small commercial and institutional buildings, refrigerated structures, and large warehouses. A detailed discussion of the insulation configurations for various building types as well as various calculation techniques to estimate foundation heat transfer can be



found in

Krarti (1999). In this section, only a simplified calculation method is provided for annual and seasonal foundation heat loss or gain from residential foundations.

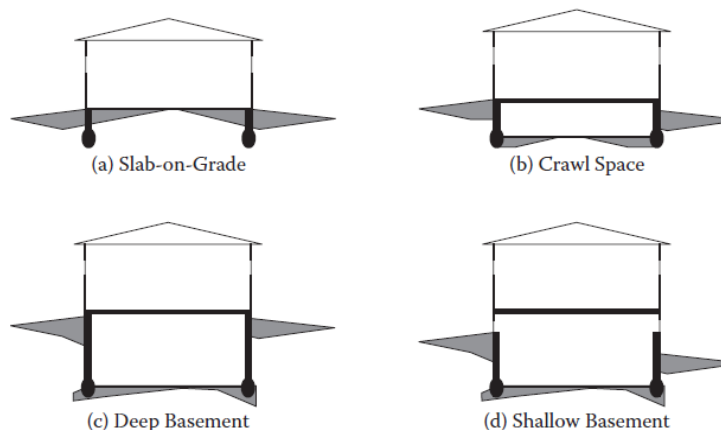
It should be noted that in the United States, there are three common foundation types for residential buildings: slab-on-grade floors, basements, and crawlspaces. The basement foundations can be either deep or shallow. Typically, shallow basements and crawlspaces are unconditioned spaces. Figure 9 shows the three common building foundation types. In some applications, the building foundation can include any combination of the three foundation types such as a basement with a slab-on grade floor.

Among the factors that affect the selection of the foundation type include the geographical location and the speculative real estate market.

A recent report from the U.S. Census Bureau indicates that the share of houses built with crawlspaces remained constant at about 20 percent over the last seven years (Krarti, 1999). However, the percentage of houses with slab foundations has increased from 38 percent in 1991 to 45 percent in 1997.

Meanwhile, the share of houses built with basements has declined from a peak of 42 percent in 1992 to

*Building Envelope*





Foundation types for the buildings.

37 percent in 1997. In 1993, houses were built with almost an equal number of basement and slab foundations.

Moreover, data from the U.S. Census Bureau clearly indicates that the foundation type selection depends on the geographical location. In the Northeast and Midwest regions, the basement foundation is the most common with a share of about 80 percent during the period between 1991 and 1997, whereas the slab foundation is more dominant in the South and the West.

#### Summary

Energy efficiency improvements of building envelope systems are generally expensive and are not costeffective especially for large commercial buildings. However, increasing the energy performance of a building shell can be justified for low-rise and small buildings based on energy cost savings but also based on improvement in indoor thermal comfort and integrity of the building structure. For residential buildings, weatherstripping to reduce infiltration losses is almost always economically justifiable.

#### References

1. H. *Monitoring Peak Power and Cooling Energy Savings of Shade Trees and White Surfaces in the Sacramento Municipal Utility District (SMUD) Service Area: Data Analysis, Simulations and Results*, LBNL Report # 34411, Berkeley, CA, 1993.
2. Akbari, H. and Sezgen, O. *Case Studies of Thermal Energy Storage (TES) Systems: Evaluation and Verification of System*





*Performance*. LBL-30852. Lawrence Berkeley Laboratory, University of California, Energy and Environment Division. Berkeley, CA, 1992.

3. Air Conditioning and Refrigeration Institute, Standard 1060-2001, Rating Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment, Arlington, VA., 2001.

4. *Proposed ASHRAE Guideline 14P, Measurement of Energy and Demand Savings*, Atlanta, GA: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1997.

5. *ASHRAE Guideline 14, Measurement of Energy and Demand Savings*, Atlanta, GA: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 2002.

6. Olimjonova, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. *Interpretation and Researches*, 1(8).

7. Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. *The American Journal of Applied sciences*.

8. Topvoldiyev, N. (2022). PHYSICAL AND TECHNICAL FUNDAMENTALS OF PHOTOELECTRIC SOLAR PANELS ENERGY. *Theoretical & Applied Science*.

9. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o'ratish va foydalaniz*.

10. ME Yulchiev, AAO Qodirov Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY (TAJET) SJIF-5.32 DOI-10.37547/tajet

11. NM Aripov, OA Qosimov MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...



12. Эгамов,Д, Боихонов. З, Узаков. Р статья Эффективность применения «Переносного АВР-0,4 кВ» для обеспечения бесперебойного электроснабжения потребителей. Конф. Гомель. Секция «энергетика» 2020г.

13. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)

14. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>

15. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>



## IMPROVING THE ENERGY EFFICIENCY OF A SOLAR AIR HEATING COLLECTOR BY CONTROLLING AIR DRIVE FAN SPEED

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### ABSTRACT

To increase the energy efficiency of the solar air heating collector, controlling the speed of the air drive fan can have a significant effect. By controlling the speed of the air drive fan, it is possible to control the flow of air entering the solar air heating collector in small ranges, increasing or decreasing the temperature of the air leaving the collector. Control of the speed of the air drive fan is carried out by means of an adjusting element in pulsed supply sources.

**Keywords.** Solar air heating collector, rectifier element, pulse width modulator.

To increase the energy efficiency of a solar air heating collector, controlling the speed of its air drive fan is also very effective. In this process, by controlling the speed of the air drive fan, it is possible to control the flow of air entering the solar air heating collector in small ranges, increasing or decreasing the temperature of the air leaving the collector. Control of the speed of the air drive fan is carried out by means of an adjusting element in pulsed supply sources.

Despite the many types of circuits of pulse power supplies, all of them are divided into two groups according to the control of the rectifier element: pulse-

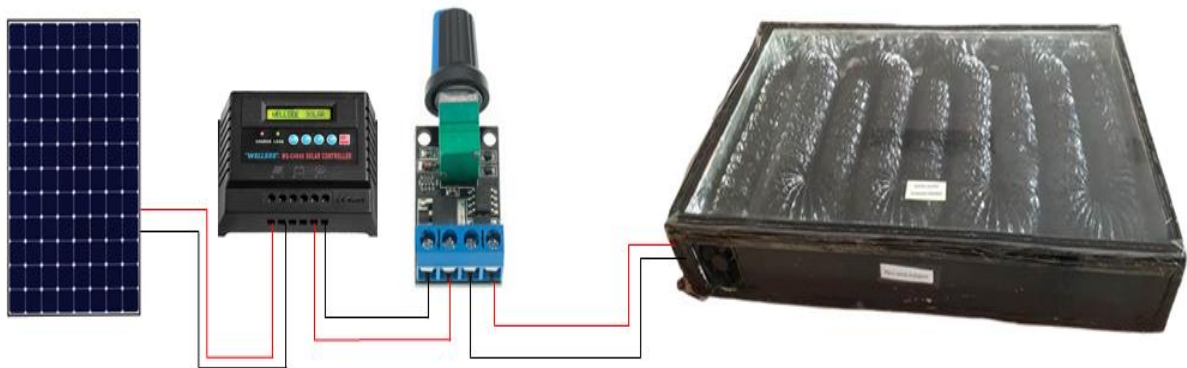


width modulated (or frequency modulated) power supplies and relay-controlled power supplies through the rectifier element . The air drive fan is equipped with a small power permanent magnet DC motor. It is considered appropriate to use a Pulse Width Modulator to control its speed.



**Figure 1.** Pulse width modulator.

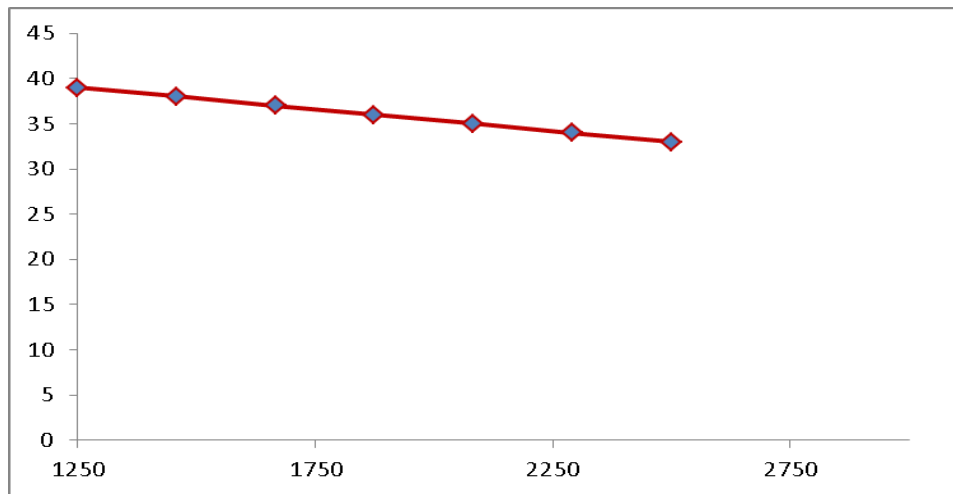
By controlling the speed of the solar air heating collector air drive fan through the pulse width modulator, we can control the temperature of the air leaving the solar air heating collector in small ranges by changing the flow of air entering and leaving the collector. By increasing the speed of the air drive fan, it is possible to reduce the temperature of the air leaving the solar air heating collector. It was observed that the air coming out of the solar air heating collector decreased by 1°C for every 208 times the fan rotation speed was increased. The table below shows the measurement results.



**Figure 2.** General view of the pulse width modulator installed on the solar air heating collector.

Air drive fan speed (rpm)	Temperature at the outlet of the collector (°C)
1250	39
1458	38
1666	37
1874	36
2082	35
2290	34
2500	33

**Table 1.** The air is obtained by increasing the rotation speed of the fan table of measurement results.



**Figure 3.** The graph of the dependence of the air temperature coming out of the collector on the speed of the fan.

As can be seen from the graph above, when the fan speed is increased to a maximum of 2500 rpm, the temperature of the air coming out of the solar air heating collector decreases by 6 °C. With this result, we can significantly control the air temperature in residential buildings or greenhouses with solar air heating collectors.

### Literatures.

1. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>
- 2.Файзиев Ш.А, Собиров Ю.Б, Беков Д.Х, Махмудов С.Ш Измерение солнечных ресурсов Паркентского района Ташкентской области// Современные проблемы физики полупроводников. Материалы Республиканской научной конференции. 26-27 октября 2018г. НУУз.
- 3.Noana'naviy va qayta tiklanuvchi energiya manbalari. Majidov T. Sh. Toshkent, 2014. – 177 bet.
- 4.Sharobiddinov, S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH



## KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH.

Interpretation and researches, 1(8).

5. Abdumutallib o'g'li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. Texas Journal of Multidisciplinary Studies, 8, 251-255.

6. Olimov, L., Yusupov, A., & Alizhanov, D. (2019). BALIQCHILIK UCHUN INNOVATSION QURILMA. SCIENCE AND INNOVATIVE DEVELOPMENT, (6), 103-107.

7. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. Oriental Renaissance: Innovative, educational, natural and social sciences, 2(12), 748-753.

8. ME Yulchiev, AAO Qodirov Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY (TAJET) SJIF-5.32 DOI-10.37547/tajet

9. Topvoldiyev, N. (2023). KREMNIY ASOSIDAGI QUYOSH ELEMENTILARI KONSTRUKTSIYASI. Interpretation and Researches, 1(1).

izvlecheno ot <http://interpretationandresearches.uz/index/iar/article/view/443>

10. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>

11. Д.Эгамов, М. Нурёғдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. Научный журнал Инженерные решение №8(9) ноябрь 2019. г. Новосибирск.

12. Эгамов, Д., Боихонов, З., Узаков, Р. статья Эффективность применения «Переносного АВР-0,4 кВ» для обеспечения бесперебойного



электроснабжения потребителей. Конф. Гомель. Секция «энергетика» 2020г.

13. Parpiev, O. B., & Egamov, D. A. (2021). Information on synchronous generators and motors. Asian Journal of Multidimensional Research, 10(9), 441-445.

14. Olimov, L. O., & Anarboyev, I. I. (2022). Some electrophysical properties of polycrystalline silicon obtained in a solar oven. Silicon, 14(8), 3817-3822.





**THE CURRENT STATE OF THE INTEGRATIVE APPROACH IN  
ENERGY MANAGEMENT SCIENCE TEACHING IN TECHNICAL  
HIGHER EDUCATION INSTITUTIONS**

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**Abstract:** In this article, raising the quality of education to a new level is based on the role of modern approaches in the development of basic competences of students in the field of science. The importance of an integrative approach in the development of basic competencies is highlighted.

**Keywords:** Competence, integration, communication, technology, e-learning, knowledge, skill, competence, ability, efficiency, flexibility, achievement, success, comprehension, "effectiveness, learnability, kocca, characteristic, quality, quantity.

The issue of education is a process that regularly adapts to the requirements of the times and improves in harmony with scientific and technical achievements. One of the unique aspects of the educational system of the 21st century is the demand for students to be able to apply the knowledge they have acquired in higher technical educational institutions in life, the improvement of the State educational standards and programs, in other words, the integration of the integrative approach into the content of the educational system, the formation of the concept of achieving its educational results.

In the Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis, "If we look at history, we see that technical sciences were the fundamental basis for the creation of almost all discoveries and technologies in the world. "Indeed, it is impossible to achieve results in today's



demanding areas such as mechanical engineering, electrical engineering, IT, water and energy-saving technologies, without a deep understanding of the principles of Energy Management."

Based on the analysis of materials on the integrative approach in education, the following information can be given.

The words "Competence" and "Competence" began to enter the scientific literature for the first time. For example, the American linguist N. Chomsky's "Aspects of the Theory of Syntax" of the term competence in relation to the theory of linguistics defines the fundamental difference between "competence (knows, speaks, hears) and consumes (actually uses the language in specific cases)" or "the ability of a person to perform some activity" ability" can be quoted.

B.S. Abdullaeva in her scientific research work showed definitions for improving the integration of Mathematics with other subjects.

G.A. Asilova summarizing the definitions of the concepts of "competence" and "competence" in her thesis, "competence" is the effective use of personal qualities and knowledge, skills and abilities in the process of working in a certain field; defined "competence" as an existing and emerging ability to perform a specific activity.

J.E.Usarov in his scientific works defined competence as "experience and knowledge in a certain field or direction, manifestation of readiness to perform activities and the ability of a person to act successfully in various non-standard situations."

According to B. Kh. Khodzhaev, "competence serves to integrate self-development efforts to acquire new personal experience." N. A. Muslimov emphasizes that competence is not the acquisition of separate knowledge and skills, but the acquisition of integrative knowledge and actions in each independent direction.



Methods of diagnosing and correcting the formation of competencies Yu. Asadov, N.Turdiev, S.Akbarova, D.Tumirov, systematized and described in research works. R. Fayzullaev conducted research aimed at solving problems related to the development of information competence in the educational process.

Many scientists and specialists have expressed their opinion on the concepts of competence and competence. For example, in the monographic work "Competence in modern society" by J. Raven: "it consists of a large number of components, many of which are independent of each other ... some components belong more to the cognitive sphere, others to the emotional sphere. These components can complement each other in effective self-management. J. Delor in his lecture "Education - hidden treasure" at the International European Council on Education in the 21st Century explains "the four pillars on which education rests": learning to know, learning to do, learning to live together, learning to live.

These concepts reveal the main content of competence. According to J. Delor, learning to perform means not only having professional skills, but also being competent in a broad sense, that is, being able to work in groups and successfully get out of many difficult situations that arise during work. It should be noted that together with the concept of "competence", there are also cases where the term "skill base" is used as its synonym.

In particular, A.K. In the works of Markova, professional competence in the context of labor psychology was considered as a special subject, while the works related to teacher competence were put forward by L.A. Petrovskaya, N.V. Kuzmin and others.

Although the content of the accepted integrative approaches has been developed, relevant suggestions and recommendations have been given, the definitions given to them are wide and diverse, and at the same time, they all cover certain directions. V. I. Baydenko suggests making some changes in the definition of the concept of competence. This set of components allows a person



to set a goal, achieve success and develop in the specified field of activity. The following conclusions can be drawn from these concepts. Competence is experience and knowledge in a certain field or direction, manifestation of readiness to perform activities, and a person's ability to act successfully in various non-standard situations. This definition given to the concept of competence shows the knowledge and experience acquired by a person in the process of study.

A.A. Verbitsky and O.B. Ermakova believe that the integrative approach is "the main way to improve the quality of general secondary and higher education, and it confidently takes the position of the main methodology in its modernization." These authors emphasized that the following considerations are important for all links of the pedagogical system to successfully involve the educational system:

- changing the structure and content of education: moving from theoretical concepts collected in different educational subjects, separated from each other, to methods that give a universal idea about the environment and implement it through practical and social skills;

- changing the approach to the purpose and results of education: from simple assimilation of the received information by students to social and intellectual culture, to the qualitative formation of the image of the human environment;

- making changes to the structure of the teacher's pedagogical activity: switching from a one-sided presentation of the educational material to conducting a dialogue with students; effective development of student personality:

- introduction of an integrative approach to the environment of higher education; media, social being, family, country, culture, etc. making changes; technological supply reform:

- transition to innovative technologies aimed at the development of student activities; strengthening the organizational, personnel, material-technical and



financial support of the educational system.

The requirement for students to be able to apply the knowledge they have acquired in life in technical higher education institutions is the improvement of DTS and programs, in other words, the integration of the integrative approach into the content of the educational system, the formation and development of the concept of achieving its educational results. The origin of these requirements is the need to update the teaching system in technical higher education institutions, the fact that technical higher education institutions did not satisfy the public, although they can demonstrate the knowledge they have received, but they are not ready to work independently to apply it in their daily and future activities.

According to A.I. Subetto, the integrative approach can be considered as an addition to the existing system of knowledge, skills and competencies. Based on the European experience, it can be noted that the effective use of an integrative approach in the higher education system today provides an opportunity for comprehensive development of the individual. It should be noted that the concept of an integrative approach that appeared in the next decade is natural for the European education system, but it is a novelty for the Uzbekistan education system. The emergence of the term "integrative approach" in turn affected the question of revising the existing category system of pedagogy.

Education based on an integrative approach today is a topic that causes some conflicts, contradictions and different opinions due to its insufficient scientific and methodological research. Currently, there is no stable definition of competence. The concepts of competence and competence are interpreted differently. For example, in the "Encyclopedic Dictionary" authored by B.A. Vvedensky, the following definition is given: "Competence is the range of powers, the range of questions acquired by this person through his knowledge and experience", that is, the knowledge that a person can discuss and has in this or that field of activity.

In education based on an integrative approach, the student becomes the main



participant in the educational process with personal goals and tasks. This approach makes it possible to engage the student in active, conscious activities, develop informational, communicative, educational and cognitive skills, personal potential, form self-esteem, and develop self-management skills.

### References:

1. M.E Yulchiev [PEDAGOGICAL PROFESSIONAL COMPETENCE AND SPECIFIC CHARACTERISTICS IN ENERGY EDUCATION](#). Academic research in educational sciences 2 (CSPI conference 3), 220-225.
2. M.E Yulchiev, AA Qodirov. [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#).
3. M.E Yulchiev. [CONTENTS, PROBLEMS AND DIDACTICAL BASIS OF TEACHING THE SUBJECT "ELECTRIC NETWORKS AND SYSTEMS" IN THE ELECTRONIC EDUCATIONAL ENVIRONMENT](#). EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES ISSN: 2750-8587.
4. Yulchiev Mash'albek Erkinovich. E-learning environment and content and problems of teaching in technical education areas. A collection of materials of the international scientific and practical conference on the topic "The importance of innovative technologies in solving the current problems in the processing of chemistry, food and chemical technology products".
5. Yulchiev Mash'albek Erkinovich. Professional competence and specific qualities in teaching students in technical higher education institutions. SCIENTIFIC REPORTS of Tashkent State Pedagogical University.



6. Yulchiev Mash'albek Erkinovich. The content and problems of teaching "electrical networks and systems" in the e-learning environment. Society and innovations - Obshchestvo i innovatsii - Society and innovations Special.
7. Yulchiev Mash'albek Erkinovich. Competence in teaching technical students in the higher education system is an important factor in the development of the educational system. Namangan State University. Scientific newsletter. 4/12, 699-703.
8. Машалбек Эркинович Юльчиев. [ПЕДАГОГИЧЕСКАЯ ПРОФЕССИОНАЛЬНАЯ КОМПЕТЕНТНОСТЬ И ОСОБЕННОСТИ ЭНЕРГЕТИЧЕСКОГО ОБРАЗОВАНИЯ](#). Академические исследования в области педагогических наук.
9. Yulchiyev M.E. ; Salokhiddinova.M . ORGANIZATION OF MULTI-STAGE ENHAT FOR MEDIUM AND LARGE POWER INDUSTRIES OR ENERGY SYSTEM. *World scientific research journal*. [www.wsrjournal.com](http://www.wsrjournal.com). *Volume-20\_Issue-1\_October -2023*.
10. Topvoldiyev Nodirbek Abdulhamid o'g'li, & M.Z.Sharipov. (2023). ENERGY DEVELOPMENT PROCESSES IN UZBEKISTAN. *Science Promotion*, 1(1), 177–179. Retrieved from <https://sciencepromotion.uz/index.php/sp/article/view/240>
11. Olimov, L. O., & Anarboev, I. I. (2021). Microstructure of polycrystal silicon heated by sunlight. *International Journal of Multicultural and Multireligious Understanding Ra Journal of Applied Research/rajar*, 2669-2671.
12. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>



13. Abdumutallib o'g'li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. Texas Journal of Multidisciplinary Studies, 8, 251-255.
14. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. Oriental Renaissance: Innovative, educational, natural and social sciences, 2(12), 748-753.
15. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
16. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va fo ydalaniz.*
17. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>
18. Д.Эгамов, М. Нурёгдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. Научный журнал Инженерные решение №8(9) ноябрь 2019. г. Новосибирск.
19. Эгамов.Д, Боихонов. З, Узаков. Р статья Эффективность применения «Переносного АВР-0,4 кВ» для обеспечения бесперебойного электроснабжения потребителей. Конф. Гомель. Секция «энергетика» 2020г.





20. Parpiev, O. B., & Egamov, D. A. (2021). Information on synchronous generators and motors. *Asian Journal of Multidimensional Research*, 10(9), 441-445.



## OBTAINING SENSITIVE MATERIALS THAT SENSE LIGHT AND TEMPERATURE

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### ABSTRACT

Mechanical treatment (cutting, physical and chemical cleaning, polishing) of semiconductor Si<B>-based material, introduction of Mn(Manganese) atoms through diffusion, formation of nanoclusters of various sizes and thus light and obtaining a sensitive material that senses temperature. Nanoclusters are materials in the transition from atomic properties to bulk material properties. Since it is possible to create new properties by obtaining nanoclusters of different sizes, by alloying Mn(Manganese) atoms to the Si<B>-based material at different temperatures, forming nanoclusters of different sizes, and studying their electrophysical parameters, light and temperature sensors is created

**Keywords** Light sensors, temperature sensors, nanoclusters, compensated silicon.

**Performance of the subject:** Current diary is taken from wide range of light and temperature. The scope of their application is constantly expanding. There are problems such as correcting sensitive materials, determining the acquisition of technology, correcting the cost. Due to the sensitivity of these materials to infrared rays, they are used in the manufacture of various electronic devices. From infrared photodetectors to remote control devices, tomographs in



medicine to measure temperature and diagnose diseases, to night vision equipment to study and control the content of solar energy, in addition to fire and control of various objects. can be done effectively.

**The purpose of the research:** to obtain materials sensitive to light and temperature by the diffusion method on the basis of compensated silicon and to study their sensitivity to infrared rays.

**Tasks of the study:** 1. Mechanical processing of semiconductor Si<B>-based material (cutting, physical and chemical cleaning, polishing);

2. Diffusion of Mn atoms into the KDB-3 element;

3. Calculation of electrophysical parameters of samples sensitive to light and temperature as a result of diffusion;

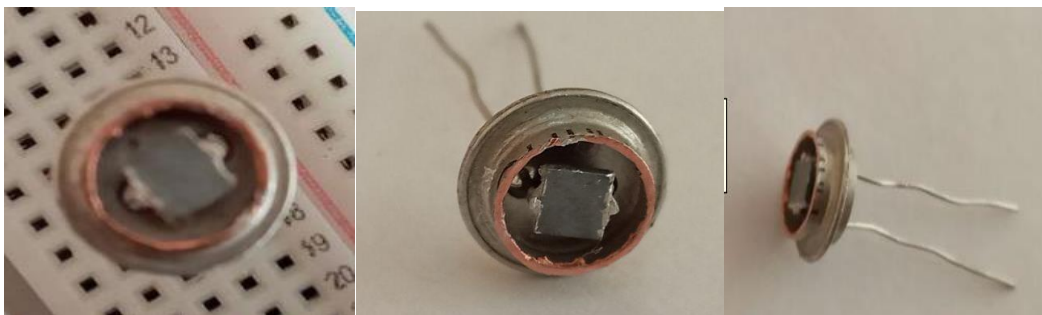
4. To study the sensitivity of materials to infrared rays

**Problem:** The main concern in obtaining light- and temperature-sensitive materials is to increase their sensitivity to infrared light. The ability to perceive low-power infrared rays depends on the diffusion process. It depends on the temperature range of  $1030\div 1050$  °C, the cooling rate of the capsule and the concentration of Mn atoms. That is, it is important to keep the same temperature, the degree to which the air is absorbed by the capsule, and the cooling rate of the capsule in exact values.

**The solution to the problem:** a material based on the semiconductor Si<B> is selected and after mechanical processing, pure metal manganese, whose mass is determined in relation to the volume of the quartz ampoule, and the studied samples, into the quartz ampoule, the air inside of which is sucked (the pressure in the ampoule is  $10^{-6}$  mm. above the wire), the ampoule is placed in the SOUL-4 diffusion furnace at room temperature ( $T=300$  K). The temperature of the previously studied diffusion furnace, along with the temperature of the quartz ampoule placed inside it, is raised step by step at a rate of 5 degrees/minute. After the samples reach the temperature  $T=550\div 700$  °C, the samples are kept at the



same temperature for  $t=10\div 20$  minutes. The temperature of the diffusion furnace rises to the temperature  $T=1030\div 1050$  °C at a speed of  $150\div 200$  °C/min. At the same temperature, the samples are kept for  $t=5\div 10$  minutes, then the quartz ampoule containing the samples is cooled by throwing them into special oil at a speed of  $200$  °C/second from the diffusion furnace (the safety oil used for rapid cooling of heated objects is a high-quality raw material). Then the obtained new material was ground (polished) and the oxide layer ( $\text{SiO}_2$ ) was removed. The sensitivity of the new material to light and temperature was studied and its electrophysical parameters were calculated. Based on them, new types of IR sensors were made. IR sensors were made on the basis of samples of nanocluster silicon with a surface of  $S=0.5$  cm<sup>2</sup>, a thickness of  $0.15$  cm, and they were installed in a hermetic case with a glass hole.



IR sensors mounted in a silicon-based hermetic housing with multi-charged nanoclusters of manganese atoms

The results of this study show that, from all calculations, the laws established for the diffusion coefficient and solubility of manganese in silicon do not work under low temperature diffusion conditions. The solubility of manganese in silicon at the given temperature  $T=550\div 700$  °C is  $N_{\text{Mn}}\sim 10^{10}$  cm<sup>-3</sup>, the diffusion coefficient is  $D=2\cdot 10^{-8}\div 5\cdot 10^{-8}$  cm<sup>2</sup>/s, in which samples with a thickness of  $1$  mm for the same alloying  $t = \frac{l^2}{4\cdot D} = \frac{0,1^2}{4\cdot 2\cdot 10^{-8}} = 10^5$ , it takes about a second, i.e.  $t=3$  hours. Our new technology requires a total of 3 hours for the diffusion process. The concentration



of manganese atoms in the volume is  $N_{Mn} \sim (2 \div 3) \cdot 10^{15} \text{ cm}^{-3}$ , which is 5 orders of magnitude higher than expected. Based on the obtained results, it can be confirmed that in the low-temperature region, diffusion occurs between the nodes, and the entry atoms are located between the nodes. Additional evidence is that the concentration of vacancies in low-temperature diffusion is  $N_V \sim 10^7 \text{ cm}^{-3}$ , that is, it is  $10^7 \div 10^8$  degrees smaller than the concentration of manganese between the nodes. The vacancy concentration is calculated using the  $N = N_s \exp\left(-\frac{3}{kT}\right)$  formula.

#### References

1. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. Interpretation and Researches, 1(8). извлечено от <http://interpretationandresearches.uz/index.php/iar/article/view/538>
2. Zuhritdinov, A., & Xakimov, T. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. International Bulletin of Applied Science and Technology, 3(5), 888-893.
3. Olimov, L. O., & Anarboyev, I. I. (2022). Some electrophysical properties of polycrystalline silicon obtained in a solar oven. Silicon, 14(8), 3817-3822.
4. Olimov, L. O., & Anarboev, I. I. (2021). Microstructure of polycrystal silicon heated by sunlight. International Journal of Multicultural and Multireligious Understanding Ra Journal of Applied Research/rajar, 2669-2671.
5. Olimov, L. O., & Anarboev, I. I. (2021). Electrophysical properties of two structured polycrystal silicon. Theoretical & applied sciences. International journal of multidisciplinary research and analysis./ijmra, v4-i11.



6. Olimov, L. O., Anarboyev, I. I., & Davronov, A. A. (2023). ZAMONAVIY AVTOMOBILSOZLIKNING DOLZARB MUAMMOLARINI HAL ETISHDA YARIMO 'TKAZGICHLI MATERIALKLARNI QO 'LLANILISHI.
7. Mamirov, A. M., Anarboyev, I. I., & Yusupov, A. X. Yuqori temperaturalarga mo 'ljallangan quyosh pechi qurulmasi konstruksiyasi. Ўзбекистон Республикаси Олий ва Ўрта Махсус Таълим Вазирлиги Наманган Муҳандислик-Технология Инститuti Илмий-Техника Журнали.
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## ПРИМЕНЕНИЯ МОБИЛЬНОЙ АВР ДЛЯ БЕСПЕРЕБОЙНОГО ЭЛЕКТРОСНАБЖЕНИЯ

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### IMPROVING THE RELIABILITY OF POWER SUPPLY IN PLACES HOLDING A PARTICULARLY IMPORTANT EVENT.

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#### **Аннотация.**

Обеспечивается автоматический перевод потребителя с одной линии на другую при исчезновении напряжения.

Обеспечивается бесперебойное электроснабжение, если учесть что в электросетях авария и повреждения возникают внезапно.

Не требуется оперативный персонал для перевода потребителя с одной линии на другой.

#### **Abstract**

Provides automatic transfer of the consumer from one line to another when the voltage disappears.

Uninterrupted power supply is ensured, taking into account that in electric networks an accident and damage occur suddenly.

No operational staff is required to transfer the consumer from one line to another.



Ключевые слова; Надёжность электроснабжение, оперативный персонал, уставка срабатывание, повреждение, авария, основное питание, резервное питание, бесперебойное питание электро-энергией.

Keywords: Reliability of power supply, operating personnel, setting operation, damage, accident, main power, backup power, uninterrupted power supply of electric energy.

Если учесть, что авария и повреждения в электрических сетях происходит неожиданно и внезапно, а также приводит непредсказуемым последствиям, что бесперебойное электроснабжение потребителей всегда было актуальным.

Большой роль играет бесперебойное электроснабжение объекта для проведения различных мероприятий и требует от нас, что всегда должны быть готовы к авариям и повреждениям которые происходят в электросетях.

Нежелательные процессы протекают так быстро, что оперативный персонал не в состоянии предотвратить их развитие и с требуемой быстротой восстановить нормальный режим. [1, с. 16]

АВР(автоматическое ввода резерва) является эффективным средством, повышающим надёжность электроснабжения, поэтому этот вид автоматики широко применяется на подстанциях основных и распределительных сетей. [3, с.453]

Необходимые электрические аппараты и оборудования для “Переносного АВР-0,4 кВ” монтируются в индивидуальный шкаф.

При проведении мероприятий устанавливается “Переносной АВР-0,4 кВ” на время проведения мероприятия, после его окончания восстанавливают прежнюю схему объекта.

При исчезновении напряжения на основной линии включение резервного источника питания следует осуществлять сразу и только после





отключения выключателя в цепи рабочего питания.[3, с454]

Перевод потребителей от одной линии в другую требует последовательности выполнения операций по переключениям, в противном случае ожидается развитие аварии и возникновение несчастных случаев. Своё временное выполнение операций по переключениям возлагается на “Переносной АВР-0,4 кВ”.

При применении “Переносного АВР-0,4 кВ” имеются следующие преимущества:

1) При потере напряжения от основной линии, потребитель быстро переводится на резервную линию для восстановления напряжения.

2) Для перевода потребителей от одной линии в другую не требуется оперативный персонал.

3) Не допускается развитие аварии связанное ошибочным переключением при переводе потребителей с одной линии на другую.

4) Обеспечивается качество напряжения у потребителя.

5) Обеспечивается качество проведенных мероприятий в связи с бесперебойным электроснабжением объекта.

Рекомендуется применение “Переносного АВР-0,4 кВ” в объектах, имеющих двухстороннее электропитание при отсутствии встроенного АВР-0,4 кВ.

С помощью “Переносного АВР-0,4 кВ” перевод потребителей с одной линии на другую производится в следующем порядке:

Первая линия считается основной, при наличии напряжения потребитель обеспечивается электроэнергией с первой линии с помощью “Переносного АВР-0,4 кВ”, вторая линия считается резервной линией.

Согласно рис-1 потребитель питается от первой линии пускатель ПМ1 удерживается во включенном положении катушкой, которая находится под полным рабочим напряжением линии.[1, с. 421] При этом включен автомат



В1, магнитный пускатель ПМ1 в включенном положении, автомат В2 второй линии включен, магнитный пускатель ПМ2 обесточен.

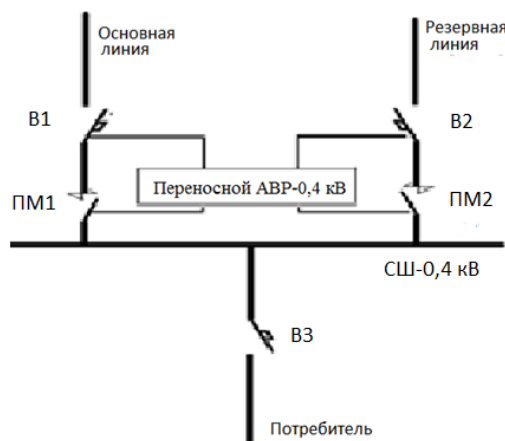


рис 1. Однолинейная схема “Переносного АВР-0,4 кВ”

При наличии напряжения на первой линии реле контроля напряжения РКН1 питается через закрытый контакт РП2, реле РП1 повторитель состояния РКН1, через нормально закрытый контакт РП1 подаётся напряжение на катушку магнитного пускателя ПМ1, тем самым подаётся напряжение потребителю от первой (основной) линии.

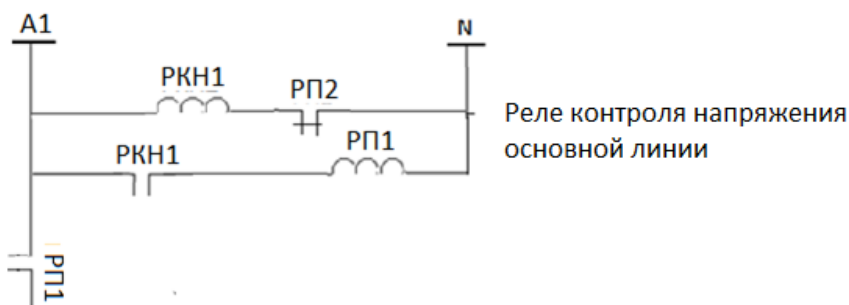


Рис 2. Схема контроля напряжения основной линии.

При исчезновении напряжения на первой линии магнитный пускатель ПМ1 обесточивается, отпадает реле РКН1 и его повторитель РП1, нормально закрытым контактом подаёт напряжение на катушку реле РКН2, одновременно с реле РКН2 срабатывает реле его повторитель РП2, нормально открытым контактом реле РП2 подаёт напряжение на катушку



магнитного пускателя ПМ2, срабатывая ПМ2 подает напряжения потребителю от второй (резервной) линии.

В целях предотвращения кратковременной потери напряжения у потребителя оставаться на второй (резервной) линии до тех пор, пока не исчезнет напряжение, заложена в функции “Переносного АВР-0,4 кВ”.

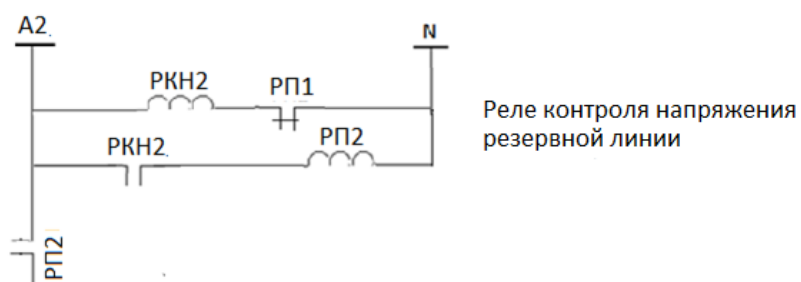


Рис 3. Схема контроля напряжения резервной линии.

АВР секционного выключателя должно приходить в действие при исчезновении напряжения на шинах или самопроизвольном отключении выключателя ввода и блокироваться при КЗ на шинах.[ 4, с.173]

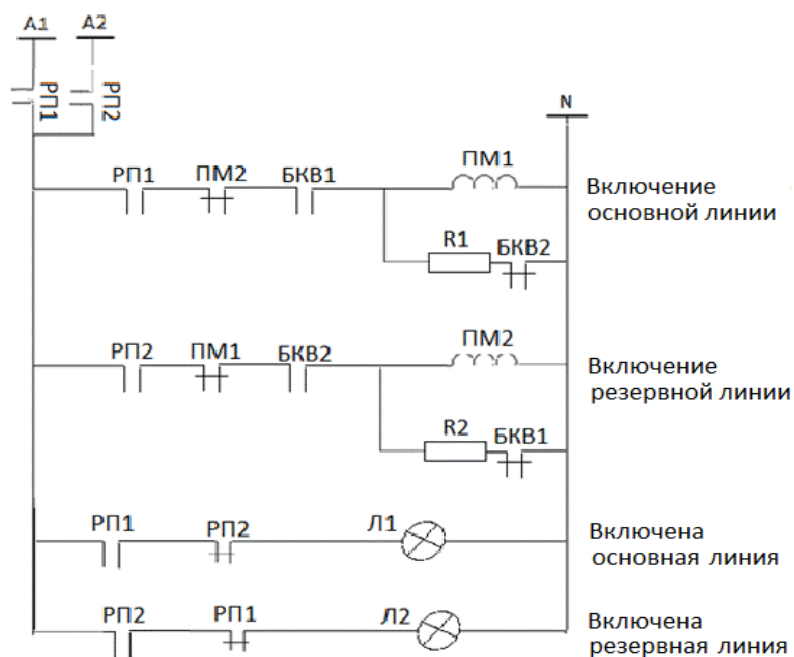


рис 4. Принципиальная схема “Переносного АВР-0,4 кВ”.



При потере напряжения перевод потребителя с второй (резервной) линии на первой (основной) линии происходит по той же последовательности.

Для управления “Переносным АВР-0,4 кВ” оперативный ток в схеме управлений подаётся согласно по первичной цепи, с помощью нормально открытым контактом реле РП1 и РП2.

Уставка срабатывания реле контроля напряжения РКН1 и РКН2 по напряжению устанавливается 65-70% от номинального напряжения.

#### Заключение

При применении “Переносного АВР-0,4 кВ” обеспечивается бесперебойное электроснабжение объекта, тем самым улучшается качество мероприятия. Для монтажа и демонтажа “Переносного АВР-0,4 кВ” в распределительном устройстве потребителя не требует много времени и материальных расходов. При установке “Переносного АВР-0,4 кВ” в РУ потребителя нет необходимости держать оперативный персонал для переключения.

#### Список литературы:

1. Д.Эгамов, М. Нурёгдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. Научный журнал Инженерные решение №8(9) ноябрь 2019. г. Новосибирск.
2. Эгамов.Д, Боихонов. З, Узаков. Р статья Эффективность применения «Переносного АВР-0,4 кВ» для обеспечения бесперебойного электроснабжения потребителей. Конф. Гомель. Секция «энергетика» 2020г.
3. Parpiev, O. B., & Egamov, D. A. (2021). Information on synchronous



generators and motors. Asian Journal of Multidimensional Research, 10(9), 441-445.

4. Olimov, L., & Anarboev, . I. (2023). ENERGY CONVERTER BASED ON NANO-STRUCTURED SI. International Bulletin of Applied Science and Technology, 3(6), 248–252. Retrieved from <https://researchcitations.com/index.php/ibast/article/view/1852>

5. Sharobiddinov, S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. Interpretation and researches, 1(8).

6. Topvoldiyev, N. (2023). *KICHIK VA MIKRO GIDROELEKTOSTANSIYALARNING TURLARI HAMDA KLASSIFIKATSIYASI.*

7. Abdumutallib o‘g‘li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. Texas Journal of Multidisciplinary Studies, 8, 251-255.

8. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. Oriental Renaissance: Innovative, educational, natural and social sciences, 2(12), 748-753.

9. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)

10. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o‘rnatish va foydalaniz.*

11. Zuhritdinov Alisher Faraxidin o‘g‘li, Yo‘lchiyev Mash‘albek Erkinovich, Xakimov Temurbek Bahodirjon o‘g‘li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>

12. Yulchiyev M.E, & Salokhiddinova M. (2023). ORGANIZATION OF MULTI-STAGE ENHAT FOR MEDIUM AND LARGE POWER INDUSTRIES OR ENERGY SYSTEM. *World Scientific Research Journal*, 20(1), 13–18.



Retrieved from <http://wsrjournal.com/index.php/wsrj/article/view/2819>

13. M. E. Yulchiev. (2023). POWER QUALITY IN THE LOW-VOLTAGE AIR NETWORK. *Spectrum Journal of Innovation, Reforms and Development*, 15, 79–84.

Retrieved from <https://sjird.journalspark.org/index.php/sjird/article/view/647>

14. Эралиев, А. Х., Юлчиев, М. Э., & Латипова, М. И. (2020). ЭКСПЕРИМЕНТАЛЬНЫЕ МЕТОДЫ И ОБЪЕМ ИСПЫТАНИЙ ТРАНСФОРМАТОРОВ ТОКА. *Universum: технические науки*, (12-5 (81)), 39-43.



**OPTOELECTRONIC SYSTEM FOR MONITORING OIL CONTENT IN  
PURIFIED WATER BASED ON THE ELEMENT OF DISTURBED TOTAL  
INTERNAL REFLECTION**

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***Abstract:** Currently , one of the most important problems of oil refineries is determining the presence of oil and oil impurities in running water. This scientific master's thesis of mine is based on these problems of oil refining industries. In the master's thesis, first of all, we set up a task where an optical sensor will be used for oil refining production. Therefore, we focused on the oil refining industry and at this point in the oil refining industry, what methods are used to displace oil from running water. Now it is important to apply spectrometry for used water in the processing of oil in production. And so the problem statement in this method is that how to determine and control running water for oil content. This master's thesis also provides an overview of new scientific publications and works. The proposed optoelectronic sensor operates on the basis of a disturbed total internal reflection (LSE) and we will discuss this in detail in our master's thesis.*

***Keywords:** sensor, cylinder, prisms, master generator (pulse power source), trigger with counting input, light-emitting diodes (LED) and compensation LED, measuring and compensation, optical radiation receivers (POI), adder photoelectric signal processing unit and recording device or computer.*



**The main part:** Currently, the main sources of oil and petroleum products pollution worldwide are mining enterprises, pumping and transportation systems, oil terminals and oil depots, oil product storage facilities, rail transport, river and offshore oil tankers, gas stations and stations. The sources of pollution are considered to be oil-containing drains that come out of oil-processing industries, causing global harm to our surrounding nature. When choosing a method and equipment for solving the analytical problem of monitoring oil content in purified water, an ultra-sensitive express method for analysis should be used mainly. Currently, the oil industry has dozens of methods and hundreds of devices based on them for determining petroleum products in purified water, which are accepted in various standardization systems: ASTM, EN ISO, IP, GOST. It is also relevant to consider the existing analytical methods for determining petroleum products in purified water in Russia, the results and conclusions of research works performed in the USA and Europe, which were obtained by various existing analytical methods in interlaboratory tests. However, currently in the oil and oil refining industry, even in oil production, there are no express analyzers for determining petroleum products in purified water. Optoelectronic control methods have received a new qualitative change due to the development of optoelectronics. The main elements of devices and devices operating on this principle are semiconductor emitters and receivers-LEDS, photoresistors, phototransistors, photodiodes, photodetectors - these elements have minimal dimensions, high sensitivity, and low power consumption, which makes it possible to create **reliable**, sensitive optoelectronic devices for monitoring and measuring.

Currently, semiconductor emitting diodes are widely used to create optoelectronic devices. Compared to other types of emitters, LED has a number of advantages such as low energy consumption, small dimensions and weight, the ability to withstand significant mechanical overloads, high stability and reliability in





operation, high speed, easy radiation modulation, linearity of light characteristics with functional modulation. These advantages of LEDS allow them to be used as a source of analyzing radiation in primary measuring transducers .

#### Sensors – based on NIP

The NIP method (Fig. 1) is based on the phenomenon of penetration of a light wave into an optically less dense medium  $n_2$ , when the light flux propagates from an optically denser medium  $n_1$  to a less dense  $n_2$  at an angle.

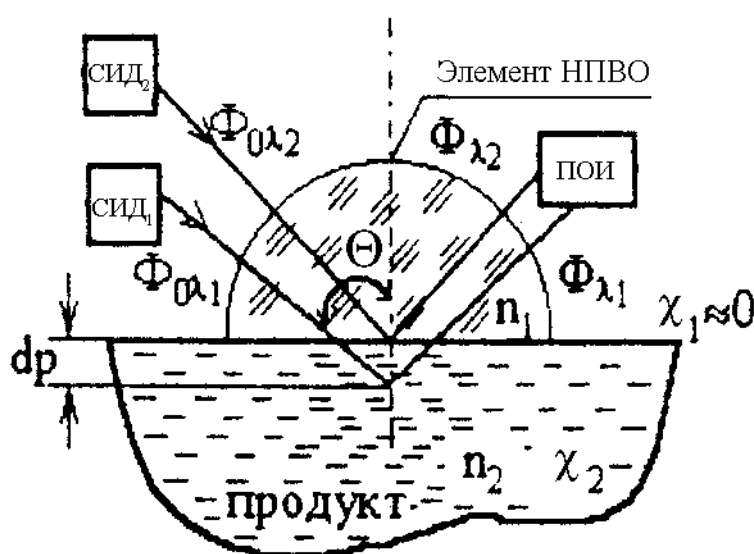


Figure 1-Physical basis of the NIP method

The physical meaning is as follows. Two light streams with different wavelengths are used, for example,  $\lambda_1 = 1.93$  microns (measuring) and  $\lambda_2 = 1.7$  microns (reference), corresponding to the maximum and minimum water absorption. The light flux  $F_{0\lambda}$  propagates from an optically dense medium with a refractive  $n_{\text{index}}$  of  $n_1$  to a less dense one with  $n_2$  at an angle  $\Theta$  exceeding the limit (critical) angle of total internal reflection  $\Theta_k$ . The luminous flux  $F_{0\lambda_1}$  partially penetrates the medium  $n_2$ ; to a depth of the order of the incident radiation wavelength:

$$d_p = \frac{\lambda_1}{2\pi(\sin^2 \Theta - n_{21})^{1/2}} \quad (1)$$

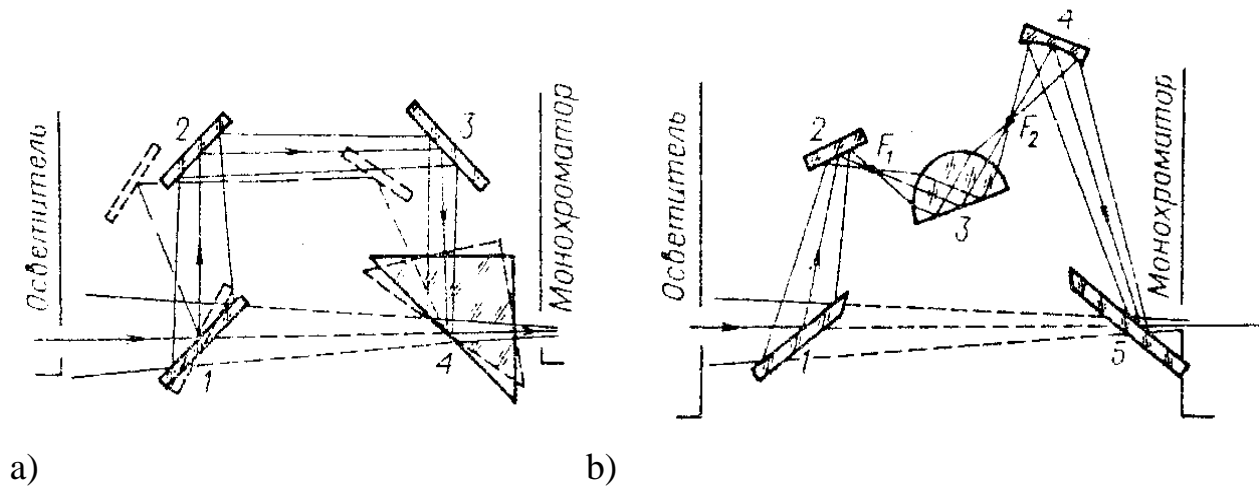


where  $\lambda_1$  is the wavelength of radiation in an optically dense medium with a refractive index of  $n_1$ ;  $n_{21} = n_2/n_1$  is the relative refractive index. If the radiation angle is equal to or exceeds the critical  $\Theta_k = \arcsin n_1/n_2$ , then total internal reflection is observed (PVO method). Since a less dense medium with a complex refractive  $\tilde{n} = n_2 - j\chi_2$  index: has absorption, the reflection will not be complete, i.e. the conditions for this are violated and the reflection coefficient ( $R = F_{\lambda 1} / F_{0\lambda 1}$ ) will become less than 1. The degree of attenuation of R is proportional to the absorption index [1]. Thus, the higher the absorption, the more reflection is disturbed. This is called the NIP effect. In the IR region of the spectrum, in order to achieve the condition  $n_1$  is greater than  $n_2$ , LSE measuring elements made of highly refractive optical materials that are transparent in the corresponding range are used.

They are made mainly in the form of prefixes (called "NIPO prefixes") to various serial spectrometers and spectrophotometers, where the prefixes are installed in the cuvette compartment between the illuminator and the monochromator. Prefixes are available in two versions: with a single reflection or with multiple reflection (MNPVO prefixes). The first ones are designed for obtaining single reflection spectra with the possibility of a smooth change in the angle of incidence and are mainly used for research purposes to determine optical constants of media. MNPVO prefixes allow obtaining spectra with a large number of reflections and a limited number of fixed angles of incidence; they are mainly used for solving analytical problems. Prefixes of NIPO (fig. 2) are issued according to two standard schemes. Scheme a) is the simplest, since it uses only flat mirrors and a simple prismatic element of the NIP. Changing the angle of incidence is performed by turning the NIP element, as well as by turning and moving the mirrors linearly (using a parallelogram mechanism). The NIP element in this prefix is illuminated convergently ( $\approx 5^\circ$  aperture) Therefore, it is far from parallel; the exact setting of the angle of incidence is also difficult due to the



different refraction of the beam on the flat surfaces of the element when the angle of incidence changes.



a)

b)

a) - prismatic: 1-3-flat mirrors; 4-NIP element;

b) – semi-cylindrical: 1, 5-flat mirrors; 2, 4-toroidal mirrors; 3-element of the NIPO.

Figure 2-NIP prefixes

Scheme b) with a semi-cylindrical NIP element is more advanced, since it provides a light beam close to parallel inside the element, but is somewhat more complex in design. In it, mirrors 1 and 2 are stationary, and the angle of incidence is changed by turning the NIP 3 element around its axis and the corresponding rotation by twice the angle of the mirror 4 and rotation by a small angle of the mirror 5. The interaction of these rotations is made using special cams.

NPVO prefixes are produced in Russia (model NPVO-1, built according to scheme b), as well as by a number of foreign companies. In all known NIPO consoles, the error in setting the angle of incidence is 10-30', and the deviation from the parallelism of the beam inside the element, even in the best consoles with a semi-cylindrical element and with special adjustment – is not less than 30'.



The LSE method is usually unsuitable for studying materials with a highly variable refractive index (for example, quartz). In these cases, it is not possible to maintain the angle of incidence above the critical one over the entire wavelength range.

Despite these drawbacks, in many cases the NIP method has expanded the scope of optical spectroscopy and simplified the measurement procedure, in particular the sample preparation procedure. As a confirmation of this, we point out that it is easy to obtain the NIPO spectra of powders. Another important advantage of the LSE method is the absence of interference fringes in the spectrum. The fields of application of optical spectroscopy have significantly expanded due to the new opportunity to obtain the LSE spectra of objects without destroying the latter (for example, the spectra of films on absorbing substrates, fibers, fabrics, samples deposited on filter paper, etc.). Another advantage of the LSE method over the transmission method, which is not yet fully used, is the presence of reflection of electric fields on the surface. fields in all three spatial directions, which is important in the study of anisotropic materials. Apparently, the most important area of application of LSE spectroscopy is the rapid analysis of oil and petroleum products.

conclusion: The progress made in the development of optoelectronic sensors for the oil industry in recent years is very significant. First of all, we should mention such areas as level measurement, phase separation, alarm of emergency level and leaks from pipelines and storage facilities, pressure, temperature and density measurements, determination of the chemical composition of petroleum products.

### list of literature

1. Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. The American Journal of Applied sciences.



2. Muhiddin Qodirjonovich Shamshiddinov, Oybek Bakhtiyorjon ogli Parpiev Use Of Electronic Keys To Increase Energy Savings Of Led Lights // The American Journal of Applied sciences IMPACT FACTOR 2021: 5. 634
3. Dilshodovich, A. D., & Rakhimovich, R. N. (2020). Optoelectronic Method for Determining the Physicochemical Composition of Liquids. *Автоматика и программная инженерия*, (2 (32)), 51-53.
4. Ларина, Т. В., Кутенкова, Е. Ю., Жмудь, В. А., & Алижанов, Д. Д. (2012). Оптоэлектронный метод контроля физико-механических параметров поверхностей твердых материалов. *Автоматика и программная инженерия*, (1 (1)), 43-48.
5. Ларина, Т. В., Рахимов, Н. Р., & Алижанов, Д. Д. (2012). Разработка оптоэлектронного датчика для исследования процесса усталости образца металлических конструкций. *Автоматика и программная инженерия*, (2 (2)), 31-35.
6. Alijanov, D. D., & Boltaboyev, I. M. (2021). Receiver For Registration Of X-Ray And Ultraviolet Radiation. *The American Journal of Engineering and Technology*, 3(03), 23-27.
7. Alijanov, D. D., & Axmadaliyev, U. A. (2020). The Peculiarities Of Automatic Headlights. *The American Journal of Engineering and Technology*.
8. Photosensitive sensors in automated systems / Alijanov D.D., Boltaboyev I.M. // PHOTSENSITIVE SENSORS IN AUTOMATED SYSTEMS // Internauka: elektron. nauchn. jurn. 2020. № 23(152).
9. D.D.Alijanov, N.Rakhimov. (2020). Optoelectronic Method for Determining the Physicochemical Composition of Liquids . *Automatics & Software Enginery*, 51-53.
10. Lisovskii V. V. Teoriya i praktika sverhvysokofchastnogo kontrolya soglasnosti sel'skikh materialov [Theory and practice of ultrahigh-frequency humidity control of agricultural materials].



11. Rakhimov N. R., Alizhanov D. D. Features of obtaining a coordinate-чувствительного sensitive optical radiation receiver based on semiconductor films with anomalous photovoltage. [Log].
12. Topvoldiyev, N. (2022). PHYSICAL AND TECHNICAL FUNDAMENTALS OF PHOTOELECTRIC SOLAR PANELS ENERGY. *Theoretical & Applied Science*.
13. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz*.
14. ME Yulchiev, AAO Qodirov Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY (TAJET) SJIF-5.32 DOI-10.37547/tajet
15. NM Aripov, OA Qosimov MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...



## ENERGY-SAVING CONTROL SCHEME OF ELECTRICAL CONTROL OF HORIZONTAL LAMINATING MACHINE

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### АННОТАЦИЯ

Закрытый электропривод с частотно-параметрическим управлением. На этом принципе построено множество частотно-управляемых асинхронных электрических цепей. Регулировка скорости осуществляется по следующему принципу регулировки, с использованием координат РС ПИ-регулятора скорости, регулятора интенсивности ЗИ и блока ограничителя тока БО.

### ANNOTATION

Closed electric drive with frequency parametric control. Using this principle, many frequency-controlled asynchronous electric circuits have been built. Speed adjustment is carried out according to the following adjustment principle, using coordinates RS speed PI-regulator, intensity controller ZI and current limiter BO block

Frequency from the converters used closed electricity procedures

In general, the frequency control of the motor using frequency converters can be implemented in three options:

- parametric control, in this case, the controlling effect on the motor is the

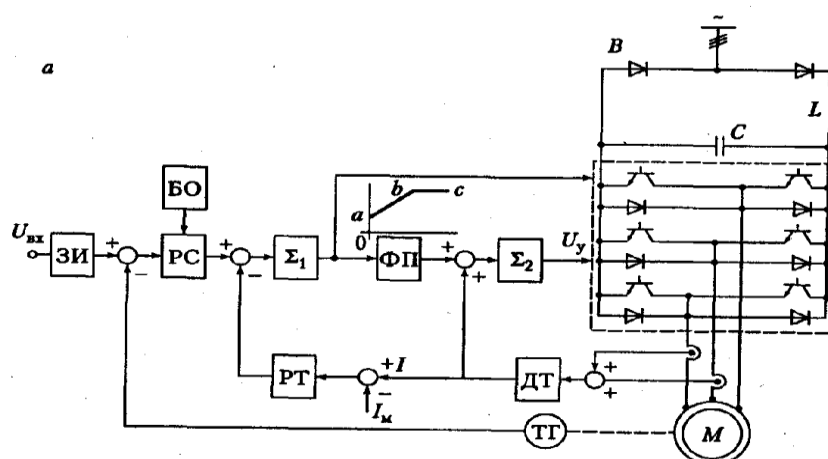


frequency and the influencing value of the voltage transmitted to the motor;

- frequency-current control, in this case, the control effect on the motor is the frequency and the effective value of the motor current;
- vector control. Such control is related to the control of the instantaneous values of the supply voltage and currents in order to form the electromagnetic moment of the electric motor.

Closed circuit with parametric control. Many frequency-controlled asynchronous electric drives are built using this principle. Due to the use of various reverse connections and functional blocks, fixed (fixed) operating sections of the mechanical characteristics of the engine are formed, current and torque are limited, and the required ratios of controlled frequency and voltage are provided for quality control of its speed. A generalized scheme of such an electrical circuit It is presented in Figure 1.

A frequency converter with a constant current circuit is used as a power converter. A constant current loop frequency converter is composed of an uncontrolled rectifier and a voltage inverter, the inverter is composed of six power modules consisting of transistors and diodes. A filter is connected between the rectifier and the inverter, the filter is composed of a reactor  $L$  and a capacitor  $C$ . The filter provides smoothing of the output voltage of the rectifier and ensures the necessary circulation of reactive energy in the power part of the circuit.







Picture 1 . Frequency in management asynchronous electricity don't drive scheme

, provides the required speed and acceleration of the engine with the help of the  $f_u$  signal in the stationary and transient modes of the electric drive .

Limitation of the motor stator current and torque is carried out by the current regulator RT; when the motor stator current is less than  $I_m$  , the signal at the RT output is zero, and the control circuit provides the set speed holding mode. When the motor stator current increases from  $I_m$  , the signal at the RT output increases sharply, so the signal at the output of the adder  $S_1$  also decreases sharply. This leads to a decrease in the frequency and voltage in the motor stator, and at the same time leads to a limitation of the motor stator current and torque.

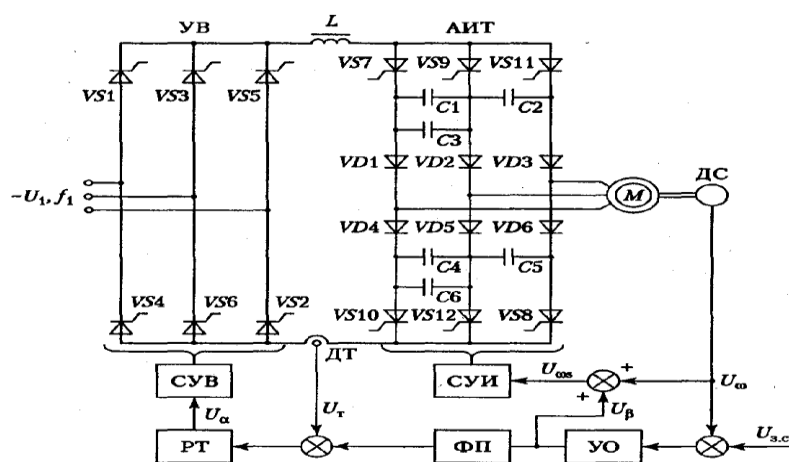
In order to reduce the effect of the voltage drop in the stator circuit on the magnitude of the motor magnetic current, and thus to reduce its effect on the torque, the circuit (so-called IR-compensation) provides a positive feedback on the current. The feedback signal is fed to the input of the adder  $S_2$  . As the motor load increases, its current increases and the  $U_u$  signal increases, due to which the output voltage of the converter increases and, therefore, the voltage drop in the stator winding is compensated.

In modern electrical systems of this type, the implementation (preparation) of the control blocks of the circuit is carried out using microprocessor circuits (Fig. 2-a), and the adjustment of their parameters and characteristics is done by programming. The mechanical characteristics of the engine obtained at different signals of the speeds specified in this scheme are shown in Fig. 2- b.

Frequency-current control of an asynchronous motor. The circuit diagram is shown in Figure 2 . Thyristors VS1 – VS6 form the controlled rectifier UV circuit, and thyristors VS7 – VS12 form the current autonomous inverter AIT.



Between these blocks, a reactor  $L$  with a large inductance is connected, which gives the inverter the characteristic of a current source.  $S1 - S6$  capacitors  $VD1 - VD6$  together with thyristors  $VS7 - VS12$  form artificial switching circuits. Other elements of the circuit are designed for:  $SUV$  and  $SUI$  — circuits controlling rectifier and inverter thyristors;  $RT$ ,  $DT$  — adjuster (regulator) and stator current sensor, respectively;  $DS$  — speed sensor;  $UO$  — amplifier-limiter (usilitel-ogranichitel);  $FP$  — functional modifier. The scheme works as follows.



Picture 2 . Frequent managed asynchronous electricity don't drive scheme

The duty signal  $U_{zs}$  determines the switching frequency of the inverter thyristors and, at the same time, the frequency of the motor stator current  $M$ . After the subtraction of the feedback signal of the speed  $U_{\omega}$  from the signal  $U_{zs}$ , the signal  $U_b$  is generated, this signal is proportional to the relative frequency of the rotor  $b = f_2 / f_{1nom}$  (the value  $b$  is also called the absolute slip of the engine). This quantity is related to engine slip  $s$  as follows:  $b = a s$ , where  $a = f_1 / f_{1nom}$ .

The  $U_b$  signal passes through  $UO$  and enters the  $SUI$  input together with the  $U_{\omega}$  signal. Frequency at the inverter output  $U_{\omega s} = U_{\omega} + U_b$ ; The  $SUI$  is configured so that when the  $UO$  is operating in the linear zone, the frequency at the output of the inverter is constant and does not depend on the load. In this case,



the engine will have fixed (fixed) mechanical characteristics.

It is also the signal for the current rectifier circuit after the  $\beta$  signal passes through the FP. Since this signal is proportional to the absolute slip, the motor current will be proportional to it at all frequencies.

In case of sharp changes in the duty signal or small loads of the motor, UO enters the limit zone of its output signal  $U_b$  signal (invariance), thereby limiting the duty to the specified level required for the current. The engine will work at any speed with constant values of absolute slip, that is, the mechanical characteristics will remain absolutely "soft". As a result, the engine will have characteristics similar to those shown in Figure 2-b .

The scheme ensures the implementation of motor braking with energy recuperation (giving) to the grid, for which the inverter is switched to the rectification mode, and the rectifier is switched to the current inverter mode.

The equation of electromagnetic torque of an induction motor can have different written forms. These forms depend on the variables used in these equations and the coordinate system that represents them. When building a vector control system, it is more convenient to express the processes in the engine in the X – Y coordinate system, where the rotor's flow resistance PS and its speed overlap in the direction of the X axis. In this case, the equation of the electromagnetic moment of a three-phase asynchronous motor will have the following form:

$$M = \frac{3pL_{12} \cdot \Psi_2 \cdot i_{1v}}{2L_2}$$

where p – the number of motor pole pairs;  $L_{12}$  – mutual inductance between the stator and the rotor;  $i_{1u}$  – component of the stator current along the Y axis;

$L_2$  – total inductance of the rotor.

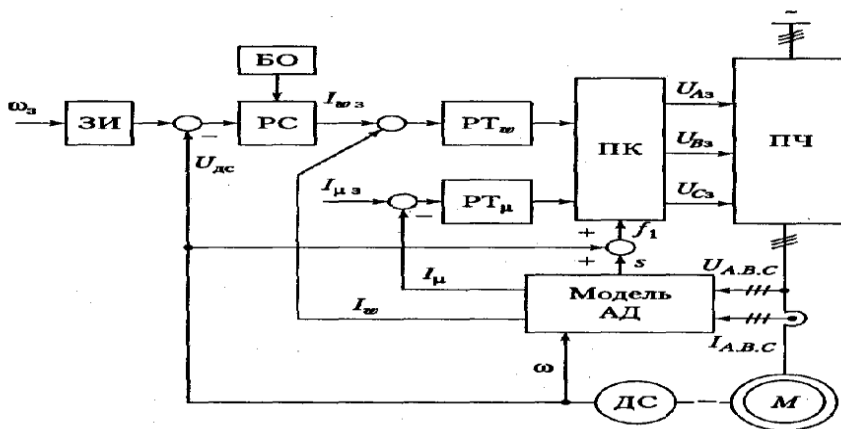
The component of the stator current  $i_{1x}$  is the flexibility of the rotor current



along the X axis

PS , in which, considering the above formula, it is determined that by adjusting  $i_{1x}$  and  $i_{1u}$ , it is possible to ensure the formation of engine torque. The component  $i_{1x}$  can be seen as the magnetizing reactive component of the motor stator current, while  $i_{1u}$  is the active component that generates the motor torque.

The above equation is exactly similar in form to the DC motor torque formula. In it,  $PS_2$  represents the DC motor magnetic flux, and  $i_{1u}$  represents its armature current.



3 . Scheme of asynchronous electric drive with closed-loop vector control.

4 shows the principle of vector control scheme construction . M asynchronous motor, on the shaft of which a speed sensor DS (tachogenerator) is installed, is fed from a PCH frequency converter. Torque adjustment  $RT_w$  active  $I_w$  and  $RT_\mu$  reactive  $I_\mu$  is aligned with the constituents of  $i_{1u}$  . The values of these variables are obtained indirectly using the asynchronous motor model "Model AD". Phase currents  $I_A, I_V, I_S$ , phase voltages  $U_A, U_V$ , Signals  $U_S$  and engine angular velocity  $\omega$  are given. The engine model provides information about the components of the engine slip  $s$  and  $I_w, I_\mu$  currents.

Speed adjustment is carried out according to the principle of follow-up adjustment, using coordinates  $RS$  speed PI-regulator, intensity controller  $ZI$  and current limiter  $BO$  block.  $PCH$  control three-phase  $U_A, U_V$ , It is carried out with a system of  $s$  voltages. The system of three-phase voltages is formed by the  $PK$



coordinate converter. It is formed on the basis of the signals of the  $RT_w$  and  $RT_\mu$  tuners and on the basis of the signal proportional to the frequency  $f_1$ .

Vector adjustment of the torque of the induction motor ensures that it is precisely maintained in the entire range of speed control. to this can be added the operation of the electric drive in the mode of operation and its operation at very low "creep" speeds, which shows that it is distinguished above the parametric (scalar) adjustment.

STA-S2 series frequency converters \_ vector type small are universal size converters . them the majority engineering their work solution in reaching , short connected rotor general industry asynchronous of an electric motor rotation frequency to correct done increase if necessary use can ( machine equipment electro transporters , conveyors , mixers , pumps , fans \_\_ and etc ...).

Frequency converter \_ main functional options : Fig. 4

- management vector mode ,  $U/f$  volt-frequency characteristic as long as possible management ;
- automatic setup mode ;
- working of the engine to the speed adjustment ;
- S- shaped of speed increase and of the engine braking ;
- frequency of the converter programmed mode ;
- into installed \_ high frequency PID- regulator ;
- integrated analog 0-10 V / 4-20 mA output ;
- integrated interface RS-485 MODBUS RTU
- high in daja again loading feature \_
- small massagabarit in the indicators high FIK;





- many p numerous protection functions .

## REFERENCES

1. Kholmiraev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (LATER) MODEL. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
2. ME Yulchiev, AAO Qodirov Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks, *THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY (TAJET) SJIF-5.32 DOI-10.37547/tajet*
3. NM Aripov, OA Qosimov  
MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...
4. ELEKTR O'LCHASH ASBOBLARIGA QO'YILGAN TALABLAR  
QO Abdumannon o'g'li  
Mexatronika va robototexnika: muammolar va rivojlantirish istiqbollari 1 (1 ...
5. Muhtorovich, K. M., & Abdulhamid o'g'li, T. N. DETERMINING THE TIME DEPENDENCE OF THE CURRENT POWER AND STRENGTH OF SOLAR PANELS BASED ON THE EDIBON SCADA DEVICE.
6. Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. *The American Journal of Applied sciences*.
7. Olimjoniva, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. *Interpretation and researches*, 1(8).
8. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI



OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от

<https://interpretationandresearches.uz/index.php/iar/article/view/538>

9. Yulchiyev M.E, & Salokhiddinova M. (2023). ORGANIZATION OF MULTI-STAGE ENHAT FOR MEDIUM AND LARGE POWER INDUSTRIES OR ENERGY SYSTEM. *World Scientific Research Journal*, 20(1), 13–18.

10. Topvoldiyev , N. (2023). KREMNIY ASOSIDAGI QUYOSH ELEMENTILARI KONSTRUKTSIYASI. *Interpretation and Researches*, 1(1).

izvlecheno ot

<http://interpretationandresearches.uz/index.php/iar/article/view/443>

11. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Xakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY*, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>

12. Alijanov, D. D., Yo'lchiev, M. E., Islomov, D. D., Topvoldiyev, N. A. (2022). Preventing accidents and achieving economic efficiency through a multi-functional device in substations with a voltage of 110/35/6 KV. *ISJ Theoretical & Applied Science*, 12 (116), 1001-1006. Soi: <http://s-o-i.org/1.1/TAS-12-116-74> Doi: <https://dx.doi.org/10.15863/TAS.2022.12.116.74>



## YAG OF THE STRUCTURE ACQUISITION , STRUCTURAL AND OPTICAL PROPERTIES

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**Keywords:** photo conductivity yttrium-aluminum garnet, single crystal, cubic lattice, solid-state laser.

### Anatasia

The results of X-ray studies showed that since YAG and Nd: YAG single crystals have a body-centered cubic lattice with space group  $Ia\bar{3}d$ , the lattice parameter for YAG  $a = 1.1949$  nm and for Nd: YAG  $a = 1.1961$  nm. The difference between the radii of  $Nd^{3+}$  ions (0.1247nm) and  $Y^{3+}$  (0.1158nm) is 8%, which leads to an increase in the unit cell parameter of Nd:YAG single crystals. After annealing YAG crystals in a reducing atmosphere, the formation of color centers was determined by charge coverage leading to a reduction in the number of growth defects acting as recipients .

Many oxides are used in laser materials, nonlinear optics, acousto-optics, optical data and magnetic memories, waves, etc. Yttrium-aluminum garnet (YAG,  $Y_3Al_5O_{12}$ ) and yttrium-aluminum garnet coated with neodymium (Nd:YAG) are the most common types of oxide crystals widely used as active media in solid state lasers. Alloyed mixture - triply ionized neodymium Nd (III), usually replaces a small part of yttrium ions in the crystal structure of aluminum-yttrium pomegranate and provides lysing activity in the crystal.

The physical properties of the Nd:YAG crystal and the properties of laser devices based on them depend mainly on internal microstrains and defects. Thus,





it is important from a physical and technological point of view to determine the optimal technological conditions, structural values and physical properties of Yeg single crystals without  $\text{Nd}^{3+}$  impurities. In this regard, this work presents the results of studying the structural properties of YAG and Nd:YAG single crystals in recent years.

The research target is single crystal YAG and Nd:YAG grown by the generally accepted Chochral method [1,2]. The Chokhralsky method is used as a laser with medium and high power efficiency, which has great advantages for growing high-quality and large YAG and Nd:YAG single crystals. Using the Chokhralsky technique, the stable and equilibrating process of crystals is controlled by different values of the process. Small changes in growth values

**Condition monitoring was performed on a third-generation Empyrean Malvern PANalytical L. td type X-ray diffractometer [2,3]. X-ray diffraction measurements were performed continuously in the Bragg-Brentano beam geometry from  $2\theta = 10^\circ$  to  $90^\circ$  with a scanning speed of 0.33 grad/min and angular steps of 0.0200 (degree). X-ray diffraction for YAG and Nd:YAG single crystals experimental data obtained using the method:**

**YAG grown by Chochral method is given in Fig. 1. Analysis of monocrystalline YAG radiography shows that there are several systematic reflexes in the diffraction image (Fig. 1- a ) of selective nature with different densities. Diffraction reflectance observed from YAG samples with YAG (2,420) at  $2\theta = 33.6^\circ$  and its next order (840) at  $2\theta = 69.9^\circ$ , their full width values up to half of the reflection (FWHM (420)  $\approx 3.23 \cdot 10^{-3}$  rad and FWHM (840)  $4.473 \cdot 10^{-3}$  rad) cryst yttrium-aluminum of garnet perfection  $a = 1.1949$  nm lattice of values value with shows . Experimental the**



results analysis YAG crystals Brave phase to the group incoming group Ia3d - to has been volume centralized cube to the fence have that shows .

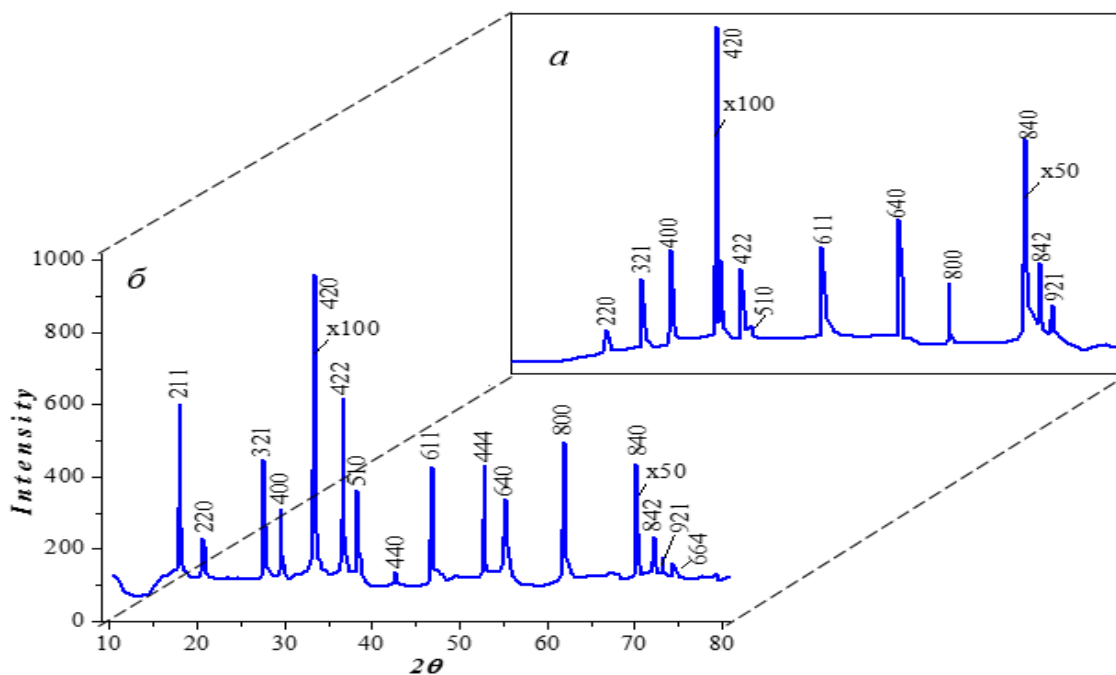


Figure 1. YAG (a) and of Nd:YAG (b) single crystals x-ray

can destabilize the system and directly affect the quality of the crystal. Structural and changes of samples studied by us

From this except , various different intensities with new systematic reflexes appear it has been ; (220)<sub>YAG</sub> with  $d/n = 4.2880 \text{ \AA}$  ( $2\theta = 20.7^\circ$ ), (321)<sub>YAG</sub> with  $d/n = 3.241 \text{ \AA}$  ( $2\theta = 27.5^\circ$ ), (400)<sub>YAG</sub> with  $d/n = 3.032 \text{ \AA}$  ( $2\theta = 29.6^\circ$ ), (422)<sub>YAG</sub> with  $d/n = 2.476 \text{ \AA}$  ( $2\theta = 36.3^\circ$ ), (222)<sub>YAG</sub> with  $d/n = 2.379 \text{ \AA}$  ( $2\theta = 37.8^\circ$ ), (611)<sub>YAG</sub> with  $d/n = 1.967 \text{ \AA}$  ( $2\theta = 46.1^\circ$ ), (640)<sub>YAG</sub> with  $d/n = 1.682 \text{ \AA}$  ( $2\theta = 54.6^\circ$ ),  $d/n$  with (800)<sub>YAG</sub> =  $1.516 \text{ \AA}$  ( $2\theta = 61.1^\circ$ ), (842)<sub>YAG</sub> with  $d/n = 1.323 \text{ \AA}$  ( $2\theta = 71.3^\circ$ ) and  $d/n$  with (921)<sub>YAG</sub> =  $1.308 \text{ \AA}$  ( $2\theta = 72.2^\circ$ ) your possession confirm addition opportunities Go to : on the site move , search ( $2\theta = 54.6^\circ$ ),



(800)  $d/n = 1.516 \text{ \AA}$  with YAG ( $2\theta = 61.1^\circ$ ), (842) you own confirm addition opportunities for (921) YAG with  $D/N = 1.308 \text{ \AA}$  ( $2\theta = 72.2^\circ$ ). Fig according to 1-  $p$  Nd: YAG of single crystals x-ray present is enough of YAG single crystals from radiography significant level difference does and by 42% main the intensity of the reflex (15). reduces ; of reflexes intensity

(840) turn with 2 times decreases and of reflexes intensity (220), (321), (400), (422), (222), (611), (640), (800), (842) and (921) one how many percent increased and they are Nd: YAG in the spectra smaller to the corners diffraction to change provides . With that together , s  $d/n = 0.4951 \text{ nm}$  ( $2\theta = 17.9^\circ$ ), li  $d/n = 0.2144 \text{ nm}$  ( $2\theta = 42.1^\circ$ ), li  $d/n = 0.1751 \text{ nm}$  ( $2\theta = 52.3^\circ$ ) and li  $d/n = 0.1293 \text{ nm}$  ( $2\theta = 73.2^\circ$ ) medium scattered in the corners uncomfortable background level uncomfortable nature \_ Relatively net width ( $\text{FWHM} = 4.36 * 10^{-3} \text{ rad}$ ) and big density ( $105 \text{ imp sec}^{-1}$ ) is the main reflex (420), as well as another even reflection carry on of procedures in radiography availability , Nd:YAG crystalline of the fence high level perfection shows and Nd: YAG spatial group with volumetric centered cube to the fence have  $Ia3d$  and with orientation (420). one crystalline . Nd for fence value : YAG  $\alpha = 1.1961 \text{ nm}$  , which is very less publication done data [3,4] ( $12.011 \text{ \AA}$ ). Nd of the crystal cell value : 0.12% more than oil YAG crystal . Nd  $^{3+}$  of ion radius ( $0.1247 \text{ nm}$ ) Y  $^{3+}$  of ion larger than the radius ( $0.1158 \text{ nm}$ ). and difference by about 8% equal to is Nd  $^{3+}$  of Y  $^{3+}$  crystalline fence to the field input difficult not but \_ cell of value to increase take will come . This is Nd:YAG in the diffractogram small spread to the corners looking systematic reflection to continue to change take will come .

### Summary

So so , YAG and Nd single crystals derived : YAG  $ia3d$  spatial group with three measured cube has a grid.for AG fence value  $\alpha = 1.1949 \text{ nm}$  and Nd for:YAG  $\alpha = 1.1961 \text{ nm}$ . Nd of the crystal cell value : 0.12% more than oil YAG crystal . Nd  $^{3+}$  of ion radius ( $0.1247 \text{ nm}$ ) Y  $^{3+}$  of ion larger than the radius ( $0.1158$



nm). and difference by about 8% equal to is  $Nd^{3+}$  of  $Y^{3+}$  crystalline fence to the field input difficult not but \_ cell of value to increase take will come . of YAG crystals in the decrease evasive then of the color centers appear be divided was determined atmosphere charge cover receiver task which performs growth defects count to decrease take will come .

### References.

1. Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. The American Journal of Applied sciences.
2. Dilshodovich, A. D., & Rakhimovich, R. N. (2020). Optoelectronic Method for Determining the Physicochemical Composition of Liquids. *Автоматика и программная инженерия*, (2 (32)), 51-53.
3. NM Aripov, OA Qosimov MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...
4. Olimjonova, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. Interpretation and Researches, 1(8).
5. ME Yulchiev, AAO Qodirov Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY (TAJET) SJIF-5.32 DOI-10.37547/tajet
6. Sharobiddinov, S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. Interpretation and researches, 1(8).
7. Donyorbek Dilshodovich Alijanov, ., & Utkirbek Akramjonovich Akhmadaliyev, . (2020). The Peculiarities Of Automatic Headlights. The American Journal of Applied Sciences, 2(10), 13–16.



<https://doi.org/10.37547/tajet/Volume02Issue10-03>

8. Abbasbek Azizjon-oglu, A. MODERN CONSTRUCTION OF HORIZONTAL AXIS WIND ENERGY DEVICES
9. Parpiev, OB, & Egamov, DA (2021). Information on synchronous generators and motors. Asian Journal of Multidimensional Research, 10(9), 441-445.
10. Topvoldiyev, N. (2023). *ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS*.
11. Yulchiyev M.E. ; Salokhiddinova.M . ORGANIZATION OF MULTI-STAGE ENHAT FOR MEDIUM AND LARGE POWER INDUSTRIES OR ENERGY SYSTEM. *World scientific research journal. [www.wsrjournal.com](http://www.wsrjournal.com). Volume-20\_Issue-1\_October -2023.*
12. Эгамов.Д, Боихонов. З, Узаков. Р статья Эффективность применения «Переносного АВР-0,4 кВ» для обеспечения бесперебойного электроснабжения потребителей. Конф. Гомель. Секция «энергетика» 2020г.
13. Olimov, L. O., & Anarboev, I. I. (2021). Electrophysical properties of two structured polycrystal silicon. Theoretical & applied sciences. International journal of multidisciplinary research and analysis./ijmra, v4-i11.
14. Olimov, L. O., & Anarboev, I. I. (2021). Microstructure of polycrystal silicon heated by sunlight. International Journal of Multicultural and Multireligious Understanding Ra Journal of Applied Research/rajar, 2669-2671.



## THE SIGNIFICANCE OF SEMICONDUCTOR MICROCHIPS IN SOLVING DOLZARB PROBLEMS IN THE AUTOMOTIVE INDUSTRY

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**Abstract:** Currently, microchips that perform important tasks in the automotive industry are made of semiconductor materials, and chips are important for manufacturers of all electronic devices and gadgets. Electronic device and gadget manufacturers face many challenges in sourcing and remanufacturing semiconductor materials to deliver orders for microcircuits.

**Key words:** automotive engineering, electronic device, semiconductors, semiconductor microchips, microcircuits.

As a result of scientific and technical progress, the economy and the mechanical engineering industry are developing rapidly. The development of the economy and industry requires serious research on the creation of high-strength, easy-to-use, cheap, precise materials and on increasing the durability of the connection [1-2]. Modern materials science occupies an important place in the study of the composition, structure and properties of material alloys, as well as the relationship between the structure and properties of the material. Metals and semiconductors are the most used materials in our daily life. Semiconductor materials and metals play an important role in the development of human material culture [3-5]. In fact, there is no sector of the economy where semiconductors and metals are not used.

There are conflicting issues in the selection of materials for machine parts and in the technological process of processing them. For example, the details used in the creation of machines and mechanisms that can ensure safe operation for a



long time should be cheap, compact, neat, and made of high-quality materials. It goes without saying that the processing of such materials causes a sharp increase in cost.

In solving such complex engineering problems, materials science and materials science of semiconductors, as well as technology of construction materials, are of great importance.

To date, microchips that perform important tasks in the automotive industry are made of semiconductor materials, and chips are important for manufacturers of all electronic devices and gadgets. Electronic device and gadget makers are facing many challenges in sourcing and remanufacturing semiconductor materials to deliver chip orders, which in turn is delaying car companies' customer service and delivery of cars to their owners. It leads to the creation of artificial barriers by itself. The lack of timely arrival of microchips will force the suspension of some branches of the automotive company. When restarting operations, chipmakers lag behind existing demand due to the fact that it takes more than six months to produce. Therefore, there is a shortage of semiconductor microchips for cars (Figure 1) [6-8].

The shortage of semiconductors is a concern of car manufacturers around the world [9-10]. The lack of such small but irreplaceable details has had serious consequences for car manufacturers. Another example is Volkswagen's plant in Kaluga, which stopped production of cars due to a shortage of semiconductors. Also, the assembly of Volkswagen and Skoda cars was temporarily suspended in Nizhny Novgorod. Most of the world's largest car manufacturers were forced to suspend their factories in Asia, Europe and North America due to the shortage of semiconductors. . These include Ford Motor, Nissan Motor, Toyota Motor, Volkswagen, Honda Motor and Volvo. The US automotive industry warned about the consequences of improper use of microcircuits and asked for help from the government. Asia is speeding up microchip production to reduce semiconductor



shortages.



Figure 1. Semiconductor microchips

In addition, it is worth noting that the shortage of containers and delays at Chinese ports are also causing disruptions in production (Figure 2). The shortage of containers has led to delays in the delivery of purchased goods and increased prices. This is four times higher than the usual price. Any additional costs incurred are covered by retailers or result in overpayments by consumers.



Figure 2. Chinese ports

Xulosa qilib aytganda yarimo‘tkazgichlar fizikasi va yarimo‘tkazgichlar materialshunosligiga katta etibor berilishini va bu soxalarni rivojlantirishga katta sarmoyalar ajratish kerakligini ko‘rsatadi. Yarimo‘tkazgichlarning yetishmasligi avtomobil sanoatini tashvishga soladi. Bunday ammo almashtirib bo‘lmaydigan





detallarning yetishmasligi avtomobil ishlab chiqaruvchilar uchun jiddiy oqibatlarni olib keldi.

### References

1. Olimov, L. O., Sokhibova, Z. M., & Anarboev, I. I. (2019). Electronic properties of granular silicon oxide. *International Journal of Advanced Research in Physical Science (IJARPS)* 6 (8), 19-22.
2. Olimov, L. O., & Anarboev, I. I. (2022). Some electrophysical properties of polycrystalline silicon obtained in a solar oven. *Silicon*, 14(8), 3817-3822.
3. Olimov, L. O., & Anarboev, I. I. (2021). Microstructure of polycrystal silicon heated by sunlight. *International Journal of Multicultural and Multireligious Understanding Ra Journal of Applied Research/rajar*, 2669-2671.
4. Olimov, L. O., & Anarboev, I. I. (2023). ENERGY CONVERTER BASED ON NANO-STRUCTURED SI. *International Bulletin of Applied Science and Technology*, 3(6), 248-252.
5. Olimov, L. O., & Anarboev, I. I. (2021). Electrophysical properties of two structured polycrystal silicon. *Theoretical & applied sciences. International journal of multidisciplinary research and analysis./ijmra*, v4-i11.
6. Anarboev, I., & Xojimatov, U. (2019). Conversion of optical beams into electric energy in semiconductor solar cells. In *Materials of the XIII international scientific and practical conference of young scientists «innovative development and the requirement of science in modern Kazakhstan» I TOM*, Taraz (pp. 18-20).
7. Olimov, L. O., & Anarboev, I. I. (2021). Micro structure of silicon obtained by re-melting in a solar furnace. In *Восьмая Международная конференция по физической электронике IPEC-8* (pp. 98-100).
8. Olimov, L. O., Anarboev, I. I., & Davronov, A. A. (2023). ZAMONAVIY AVTOMOBILSOZLIKNING DOLZARB MUAMMOLARINI



## HAL ETISHDA YARIMO 'TKAZGICHLI MATERIALKLARNI QO'LLANILISHI.

9. Сохибова, З. М., Анарбоев, И., Мамиров, А., & Олимов, Л. О. (2018). Электропроводность гранулированных полупроводников. In Материалы республиканской научно-практической конференции. Андижан (p. 153).
10. Olimov, LO, Anarbobeov, II, Mamirov, A., Omonboev, FL, & Omonboeva, ML (2021). Patent UZ № FAP 01593" Termoelektrik materialni tayyorlash usuli.
11. Olimov, LO, Anarbobeov, II, Mamirov, A., Omonboev, FL, & Omonboeva, ML (2021). Patent UZ № FAP 01593" Termoelektrik materialni tayyorlash usuli.
12. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>
13. Abdumutallib o'g'li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. *Texas Journal of Multidisciplinary Studies*, 8, 251-255.
14. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
15. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
16. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz.*
17. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY*, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>



18. Д.Эгамов, М. Нурёгдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий.

Научный журнал Инженерные решение №8(9) ноябрь 2019. г.  
Новосибирск.



## КОНСТРУКЦИЯ ФОТОТЕРМОЭЛЕКТРИЧЕСКИХ ПРЕОБРАЗОВАТЕЛЕЙ

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**Введение.** В условиях растущего интереса к возобновляемым источникам энергии и совершенствования методов преобразования энергии света в электричество, фототермоэлектрические преобразователи привлекают все большее внимание исследователей и инженеров. Эти устройства представляют собой перспективный класс солнечных ячеек, использующих термоэлектрический эффект для преобразования световой энергии в электричество.

В данном обзоре рассматривается современное состояние исследований и разработок в области конструкции фототермоэлектрических преобразователей. Основное внимание уделяется элементам конструкции, оптимизации термоэлектрических свойств, методам производства и интеграции устройств в технические системы.

Первая часть обзора посвящена светопоглощающим элементам, термоэлектрическим материалам и теплопроводящим компонентам. Рассматриваются современные подходы к созданию эффективных светопоглощающих материалов и материалов с высоким коэффициентом Seebeck, а также методы теплового управления в устройствах.

Вторая часть обзора фокусируется на технологиях производства, включая магнетронное напыление, химическое осаждение из газовой фазы и термическое испарение. Обсуждаются преимущества и ограничения каждого метода и их влияние на конечные характеристики устройств.



Завершая обзор, внимание уделяется аспектам интеграции фототермоэлектрических преобразователей в технические системы, а также текущим вызовам и направлениям будущих исследований. Исследования в этой области могут способствовать дальнейшему совершенствованию эффективности и устойчивости фототермоэлектрических преобразователей, что является важным вкладом в область возобновляемой энергетики.

**Аннотация:** Фототермоэлектрические преобразователи представляют собой перспективный класс устройств для преобразования световой энергии в электрическую, используя принципы термоэлектрического эффекта. Эффективная конструкция таких устройств требует комплексного подхода, объединяющего материаловедение, инженеррию и технологии производства.

Эта аннотация обсуждает основные элементы конструкции фототермоэлектрических преобразователей, включая светопоглощающие элементы, термоэлектрические материалы, теплопроводящие и теплоизоляционные компоненты, элементы для сбора и передачи электричества, оптические улучшения и защитные элементы. Акцент делается на технологиях создания разнообразных элементов, таких как магнетронное напыление, CVD и термическое испарение.

Также обсуждаются ключевые аспекты, такие как оптимизация термоэлектрических свойств, управление тепловыми потоками и эффективная интеграция в различные технические системы. Учитываются также вопросы теплоотвода и защиты устройств от внешних факторов [1].

Эта аннотация предоставляет обзор состояния исследований в области конструкции фототермоэлектрических преобразователей и может служить основой для дальнейших исследований в разработке более эффективных и устойчивых к внешним воздействиям устройств для преобразования световой энергии [2].

**Ключевые слова:** Фототермоэлектрические преобразователи,

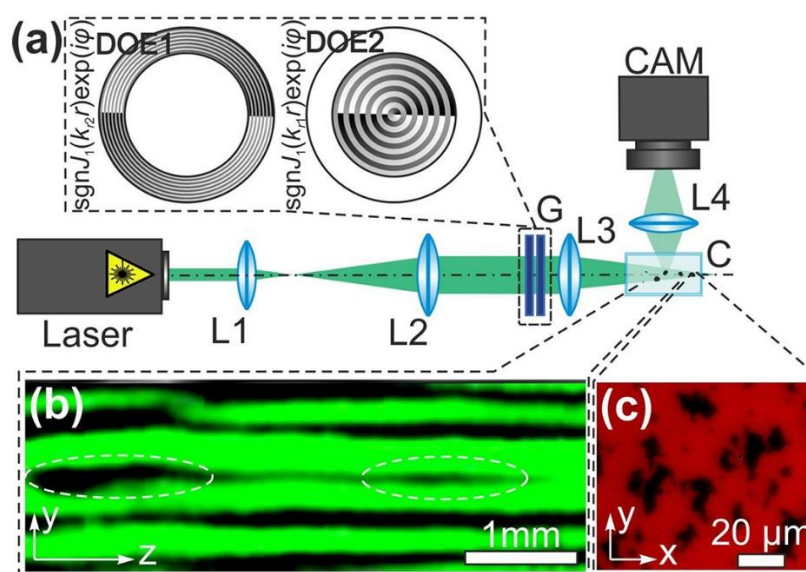


термоэлектрические материалы, светопоглощающие элементы, теплопроводящие компоненты, коэффициент Seebeck, магнетронное напыление, химическое осаждение из газовой фазы (CVD), термическое испарение, оптические элементы, интеграция в технические системы, солнечные ячейки, эффективность преобразования энергии, световая энергия, тепловой учет, термический радиатор, термоизоляция, тонкие пленки.

Фототермоэлектрические преобразователи - это устройства, способные преобразовывать световую энергию в электрическую энергию с использованием термоэлектрических принципов [3]. Конструкция таких устройств зависит от конкретной реализации и требований, но включает ряд общих элементов:

#### 1. Светопоглощающий элемент (поглотитель света):

- Это компонент, предназначенный для поглощения света. Обычно используются полупроводниковые материалы, которые способны эффективно поглощать фотоны и создавать тепло.

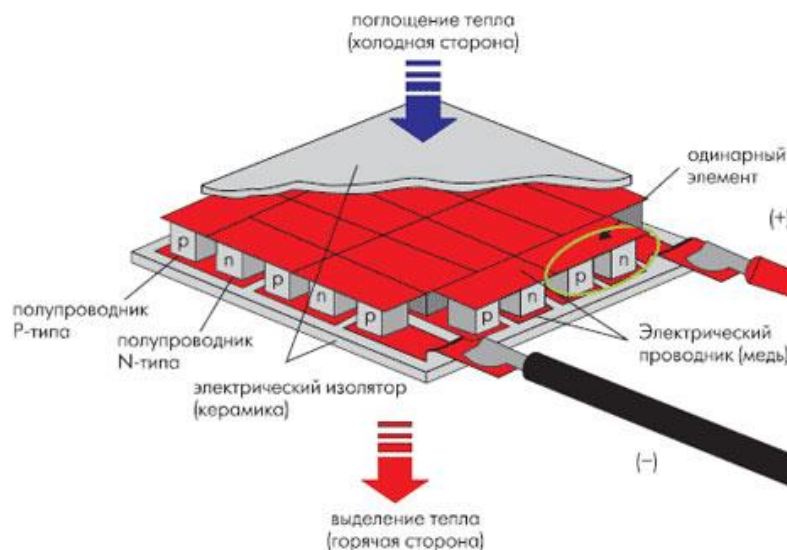




**Рис.1. Реализованы притягивающие/отталкивающие лазерные пучки для светопоглощающих част**

## 2. Термоэлектрические материалы:

- Термоэлектрические материалы, такие как бисмут-теллурид или сурьма-теллурид, играют ключевую роль в фототермоэлектрических преобразователях. Они создают разности температур, которые затем используются для генерации электрического тока.



**Рис.1. Термоэлектрические материалы**

## 3. Теплопроводящие элементы:

- Элементы, обеспечивающие передачу тепла от светопоглощающего элемента к термоэлектрическим материалам. Они могут быть встроены в структуру или использоваться как внешние компоненты.



Сравнительная таблица теплопроводностей различных веществ и материалов (к теплопроводности воды)

Вещества и материалы	Отношения теплопроводностей	Вещество	Отношения теплопроводностей
Алмаз	222,2	<i>Металлы и сплавы</i>	
Асбест	0,24		Алюминий
Вата	0,07	Вольфрам	267
Вода	1	Железо	122
Гранит	5,7	Медь	656
Земля(сухая)	0,2	<i>Газы и пары</i>	
Земля(влажная)	1,1		Водород
Стекло	1,3	Воздух	0,04
Шерстяная ткань	0,09	кислород	0,04

**Рис. 2. Сравнительная таблица теплопроводностей различных веществ и материалов**

#### 4. Радиаторы для отвода тепла:

- Чтобы эффективно использовать разницу в температуре, важно отводить тепло с области с высокой температурой. Для этого могут использоваться радиаторы или другие системы охлаждения.

#### 5. Теплоизоляционные материалы:

- Там, где это необходимо, в конструкции могут быть использованы материалы для теплоизоляции, чтобы минимизировать потери тепла.

#### 6. Элементы для сбора и передачи электричества:

- В конструкции фототермоэлектрических преобразователей также включены элементы, предназначенные для сбора и передачи электрического тока от термоэлектрических материалов к внешней нагрузке.

#### 7. Оптические элементы:

- В некоторых конструкциях могут включаться оптические элементы, например, линзы или зеркала, чтобы усилить световой поток, направляемый





на светопоглощающий элемент.



**Рис. 3. Разные оптические элементы**

#### 8. Защитные элементы:

- Для защиты от внешних воздействий или неблагоприятных условий могут использоваться защитные элементы, такие как покрытия или оболочки.

Конструкция фототермоэлектрического преобразователя подбирается в зависимости от конкретных приложений и требований, таких как эффективность преобразования, стоимость производства, масштабируемость и долговечность [4].

Фототермоэлектрические преобразователи представляют собой перспективное направление в области преобразования солнечной энергии в электричество, основанное на инновационных принципах термоэлектрического эффекта [5]. В данном обзоре была рассмотрена ключевая тема конструкции таких устройств, выделяя основные компоненты и технологические подходы, направленные на оптимизацию их эффективности.



Анализ светопоглощающих элементов, термоэлектрических материалов и теплопроводящих компонентов подчеркнул важность разработки высокоэффективных материалов и структур для максимизации преобразования световой энергии в тепло и, следовательно, в электричество. Методы производства, такие как магнетронное напыление, химическое осаждение из газовой фазы и термическое испарение, были рассмотрены с точки зрения их применимости и влияния на конечные характеристики устройств [6,7].

Интеграция фототермоэлектрических преобразователей в технические системы требует глубокого понимания требований конечного применения, а также сбалансированного подхода к теплоотводу, масштабированию и структурному дизайну. Важность создания устойчивых к внешним воздействиям устройств, способных эффективно интегрироваться в современные энергетические системы, подчеркнута как ключевой аспект развития данной технологии.

**Заключение:** В заключение, развитие фототермоэлектрических преобразователей представляет собой перспективное направление для солнечной энергетики. Необходимо продолжать исследования в области новых материалов, инновационных методов производства и оптимизации конструкции устройств с целью создания эффективных, устойчивых и экономически целесообразных фототермоэлектрических преобразователей.

### Литературы

1. Касимахунова А.М., Мамадалиева Л.К. «Перспективы использования многоцелевых фототермогенераторов» Монография// Ташкент «Навруз». 2009. Ст. 105.
2. Атажонов.М.О. Новые конструкции солнечных воздухонагревателей. Международная научно-практическая конференция



посвященная 80 - летию Академии наук Узбекистана. Андижан – 2023. Ст. 200-203.

3. Атажонов.М.О. Исследование гибридных фототермогенераторов и их перспективы. Международная научно-практическая конференция посвященная 80 - летию Академии наук Узбекистана. Андижан – 2023. Ст. 265-268.

4. Атажонов.М.О. Улучшение эффективности фототермоэлемента. «Критические проблемы использования возобновляемых энергетических ресурсов, применения искусственного интеллекта и цифровых технологий в повышении эффективности энергосберегающих устройств» научно-техническая конференция. Ст. 496-498.

5. Абидов К.Г., Зарипов О.О., Атажонов. М.О., Зайнидинов. Б.Г. «Само запуск асинхронных электроприводов насосных установок в мелиоративных станциях» // Монография. Фергана. «Poligraf Super Servis» 2023. –143с.

6. M.O. Atajonov., S.J. Nimatov., A.I. Rahmatullayev. Formalization of the dynamics of the functioning of petrochemical complexes based on the theory of fuzzy sets and fuzzy logic. AIP Conference Proceedings, Published 2023-01-05. DOI: <https://doi.org/10.1063/5.0112403>.

7. М.О.Атажонов. Исследование термогенераторов как альтернативных источников энергии. НамМТИ, Международная научно-практическая конференция. 2023г, 3-4 май, 2-том.Ст. 118-122.

8. Olimov, LO, Anarboev, II, Mamirov, A., Omonboev, FL, & Omonboeva, ML (2021). Patent UZ № FAP 01593" Termoelektrik materialni tayyorlash usuli.

9. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI



- OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>
- 10..Abdumutallib o'g'li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. *Texas Journal of Multidisciplinary Studies*, 8, 251-255.
- 11..Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
- 12..ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
13. *Topvoldiyev, N. (2023). Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz.*
- 14.Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY*, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>
15. Д.Эгамов, М. Нурёгдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий.  
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## DEPENDENCE OF THE COEFFICIENT OF LINEAR EXPANSION OF SOLIDS ON TEMPERATURE METROLOGICAL STANDARDIZATION IN MEASUREMENT

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Andijan machine building institute

**Abstract:** In order to determine whether the coefficient of linear expansion of solids depends on temperature, initially, various materials with clear standards are selected, and after determining their linear coefficient, other details are determined. For this purpose, the temperature dependence of the coefficients of linear expansion of brass, steel and glass is measured.

**Key words:** metrological standardization, thermal expansion, temperature, solid body, linear expansion.

To date, the increasing number of production enterprises and organizations in our republic leads to a decrease in the price of manufactured products and, moreover, to an increase in their quality. This increases the demand and attention to the quality indicators of the product. In recent years, as a result of the development of the automotive industry in our country, the localization of car spare parts has become one of the most important tasks, the standardization of car spare parts and the production of parts that meet the global demand [1-2]. As we know from the world experience, in the production of integral and spare parts of every car and in order to increase its service life, the standard conditions of details are checked and measured. Including thermal expansion of solid bodies, measurement of the coefficient of linear expansion of solid bodies as a function of temperature covers all areas of automotive engineering. The reason is that the verification of the uniqueness, use and durability of each detail has its effect on the quality of the manufactured product [3-4].



Taking into account that car parts are made of different solid materials, studying their linear expansion depending on temperature is one of the important tasks. Thermal expansion is the change in linear dimension of objects when they are heated. Different bodies expand differently from heat: in solids, the interaction between molecules and atoms (ions) is very strong, so heat expands less for solids, more for liquids, and more for gases. expressed by volume and linear expansion coefficients. The increase in volume of a body of a certain volume when it is heated by one degree is called the coefficient of volume expansion, and the increase in length of a body of a certain length when it is heated by one degree is called the coefficient of linear expansion. This coefficient changes with temperature changes. The coefficient of volume expansion of all liquids is approximately the same, equal to 1.273. Some bodies (water, cast iron, bismuth, etc.) shrink in size when heated to a certain temperature. For example, at 4° the volume of water is the smallest. Thermal expansion in this. is taken into account[5].

Measurement of the temperature dependence of the coefficient of linear expansion of solids is carried out under different conditions and with the help of laboratory equipment. In particular, the laboratory should be subjected to metrological inspection, otherwise it may have a negative effect on the result. In order to determine whether the coefficient of linear expansion of solids depends on temperature, initially, various materials with clear standards are selected, and after determining their linear coefficient, other details are determined. For this, measurements of the temperature dependence of the linear expansion coefficients of brass, steel and glass are carried out [6-8].

In testing these standards, a circulation thermostat is used to heat water, and heated water flows through pipes made of different materials. The rotary scale is used to measure the change in length as a function of temperature  $\Delta s = s - s_0$  using a device consisting of 0.01 millimeter scale divisions [9-10]. The linear dependence



of the length  $s$  of the solid body on the temperature  $T$

$$s = s_0 (1 + \alpha T) \quad (1)$$

where  $s_0$  is the length at room temperature,  $T$  is the temperature in  $^{\circ}\text{C}$ .

Coefficient of linear expansion of solids  $\alpha$  is determined by their material.

It is possible to choose different solid materials when determining the linear expansion coefficient of solids as a function of temperature. For example, we can choose steel, brass, glass materials. Figure 1 shows a view of the laboratory equipment, a schematic view of the experimental equipment for measuring the linear expansion of heat-conducting pipes as a function of temperature, together with the expanding apparatus.

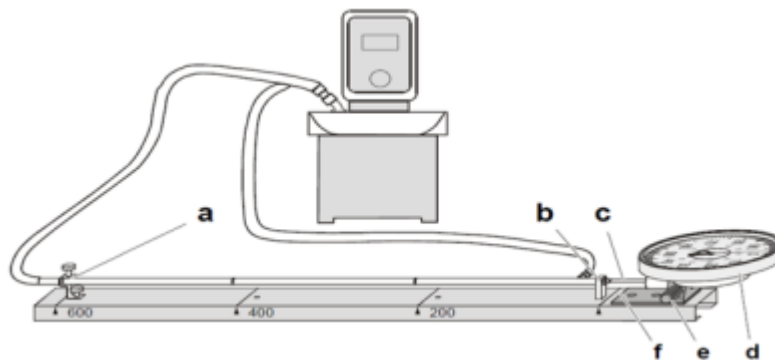


Figure 1

Here a- heat-conducting pipes, b- heat-conducting pipes, s - solid body under inspection, d- indicator (micrometer), e - adjuster, f- holder.

After measuring the initial temperature, set the room temperature to  $T=0$ . The circulation thermostat is connected and its temperature is set to  $5^{\circ}\text{C}$  higher than  $T=0$ . Wait until the thermodynamic equilibrium is established. After measuring the temperature  $T$ , the reading of the dial indicator is recorded.  $T$  increases the temperature in steps of approximately  $5^{\circ}\text{C}$  up to  $100^{\circ}\text{C}$ . This gives an opportunity to experimentally measure the dependence of the coefficient of linear expansion of various solids on temperature.

Table 1. Measured length change values  $\Delta s$  as a function of temperature  $T$



brass		Steel		glass	
$\theta, ^\circ\text{C}$	$\Delta s, \text{mm}$	$\theta, ^\circ\text{C}$	$\Delta s, \text{mm}$	$\theta, ^\circ\text{C}$	$\Delta s, \text{mm}$
20.0	0.03	24.1	0.07	30.4	0.02
25.0	0.09	26.0	0.09	39.9	0.04
30.0	0.13	30.5	0.12	49.9	0.05
35.0	0.18	34.1	0.15	60.3	0.08
40.0	0.24	40.7	0.20	70.3	0.09
45.0	0.30	44.3	0.22	79.9	0.11
50.0	0.35	49.7	0.26	90.5	0.12
57.0	0.41	52.7	0.28	98.9	0.15
59.8	0.46	62.8	0.35	-	-
64.0	0.50	66.8	0.38	-	-
70.0	0.55	69.1	0.39	-	-
75.0	0.60	72.9	0.42	-	-
80.0	0.67	76.8	0.45	-	-
85.0	0.71	80.1	0.47	-	-
90.0	0.77	84.9	0.51	-	-
95.0	0.82	89.6	0.55	-	-
99.8	0.86	92.8	0.56	-	-
-	-	98.6	0.60	-	-

To determine the coefficient of linear expansion as a function of temperature  $\theta$ , a graph is made based on the measurement of the change in length  $\Delta s$  (Fig. 2). can be obtained for:  $s - s_0 = s_0 \cdot \alpha \cdot T$

$$\Delta s = kT, \tag{2}$$

where  $k = s_0 \cdot \alpha$ . Equation (2) gives a linear approximation to the measured results  $a$  (Fig. 2).

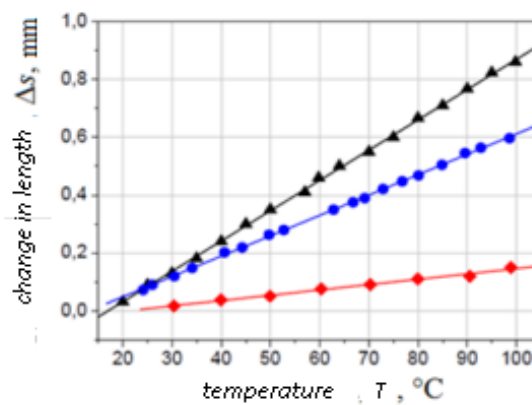


Figure 2

The results are presented in Table 2. Table 2. Linear expansion coefficients  $a$  determined according to Fig. 2, made according to equation (II).

Table 2





Material	$\Delta s$ , mm	experience, K <sup>-1</sup>	in the literature $\alpha$ , K <sup>-1</sup>
brass	600	$17.8 \cdot 10^{-6}$	$18 \cdot 10^{-6}$
steel	600	$11.7 \cdot 10^{-6}$	$11 \cdot 10^{-6}$
glass	600	$3.1 \cdot 10^{-6}$	$3 \cdot 10^{-6}$

In short, in determining the coefficient of linear expansion of various solids, comparison with the standard ensures that they meet the new material metrology standards.

### References

1. Olimov, L. O., & Anarboyev, I. I. (2022). Some electrophysical properties of polycrystalline silicon obtained in a solar oven. *Silicon*, 14(8), 3817-3822.
2. Olimov, L. O., & Anarboev, I. I. (2021). Microstructure of polycrystal silicon heated by sunlight. *International Journal of Multicultural and Multireligious Understanding Ra Journal of Applied Research/rajar*, 2669-2671.
3. Olimov, L. O., & Anarboyev, I. I. (2023). ENERGY CONVERTER BASED ON NANO-STRUCTURED SI. *International Bulletin of Applied Science and Technology*, 3(6), 248-252.
4. Olimov, L. O., & Anarboev, I. I. (2021). Electrophysical properties of two structured polycrystal silicon. *Theoretical & applied sciences. International journal of multidisciplinary research and analysis./ijmra*, v4-i11.
5. Rijkin V. Yes. *Teplovye elektricheskie stantsii*. — M., "Energy". 1974.
6. Nechaev S. G., Kampfer G. M. *Practical thermodynamics of heat DVS*. — M., Izd. MADI, 1996.
7. Anarboyev, I., & Xojimatov, U. (2019). Conversion of optical beams into electric energy in semiconductor solar cells. In *Materials of the XIII international scientific and practical conference of young scientists «innovative development and the requirement of science in modern Kazakhstan» I TOM, Taraz* (pp. 18-20).



8. Olimov, L. O., & Anarboyev, I. I. (2021). Micro structure of silicon obtained by re-melting in a solar furnace. In Восьмая Международная конференция по физической электронике IPEC-8 (pp. 98-100).
9. Olimov, L. O., Anarboyev, I. I., & Davronov, A. A. (2023). ZAMONAVIY AVTOMOBILSOZLIKNING DOLZARB MUAMMOLARINI HAL ETISHDA YARIMO 'TKAZGICHLI MATERIALKLARNI QO 'LLANILISHI.
10. Сохибова, З. М., Анарбоев, И., Мамиров, А., & Олимов, Л. О. (2018). Электропроводность гранулированных полупроводников. In Материалы республиканской научно-практической конференции. Андижан (p. 153).
11. Olimov, LO, Anarboev, II, Mamirov, A., Omonboev, FL, & Omonboeva, ML (2021). Patent UZ № FAP 01593" Termoelektrik materialni tayyorlash usuli.
12. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>
- 13..Abdumutallib o'g'li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. *Texas Journal of Multidisciplinary Studies*, 8, 251-255.
- 14..Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
- 15..ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
16. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz.*
17. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN*



OF APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893.  
<https://doi.org/10.5281/zenodo.7969053>

18. Д.Эгамов, М. Нурёғдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. Научный журнал Инженерные решение №8(9) ноябрь 2019. г. Новосибирск.
19. Эгамов.Д, Боихонов. З, Узаков. Р статья Эффективность применения «Переносного АВР-0,4 кВ» для обеспечения бесперебойного электроснабжения потребителей. Конф. Гомель. Секция «энергетика» 2020г.
20. Parpiev, O. B., & Egamov, D. A. (2021). Information on synchronous generators and motors. Asian Journal of Multidimensional Research, 10(9), 441-445.



**EXPERIMENTAL DETERMINATION OF THE SPECIFIC HEAT  
CAPACITY OF GRANULAR SOY FROM LEGUMINOUS CROPS  
(MEASURE)**

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**Abstract:** This article presents experimentally determined values of the specific heat capacity of grain soybeans from leguminous crops.

**Purpose:** In this article, the specific heat capacity of the granular "Selecta" soybean variety grown in Andijan region at constant pressure and constant volume at room temperature is determined experimentally.

**Methods:** Measurements were made on the experimental device "LD Phusica Leafies" brought from Germany to the Andijan Mechanical Engineering Institute.

**Results:** In order to increase the accuracy of the specific heat capacity of the granular shade determined in the experimental device, the specific heat capacity of the shade was determined after measuring the granular lead, copper, and glass samples supplied with the experimental device and comparing the obtained results with the results given in the literature.

**Conclusion:** The specific heat capacity of granular soybean determined by the experimental method is equal to  $S=0.385$  kJ/(k.kg), and it was found that the specific heat capacity of water is less than 4.19 kJ/(k.kg).

In order to ensure the implementation of the decision of the President of the Republic of Uzbekistan "On measures to increase soybean planting in the Republic in 2017-2021 and to organize the cultivation of soybean crops" dated March 14, 2017 PQ-2832, the Cabinet of Ministers of the Republic of Uzbekistan "Measures to further increase the volume of soybean cultivation in the Republic in



the decision on "events":

In recent years, special attention has been paid to the placement and cultivation of non-traditional agricultural crops in the Republic, and "Selekta", "Nafis", "Uzbek-6", "Baraka" varieties have been planted in Andijan region.

In this article, the results of specific heat capacity of "Selekta" soybean variety grown in Andijan region at constant pressure and constant volume at room temperature are determined by the experimental method.

Knowing the relative heat capacity of the product is of great importance in the quality drying and storage of granular agricultural products at a certain level of humidity.

It is known that the amount of heat  $\Delta Q$  when a body is heated or cooled and released is directly proportional to the change in temperature  $\Delta t$  and the mass of the body  $m$ :

$$\Delta Q = C \cdot m \cdot \Delta t$$

The proportionality coefficient  $C$  in this formula is called the specific heat capacity of the body, and its value depends on the type of material.

In this experiment, the coefficient of specific heat capacity is determined in the form of samples of granular lead, copper, and glass materials. For each point, a pile of lead, copper, glass is weighed on the OHAUS CENT-O-GRAM MODEL 311 balance (310 g) and heated to temperature  $t_1$ , the temperature of Nicr is measured with a temperature sensor (thermocouple), then the mass is determined by weighing it on the balance  $t_2$  temperature water is poured into the colorimeter. After good mixing, the temperature  $t_m$  is reached in the state of equilibrium in which the substance is mixed with water due to heat exchange. In this case, the amount of heat released from the sample, substance is  $\Delta Q_1$

$$\Delta Q_1 = c_1 m_1 (t_1 - t_m) \quad [1]$$

where  $m_1$  is the mass of the sample,  $s_1$  is the specific heat capacity of the sample, the amount of heat absorbed by water is equal to  $\Delta Q_2$ .



$$\Delta Q_2 = c_2 m_2 (t_m - t_2) \quad [2]$$

Here  $m_2$  is the mass of water.

In this case, the specific heat capacity coefficient  $s_2$  is exact, and the temperature  $t_2$  is assumed to be equal to the steam temperature  $t_2=100^\circ\text{C}$ .

The value of the unknown  $s_1$  is calculated by the following formula based on the values of the measured  $t_m$ ,  $t_1$ ,  $t_2$  and  $m_2$ :

$$C_1 = C_2 \cdot \frac{m_2(t_m - t_2)}{m_1(t_1 - t_m)} \quad [3]$$

The container of the calorimeter also absorbs some of the heat released from the sample. Then, the heat capacity of the calorimeter is equal to:

$$C_K = C_2 \cdot m_K \quad [4]$$

Thus, the water equivalent of the calorimeter vessel  $m_K$  is taken into account in the calculations. As a result, the amount of absorbed heat calculated by formula (2) is more accurate.

$\Delta Q_2 = c_2(m_2 + m_K)(t_m - t_2)$  and taking this into account formula (3) becomes:

$$C_1 = C_2 \cdot \frac{(m_2 + m_K)(t_m - t_2)}{m_1(t_1 - t_m)} \quad [5]$$

To perform the above calculations, we use the experimental device of Germany "LD Phusica Leafies" shown in Figure 1.



**Figure 1.** An experimental device for determining the specific heat capacity of solids. "LD Phusica Leafits" (Germany).

Before determining the specific heat capacity of the shade in an experiment, we determine the specific heat capacity of lead, copper, and glass samples, and



after matching the values given in the literature, we begin to determine the specific heat capacity of the shade. (See Tables 1, 2)



Before starting the experiment, we pour  $m=180\text{gr}$  of water into the colorimeter, we take the temperature of the sample equal to the temperature of the boiling water  $t_2=100^\circ\text{C}$

Table 1 shows the values needed to measure the specific heat capacity of sample substances.

Figure 2

Table 1.

Substance name	$m_2/\text{kg}$	$t_1$	$t_2$
Lead	77	$24,5^\circ\text{C}$	$25,4^\circ\text{C}$
Copper	69	$24,0^\circ\text{C}$	$26,2^\circ\text{C}$
Glass	19	$23,8^\circ\text{C}$	$24,9^\circ\text{C}$

In the calculation, we take the equivalent mass of the colorimeter as  $m_k=232$  and take the specific heat capacity of water as  $C_2=4.19\text{ kJ/k.kg}$ .

Table 2 shows the experimentally determined specific heat capacities of the samples and the values obtained from the literature for comparison.

Table 2.

Substance	$C, \text{kJ/k.kg}$	
	Experience	Results in the literature



Lead	0,133	0,1295
Copper	0,367	0,385
Glass	0,656	0,746
Soya	0,385	-----

### Summary

It can be seen from the table that the experimental results correspond to the results in the literature, which means that the experiments were conducted correctly.

The specific heat capacities of lead, copper, glass and soy, which were determined in the experiment, were found to be much smaller than those of water.

Knowing the experimentally determined relative heat capacity of soybeans, it is possible to achieve energy savings in the drying of soybeans in natural and technical devices.

### References:

1. Abbosbek Azizjon-o'g'li, A., & Nurillo Mo'ydinjon o'g, A. (2023). GORIZONTAL O 'QLI SHAMOL ENERGETIK QURILMALARINING ZAMONAVIY KONSTRUKSIYALARI.
2. M.O. Atajonov., S.J. Nimatov., A.I. Rahmatullayev. Formalization of the dynamics of the functioning of petrochemical complexes based on the theory of fuzzy sets and fuzzy logic. AIP Conference Proceedings, Published 2023-01-05. DOI: <https://doi.org/10.1063/5.0112403>.





3. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>
4. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
5. .ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
6. *Topvoldiyev, N. (2023). Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz.*
7. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY*, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>
8. Д.Эгамов, М. Нурёғдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. Научный журнал Инженерные решение №8(9) ноябрь 2019. г. Новосибирск.
9. Olimjonova, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. *Interpretation and Researches*, 1(8).



10. Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. The American Journal of Applied sciences.
11. Topvoldiyev, N. (2022). PHYSICAL AND TECHNICAL FUNDAMENTALS OF PHOTOELECTRIC SOLAR PANELS ENERGY. *Theoretical & Applied Science*.
12. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz*.
13. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
14. NM Aripov, OA Qosimov MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...



**ONE , TWO AND A LOT LIGHT REPETITION AGAINST TO LAYERS  
HAVE THE SUN ELEMENTS MODELING**

*Alijonov Abbosbek Azizjon o'g'li*  
*Andijan machine building institute*

**ANNOTATION**

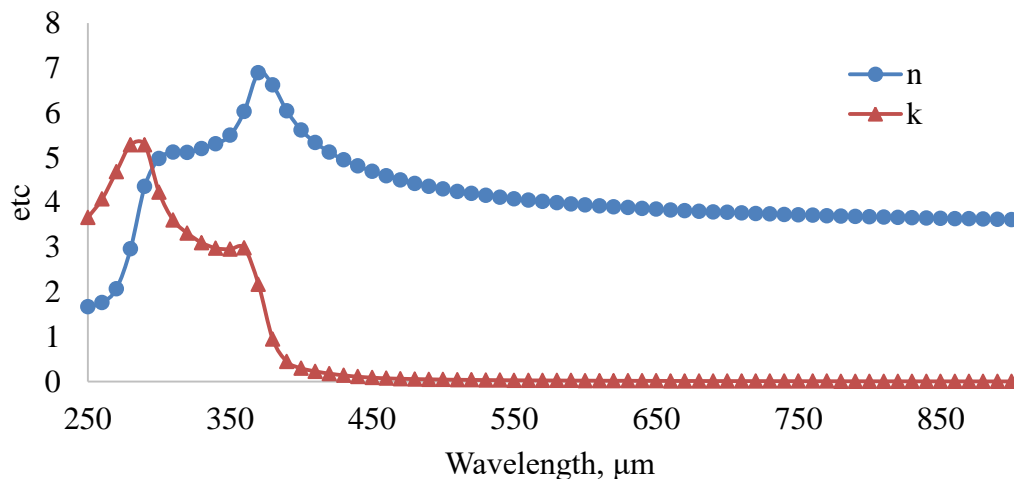
The sun elements optical feature determination for intended Adopted PVlight House 's Wafer Ray Tracer module and silicon and GaAs based the sun of the elements optical features was determined . Optimal thicknesses for  $TiO_2$  ,  $SiN_x$  ,  $Al_2O_3$  ,  $SiO_2$  ,  $MgF_2$  suitable 70 nm, 80 nm, 100 nm, 110 nm and 120 nm respectively and this in thicknesses that's it materials with covered silicon justified the sun of the element photogeneration coefficients suitable 76.43 % , 77.87% , 76.96% , 73.2% and 70.27% respectively equality was determined .

**Key words :** \_ The sun elements , exponential , silicon , Urbah theory ,  $TiO_2$  ,  $SiN_x$  ,  $Al_2O_3$  ,  $SiO_2$  ,  $MgF_2$  , single crystal silicon , light Back to coefficient , Light to return against layers , light break down indicator

The sun elements on the surface back going light the amount reduce for a lot layered optical in terms of acceptable has been systems harvest will be done . of silicon complex light break indicator light wave to the length dependence graph shown in figure 1 . So of silicon maximum light break down indicator is 6.891 ha equal to it is light wave length to a value of 370 nm right will come . light break down of the indicator real part wave 1.665 to 6.891 in the range of 250-370 nm increased , in the range of 370-900 nm while exponential decreases . Also this \_ in between average light break down the indicator is 3.9 ha equal to Complex light break down of the indicator abstract part while of silicon swallowing coefficient set gives , just like that light break down indicator Back to coefficient set like



giving Air average light break down indicator together equal to that it was for the air and silicon on the surface light about 40% of its energy quantity back goes \_ of materials swallow coefficient Urbah theory or in the experiment determined complex light break down of the indicator abstract part through is determined . of the material swallowing coefficient complex light break down of the indicator abstract part right light wave to the length while reverse proportional is the size .

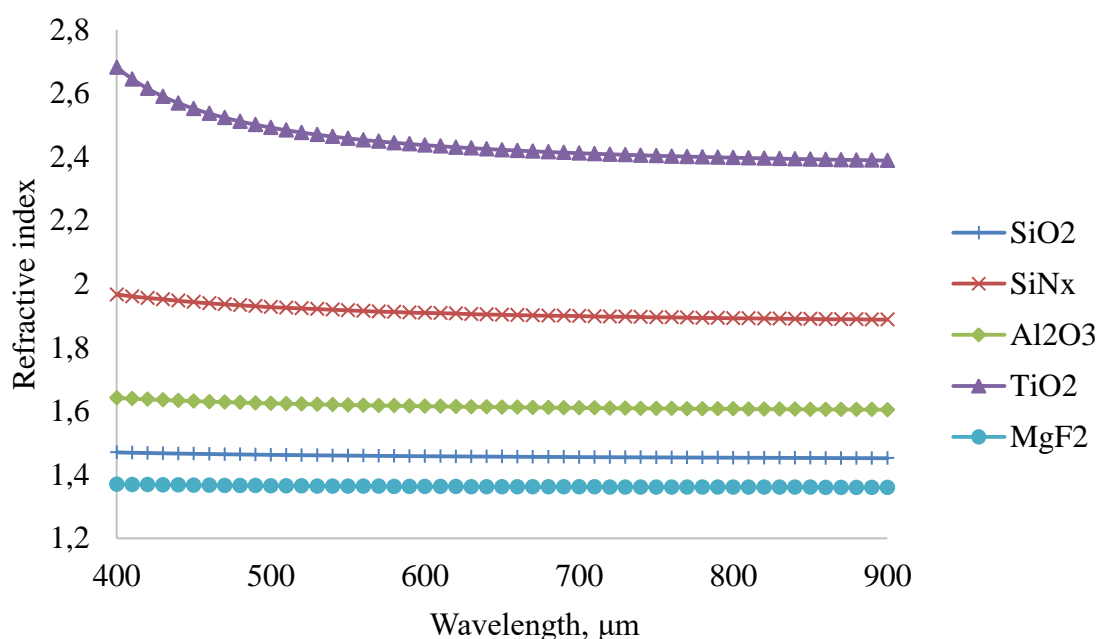


**Picture 1.** Single crystal of silicon complex light break down indicator light wave to the length dependence

Above in chapter basically silicon justified the sun of the elements to the surface one layer as coated  $\text{TiO}_2$ ,  $\text{SiN}_x$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{SiO}_2$ ,  $\text{MgF}_2$  materials the sun of the element optical features effect was studied . Today's in the day one layered no , two and three layered light to return against layers there is the sun elements work coming out [1]. In this main The idea is gradient light break down indicator harvest to do Theoretical in terms of thinking if the air light break down indicator with of silicon light break down indicator The gradient is continuous in the interval light break down to the indicator have from the material if we use the sun of the element light Back to coefficient to 0 % reduce can \_ Of course, such a



gradient light is ideal break down to the indicator has material \_ not , but so the system one how many of materials to make can \_ That's why for , silicon justified the sun of the element surface suddenly more than light to return against layers with is being covered . In this main attention of materials light break down to the indicator is directed . That's why for in picture 2  $\text{TiO}_2$  ,  $\text{SiN}_x$  ,  $\text{Al}_2\text{O}_3$  ,  $\text{SiO}_2$  ,  $\text{MgF}_2$  of light break down indicators light wave to the length dependence described \_ Theirs all of them in the experiment determined .

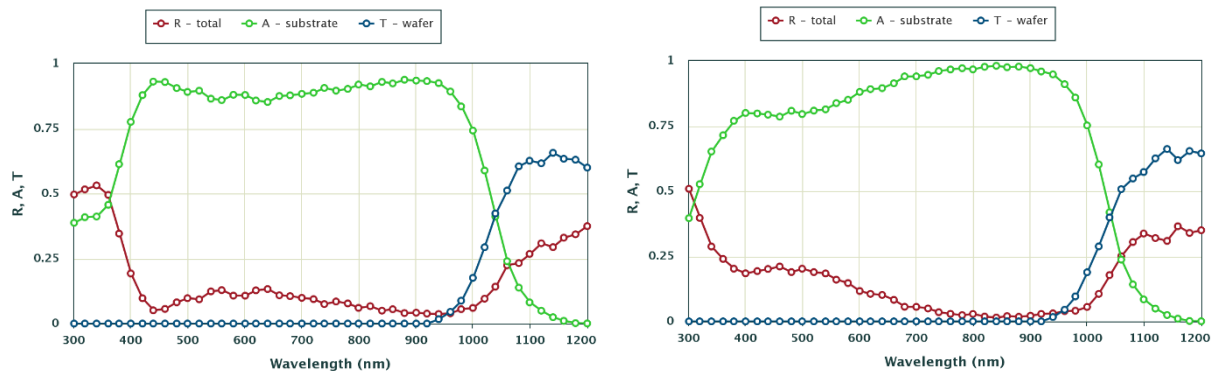


**Picture 2.** Single crystal of silicon complex light break down indicator light wave to the length dependence

Above from the graph the most high light break down to the indicator material with  $\text{TiO}_2$  and the most minimal light break down to the indicator and the material has  $\text{MgF}_2$  that let's see can \_ This graph through given in figure 1 photogeneration coefficient light to return against layer to the thickness dependence to prove can \_ That is light to return against optimal layer thickness of the material light break down to the indicator reverse is proportional . A lot layered light to return against layers harvest in doing light break down indicator increased to go in order placing need \_ That's why for light break down indicator



sharp difference  $\text{MgF}_2$  did and  $\text{TiO}_2$  from made  $\text{MgF}_2/\text{TiO}_2/\text{n-Si/p-Si}$  (a) and  $\text{SiO}_2/\text{SiN}_x/\text{n-Si/p-Si}$  (b) solar of the elements swallowing transition and Back to coefficients light wave to the length dependence shown in figure 3 .



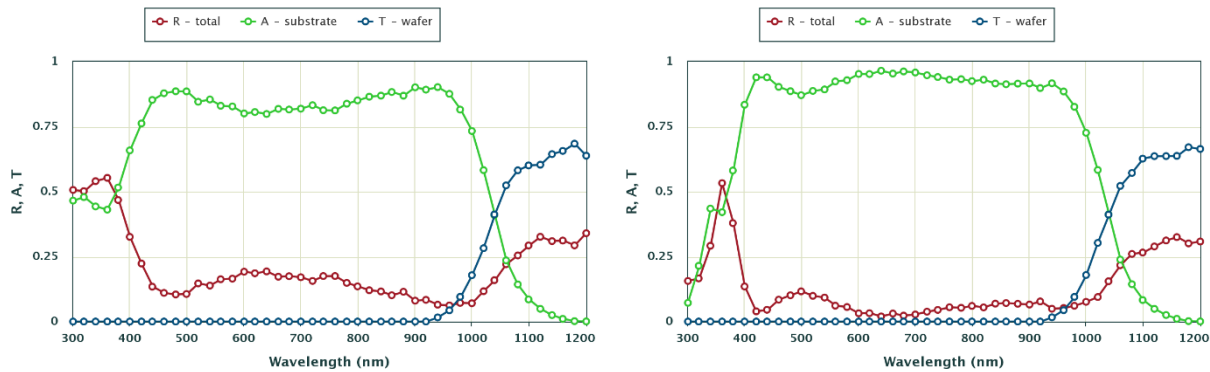
*ab*

**Picture 3 .**  $\text{MgF}_2/\text{TiO}_2/\text{n-Si/p-Si}$  (a) and  $\text{SiO}_2/\text{SiN}_x/\text{n-Si/p-Si}$  (b) structural the sun of the element absorption , transition and Back to coefficients light wave to the length dependence .  $\text{MgF}_2$  ,  $\text{TiO}_2$  ,  $\text{SiO}_2$  ,  $\text{SiN}_x$  and Si 's thickness suitable 120 nm, 70 nm, 110 nm, 80 nm and 200  $\mu\text{m}$  respectively to equal to

$\text{MgF}_2/\text{TiO}_2/\text{n-Si/p-Si}$  structure swallowing spectrum one layered light to return against to layer have silicon justified the sun from element sharp difference did \_ Swallowing coefficient wave in the range of 450-950 nm of length almost one different high the value note did \_ But this in between swallowing coefficient one little decreased increase observed and wave at a value of 630 nm relatively lower swallowing to the coefficient achieved \_  $\text{SiO}_2/\text{SiN}_x/\text{n-Si/p-Si}$  solar of the element swallowing coefficient while wave in the range of 360-1000 nm of length good to the result to melt and light wave at a value of 820 nm maximum absorption of 98% to the coefficient achieved [2]. light to return against of layers thicknesses from this previous in chapter determined optical to the optimal values of layers equal to by doing is being taken . Figure 4 shows the structure of  $\text{MgF}_2/\text{Al}_2\text{O}_3/\text{n-Si/p-Si}$  (a) and  $\text{MgF}_2/\text{SiN}_x/\text{TiO}_2/\text{n-Si/p-Si}$  (b) the sun of the element absorption , transition and Back to coefficients light wave to the length



dependence described \_



ab

**Picture 4 .**  $MgF_2/Al_2O_3/n-Si/p-Si$  (a) and  $MgF_2/SiN_x/TiO_2/n-Si/p-Si$  (b) structural the sun of the element absorption , transition and Back to coefficients light wave to the length dependence .  $MgF_2$  ,  $Al_2O_3$  and Si 's thickness suitable 120 nm, 100 nm and 200  $\mu m$  respectively to equal to

$MgF_2$  from organize found  $MgF_2/Al_2O_3/n-Si/p-Si$  and  $MgF_2/TiO_2/n-Si/p-Si$  solar of the elements light swallow spectrum almost one different only swallowing in the coefficient difference is doing So , two layered light to return against to layer have the sun in the element his swallowing spectrum quality top optical layer swallowing of the coefficient size while bottom optical layer set will give it is  $TiO_2$  \_ of light break down indicator  $Al_2O_3$  of light break down from the indicator according to of silicon light break down to the indicator closer therefore for  $MgF_2/TiO_2/n-Si/p-Si$  solar of the element swallowing coefficient  $MgF_2/Al_2O_3/n-Si/p-Si$  sun from that of the element according to higher it has been . light break down indicators increased to go in the way placed  $MgF_2$  ,  $SiN_x$  ,  $TiO_2$  of materials organize found three layered silicon basic  $MgF_2/SiN_x/TiO_2/n-Si/p-Si$  solar of the element swallowing spectrum light wave in the range of 400-930 nm of length an average of 92% organize did \_ So , light to return against layers the number gain through swallowing coefficient known wave lengths between maximum in value Immutable holding stand up can \_ For example,  $TiO_2$



covered silicon justified the sun 400-600 nm wave in the element length between harvest has been swallowing coefficient sharp decrease his  $MgF_2$  on it and  $SiN_x$  to cover through loss can \_ And in Table 3 light break down of the indicator to the value of according to harvest to do possible has been two and three layered light break down to the indicator have the sun of the elements photogeneration coefficient given .

**Table 1.** Dielectrics different combination using harvest done a lot light to return against to layer have the sun of the elements photogeneration coefficient

Structures	Photogeneration coefficient
$SiN_x/TiO_2/n-Si/p-Si$	75.41
$Al_2O_3/TiO_2/n-Si/p-Si$	78.57
$SiO_2/TiO_2/n-Si/p-Si$	81.66
$MgF_2/TiO_2/n-Si/p-Si$	81.06
$Al_2O_3/SiN_x/n-Si/p-Si$	73.42
$SiO_2/SiN_x/n-Si/p-Si$	77.69
$MgF_2/SiN_x/n-Si/p-Si$	76.31
$MgF_2/Al_2O_3/n-Si/p-Si$	72.17
$SiO_2/Al_2O_3/n-Si/p-Si$	70.74
$MgF_2/SiO_2/n-Si/p-Si$	65.68
$MgF_2/SiN_x/TiO_2/n-Si/p-Si$	78.63

In the table given to values according to the most good to the system have the sun element is  $SiO_2/TiO_2/n-Si/p-Si$  and his photogeneration the coefficient is 81.66% equality was determined . Most bad the result and  $MgF_2/SiO_2/n-Si/p-Si$  solar in the element note done . Because ,  $MgF_2$  and  $SiO_2$  of light break down indicator of air light break down of the indicator to the value of near \_ Good optical the system harvest to do for above optical of the layer light break down indicator of air light break down to the index , below optical layer while of silicon





light break down to the indicator near to be need \_

#### REFERENCES

15. Abbosbek Azizjon-o'g'li, A., & Nurillo Mo'ydinjon o'g, A. (2023). GORIZONTAL O 'QLI SHAMOL ENERGETIK QURILMALARINING ZAMONAVIY KONSTRUKSIYALARI.
16. M.O. Atajonov., S.J. Nimatov., A.I. Rahmatullayev. Formalization of the dynamics of the functioning of petrochemical complexes based on the theory of fuzzy sets and fuzzy logic. AIP Conference Proceedings, Published 2023-01-05. DOI: <https://doi.org/10.1063/5.0112403>.
17. Sharobiddinov , S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от <https://interpretationandresearches.uz/index.php/iar/article/view/538>
18. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
19. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
20. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz*.
21. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Xakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF*



APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893.

<https://doi.org/10.5281/zenodo.7969053>

22. Д.Эгамов, М. Нурёғдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. Научный журнал Инженерные решение №8(9) ноябрь 2019. г. Новосибирск.
- 23.Olimjonova, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. Interpretation and Researches, 1(8).
- 24.Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. The American Journal of Applied sciences.
- 25.Topvoldiyev, N. (2022). PHYSICAL AND TECHNICAL FUNDAMENTALS OF PHOTOELECTRIC SOLAR PANELS ENERGY. *Theoretical & Applied Science*.
- 26.Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz*.
- 27.ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)
- 28.NM Aripov, OA Qosimov MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...



## CONTROLS IN THE IMPLEMENTATION OF PUBLIC PROCUREMENT

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**Abstract:** The article describes the need to control public procurement and the mechanism of its implementation.

**Key words:** control of public procurement, authorities in the field of procurement, regulatory bodies

The main goals of state regulation of the public procurement sector are to achieve the strategic goals and objectives of the state; ensuring the needs of state customers for goods (works, services); Implementation of the Investment Program of the Republic of Uzbekistan and other state programs; performing functions of the state to solve social tasks; consists of creating a favorable environment for public procurement entities to provide public services, as well as fight against corruption and other violations of the law in the implementation of public procurement.

In the implementation of public procurement, socio-economic policy priorities, including the creation of high-tech and innovative productions, and the maintenance of a favorable environmental situation, are taken into account.

If at least three domestic producers, along with foreign suppliers, participate in the state procurement of goods (works, services), unless otherwise stipulated in the international agreements of the Republic of Uzbekistan, according to the decrees and decisions of the President of the Republic of Uzbekistan domestic



producers may be given incentives and preferences used in the evaluation of bids.

State procurement of goods (works, services) necessary to meet the needs of the Republic of Uzbekistan can be carried out in cooperation with foreign countries. The procedure for the implementation of such state procurement is determined by the international agreement of the Republic of Uzbekistan.

The Cabinet of Ministers of the Republic of Uzbekistan ensures the formation and implementation of state policy in the field of public procurement. In addition, in the field of public procurement, the budget system takes measures for the rational use of budget funds, improvement of the types of procurement procedures and expansion of their application, as well as ensuring wide participation of business entities.

In addition, the Cabinet of Ministers of the Republic of Uzbekistan coordinates work on control over the activities of state customers in the field of public procurement; determines the methods and criteria for evaluating and comparing bids of participants in procurement procedures, as well as the procedure for organizing their conduct; determines the procedure for the selection of the best offers by the participants of procurement procedures and the submission of offers in electronic form for participation in the tender; approves the composition of the commission for considering complaints in the field of public procurement.

The Ministry of Finance of the Republic of Uzbekistan is the competent body in the field of public procurement. Ministry of Finance of the Republic of Uzbekistan:

- carries out state regulation and state policy in the field of public procurement;
- takes measures to increase the efficiency and openness of the implementation and development of programs for the development of the system of organizing and conducting public procurement, including the electronic



system;

- defines the operators of the public procurement electronic system and the procedure for their activities related to the organization and implementation of public procurement, as well as the procedure for the operation of the special information portal;

- specifies requirements for the electronic system of public procurement;

- develops the procedure for applying the method of evaluation of the most economically advantageous offer (non-price evaluation criteria);

- determines the order and volume of posting, disclosure and use of information on public procurement, as well as additional requirements for publication depending on the goods (work, service) and the method of public procurement;

- approves the model forms of announcements on conducting procurement procedures, procurement documents;

- Develops and approves the procedure for forming a single register of dishonest performers;

- Determines the procedure for maintaining a single register of contracts;

- provides monitoring and control over the implementation of regulatory legal documents in the field of public procurement;

- requests information from public procurement subjects, collects, analyzes them and prepares reports;

- develops proposals for the introduction of a certification system for procurement and anti-corruption standards in the field of public procurement and submits them to the Cabinet of Ministers of the Republic of Uzbekistan for consideration.

Monitoring in the field of public procurement is a monitoring system that is implemented on a permanent basis through the means of collecting, summarizing, systematizing and evaluating information about the conduct of public



procurement to ensure compliance with the legislation on public procurement, the implementation of the goals, principles and limitations of public procurement established by the Law. will consist of

Control in the field of public procurement consists of a system of measures aimed at preventing, identifying and putting an end to violations of legal requirements in this field.

Inspections carried out by comparison and analysis of statistical and other information in accordance with the procedure established by law are the main form of control over the compliance of state bodies with the laws on public procurement. Monitoring and control in the field of public procurement is carried out by the relevant competent state bodies.

During the organization and implementation of public procurement, it is not allowed to carry out inspections that are not provided for by law and to require reporting forms.

State control over the correct application of the law and other regulatory legal documents in the field of public procurement is carried out by the following within the scope of their powers:

- Accounts Chamber of the Republic of Uzbekistan;
- General Prosecutor's Office of the Republic of Uzbekistan;
- Anti-Corruption Agency of the Republic of Uzbekistan;
- Ministry of Finance of the Republic of Uzbekistan;
- Committee to fight against monopoly of the Republic of Uzbekistan.

The Accounts Chamber of the Republic of Uzbekistan conducts an audit of public purchases made by state customers and presents the audit results in the annual report to the Legislative Chamber of the Oliy Majlis of the Republic of Uzbekistan, as well as places them on open information sources.

State control over the correct application of the Law "On State Procurement" and other legislative documents in the field of state procurement is



carried out in accordance with the legislation by other competent state bodies within their powers.

In our country, the legal basis for public control over procurement procedures has been created. Public control over procurement procedures is carried out in order to support the development and improvement of public procurement, to prevent and identify violations of the legislative requirements on public procurement, and to inform state customers and authorized state bodies about detected violations.

Public control over procurement procedures is carried out by implementing the principles of openness and transparency.

Citizens of the Republic of Uzbekistan, self-government bodies of citizens, as well as non-governmental non-profit organizations and mass media registered in accordance with the procedure established by law, have the right to exercise public control over compliance with the legislation on state procurement.

Citizens of the Republic of Uzbekistan exercising public control, self-government bodies of citizens, as well as non-governmental non-profit organizations and mass media registered in accordance with the law: to prepare proposals for improving the legislation on public procurement ; to send requests to state customers to provide information on the implementation of procurement procedures and the progress of contract execution; to carry out independent monitoring of procurement procedures and evaluation of the efficiency of public procurement, including the assessment of their compliance with the requirements of the Law "On Public Procurement"; they have the right to apply to state bodies with the initiative of carrying out inspection activities.

Also, public representatives have the authority to apply to law enforcement agencies or to apply to the court in accordance with the law in cases where violations are detected in the actions (inaction) of the state customer, operator of the state electronic procurement system, authorized body, procurement



commissions and their members.

### References

1. O‘zbekiston Respublikasining 22.04.2021 yildagi “Davlat xaridlari to‘g‘risida”gi O‘RQ-684-son Qonuni.
2. Vazirlar Mahkamasining 2022 yil 20 maydagi 276-son qarori bilan tasdiqlangan “Davlat xaridlarini amalga oshirish bilan bog‘liq tartib-taomillarini tashkil etish va o‘tkazish tartibi to‘g‘risida”gi Nizom.
3. O‘roqov U.Yu. Davlat xaridi. O‘quv qo‘llanma.T.:«Nihol print» OK, 2022.200 b.
4. У.Ўроқов, Э.Шодмонов, Д.Бобобекова. Давлат харидларини бошқариш. Т.-2022 й.
5. У.Ўроқов. Давлат харидлари тизимида электрон харидлар ҳажмини ошириш масалалари. “Замонавий молиянинг миллий ва халқаро долзарб масалалари”. Халқаро илмий-амалий конференция материаллари тўплами. ТМИ, 2021 йил 20 май
6. A.V. Vaxabov, Sh. A. Tashmatov, N.X. Xaydarov, A.V.Vaxabov. Moliyaviy savodxonlik asoslari: o‘quv qo‘llanma/-Toshkent- 2013.
7. Т.С.Маликов, Н.Хайдаров. Финансы: государственные финансы. Учебное пособие. Экономика и финансы. Ташкент. 2009.
8. Исмаатов Р. О., Дадамирзаев М. Х., Маллабаев О. Т. An increase in efficiency of marketing activity in food market grown in agriculture of uzbekistan //Молодой ученый. – 2014. – №. 4. – С. 522-523.
9. SOLIEV I. I., DADAMIRZAEV M. H. Corporate governance as the way of investment attraction //Современные научные исследования и разработки. – 2017. – №. 4. – С. 11-13.





10. Нажмиддинова Ё., Дадамирзаев М. ГЛОБАЛЬНЫЕ ОРИЕНТИРЫ В ОБРАЗОВАНИИ //Теория и практика современной науки. – 2016. – №. 3 (9). – С. 329-333.



## CHILDREN WITH DEVIANT BEHAVIOR

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**Annotation:** This article provides support for the mental states of children with deviant behavior through pedagogical methods and methods, as well as specific causes of deviant behavior, and the issue of pedagogical and mental prevention.

**Key words:** behavior, deviant behavior, addiction, family, crime, bureaucracy, prevention, children with deviant behavior.

### INTRODUCTION

In society, the activities, actions and behaviors of people are governed by social norms. Social norms are an integral part of society management, and social behavior is a set of rules that adjust the behavior of an individual or a group to a specific social environment. The problems of the sociology of deviant behavior, which studies cases of deviation from the social norms established in society, in Uzbekistan began to be studied with the honor of independence. It is known that there is no single approach to the theory of deviant behavior. Along with various sociological, pedagogical, psychological and other approaches, the biological approach is also improving. Deviant behavior is especially characteristic of minors. During this period, the personal characteristics of minors are formed. The child's view of the world is embodied in personal thoughts. However, the formation and development of the personality is a complex process and creates



unique difficulties. Children with deviant behavior (deviant behavior) every what actions they perform without thinking about the end. They cannot control themselves. There are many such people in society.

#### DISCUSSION AND RESULTS

The following are some of the more common forms of deviant behavior:

1. Crime;
2. Drunkenness;
3. Drug addiction;
4. Prostitution;

such types serve to pollute the life of the society.

**Crime.** The negative attitude of some people towards the laws and norms established in a certain country is a criminal activity. The person who has done such things is considered a criminal. At the heart of this is human interest, also at risk.

**Alcoholism** (lot alcoholismus), that is, drunkenness, also causes many problems in the life of society. In this case, a person suffers from a chronic mental progressive disease, that is, it is characterized by addiction to alcohol and mental and physical dependence on it.

**Addiction.** drug addiction, drug addiction - a disease state caused by temporary or chronic consumption of natural or synthetic toxic substances (certain drugs).

**Prostitution** is sex for money or other benefits. Adultery occurs mainly among women and is divided into two types:

1. Cohabitation - living together without marriage.
2. Prostitution - selling one's body for money.

Although the problem of deviant behavior was first specifically studied by E. Durkheim within the scope of sociology, this problem has been formed since ancient times. E. Durkheim explains the law, non-recognition of laws and



non-compliance with the term "Anomania" which he introduced to the science.

In a more in-depth analysis of the problem of social norms and deviation from them: Mantesque, Rousseau, Beccorio, Gelvetsey, Diderot, Holbax, Morelli and Fourier are incomparable. It is possible to indicate 3 factors that are important in the emergence and formation and development of deviant situations in individuals:

1. Personal characteristics;
2. Problem situations;
3. Institutions of social control;

It is these factors that determine a person's place in society and how they function. The occurrence of social deviations depends on a person's determination or lack of determination, habits of obeying or disobeying rules, how much he is given to external influences, his will and other factors. such psychophysiological conditions also have a great effect. In adolescence, there is a constant increase in the manifestation of deviance. At this age, regardless of whether a teenager is a girl or a boy, they are very impressionable, some of them become very introverted. This is a period of certain difficulties. In the family, the environment first of all affects the teenager. For parents, this period is also full of trials. In addition, the pedagogue and psychologists working in the educational institution have a heavy burden. In this, it is appropriate for the pedagogue-psychologist to use various methods and methods to demonstrate the condition of the teenager. One technology is their rehabilitation. Rehabilitation can be considered as a system of measures aimed at solving issues ranging from a wide range of tasks and simple skills to full integration of a person into society. Rehabilitation facilities include:

These are:

1. Socially and pedagogically neglected children.
2. Juvenile offenders, orphans, teenagers with deviant behavior.



Currently, orphanhood in society can be distinguished by two concepts:

1. Orphan (absence of no one), social orphan (lack of role of parents or relatives in the life of society).

2. Children with impaired psychosomatic and neuro-psychological health and functional deviations:

- nervous - mental illnesses;
- chronic somatic diseases;
- mental retardation;
- disability;
- functional disorders.

Children of this category are primarily in need of medical and mental rehabilitation. Their subjects are doctors and psychologists. They can work together and solve the problem from all sides. In addition, calling pedagogues for help and producing complex programs will meet the goal. When creating rehabilitation programs for working with adolescents with deviant behavior, the following are taken into account:

1. Relying on and taking into account the positive aspects of a minor. A social pedagogue has no right to condemn a child with deviant behavior or reveal his faults to his face. He should only look for his good feelings.

2. Formation of life aspirations in a child with deviant behavior. Usually, after chronic failures in school or in life, teenagers feel hopeless. They lose self-confidence. After this situation, the adolescent's desire for professional self-realization weakens. The attention of the social pedagogue is focused on understanding his future profession. Of course, with the help of a psychologist.

3. Involvement in social activities important for children with deviant behavior is one of the complex tasks. Because it is very difficult to involve such a child in any activity. It is natural for them to resist any work at first. such an action requires great effort from a pedagogue or psychologist.



4. Treating relationships with teenagers with respect. Due to the lack of good behavior in maladaptive children, any educational influence is strongly resisted by the minor. Working with such a child requires patience from the social pedagogue.

The pedagogue develops skills and adaptability in a child with deviant behavior through an all-round approach. Through this way, positive characteristics begin to form in the teenager. The social pedagogue should work not only with the teenager, but also with his family. Family environment, the relationship of family members to each other are the factors that have the strongest influence on a teenager. Deviant behavior is more often observed in adolescents without a father or mother. Such children are orphans. They have less love for life than children with parents. Because the worries of life and not being able to see a loved one creates the basis for the formation of deviant behavior. In order for the teenager not to fall into such a path, various preventive measures should be carried out in the school. Social and pedagogical rehabilitation centers are responsible for preventing such situations.

#### CONCLUSION

Social pedagogical rehabilitation in educational institutions is aimed at preventing family and school repressions against neglected children and adolescents with various changes in their character, solving conflict situations and problems, as well as restoring them as subjects of educational activities.

#### USED LITERATURE

1. Giyohvandlik profilaktikasi bo'yicha uslubiy qo'llanma-T: Abu Ali ibn Sino nomidagi tibbiyot nashriyoti, 2003y.

2. M.U. Xamidova. Maxsus Pedagogika, o'quv qo'llanma-Toshkent "NIF MISH". 2020.



3.Nodira Egamberdiyeva: “Ijtimoiy Pedagogika”Alisher Navoiy nomidagi O‘zbekiston Milliy kutubxonasi nashriyoti Toshkent-2009.

4.To‘laganova G.Q -Tarbiyasi qiyin o‘smirlar.T: “Univrsitet”nashriyoti,2005.



## EVALUATION OF THE EFFICIENCY OF MEASURES AGAINST THE EPIDEMIC IN TREATMENT AND PREVENTION INSTITUTIONS

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**Abstract:** The article analyzed the issue of evaluating the effectiveness of anti-epidemic measures in treatment and prevention institutions.

**Key words:** General and private epidemiology, medicine, epidemiology, prevention, virus.

### INTRODUCTION

Epidemiology (epidemic and ...ology) is a branch of medicine. He studies the causes and spread of infectious diseases, as well as develops measures to combat and prevent them. Epidemiology is closely related to biology, microbiology, virology, genetics, biochemistry, physics and other sciences. General and private epidemiology are distinguished.

General epidemiology studies the evolutionary basis of the classification of infectious diseases, the epidemic process, categories and laws of epidemiology; private epidemiology studies the unique history, causative agent, epidemiology, source of infection, ways and means of transmission, methods of combating and prevention of each infectious disease.

The history of epidemiology goes back to the distant past. Avesta, the holy book of Zoroastrianism, contains religious and philosophical issues, as well as ideas related to medicine, in particular, the spread of infectious diseases and their prevention.

Attempts to scientifically justify infectious diseases were expressed in the





works of Hippocrates, Razi, ibn Sina and others in the Middle Ages. Abu Ali ibn Sina, in his book "The Laws of Medicine", expressed his thoughts about the main causes of diseases, their triggers, symptoms of diseases and their prevention. It contains information about the invisible causes of several dangerous infectious diseases (cholera, plague, smallpox, tuberculosis, etc.) and their mechanism, as well as the fact that external factors such as polluted water and air play an important role in the occurrence of infectious diseases. described whooping cough. In his works, he was one of the first to think about vaccinating healthy people with liquid from the smallpox (pustula) blisters of patients in order to prevent smallpox. By the 17th century, the English physician E. D. Jenner proposed a smallpox vaccine to treat smallpox. The discoveries of the French scientist L. Pasteur and the German scientist R. Aoch, who proved the role of microbes in the origin of infectious diseases, laid a scientific foundation for the doctrine of immunity. I.I. The researches of Mechnikov and his students, and the work of D. I. Ivanovsky, who first described filterable viruses, became of great importance in epidemiology. As a result of the further development of medicine and health care, significant progress was made in the science and practice of epidemiology. In many countries, including Uzbekistan, a sanitary epidemiology committee was established under the leadership of leading epidemiologists. The development of epidemiology in Uzbekistan is connected with the establishment of the Institute of Epidemiology, Microbiology and Infectious Diseases, the success of major scientists such as L. M. Isayev, P. F. Borovsky, T. Kh. Also, Uzbek scientists A.Z.Zohidov, S.N.Bobojonov, I.Q.Musaboyev and others made a significant contribution to the development of sanitation and epidemiology with their work in the field of epidemiology. In the republic, studies are being conducted on the study of the epidemiology of infectious diseases and the development of measures to prevent them, as well as on the issues of reducing infectious diseases. Currently, a new direction has emerged that studies the



emergence, spread and disappearance of epidemic diseases - the epidemiology of non-communicable diseases. Its main task is to develop prevention methods based on the analysis of data on the etiology and pathogenesis of such diseases and to reduce the number of deaths caused by malignant tumors and other chronic non-infectious diseases among the population.

Methods of measures to prevent infectious diseases and fight against epidemics.

Anti-epidemic measures are a set of measures designed based on the development of modern science and aimed at preventing infectious diseases. Measures aimed at preventing infectious diseases are called preventive measures, and measures aimed at eliminating the epidemic center are called anti-epidemic measures. Such a definition is relative, and in fact, all group activities are aimed at preventing diseases.

Preventive measures require not only the prevention of infectious diseases in the future, but also the reduction of diseases. The measures used in the epicenter of the epidemic include preventive measures, as it is aimed at preventing new diseases in the place where the infectious disease has spread. Various authors use a list of measures against the epidemic, based on its composition, the direction of each of the measures used, and the divided groups. Due to the fact that various anti-epidemic measures are sometimes recommended as part of the epidemic control service, epidemiological diagnostics or epidemic control management are also included in the list of anti-epidemic measures. Thus, the diagnostic directions aimed at the epidemic are as follows: sanitary-epidemiological observations, epidemiological analysis (retrospective and operational), epidemiological investigation conducted at the epicenter of the epidemic, their management, organization of fighting against the epidemic, planning of measures, sanitary and determining the quality of work of epidemiology institutions and specialists. The content and group of anti-epidemic measures are of primary importance. Anti-



epidemic measures should be aimed at three factors necessary for the development of the epidemic process.

List of measures used against the epidemic.

The direction of the group of activities is the source of the disease:

a) diagnosis, isolation, treatment;

b) sanitary-veterinary measures and rodent control. The mechanism of transmission is sanitary and hygienic measures.

Disinfection, sterilization, and disinfection, susceptibility of the organism to diseases, vaccination, immediate vaccination, general laboratory tests, sanitary and educational work, measures to combat certain diseases can be focused on any factor of the epidemic process. and the elimination of any of these factors prevents the further spread of the infectious disease, that is, it leads to the termination of the epidemic center. Measures related to these three factors are as follows:

1) measures aimed at the source of infectious disease agents;

2) measures applied to the transmission mechanism of infectious disease agents;

3) reducing the body's susceptibility to infectious diseases (planned and urgent vaccination).

The measures used in diseases related to the first factor, i.e. diseases specific to the human organism (anthroponosis) and animal organism (zoonosis), which is the source of the infectious disease, are different. The measures used in anthroponosis consist of methods of identifying diseases, isolation of the patient, treatment, and measures such as limiting contact with the surrounding people. In zoonotic diseases, sanitary-veterinary and rodent control (deratization) measures are used.

Indicators for assessing the quality and effectiveness of anti-epidemic measures. Actions aimed at the source of the disease.



The difference between the initial and primary diagnosis of events and symptoms. Isolation and hospitalization, percentage of isolated (hospitalized) patients compared to total patients, distribution of patients by terms of isolation (hospitalization). Completeness of quarantine and observation places and people. Violation or non-violation of quarantine and observation rules, reduction of the number of rodents in places where deratization was carried out.

Veterinary and sanitary measures The completeness of the implementation of official measures arising from veterinary and sanitary conditions. Measures to cut off the mechanism of transmission of infectious disease agents are carried out based on sanitary and hygienic rules. It is known that they are of great preventive importance. Disinfection, sterilization, and disinsection (measures against insects that spread infectious diseases) are also measures aimed at interrupting the transmission mechanism, and their effectiveness depends on many factors. Measures aimed at the third stage of the epidemic process are preventive vaccination (a separate topic will be devoted to this). The "parasite-causing" and "cannibal" populations that make up the parasitic system are biologically different. This, in turn, causes clinically different diseases and at the same time has a certain effect on the manifestation of the epidemic process. Measures applied to the mechanism of transmission of the disease.

The efficiency indicator of the measures is the completeness of the implementation of the measures indicated in the official documents arising from the sanitary and epidemiological situation of sanitary and hygienic measures directed against the epidemic. The percentage of places where disinfection is carried out compared to the places where it should be carried out. Transfer period (in the case of an infectious disease). The share of the places where disinsection is carried out compared to the places where it is necessary to carry it out. The number of insects in this place before and after disinsection. Activities aimed at the body's susceptibility to diseases. Vaccination and immediate vaccination. The



proportion of vaccinated among the population.

Immunological tests among the vaccinated. The time elapsed from the time of exposure to vaccination. The number of vaccinated among those who should be vaccinated. Activities in the general direction: laboratory tests, full inspection of people and places where laboratory tests should be conducted, quality of tests and sanitary education work:

The number of lectures, conversations, documents, visual aids and their compliance with modern sanitary-epidemiological requirements. The second group of factors includes various external environmental conditions, which can increase or decrease the parasitic nature of pathogens, and at the same time, the epidemic process. affects how it manifests. These factors include the natural and social environment, including the living and working conditions of the population, as well as effective anti-epidemic measures. It is necessary to make a true assessment of the role of each natural and social factor in the origin and spread of infectious diseases and to recommend anti-epidemic measures that should be used in specific epidemic conditions based on the factors affecting the internal development of the epidemic process. Such evaluation is based on the results of epidemiological diagnostics. The third sign is used to determine the main direction of the implemented measures, which is their effective result and simplicity in practical application. It should be assumed that the use of the first and second signs indicated above is based on a highly effective result. It is appropriate to apply anti-epidemic measures to all stages of the epidemic process. Several participants participate in the application of some measures. It is necessary to describe five different tasks of epidemic fighters: organizational, diagnostic, methodological, executive and control. In the implementation of some measures, several participants participate in the performance of different tasks. The goal of the modern system of combating epidemics is to drastically reduce infectious diseases among the population and to completely eliminate some of



them. The system of combating the epidemic is based on the measures applied based on the result of the disease detection, scientific manuals aimed at preventing and combating infectious diseases. The public service of the anti-epidemic system should be strengthened on the basis of the law.

According to the health laws of the Republic, the health of the population is ensured through the socio-economic system and medical and sanitary measures. This document also describes the responsibilities of all state agencies, enterprises, institutions and organizations in solving issues related to public health. In accordance with the measures to combat the epidemic, the executive committee of the Council of People's Deputies, hokims, heads of enterprises, institutions, organizations and other leaders should take timely measures to prevent infectious diseases, and actively participate in their elimination when the disease occurs. must do. The group of measures is focused on each factor of the epidemic process, depending on its direction, in which the anti-epidemic agent may or may not be used, and at the same time it should be aimed at preventing the disease.

#### References

1. Musaboyev E.I., Boyjonov A. K., Yuqumli kasalliklar, epidemiologiya va parazitologiya asoslari, T., 2004 y.
2. Mirtazaev O.M. "Epidemiologiyadan amaliy mashg'ulotlar uchun qo'llanma". Toshkent 2009 y.
3. Абдуллаев Л.Е. "Эпидемиологиядан амалий кўрсатмалар " Тошкент 2000 й.



## PSYCHOLOGICAL ASPECTS OF WOMEN'S PROFESSIONAL SUCCESS

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**Abstract:** This article explains ideas about a woman's professional success in society and the tasks of combining family and professional roles to significantly increase a woman's need for self-awareness and material self-sufficiency in modern socio-economic conditions. It is explained that the types of professional areas of women depend on their success in life and the system of ideas about the social role of women in the modern world.

**Keywords:** Women, career path, life success, modern world, social role, career path, professional identity.

### INTRODUCTION

Success is an event that, at first glance, has a clear meaning in life. But success is a multifaceted concept and is expressed in different ways in people's minds. The importance of ideas about success lies in the fact that they act as a mechanism for assessing the success of setting life goals and implementing life strategies. In addition, an attitude of success, a feeling of satisfaction from achieving a set goal, gaining prestige and status directly affects a person's psychological state, promotes professional self-awareness and is an incentive for personal improvement[1].

Often the concept of "success" is associated with career growth and self-awareness in the professional field. This is due to the fact that success is often viewed as an event that receives social and public evaluation. However, success is



seen not only in the mirror of public opinion or in the recognition or non-recognition of others. Self-assessment of success, mediated by a value system, life orientations, career prospects, etc., is important for personal development[5].

Currently, gender stereotypes prevail in society, according to which solving everyday problems is traditionally the prerogative of women, and professional issues are traditionally the prerogative of men. Based on this, professional activities and careers are largely the prerogative of men. However, in modern socio-economic conditions, women's need for self-realization and material self-sufficiency has increased significantly, so they have to combine family and professional roles. At the same time, a career in a woman's life becomes especially important[4].

In addition, in the public consciousness there are common ideas about which professions are "male" and which are "female", that is, gender roles and the "natural" division of labor by gender. In addition, the name of the profession often reflects its gender.

1. The uniqueness of ideas about "success" and "successful woman" is determined by the traditional or non-traditional nature of the professional role performed by women, as well as the characteristics of their attributional processes.

2. The types of women's career paths depend on their success in life and the system of ideas about the social role of women in the modern world.

3. Women in traditional and nontraditional professional roles differ in their different life goals and strategies for achieving them[3].

The theoretical and methodological foundations of our research were: the French school of studying social images (S. Moscovici, D. Jodlet), the theory of cognitive correspondence (F. Heider, T. Newcombe, L. Festinger), and the theory of attributes. (L. Ross, E. Jones, K. Davis, H. Kelly, D. Boehm, B. Weiner), general psychological theory of activity (A. N. Leontiev, S. L. Rubinstein),





concept of social cognition (G. M Andreeva), the concept of human life or (K.A. Abulkhanova-Slavskaya, S.L. Rubinstein), dispositional theories of personality (G. Allport, G. Eysenck, R. Kettel, V.A. Yadov), gender concepts ( S. Bem), theories of career growth (E. Shane, D. Hall), role theories (V.I. Shuvanov, G. Mintzberg).

The uniqueness of ideas about the “successful woman” and the “success” of women in traditional and non-traditional professional roles is reflected in:

- women with traditional professional roles have adverbial ideas, according to which success is determined by an assessment of the social environment;

- Internal External;

- global identity; b) attribution error:

- underestimation of “unequal opportunities for role behavior”;

- “error of fictitious correlations”;

- self-serving biases.

3. A high level of similarity in the system of ideas about a “successful woman” was discovered between men and women performing non-traditional professional roles, which is expressed in the statement that a woman’s success is ensured by a set of specific personal qualities. . adjectives (type of “personal” ideas).

4. The leading professional areas of women performing traditional and non-traditional professional roles are determined:

- career paths “autonomy” and “lifestyle integration” are the main career development strategies for women in non-traditional professional roles;

- Career paths of “service” and “sustainability” are the main career strategies for women in traditional professional positions[2].

5. The main life goals and strategies for their implementation are analyzed:

- high level of reflexes in planning life goals; the presence of internal strategies for their implementation, based on the use of specific psychological



qualities of women with non-traditional professional roles;

- low level of awareness and planning of their life goals, as well as the use of external strategies for their implementation, based on the involvement of external factors (support from the immediate environment, luck, a successful combination of situations, etc.), which are typical for women to have traditional professional roles.

- the presence of personal ideas, expressed in the need to possess certain psychological qualities that ensure success for women in non-traditional professional roles;

- the predominance of gender stereotypes that women performing traditional professional roles have limited opportunities for professional self-realization and a lack of psychological qualities necessary for successful career growth.

2. The uniqueness of the system of social ideas about success is determined by: a) stylistic features of the respondents' attribution processes:

The success of modern women lies in concretizing the ideas about traditional or non-traditional professional roles that they play. The conducted research allows us to identify the possibility of using the theory of social representation and the theory of cognitive correspondence as a general research approach on the basis of which one can assess the nature of a person's construction of his professional path. The effectiveness of using the basic rules of the concept of social ideas to divide various professions into "traditionally female" and "traditionally male" is shown. The theoretical data of the work are recommended for use in lecture courses and seminars on social psychology, personality psychology, gender psychology, and occupational psychology.

- when developing and implementing educational programs and trainings for personal and professional growth, it is advisable to use the identified systems of women's ideas about success in life and areas of career growth; in consulting work on creating personal strategies for career growth in traditionally male



professions[2].

For women with a traditional professional role, the most important goals in life are: “achieving material wealth,” “children’s well-being and stability in the family.” 20 percent of women strive to achieve a high level of professionalism; for 16 percent, “their own health” is an important value. Half (50%) of women in non-traditional professional roles cite “children's well-being” and “family stability” as their top goals. We believe that the feeling of guilt associated with the lack of time spent with family leads to the fact that family, and especially children, become one of the most important values for women in this group in life.

Women have reached a certain level of self-awareness in the professional sphere, and therefore want to “stabilize” and improve the sphere of family relationships so that their lives are more harmonious. At the same time, success and career do not lose their importance (25% of women in this group want to continue moving up the career ladder). However, it was found that 14% of women in non-traditional professional roles reported a complete lack of purpose in life, that is, a loss of a certain meaning in life.

In modern psychology, an increasing number of researchers are turning to the analysis of the phenomenon of success. This is due to a number of reasons. First, social success, cultivated by the media, becomes almost a social norm. A person is largely assessed in terms of his social prestige. A person who has not achieved social recognition is often perceived as a loser, as a person who does not deserve due attention. Secondly, in modern Russian society there is a significant transformation of ideas about success, which in turn determine the path of personal, professional and generally social development of each individual. The nature of ideas about success is influenced by a variety of factors, including the specifics of the professional activity that a person performs. In turn, during the process of feminization of society, women are increasingly “penetrating” into



traditionally male spheres of activity. An increasing number of women are striving to prove themselves not only as “homemakers,” but as qualified professionals focused on career advancement. “Traditionality” or “unconventionality” of professional roles performed by women influences the specifics of ideas about success, which, in turn, act as a mechanism for setting life goals and assessing the success of implementing one’s life strategy.

### BIBLIOGRAPHY

1. Abulkhanova-Slavskaya, K.A. Life Strategy Text. / K.A. Abulkhanova-Slavskaya. -M.: Mysl, 1991. -286 p.
2. Adler, A. Practice and theory of individual psychology Text: [trans. with him. A.M.Bokovikova] / A.Adler. M.: Foundation for Economic Literacy, 1995. - 375 p.
3. Aleshina, Yu.E. Problems of mastering the roles of men and women Text. / Yu.E Aleshina, A.S. Volovich // Questions of psychology. M., 1991. - No. 4.-p. 32-40.
4. Aleshina, Yu.E. Role conflict of a working woman Text. / Yu.E. Aleshina, E.V. Lektorskaya // Questions of psychology. M., 1989. -No. 5. - With. 80-89.
5. Andreeva, G.M. On the problems of the psychology of social cognition Text. / G.M. Andreeva // World of Psychology. M., 1999. - No. 3. - With. 2735.
6. Andreeva, G.M. Psychology of social cognition Text. / G.M.Andreeva. M.: Aspect Press, 2000. - 288 p.



## **INNOVATIONS AND ADVANCED FOREIGN EXPERIENCE IN TEACHING ECONOMIC SCIENCES SCIENCES**

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This article develops scientifically based proposals and recommendations on innovations and advanced foreign experience in teaching economic sciences, their characteristics, and the importance of teaching methods and technologies in foreign countries.

Key words: Economics, educational and methodological complexes, advanced pedagogical technologies, information technologies, electronic textbooks, multimedia, problem-based lectures.

When we talk about the issue of education, which is the most important condition for raising a mature generation and a generation with high intellectual potential in our country, we often talk more about strengthening the material and technical base of the industry, building new schools, lyceums and colleges, higher educational institutions, and modernizing them. . Because they fundamentally change the content and quality of education.

Cultivation of qualified personnel meeting the requirements of the world market has become an urgent issue of our time. It is worth noting that the concept of the production category in the national model of personnel training is the main customer, who determines the need for personnel in production, as well as the requirements for the quality of their training, and appears as a participant in the process of providing the personnel training system in terms of financial and



material technology. The high qualification of specialists and the increase of their creativity can be realized only due to scientific and innovative activities. If, in order to implement their ideas and scientific directions, they produce marketable products or provide services, and if they involve young specialists and students in this process, productive and effective results can be achieved. This, in turn, provides opportunities to meet their life needs through intellectual work as an integration of the educational process, scientific and industrial environment. That's why learning to finance one's mental work as much as possible, moving to the order of advancement, is becoming the need of the hour.

The Law of the Republic of Uzbekistan "On Education" and the "National Program of Personnel Training" fully reveal the essence of the process of raising a competent person and qualified specialist. Teaching "Economics" with the help of modern pedagogical technologies is of great importance in the implementation of the tasks provided for in these legal documents.

It envisages the implementation of tasks such as improving and further developing the personnel training system, further strengthening the resources, personnel and information bases of educational institutions, fully providing the educational process with new educational and methodological complexes, advanced pedagogical technologies, and informatization of the educational process. In the implementation of these tasks, teachers working in the higher education system are required to have high professional skills, computer literacy and the ability to know foreign languages.

In this process, several problems of advanced pedagogical technologies are solved. That is:

- resource, personnel and information bases of educational institutions will be further strengthened;
- the educational process is fully provided with new educational and methodological obligations, advanced pedagogical technologies;



- determination and development of national (elite) higher education institutions is carried out;
- independent functioning of vocational education institutions and forms of self-management will be strengthened;
- informatization of the educational process, the continuous education system will be fully covered by the computer information network connecting to the global information network.

In accordance with the state and social order placed before the continuous education system, higher educational institutions increase the efficiency of the educational process, by introducing the latest achievements of science into practice, create creative, socially active, highly spiritual, professional, loyal to the Motherland, national and universal people. It is intended to fulfill important tasks such as bringing up a well-rounded person who is brought up in the spirit of values, who can think creatively and independently, who feels his duty and responsibility before the state and society, and inculcates the idea of national independence into his mind and heart.

In the process of educational work, it is important to teach students to think creatively, to adapt to changing situations, to organize activities based on free competition, and to be able to use information technologies, electronic textbooks and multimedia in practical training. This requires the education of students' independence, free thinking, analysis of educational activities, professional skills and computer literacy should be turned into their internal needs in the future.

Before talking about innovations and advanced foreign experiences in teaching "Marketing", let's talk about what innovation and advanced foreign experiences are:

The concept of innovation is derived from the English language, "innavation", which means innovation.



Advanced foreign experiences are scientific and practical knowledge and experiences gained over the years in the field of Economy. The use of multimedia systems in the application of such experiences to the educational process is a guarantee of achieving high efficiency.

Multimedia (multi-many, media-environment) is a field of computer technology related to the use of information in different physical forms (text, graphics, pictures, sound, animation, video, etc.) available in different carriers.

Multimedia is a set of hardware and software that allows a person to communicate with a computer using sound, video, graphics, text, and animation.

Modern pedagogical technologies are a set of new forms, methods and tools of the educational process, which are integrated into one system based on scientific-theoretical and methodological basis. In this case, the integrity of the goal, task, activity and pedagogical result is ensured in the combination of new content, form, method and means, and the educational process that guarantees the achievement of educational goals is designed and implemented. The technological approach is, first of all, not a description, but a practical instructional structure that allows the realization of the designed results.

The conditions that determine the quality of education related to the educational process are as follows:

- teaching at a high scientific-pedagogical level;
- writing problem reports;
- interesting organization of lessons in question-and-answer style;
- use of advanced pedagogical technologies and multimedia guides;
- to put in front of students the problems that encourage and make them think;
- demand;
- individual work with students;
- encourage creativity;





- teaching to communicate freely, to think creatively;
- involvement in scientific research and other activities ensure the priority of education.

Consideration of these aspects in the teaching of economic sciences plays an important role in increasing the effectiveness of the educational process.

### REFERENCES:

1. Ўзбекистон Республикаси Президенти Ш.М.Мирзиёевнинг 2019 йил 8 октябрдаги “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепциясини тасдиқлаш тўғрисида”ги ПФ-5847-сонли Фармони.
2. М.Хошимова, Д.Файзуллаева. “Замонавий таълим ва инновацион технологиялар бўйича илғор хорижий тажрибалар” модули бўйича ЎЎМ., БИММ, 2015 й.
3. Буриев Х.Т., Усмонов И.А., Комилова М.Ш.. Маркетинг. Дарслик. -Т.: СамДАҚУ, 2022.-256 б.
4. Х.Т.Бuriyev, М.Ш. Komilova Qurilishda menejment. Darslik. SAMDAQU, 2022.-276 б.
5. Komilova Mukammal Shavkatovna Abdixoliqov Jamshid Abdixalilovich. "USE OF MARKETING STRATEGY AS A FACTOR OF INCREASING THE COMPETITIVENESS OF CONSTRUCTION ENTERPRISES." *International journal of advanced research in education, technology and management* 2.3 (2023).
6. Komilova, M. Sh. "O'ZBEKISTONDA INVESTITSIYA SALOHİYATINI OSHIRISH YO'LLARI." *Евразийский журнал академических исследований* 2.3 (2022): 575-584.
7. Sh, Komilova M. "RAQAMLI IQTISODIYOTNING TIZIMLI RIVOJLANISHIDA BOSHQARUV USLUBLARINING O'RNI." *Journal of*



*marketing, business and management* 1.5 (2022): 53-57.

8. Жуманов, Ш. Н., М. Ш. Комилова, and А. Х. Ташимов. "“МАРКЕТИНГ” ФАНИНИ ЎҚИТИШДАГИ ИННОВАЦИЯЛАР ВА ИЛҒОР ПЕДАГОГИК ТЕХНОЛОГИЯЛАРИНИНГ АҲАМИЯТИ." *Экономика и социум* 4-1 (107) (2023): 586-589.

9. Komilova, Mukammal Shavkatovna, and Jamshid Abdikhalilovich Abdikholikov. "THE ROLE OF EMPLOYEES IN ENSURING THE LABOR POTENTIAL OF ENTERPRISES." *Academic research in educational sciences* 3.11 (2022): 481-484.

10. Shavkatovna, Komilova Mukammal, and Shernazarov Temurbek Tulkinovich. "IMPROVEMENT OF ACTIVITIES OF HOUSING AND UTILITIES IN THE REPUBLIC OF UZBEKISTAN." *World Bulletin of Management and Law* 22 (2023): 25-27.

11. Shavkatovna, Komilova Mukammal, and Abdixoliqov Jamshid Abdixalilovich. "THE ROLE OF EMPLOYEES IN ENSURING THE LABOR POTENTIAL OF ENTERPRISES." *IJTIMOIIY FANLARDA INNOVASIYA ONLAYN ILMIIY JURNALI* 2.12 (2022): 135-137.

12. Musakulovna, Rakhmonova Feruza, Komilova Mukammal Shavkatovna, and Shernazarov Temurbek Tulkinovich. "USE OF MARKETING CONCEPTS IN THE ACTIVITY OF ORGANIZATIONS IN THE CONDITIONS OF FORMING AN INNOVATIVE ECONOMY." *World Economics and Finance Bulletin* 17 (2022): 55-56.

13. Shavkatovna, Komilova Mukammal, and Olimova Lola Erkinovna. "WAYS OF EFFICIENT USE OF LABOR RESOURCES IN THE COUNTRY." *World Economics and Finance Bulletin* 7 (2022): 85-90.

1. Buriev, Khakim, Ravshan Kurbanov, and Maruf Rayimov. "PRODUCTION AND TECHNOLOGICAL PROCESSES IN



CONSTRUCTION." *International Bulletin of Applied Science and Technology* 3.6 (2023): 1521-1525.

2. Буриев, Х. Т., and И. А. Усманов. "ПОВЫШЕНИЕ КАЧЕСТВА СТРОИТЕЛЬСТВА В РЕСПУБЛИКЕ УЗБЕКИСТАН." *Россия: тенденции и перспективы развития* 17-1 (2022): 363-371.

3. Буриев, Х. Т., and И. А. Усманов. "Пути совершенствования организационно-экономического механизма повышения качества строительства: монография." (2020).

4. Буриев, Хаким Тошимович, and Ильхом Ачилович Усманов. "A development strategy for the construction industry in Uzbekistan: organizational aspects of implementation." *Недвижимость: экономика, управление* 4 (2021): 70-74.

5. Усманов, И. А., and Х. Т. Буриев. "Пути совершенствования стимулирования повышения качества работ в сельском строительстве." *Часопис економічних реформ* 4 (2017): 25-30.



## ОПТИЧЕСКИЕ СВОЙСТВА ПЕРОВСКИТНЫХ АКТИВНЫХ СЛОЁВ НА ОСНОВЕ CsPbI<sub>3</sub>

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***Аннотация:** Данная статья посвящена проблеме повышения эффективности новых типов солнечных фотоэлементов возобновляемых источников энергии, так как одной из актуальных проблем современности является ограниченность запасов традиционных источников энергии, их возрастающее негативное влияние на экологическую среду.*

***Ключевые слова:** Энергия, перовскит, спектр поглощения, деградация.*

### ВВЕДЕНИЕ

В последние годы одной из глобальных проблем человечества является ограниченность ресурсов традиционных источников энергии и усиление негативного воздействия на экологическую среду. По данным World Energy Resource Base, запасы нефти составляют 500,3 млрд тонн, запасы природного газа 404,4 трлн кубометров, запасы угля — 6,5 трлн тонн. Ожидается, что при текущем уровне добычи запасов нефти хватит на 127 лет, запасов природного газа — на 133 года, а запасов угля — на 120 лет (рис. 1). Невозобновляемость таких источников энергии, их «парниковый эффект» и загрязнение атмосферы порождают такие проблемы, как нарушение экологии нашей планеты и изменение климата [1].

Мы признаем, что среди устойчивых источников энергии, не наносящих вреда внешней среде, особое место занимают солнечные элементы, преобразующие световую энергию в электрическую посредством



солнечной энергии. Среди типов солнечных элементов применение перовскитных солнечных элементов (ПСЭ) являются наиболее быстро развивающейся областью. Преимущество материалов ПСЭ перед обычными солнечными элементами заключаются в их тонкости (около 300 нм), легкости, гибкости, простоте и недорогой технологии производства в простых атмосферных условиях; а также в том, что они не требуют сложных условий производства (например, в условиях вакуума, при высокой температуре в диапазоне 1000-2000 градусов). Из-за высокой эффективности преобразования энергии, применение ПСЭ считается перспективным в будущем, из-за способности транспортировать электроны и дырки на большие расстояния.



Рисунок 1. Доля мирового энергопотребления по источникам энергии

В последние годы эффективность преобразования энергии ЭПЭ увеличилась с исходного значения 3,8% до 25,2% [2]. ПСЭ имеет ширину запрещенной зоны 1,55 эВ, которая поглощает фотоны с длинами волн короче 800 нм, в то время как кремниевые солнечные элементы с энергией 1,12 эВ поглощают фотоны с длинной волн более 800 нм в солнечном



спектре [3].

В лабораторных условиях для исследования различных параметров технологий изготовления ПСЭ, таких как повышение эффективности и срока службы широко используется метод «спин-покрытия». Поскольку изготовление ПСЭ методом центрифугирования малозатратно и удобно, оно позволяет изготовить первичный фотоэлемент за короткое время, в связи с чем, проведение научных исследований ПСЭ с помощью данного метода более популярно в отличие от других методов. Технология изготовления ПСЭ методом центрифугирования выполняется в несколько этапов [4].

Несмотря на то, что ПСЭ является большим прорывом в применении технологий альтернативной энергии, у них есть ряд недостатков, которые в настоящее время ограничивают его возможности выхода на потребительский рынок. В настоящее время основной проблемой, препятствующей коммерциализации ПСЭ, является их нестабильность, то есть, у них совсем непродолжительный срок хранения в условиях открытой атмосферы. ПСЭ быстро разлагаются из-за способности вступать в быструю реакцию с водой и кислородом. Чтобы быть конкурентоспособными кремнию, необходимо стабилизировать ПСЭ по отношению к воде и кислороду. Срок годности первых ПСЭ не составлял и одного часа, но сейчас лучшие ПСЭ, созданные учеными, имеют стабильность 2000-3000 часов [5]. Мы уже упоминали, что основным недостатком ПСЭ является их деградация за короткий период времени.

Так что же представляет собой сам процесс деградации? Деградация – это физическое (иногда химическое) повреждение материала из-за внешних химических или экологических воздействий (влага, кислород, тепло и т. д.) [6]. Одним из наиболее эффективных методов характеристики перовскитных активных слоев является анализ их оптических и спектроскопических свойств. То есть, после формирования активного слоя ПСЭ, определив



спектр поглощения и интенсивность его фотолюминесценции, мы можем сделать вывод о действительности/недействительности ПСЭ и о процессе его деградации [7].

В данной статье мы проанализировали деградацию ПСЭ CsPbI<sub>3</sub> в атмосферных условиях на основе спектроскопического метода. CsPbI<sub>3</sub> для этого базовый перовскит получают путем формирования активного слоя. Для изучения процесса деградации активного слоя перовскита CsPbI<sub>3</sub> были измерены результаты коэффициента поглощения в различные промежутки времени (0, 1, 2, 3 часа) с помощью спектрофотометра Shimadzu UV-1280 в диапазоне длины волн 400-800 нм. На рис. 4 представлен график коэффициента поглощения активного слоя CsPbI<sub>3</sub> в различные интервалы времени. Как видно из графика, значение коэффициента поглощения первого свежеизготовленного активного слоя CsPbI<sub>3</sub> высоко,

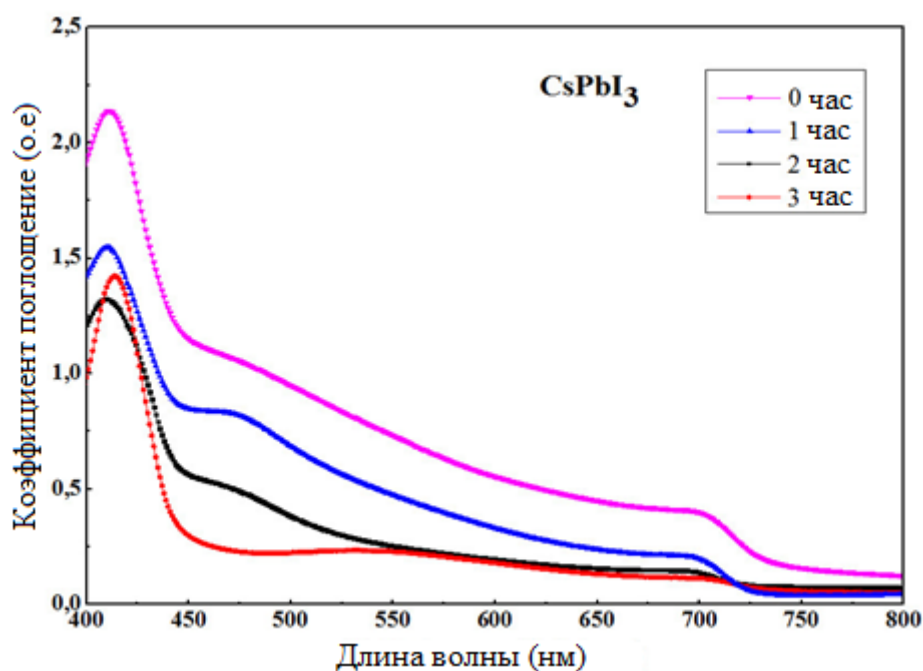


Рисунок 4. Спектры поглощения активного слоя CsPbI<sub>3</sub> в разные промежутки времени

но со временем оно понижается. Когда мы измерили его через 3 часа, видно, что значение коэффициента поглощения было низким (рис. 4).



Таким образом, из приведенных выше результатов можно сделать следующие выводы. Мы можем проанализировать деградацию ПСЭ спектроскопически, подготовив его до активного слоя перовскита, не создавая ни одного перовскитного солнечного элемента на основе CsPbI<sub>3</sub>. При первоначальном измерении коэффициента поглощения исходного перовскитного активного слоя в атмосферных условиях его значение максимально, но измерение спустя 3 часа показывает очень низкий коэффициент поглощения, что не характерно для ПСЭ (рис. 4). Первый изготовленный активный слой перовскита соответствует черной фазе ПСЭ. Состояние этого материала через 3 часа упало до желтой фазы ПСЭ. То есть, кристаллическая структура нашего материала в атмосферных условиях изначально находится в черной фазе, а со временем, под воздействием кислорода, влаги и тепла ее морфология нарушается, и она переходит из черной в желтую фазу.

Подводя итог вышесказанному, можно сделать вывод о том, что солнечные батареи на основе перовскита усовершенствованы и продолжают стремительно совершенствоваться во всех отношениях по сравнению с первичными вариантами альтернативной энергетики. Хотя у ПСЭ есть серьезные проблемы с технологией и деградацией, которые необходимо решить, нет сомнений в том, что в ближайшем будущем ПСЭ станут высокоэффективными источниками преобразования энергии.

### ЛИТЕРАТУРЫ

29. Abbosbek Azizjon-o'g'li, A., & Nurillo Mo'yudinjon o'g, A. (2023). GORIZONTAL O 'QLI SHAMOL ENERGETIK QURILMALARINING ZAMONAVIY KONSTRUKSIYALARI.
30. M.O. Atajonov., S.J. Nimatov., A.I. Rahmatullayev. Formalization of the dynamics of the functioning of petrochemical complexes based on the theory of fuzzy sets and





fuzzy logic. AIP Conference Proceedings, Published 2023-01-05. DOI: <https://doi.org/10.1063/5.0112403>.

31. Sharobiddinov, S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and Researches*, 1(8). извлечено от

<https://interpretationandresearches.uz/index.php/iar/article/view/538>

32. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.

33. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)

34. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz*

35. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Hakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY*, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>

36. Д.Эгамов, М. Нурёгдиев. статья Повышение надёжности электроснабжения в местах проведение особо важных мероприятий. *Научный журнал Инженерные решения* №8(9) ноябрь 2019. г. Новосибирск.

37. Olimjonova, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. *Interpretation and Researches*, 1(8).

38. Alijanov, D. D., & Axmadaliyev, U. A. (2021). APV Receiver In Automated Systems. *The American Journal of Applied sciences*.

39. Topvoldiyev, N. (2022). PHYSICAL AND TECHNICAL FUNDAMENTALS OF PHOTOELECTRIC SOLAR PANELS ENERGY. *Theoretical & Applied Science*.

40. Topvoldiyev, N. (2023). *Quyosh havo isitish kollektorlarini o`rnatish va foydalaniz*.

41. ME Yulchiev, AAO Qodirov [Electricity Quality And Power Consumption In Low Power \(0.4 Kv\) Networks, THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY \(TAJET\) SJIF-5.32 DOI-10.37547/tajet](#)

42. NM Aripov, OA Qosimov MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH 2 ...



## USE OF MODERN TECHNOLOGIES IN TEACHING PHYSICS

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**Annotation:** in the article, the process of learning is the systematic development of spiritual and mental abilities, while the process of learning is a holistic lesson, which relies on various methods (methods). Methods of using modern technologies in teaching physics. To learn to use them in lecture, practical and laboratory classes. Interesting and effective conduct of physics lessons, transparent assessment methods are presented.

**Keywords:** methodology, educational training, assessment, mystery assessment, exemplary, Millionaire game, reflection.

In my experience, he is a determined businessman,  
a man alert, brave and ambitious  
from a thousand idle people  
is better.

Amir Temur.

In fact, the fact that such words were quoted by the great general Amir Temur in his work "Temur tuzuklari" is of great spiritual and educational significance today. It should be clear to all of us that where indifference reigns, when the most urgent issues are left to be, education becomes the weakest and weakest point. My goal is to further increase the will of the cadets during training. After all, a strong-willed person believes in himself and is not afraid to take on any difficult task. [1]

It is known that the process of education is the process of systematic



development of spiritual and mental abilities, formation of knowledge and concepts, and the ability to use the acquired knowledge. This process can be carried out by the learner himself or with the help of another teacher. The educational process takes place based on various methods (methods).[4] In the continuing education system, in accordance with the state order and social demand, each educational institution and the pedagogues serving in it are responsible for increasing the effectiveness of the educational process, creatively by introducing the latest achievements of science into practice. To educate a socially active, highly moral, professional, loyal to the country, educated in the spirit of national and universal human values, able to think creatively and independently, feel his duty and responsibility before the state, society and family, competitive and well-rounded person and implementation of important tasks such as bringing to maturity, instilling the idea of national independence in their minds and hearts. The successful solution of this task is inextricably linked with the use of modern educational technologies in the educational process. The introduction of modern pedagogical technology into educational processes requires, first of all, the humanization and democratization of pedagogical relations. Any pedagogical technology used without establishing such a relationship will not give the expected effect. Pedagogical technology based on the humanization and democratization of pedagogical relations is opposed to authoritarian technology, in which educational activities consisting of cooperation, care, respect for the personality of the learner are organized. The humanized attitude of the teacher to the personality of the pupil or student is carried out at the expense of love for children, concern for their fate, high trust in the individual, mutual cooperation, perfect communication culture, voluntariness and freedom, encouragement and resistance to shortcomings. increases. Achieving the intended goal requires the activeness and equal rights of all participants in the educational process. Democratization of the educational process leads to the equalization of civil rights



of teachers and students, the creation of conditions for students to choose and freely express their opinions and views. This also complies with the norms guaranteed by the Constitution of the Republic of Uzbekistan. The peculiarity of the new relationship is that it is different from the traditional education, directing students to the set goal without prohibiting their independence and creative learning activities, organizing learning activities in cooperation, taking into account their interest and needs. and is characterized by the fact that it is carried out due to free and active work. The new pedagogical relations that have arisen in the process of education require the use of modern pedagogical technologies in this process. For this, special means of introducing pedagogical technologies will be necessary. [3]

For example, every student should know the criteria for evaluating and motivating students' knowledge in the class of solving problems in physics. During the whole lesson, active students work on all the given problems correctly and quickly. On the other hand, slow-learning cadets can do one or two problems correctly, and they want to get an exemplary grade for these correctly worked problems. At this time, the teacher finds it difficult to assess the students' knowledge. Because these students have worked the problem correctly even if they have worked on a few problems. By using the following method, it is possible to eliminate this problem and increase students' interest in the lesson. The teacher announces the topic of the practical lesson. The lecture will be reinforced. "Millionaires Game" method is used to check the knowledge of students. In this method, the teacher prepares Blitz questions based on the given lecture. The questions are read by the teacher. The student who answered each question will be given a card with "200,000 soums" written on it. After the questions are finished, the number of collected cards is determined. Any cadet who collects 5 cards will collect 1 million and is encouraged as a "group millionaire", that is, a spiritually rich person, a person with strong human capital. If there are students who have



collected more than 5 cards, they are considered "super millionaires". Problems will be worked out in order to create practical skills based on the theoretical knowledge of the subject.

We use the "Mystery assessment" method in order to develop comprehensibility, speed, initiative in solving problems related to the topic, and to arouse students' interest in solving problems. This method is organized as follows. It provides detailed information about the required physical quantities and their expressions. After that, the problem solving begins. The condition of problem 1 is announced. The teacher marks the first three students who worked the problem correctly and quickly with the letter "N" instead of a grade. Then they start working on problem 2. The first three students who worked correctly and quickly for this problem will mark the letter "A" in their notebook. For problem 3, the letter "M" is not, etc. In this way, the following issues are dealt with. If one student correctly and quickly solves all the problems given during the lesson (8 problems in this exercise), instead of a consecutive score, letters forming the word "EXEMPLARY" will be placed. At the end of the lesson, students who have collected all the letters of the word "EXEMPLARY" (at least 7) will be given an incentive card written "Exemplary Student of Physics" and rated with a grade of "5". During the lesson, students who can collect the letters "SAMPLE" will be given a "Good Participant in Physics" card and will be graded "4". "Physics is an interesting science." Work on yourself." A card will be issued and these students will be graded "3". Using this method, the following results can be achieved:

1. Students are interested in collecting mysterious letters, they try to solve the problem faster, they are interested in the results of their work.

2. Even a student who received a grade of "3" is not dissatisfied with this grade, on the contrary, he understands why he got a low grade and starts working on himself.[6]

I believe that it is very important to use reflection at the end of every



lecture, practical, laboratory and seminar lesson. It means reflection. There are many types of reflection. this method does not require a lot of time, but reflecting the entire lesson, the subject is strengthened in the student. For example, reflection "3.4.5.6.7" in which the student should write 3-letter, 4-letter, 5-letter, 6-letter and 7-letter words from the science words used during the lesson. The teacher will give one or two minutes for this. For example, if the topic of electric current is covered, they write such words as 3-current, 4-current, 5-particle, 6-charge, 7-carrier(3-tok, 4-oqim, 5-zarra, 6-zaryad, 7-tashuvchi). When the teacher gives, the student starts flipping through the notebook, remembers all the information that has been passed, discussed, discussed, and here the brain attack begins. When the time is up, whoever wants to read the 3, 4, 5, 6, 7 letter words written by the students, but all the students write. And they can analyze today's lesson. He reviews what words we used in today's lesson, what word he remembered today, what word he missed today, and what words he used while writing. When each student reads, other students say yes, I forgot that, wow, my teacher said that too, it helps him to strengthen and reflect on the topic he has studied. If we use this method at the beginning of the lesson, it can be a basis for strengthening the topic learned yesterday.

What the teacher achieves through this method: we can organize the process through an interesting situation for them to repeat and reinforce yesterday's lesson; moreover, they should remember the important words that they did not pay attention to in yesterday's lesson and write them down in the notebook today; and at the same time, it greatly helps to develop the skill of writing words correctly.[5]

Our main task is to provide young people with the necessary professional knowledge in their fields, and to train them to become perfect people who will ensure the great future of our Motherland by providing them with dedication to their profession and all-round human education. I believe that every physics



teacher can achieve this task only if he uses modern, advanced methods of teaching with a creative approach rather than traditional methods.

References.

1. Jumaboy Rahimov. "Temur Tuzuklari" Shodlik publishing house Tashkent-2018.
2. Sh. Yolchiyev. "Continuous professional development of physics teachers in general secondary schools" Hayat publishing house. Andijan-2021.
3. Uzokova G.S., Tursunov. Q. Sh., Kurbanov M. Fundamentals of the theory of teaching physics.-T., Uzbekistan, 2008.
4. Ravshan Ishmuhammedov, Maksudjon Yuldashev. Instruction manual "Innovative pedagogical technologies in education and training". Tashkent-2016
5. Dilafruz Hidoyatova. "Effective methods 1.0" Teacher's publishing house Tashkent-2022
6. <https://fayllar.org/kirish-malimki-yosh-avlod-tarbyyasi-hamma-zamonlarda-ham-muhim.html?page=3>



## СОВРЕМЕННЫЕ ОБРАЗОВАТЕЛЬНЫЕ ТЕХНОЛОГИИ В ИНТЕРПРЕТАЦИИ МЫСЛИТЕЛЕЙ СРЕДНЕВЕКОВОГО ВОСТОКА

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**Аннотация.** В статье представлены данные относительно сущности понятия STEAM-образования как современной образовательной технологии. На основе идей и личной биографии Восточных мыслителей, ретроспективного анализа их теории и практики по применению элементов интегративной технологии анализируется эффективность использования педагогической технологии STEAM в современном образовании.

**Ключевые слова:** модели образования, образовательная технология, зарождение STEAM, духовный потенциал, повышение квалификации учителей.

### MODERN EDUCATIONAL TECHNOLOGIES IN THE INTERPRETATION OF THINKERS OF THE MEDIEVAL EAST

**Annotation.** The article presents data regarding the essence of the concept of STEAM education as a modern educational technology. Based on the ideas and personal biography of Eastern thinkers, a retrospective analysis of their theory and practice in the use of elements of integrative technology, the effectiveness of





using STEAM pedagogical technology in modern education is analyzed.

**Keywords:** educational models, educational technology, the emergence of STEAM, spiritual potential, teacher training.

Современное образование под влиянием меняющихся жизненных потребностей и научно-технического прогресса вносит в процесс обучения определенные изменения, ищет новые пути и средства для повышения эффективности процесса образования и воспитания. В связи с этим, меняются приоритеты образования: разрабатываются новые модели, методики и подходы, достижения научно-технического прогресса становятся частью обучения.

Одним из новых моделей образования, которые внес определенные коррективы в качество образования является STEM (science, technology, engineering and mathematics) образование. STEM включает в себя естественные науки, технологию, инженерию и математику, параллельно изучая названные академические дисциплины в процессе обучения.

Эта новая образовательная технология используется как инструмент исследовательских компетенций, критического мышления и навыков работы в группе и состоит из четырех принципов:

1. Проектный формат организации учебного процесса, при которой учащиеся, объединившись в группы приобретают знания и умения в процессе планирования и выполнения постепенно усложняющихся заданий – проектов, учебных задач.

2. Практическая направленность учебного процесса, результат которых может быть использован для нужд семьи, класса, школы, вуза, предприятия, города и т. д.;

3. Интегративный подход к обучению: учебные задачи конструируются таким образом, что для их решения необходимо



использование знаний сразу нескольких учебных дисциплин. Это синтез отраслевых научных знаний для общего школьного и высшего образования.

4. Получение практических навыков и развитие soft skills (гибкие навыки, которые помогают решать жизненные задачи и работать с другими людьми).

Цель STEM-подхода в образовании – это преодоление оторванности, которая наблюдается в традиционной теории и практики образования, и построение связи между учебными дисциплинами.

Новая аббревиатура и концепция – STEAM (science, technology, engineering, arts and mathematics) была принята после того, как появилась необходимость в креативной индустрии (особый сектор экономики, основанный на продаже товаров и услуг, являющихся результатом интеллектуальной деятельности). В США, в рамках креативных индустрий было создано свыше 30 млн рабочих мест. Такая необходимость привела к трансформации STEM-концепции: к синтезу науки, технологии, инженерии и математики, куда добавился пятый компонент – Art (искусство).

Кроме известных предметов STEM и STEAM, существуют STEMМ и STREAM обучения, созданные на основе 4 основных базовых предметов с добавлением музыки и чтения: STEMМ – наука, технология, инженерия, музыка и математика, STREAM – наука, технология, инженерия, чтение и математика.

STEM-предметы и технологии дают ясные решения для прикладных задач, развивают умение находить выход в состоянии неопределенности, неоднозначности и двусмысленности, позволяют совершенствовать вербальные и невербальные навыки обучающихся, развивать их критическое мышление, учить их открытости к восприятию других людей, понимать социокультурную ситуацию. Реализация подхода STEM осуществима на



всех уровнях образования – от дошкольного до профессионального.

Основной характеристикой этой системы обучения является практическое обучение, во время которого учащиеся или студенты учатся и работают в реальном режиме, проводя эксперименты.

В образовательных учреждениях для реализации такой модели цифровые компетенции, командная работа и процессы принятия решений должны быть интегрированы в учебную программу каждого предмета. Кроме этого, учебные концепции должны сочетаться с игровыми практиками. Такая игровая методология называется **геймификацией** (использование игровых элементов, экспериментов и механик в любом неигровом контексте: в бизнесе, быту, образовании и т.д.) и направлена на преобразование академических ситуаций, в игровые ситуации, чтобы больше мотивировать учащихся и студентов.

Например, школы Best Schools в Испании в процессе занятий прилагают все усилия, чтобы предоставить учащимся неограниченный доступ к различным источникам знаний, а также помочь учащимся развить более универсальный менталитет и стать бесспорными героями собственного опыта обучения. Такие подходы поддерживают многие ведущие школы современного мира (Китай, Россия, Иран, Индия, Индонезия, США, Австралия, Турция и т.д.) Лидером по числу выпускников STEM-специальностей в мире является Китай.

Геймификация или игрофикация позволяет повысить мотивацию и включенность в процесс обучения. В. А. Сухомлинский по этому поводу отмечал, что «игра – это искра, зажигающая огонек пытливости и любознательности» [7].

Сегодня геймификация поддерживается и в высшей школе. Создание такой информационной активной среды способствует самостоятельному, активному стремлению студентов к получению знаний, профессиональных



навыков и умений, критического мышления, умения принимать решения, работать в команде. Во многих вузах мира за успехи в игровых формах занятий студентов награждают баллами, и соревнование завершается в конце года торжественным объявлением победителя.

Идеологи STEAM-подхода вдохновляются примерами великих ученых, которые сочетали научные занятия с творчеством, и благодаря развитому мышлению, интеллекту и воображению смогли дать миру феноменальные открытия: художник Леонардо Да Винчи, литератор Галилей, музыкант Эйнштейн, философ Гейзенберг и др.

По мнению ряда российских и зарубежных авторов (Дж.Якман), одним из первых крупных философов образования, который дал толчок зарождению идеи STEAM образования был Р. Декарт (1596 –1650). В своей книге «Правила для руководства ума» он писал, что «гораздо легче изучать их все сразу, чем отделяя одну от других. Итак, если кто-либо всерьез хочет исследовать истину вещей, он не должен выбирать какую-то отдельную науку: ведь все они связаны между собой и друг от друга зависимы». Здесь уместно отметить, что гораздо ранее, чем Р.Декарт Абу Али ибн Сина (980–1037) в своей «Метафизике» писал, что «геометрия, арифметика, астрономия, музыка, оптика, механика, наука о движущихся сферах, наука о приборах и тому подобное входят в состав математики» [2, с. 58], что напрямую указывает на практическое использование Ибн Сины в процессе изучения дисциплин, ныне скомпонованного в STEM-образование, еще в X веке.

Заглянув на страницы истории педагогики народов Центральной Азии можно заметить, что еще в начальном этапе мусульманского Возрождения существовали тенденции в стирании граней между «свободными» предметами (грамматика, риторика, логика, арифметика, геометрия, астрономия, музыка) и «механическими» предметами (архитектура,



живопись, медицина, торговля, ремесла и т.д.).

Именно через идею современного STEM-образования, которая стояла на истоках нашей отечественной цивилизации мудрость Китая, Индии и всего Востока была распространена через науку и литературу в Европу, а открытия в области тригонометрии и алгебры открыли новые страницы аэродинамики, своевременные идеи в промышленности (особенно в производстве бумаги), медицине, фармацевтики, математики, физики, астрономии, географии, в строительстве кораблей, каналов прославили мусульманскую цивилизацию во всем мире, а учрежденный в IX веке одно из крупнейших просветительских центров «Дом мудрости» в Багдаде халифом Абу аль-Аббасом аль-Мамуном абсорбировал греческие знания на Востоке.

Такие великие мыслители как аль-Фараби – философ, музыкант и математик; аль-Хорезми – математик, астроном, географ, историк; аль-Беруни – историк, географ, астроном, математик, геолог, фармаколог; Ибн Сина – поэт, астроном, философ, врач через свои бесценные научные трактаты осветили истинный смысл, значение знания и призывали всех к совершенствованию знаний. Ими были поставлены методические рекомендации и задачи к овладению наукам по всем названным параметрам включающие современное STEM-образование.

Великие мыслители занимались наукой, получали удовольствие от своей работы, наслаждались райскими пейзажами построенных садов своего умозрения, достигая одну интеллектуальную вершину за другой и стремились постичь все тайны Космоса.

Первый кто проложил тропу в науку через STEM-образование был Абу Наср аль-Фараби (870–950). Интересен его взгляд, на то, что он наряду с геометрией, арифметикой и музыкой астрономию тоже преподносил к категории воспитательных наук, вместе составляющих традиционную



структуру мироздания. Он занимался медициной, и как врач – ботаникой, минералогией и алхимией. В «Большой книге о музыке» освещая принципы физической основы звука, его распространения, измерения, при обосновании звуковых интервалов он применил арифметические, алгебраические и графико-геометрические принципы. Его принцип непрерывной пропорции в дальнейшем развитии способствовал зарождению метода дифференциального исчисления Лейбница. Как мы видим, Фараби даже в своих музыкально-теоретических исследованиях успешно пользовался прикладной математикой и физикой. Он был идеальным поэтом, лингвистом, языковедом. Им написаны трактаты по правописанию, каллиграфии, стихосложению, риторике, ему принадлежат глубокие научно-философские стихи [6, с. 72].

Знаменитый ученый-математик Муса Аль-Хорезми (799–846) впервые внес свою лепту в науку благодаря знанию астрологии. Он служил астрологом халифа ал-Мамуна в багдадской научной академии «Байт-ул-хикма». Известно, что через свой знаменитый труд «Китоб ал-жам ва тафрик би-хисаб ал-хинд» («Книга сложения и вычитания по исчислению индийцев») он впервые познакомил арабов, и через них всю Европу с индийской системой нумерации, а через «Китоб ал-мухтасар фи-хисаб ал-джабр ва-л-мукабала» («Краткая книга об исчислении алгебры и ал-мукабалы») он ввел в оборот не только термин «алгебра», но и открыл новую эпоху в математике. Современная терминология в форме «алгоритм» (искаженное средневековое «алгоризм» от ал-Хоразми), тоже является его феноменальным трудом. Наряду с открытиями в точных науках ему принадлежит «Книга истории», содержащая сведения о многих событиях IV–IX веков. Следуя Аристотелю, он изложил свои философские мышления



о движении и пространстве. Феноменальный ученый внес также существенный вклад в географии, что наводит на мысль о существовании на практике наших предков STEM-образования еще до X века.

Другая совершенная личность, которая смогла на самом деле совместить все основы STEM-образования в своей практике был Абу Райхан Бируни (973–1048). В своей книге «Книга вразумлений начаткам науки звезд» он дает определения и факты по геометрии, арифметике, астрономии, географии,

хронологии. Также как аль-Фараби он отмечает пользу «искусства астрологических предсказаний» в изучении многих наук. В предисловии «Книги вразумлений начаткам науки звезд» он отмечает, что для того, чтобы изучить звезды он параллельно изучил несколько предметов: «Я начал с геометрии, затем перешел к арифметике и числам, затем к устройству вселенной, а затем к приговорам звезд, ибо лишь тот достоин звания звездочета, кто полностью изучил эти четыре науки». [1, с. 21].

Беруни написал много фундаментальных трудов по всем отраслям науки. Он сделал невозможное возможным в науке, не только благодаря своему упорству, но всесторонне развитому творческому мышлению, художественному взгляду и знанию законов природы и космоса, что последнее пока еще не входит в союзные со STEMом дисциплины.

В своем почти на поэтическом языке написанном произведении «Осор-ул-бокия», Беруни красочно и изящно излагает такую мысль: «Когда человек все время думает о науке, сильно устает, но если от изучения одного предмета переходит на другой, это схоже с тем, что шагает по разным садам и еще не выходя из одного сада, под его ногами расстилается другой чудный сад...» [5, с. 8].

Другой феномен науки, пришедший взамен своим предшественникам, был Абу Али ибн Сина, которого на Востоке называли Шайх-ур-раисом, а



христианский мир дал всемирно известное прозвище – Авиценна. Ибн Сина известен в мире не только своей совершенной личностью, но и научными трудами, которые соединяют и интегрируют многие дисциплины. В центре внимания трудов Ибн Сины все стороны жизни человека, без преувеличения от А до Я – с утробы матери до смерти, от Земли до Космоса.

В его педагогических взглядах современное STEM-образование прослеживается начиная с семьи. Так, например наряду с другими предметами Ибн Сина предлагал не только в школе, но и в семье учить детей декламировать стихи в форме раджаза, затем касыды. Раджаз – это метр, используемый в классической арабской поэзии. Его знаменитый медицинский труд «Урджуза-фи-тиб» («Лечебная поэма») написана в поэтической форме (урджуза). Иранские ученые считают, что «урджуза», это есть разновидность поэзии в которой отсутствуют внутренние личные чувства, а подразумевается присутствие знания и культуры, они охватывают специальные научные вопросы не в пространной форме книг, а в длинной поэтической касыде [4, с. 52]. Таким образом, Ибн Сина с великолепным мастерством сливая в одно единое медицину и поэзию создал шедевр в мировой науке. В «Урджуза-фи-тиб» он пишет: «Медицина – это искусство поддержания здоровья и, в конечном итоге, излечения болезней, возникших в теле» [3]. Кроме данного трактата еще 9 трудов Ибн Сины написаны в поэтической форме.

Его знаменитый роман «Хай ибн Якзан» посвящена естествознанию и космологии, где младенец, выросший среди зверей, пытается осмыслить окружающий мир. Он силой своего разума постепенно постигает основы мироздания и жизненные законы, затем отправляется к людям, чтобы разьяснить истину. Этот философский роман начинается с изучения природы человека, где Хай действительно обнаруживает, что есть составные элементы реальности, которые можно постичь интеллектуально, но не





воспринимаются чувствами. Он различает чувственное знание и разумное знание. Узнав природу человека, он изучает природу вселенной и доходит до Космоса.

Известно, что Ибн Сина одним из первых внес в педагогику использование игровых элементов в процессе обучения, и это были первые шаги к геймификации обучения на истоках мусульманской цивилизации.

Ибн Сина был всеохватывающим ученым своего времени. Написал труды по всем отраслям науки: логика, лингвистика, поэзия, физика, психология, медицина, химия, математика, музыка, астрономия, мораль, экономика, метафизика, мистицизм, комментировал суры Корана, перевел произведения Гиппократ, Галена, изучил и дал комментарии трудам Аристотеля. Неоценимый вклад внес в науку педагогики. Он на практике доказал преимущества STEM со всеми его союзами.

Необходимо еще заметить, что все успехи мусульманского Востока в постижении наук давались им еще благодаря богатому духовному потенциалу, сопровождающая исламской религией, в котором даже намаз был просчитан до математических точностей времени. Ценности исламской религии, как частица национальных ценностей нашего народа и сегодня продвигают нас к достижению великих замыслов, открытий и постижений.

Наша восточная цивилизация богата своими именами, которые внесли неоценимый вклад в мировую науку. В Узбекистане жили и трудились знаменитые всестороннее развитые ученые и предстоит большая работа по восстановлению многочисленных источников неизученных до сих пор. STEM-образование, которое сейчас признана в мире, как образец разумного воспитания молодого поколения уже давно была на практике доказана нашими предшественниками. Вдобавок к разнообразным параметрам нынешнего STEM-образования еще в средних веках были использованы астрономия, философия, языкознание и поэзия. Благодаря знанию



нескольких языков без интернета и без приложений, без наставника и учебников они смогли самосовершенствоваться своим творческим воображением, изучением культур и языков, астрономии, и конечно же интегрированному обучению точным наукам.

STEM образование только развивается и набирает обороты в многих странах мира, в том числе и в Узбекистане. Сегодня, как и для многих стран мира у нас тоже идет инвестирование в так называемый «интеллектуальный капитал». Поставлена задача модернизации традиционной системы научно-технического образования, применение инновационных форм обучения. В рамках реализации соответствующих мер в нашей стране совместно с зарубежными специалистами внедряются ряд проектов и программ, предусматривающие привлечение специалистов к реформированию системы школьного образования и внедрения современных методологий преподавания, в том числе STEM-обучения.

В настоящее время перед педагогами нашей республики стоит важная и ответственная задача: разработать и внедрить необходимые проекты и программы по STEM-образованию. Студенты получившие образование по модели STEM более востребованы во всех развитых странах. В большинстве стран уже разработаны и внедряются программы по подготовке STEM специалистов.

Работу надо начинать не только с учителей школ, но и преподавателей вузов. Организовывать и проводить курсы повышения квалификации учителей и преподавателей вузов, содержательно направленных на получение STEM-образования. Разработать качественные, практикоориентированные программы с учетом наших исторически сложившихся национальных ценностей и традиций. Координируясь на величайшие успехи наших предков, внедрить их практику в программу STEM-образования, т.е. создать комплексную программу STEM-



образования в союзе с астрономией, языкознанием, творчеством. Эту идею можно решить только при сочетании искусства воображения педагога с ученым, дизайнером, конструктором, психологом, менеджером, историком, творчески настроенным специалистом.

### Использованная литература:

1. Абу Райхан Беруни. Избранные произведения. Т.VI. – Т.: «Фан», 1973. – 643 с.
2. Абӯалӣ Ибни Сино. «Илоҳиёт» (57–105 с.), Осори мунтахаб. Ҷ.1. Душанбе: «Ирфон», 1980. – 477 с.
3. Авицена// <https://ru.frwiki.wiki/wiki/Avicenne>).
4. Али Ибрахим Мансур. Абуали ибн Сина и его арабоязычное поэтическое наследие. // Дисс. на соискание ученой степени кандидата филологических наук. Душанбе, 2015.
5. Берунӣ А. Осор-ул-боқия. – Душанбе, Ирфон, 1990, – 432 с.
6. Негматов Н.Н. Государство Саманидов. Душанбе: «Дониш». – 1977.
7. Сухомлинский В.А. Сердце отдаю детям / [https://pedlib.ru/Books/1/0214/1\\_0214-33.shtml](https://pedlib.ru/Books/1/0214/1_0214-33.shtml). Дата обращения: 20.01.2023.



## WORDS OF POSITIVE WISHES OF THE UZBEK AND KARAKALPAK PEOPLES AROUND THE TABLE

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**Abstract:** The examination of praise and wishes of the Uzbek and Karakalpak peoples around the table is the center of this article. This procedure is frequently used to communicate positive wishes during celebrations and festivities.

**Keywords:** *applause, positive desire, prayer, wish, speech etiquette, food, household applause, food, happy life, aging.*

Applause and wishes are utilized in folklore in various forms and meanings in everyday life. Everyday applause has no unique creators or performers. Wherever they are needed, older people speak them. There are three forms of clapping: applause at the meeting, applause at the table, and applause at the start of a business or event. Each of these three species has its own distinct traits. Due to different circumstances, the lexicon of ceremonial names is genetically generated directly on the basis of that people's linguistic richness, sometimes by gaining terms from the lexical richness of other, typically surrounding ethnic groupings. The emergence of new ethnographic phenomena in the subsequent historical process of ethnos life is also a factor that ensures the continuous development of ceremonial lexicon.

People who live next to one other constantly influence, borrow, and integrate

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each other's ideas. This is frequently visible in the set of words used to describe the ritual. As a result, in some instances, the influx of vocabulary units expressing rituals from other people's languages is also one of the causes of ceremonial lexicon enrichment.

Folklorists' research into the scope, location, and content of the words acclaim and desire in folklore, in our opinion, needs more precise additions.

A lot of social elements are linked to the creation of desire and applause units. The Uzbek people's traditions, rites, beliefs, and national ideals are among them. It appears that, in addition to researching the lexical and grammatical characteristics of Uzbek applauding units, they must also be classified according to their content and speech.

The lexical richness of any language is known to be researched in the linguistics department's lexicology department, which analyzes the structural and systemic elements of lexical richness, as well as the rules of their growth and their relationship with other branches of language (phonetics and grammar).

Lexicology also considers the processes of obsolescence and renewal of a language's vocabulary, the role of linguistic and extralinguistic elements, the functional-semantic description of existing lexical units, old, new lexical layers, and linguistic theme groups.

When the lexical features of each language are studied on various levels, such as the laws of language development, language and thinking, the influence of language and society relations on the lexical structure, lexical units in terms of modernity, history, expressive-stylistic the definition of socio-philological processes, such as the division into different thematic layers, lexical units in terms of modernity, history, expressive-stylistic the definition of socio-philological processes, such as the division into different.

People wishing each other well is one of the most popular expressions in the Uzbek and Karakalpak cultures of communication. Praying, cheering, wishing,



and wishing well are examples of such statements. However, the term applause is suitable in the above-mentioned research of Uzbek folk oral poetry. In addition to applause, such units include prayer phrases, phrases such as "*Let the house be full of wheat,*" "*Find blessings,*" and some proverbs and phrases.

Positive desire units have been used in our people's history from ancient times, and instances can be found in prayers, ceremonial etiquette, phrases, and proverbs.

The happy wishes around the table are various due to the hospitality of the Uzbek and Karakalpak people.

When Uzbek and Karakalpak families visit a house, the table is set with the following words: "May this room is filled with peace and quiet." May the homeowners live long and see their children's wishes come true! The following positive wishes in the form of text are used when setting the table, eating and after the meal: "*Let there be no state, let there be generosity, let there be endless pleasure, let there be no prosperity in your house, let there be happiness in your house, let there be plenty of tablecloths, let there be a face in front of your neighbors May your light be long, may your tongue be long, may your destiny be full, may your intentions be great, may your table be full, may your food be whole!*"

The following prayer is recited around the table: "*Let us not lose our seats. May the blessings of what we eat and drink touch those who pass by here! May our work come from the right, may our destiny be formed!*"

The most commonly used phrases are "*Let the one who gives soup, let the state that does not go, let the state give a broad verb! Blessings, the state increases*".

The above instances demonstrate that, according to our people's customs, entering a house is a beautiful gesture to the owners, and then when the table is set, those seated around it desire the human health and wellbeing, longevity,



success, wealth, harmony, and well-being in the future. Even when the guest is not present, each apartment owner with a table setup and before the table is washed, himself, family members, and relatives wants applause reflecting similar happy wishes for his connections. The topic of responses and speech propriety reflects the applause heard.

The word **pray** is often used in the context of applause, followed by sentences expressing a positive desire, such as *"Let our prayers be accepted, and enjoy the seven rewards of the prayers we recite."*

The word duo in the Uzbek language has been used for a long time. Units ending "**Olohu Akbar**" in (Allah is great, Allah is great) were used.

The Arabic lexeme duo was adopted in both Persian and Turkish, and is one of the most widely used words in Islam, being used in the language of ancient Uzbek written records from the 14th to the 15th centuries. In the language of "Muhabbatnoma" (Khorezmi's work) and in the works of AlisherNavoi in the 15th century, it became a polysemous word in both poetic and prose works:

- "Pray"** - 1. Ambitions; pray to god for good.  
 2. purpose, demand, desire.  
 3. Wishing you a long life.  
 4. Amurlet.

The Persian word for prayer is duo: the phrase "**pray for goods**" is a prayer for good deeds; "**Prayer of the soul**" is a prayer for someone's life and well-being, and always means "**your prayer is in your soul.**"

The word duo is also formed in compound verbs: to pray, to pray, to pray. The Arabic grammatical form of the word pray is also found in the language of written monuments in Uzbek.

Examples of written texts that show the different meanings of the word duo in a sentence: Golden apple, take a prayer, isn't a prayer a gold? (Proverbs).

*"Father, I don't need your money, just pray,"* he said hurriedly. (S.Ahmad)



After the prayer, Otabek took out a blanket and held it in a box. (A.Qodiriy) The prayer of many will be a lake (Proverb) Say a prayer to my aunt, my daughter ... - said Aunt Tokhta (I. Rahim).

The word tandem appeared in the examples above as a syllable of appreciation with several definitions.

As a result of the foregoing, it can be stated that positive desire content units have a wide range of content and are classified into several content groups. They possess peace, harmony, health, longevity, a pleasant life, good luck, sustenance, congrats on holy days, a large family, money, and strength in particular. The applause's content will be represented as a joyful existence with twofold aging.

#### REFERENCES:

Жабборов Э. Ўзбек халқ ўйинлари лексикаси: Филол. фанлари номзоди дисс. ... автореф. –Т., 1998. -26-б.

Ja`rimbetov Q., Allambergenov I., Nizamatinov J.Qaraqalpaq folklori.-T-2018.73-b.

Qaraqalpaq folklori.77-87-tom.No`kis.Ilim.2017. 531-b.

Qazaqbaev S. Qaraqalpaq salt-da`stu`r jirlari. No`kis.Qaraqalpaqstan. 7-b.

Yarashova N. J. The lights of jewels of turkic language in the works of AlisherNavoi //Theoretical & Applied science Учредители: Теоретическая и прикладная наука. – 2021. – №. 9. – С. 659-661.

Jumaevna N. Y. Metaphor in children's prose as a linguoculturological phenomenon //Eurasian Journal of Social Sciences, Philosophy and Culture. – 2022. – Т. 2. – №. 2. – С. 18-22.

Shahodat, X. (2023). THE MAIN DIFFERENCES AND SIMILARITIES OF NICKNAMES AND PSEUDONYMS IN THE ENGLISH LANGUAGE. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 7.429, 12, 60-61.





Ibragimova, Z., & Ibragimova, U. (2020). PROFESSIONAL WORDS IN THE UZBEK DIALECTS OF KARAKALPAKSTAN WHICH CAN BE FOUND IN OTHER UZBEK DIALECTS. In *Recent Scientific Investigation* (pp. 69-72).

Ibragimova, Z. (2023). FORMATION OF SOCIAL COMPETENCE STUDENTS ON FOREIGN LANGUAGE LESSONS. *Science and innovation*, 2(B6), 48-52.

Ikromo'g'li, A. O. (2023). O'ZBEK VA QORAQALPOQ TILI LEKSIKOGRAFIYASINING BOYISH MANBALARI VA USULLARI. *BOSHQARUV VA ETIKA QOIDALARI ONLAYN ILMIY JURNALI*, 3(2), 50-52.

Kilichov, N. R., & Durдона, A. (2022). Vocabulary in the old turkish language.

Rakhmonov, N., Kurbaniyazov, M., & Kilichov, N. (2020, December). SOME NOTES ABOUT CLASSIC POETICS. In Конференции.

Radjabbaevich, K. N. (2019). LINGUOAESTHETIC CHARACTERISTICS OF THE LEXICS OF MONUMENT "OLTUN YORUG". *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 8(6), 35-42.

Киличов, Н. Р. (2019). ЗАИМСТВОВАННАЯ ЛЕКСИКА В ПРОИЗВЕДЕНИИ "ЗОЛОТОЙ БЛЕСК" ("АЛТУН ЯРУК"). In *ИННОВАЦИОННЫЕ ПОДХОДЫ В СОВРЕМЕННОЙ НАУКЕ* (pp. 34-38).

Киличов, Н. (2022). Қадимги туркий тилдаги синоним компонентли жуфт отлар семантикаси. Развитие лингвистики и литературоведения и образовательных технологий в эпоху глобализации, 1(1), 40-43.

Киличов, Н. Р. ҚАДИМГИ ТУРКИЙ ТИЛДАГИ СИНОНИМ КОМПОНЕНТЛИ ЖУФТ ОТЛАР СЕМАНТИКАСИ («Олтун ёруғ» асари мисолида).



Dauletbayevich, A. S. (2021). The Expression of the Symbolic Phrases" to Think" in Uzbek-Karakalpak Literary Text. *International Journal on Integrated Education*, 4(10), 57-58.

ABDULLAYEV, S. FRAZELOGIZMLAR-MUHIM TIL BIRLIGI SIFATIDA. *АКТУАЛЬНЫЕ НАУЧНЫЕ ИССЛЕДОВАНИЯ В СОВРЕМЕННОМ МИРЕ Учредители: Общественная организация" Институт социальной трансформации"*, 19-21.

Abdullayev Davronbek. (2023). NUTQNING IJODIY VOQELANISHIDA LUG‘AVIY BIRLIKLAR VAZIFADOSHLIGI. *Scientific Impulse*, 2(13), 63–67.

Abdullayev, D. A. (2020). «O ‘ZBEK TILINING IZOHLI LUG ‘ATI» DA IBORALARNING IZOHLANISH TAMOYILLARI. *Интернаука*, (40-2), 48-50.

Masharipovna, R. K. (2022, October). TAYANCH KOMPETENSIYALARNI SHAKLLANTIRISH ORQALI ONA TILI DARSLARINING SAMARADORLIGINI OSHIRISH. In *Proceedings of Scientific Conference on Multidisciplinary Studies* (Vol. 1, No. 1, pp. 219-222).

Kurbanbaevich, B. M. (2019). THE PHRASEMES TRANSLATED WITH THE DESCRIPTION METHOD IN THE UZBEK-KARAKALPAK LITERARY WORKS. *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 8(6), 20-26.

Orazbaev Ergash Yuldashevich (2021). Globallashuv davrida ona tili fanining ahamiyati. *Евразийский научный журнал*, (4), 18-19.

Oglu, N. O. E. (2020). ETHNOGRAPHIC VOCABULARY OF UZBEK DIALECS IN KARAKALPAKSTAN. *Евразийский Союз Ученых*, (10-4 (79)), 31-32.

Yuldashev, O. (2023). O ‘ZBEK XALQ OG ‘ZAKI IJODI BO ‘LMISH-MAQOLLARNING O ‘RGANILISHI. *Евразийский журнал академических исследований*, 3(10), 50-53.

Sabirovich, Y. O., Ithomovna, T. S., & Mahsudovich, A. O. (2021). LINGUCULTUROLOGICAL FEATURES OF SOME PROVERBS OF SOUTH KARAKALPAKISTAN IN UZBEK DIALECTS. *Thematics Journal of Social Sciences*, 7(6).

Allambergenovich K. M. History and Tradition in the Stories of Golden Orda Literature //ANGLISTICUM. *Journal of the Association-Institute for English Language and American Studies*. – 2018. – Т. 7. – №. 4. – С. 52-58.

Radjabbaevich, K. N., Allambergenovich, K. M., Dauletbayevich, A. S., Adilbayevna,



K. Z., & Gulmanovna, Y. N. (2023). The Dialectal Structure of the Work "Oltun Yorug". *Telematique*, 7739-7744.

Ashirov, O. (2023). "MUQADIMAT UL-ADAB" QIPCHOQ LAHJASIGA OID QAYDLAR AKS ETGAN MUMTOZ MANBA. *Евразийский журнал академических исследований*, 3(9), 164-167.

Ashirov, O. (2023). BADIY MATNLARDA NUTQIY AKT NAZARIYASIGA DOIR BA'ZI MULOHAZALAR. *Science and innovation in the education system*, 2(10), 27-29.

Allamberganova, M. (2021). O'RXUN-ENASOY OBIDALARINING O'ZBEKISTONDA O'RGANILISHI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 1(4), 20-24.



**CHARACTERISTICS OF THE MEANING OF THE FORM OF  
ADJECTIVES AND DIMINUCTIONS IN THE UZBEKI LANGUAGE**

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**Abstract.** In this article, the forms of diminution and caress specific to nouns in the Uzbek language are analyzed. The features of the use of diminutive and caressing forms within the text are proven with concrete examples.

**Key words:** Uzbek language, nouns, dictionary forms, diminutive forms, caress forms.

In Uzbek linguistics, noun as one of the largest word groups has its own lexical-grammatical properties. The phenomenon of word formation and form formation in nouns is also quite extensive. It is important to analyze the phenomenon of formation of nouns and the expression of meaning in them.

The formation phenomenon is observed within independent word groups within noun and verb groups. Usually, each form of the word is formed using a special tool - an affix or auxiliary word. But in the Uzbek language, there are also forms of the word that do not have a special indicator. For example, in nouns, the plural form is formed using the affix -lar, there is no singular form: item (singular form), items (plural form), flower (singular form), flowers (plural form).

The noun group is very rich in grammatical forms. In this category, both



categorical forms and non-categorical forms make up a considerable amount. Also, there are both synthetic forms and analytical forms in the noun category. A number of categorical and non-categorical forms of the noun are formed by the affixation method. In this article, we want to focus on non-categorical forms of nouns, diminutive forms and their meaning.

In the Uzbek language literature, information is given about categorical forms rather than noun-specific forms. Non-categorical forms of nouns are almost ignored. Such forms and a number of other affixes are given as word-formers or nothing is said about them at all. Forms of this type serve to add an additional meaning to the lexical meaning of the noun, to adapt the word belonging to the noun family to a syntactic function not typical of nouns.

Diminutive and caressing forms of nouns are listed in the literature, including in the system of non-categorical forms of nouns, the diminutive form as a type of synthetic form, caressing form [1, 274], and the diminutive-caressing form as special lexical forms of the noun in the system of lexical forms, personal Forms of attitude [2, 231] are being studied in different groups.

The diminutive form of nouns is made by adding special affixes to nouns using the affixation method. With the addition of these affixes, the lexical meaning of the noun does not change, but in addition to this lexical meaning, the meanings of belittling, caressing, respecting, humiliating, strengthening, and pitying the personal attitude are loaded. These affixes include -cha, -chak, -chak, -gina (-kina, -kina), -(a)loq, -jon, -khan, -boy, -bek, -toy, -oy, -bibi, -bonu , -niso, -gul and other affixes are included. We observe the meaning aspects of some of these affixes in the formation of lexical forms.

A diminutive form. The lexical form formed using the affix -cha mainly expresses the meaning of diminutive: basket, table, bird, mare, sister, stick. For example: The old man had a knot in his hand (F. Musajonov). - Because you didn't have knowledge, - says the cap (Kh. Tokhtaboyev).



*-cha* When the affixed form is added to words denoting a person, it can express the meaning of respect or contempt along with caress. But these meanings are the meanings that arise from the meaning of reduction under the influence of certain facts: The leadership is done by the women Bibioysha from home (Mushtum). It's an interesting story, and I don't get bored anymore (Oybek).

Sometimes words with the suffix *-cha* are used to express the meaning of smallness: Vahabjan brought a small bed, it didn't work... (R. Fayziy). The bead stares into your eyes, stretches out its small white arm and tugs at your collar...(S. Zunnunova). So, it can be seen from the examples that when the suffix *-cha* is added to a word that expresses a small thing, it creates the meaning of diminutive, and if a diminutive determiner is used before the word of this form, it means petting together with diminutive. is also expressed.

Also, when the suffix *-cha* is added to living objects and the names of body parts, not only the meaning of diminutive, but also the meaning of caress arises: "If you don't mind, listen, boy", - says the old man and begins his coughing history (Oybek). The girl raised her head with hope and put it back on the pillow (M. Ismaili).

Also, the suffix *-cha* is added to the words expressing small things, and along with the meaning of diminution, it also expresses the attitude of the speaker to that thing, serves to mean negative or positive personal attitude. When the suffix *-cha* is added to words such as horse, chick, baby, a personal attitude is expressed: A horse was wading his skinny legs in the water and drinking water (from the book of tales about H. Olimjon). The baby is a boy, his eyes are like black necklaces...(From the newspaper).

It is also worth noting that the diminutive form with the affix 1) can acquire a new lexical meaning and become a new word. In this case, the meaning of diminutive is lost: like paddy field, blanket, garden (kindergarten); 2) *-cha*



homonymous adverb and polysemous adverb.

*-chak, -chak* affix This affix is added to various words and expresses the meaning of diminutive, as well as caressing: mare, lamb, bride, knot. For example: He is whining about his mare, which he did not see for a day, and he stayed at home with a straw blanket (M. Muhamedov). In addition to the diminutive meaning, it can also express the personal attitude of the speaker to this or that event. The meaning of diminutive-caressing is formed by adding a different determiner before the word that receives the suffixes *-chak, -chak*, or by adding the suffix *-dek/-day* after the word of this suffix. For example: Spring came like a bride (Furqat). He was sleeping like a fed lamb (A. Qahhor).

A form of caress. *-jon* affix is added to personal nouns or proper nouns denoting a person's name to form forms expressing caressing, kissing, positive attitude: brother, father, Anvarjon. For example: My mother always oiled my shoes. My grandmother used to wipe my forehead, caress her, caress her (A. Kochimov).

*-khan, -oy* suffixes are also added to nouns denoting a person's name and mean caressing, kissing: such as Feruza Khan, Salima Khan, Barchinoy.

It is also possible for such forms to be added to several lexical units and express different meanings in speech. In particular, it is observed that these forms are added to gender-related words in a unique way. Forms expressing the meaning of caressing can be divided into three groups according to their addition to words denoting gender and their semantic characteristics: 1) a form expressing the meaning of caressing, added to words belonging to the male and female genders; 2) a form expressing the meaning of caressing when added to words belonging to the male gender; 3) a form expressing the meaning of caressing when added to words of the female gender [3, 234].

It should also be noted that the suffixes *-jon, -khan, -oy* can become part of a person's name and become its integral component. It does not mean caressing



or respecting: like Dadajon Mamajonov, Rohatoy, Onakhan, Oghiloy, Nurkhan.

In addition, such lexical forms as -gina (-kina, -kina), -lok, -boy, -bek, -kul, -toy, -beka, -bibi are added to various nouns to caress, respect, kiss. represents the nos.

On the basis of the examples and comments analyzed above, it can be said that the forms of diminutive and caressing nouns are considered an important methodological and semantic tool in the expression of a person's personal attitude, the etiquette of addressing and communicating between individuals, in the formation of speech culture, as well as as a linguistic and cultural unit.

## REFERENCE

- Tursunov U., Mukhtorov J., Rahmatullayev Sh. Modern Uzbek literary language. -Tashkent, 1992. 399 p.
- Sayfullayeva R. and others. Modern Uzbek literary language. -Tashkent, 2009. 414 p.
- The team of authors. Modern Uzbek language. Volume I. Morphology. -Tashkent, 2008. 468 p.
- Dauletbayevich, A. S. (2021). The Expression of the Symbolic Phrases" to Think" in Uzbek-Karakalpak Literary Text. *International Journal on Integrated Education*, 4(10), 57-58.
- ABDULLAYEV, S. FRAZELOGIZMLAR-MUHIM TIL BIRLIGI SIFATIDA. *АКТУАЛЬНЫЕ НАУЧНЫЕ ИССЛЕДОВАНИЯ В СОВРЕМЕННОМ МИРЕ Учредители: Общественная организация" Институт социальной трансформации"*, 19-21.
- Abdullayev, S., & Abdullayev, O. (2023). O'ZBEK VA QORAQALPOQ TILLARIDA IQTISODIYOT SOHASIGA DOIR ZAMONAVIY LEKSIKA. *Talqin Va Tadqiqotlar*, 1(31).
- Абдуллаев, С. (2023). Структурно-семантические особенности пословиц в узбекском и каракалпакском языках. *Американский журнал языка, грамотности и обучения в области STEM-образования (2993–2769)*, 1 (9), 70–73.
- Киличов, Н. (2022). Қадимги туркий тилдаги синоним компонентли жуфт отлар семантикаси. *Развитие лингвистики и литературоведения и образовательных технологий в эпоху глобализации*, 1(1), 40-43.
- Kilichov, N. R., & Durdona, A. (2022). Vocabulary in the old turkish language.
- Rakhmonov, N., Kurbaniyazov, M., & Kilichov, N. (2020, December). SOME NOTES ABOUT CLASSIC POETICS. In *Конференции*.
- Radjabbaevich, K. N. (2019). LINGUOAESTHETIC CHARACTERISTICS OF THE LEXICS OF MONUMENT "OLTUN YORUG". *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 8(6), 35-42.





Киличов, Н. Р. (2019). ЗАИМСТВОВАННАЯ ЛЕКСИКА В ПРОИЗВЕДЕНИИ "ЗОЛОТОЙ БЛЕСК" ("АЛТУН ЯРУК"). In *ИННОВАЦИОННЫЕ ПОДХОДЫ В СОВРЕМЕННОЙ НАУКЕ* (pp. 34-38).

Ibragimova, Z. (2023). FORMATION OF SOCIAL COMPETENCE STUDENTS ON FOREIGN LANGUAGE LESSONS. *Science and innovation*, 2(В6), 48-52.

Abdullaev, D. (2022). Expression of mental relationship in phraseologies.

Abdullayev, D. A. (2020). «O 'ZBEK TILINING IZOHLI LUG 'ATI» DA IBORALARNING IZOHLANISH TAMOYILLARI. *Интернаука*, (40-2), 48-50.

Kurbanbaevich, B. M. (2019). THE PHRASEMES TRANSLATED WITH THE DESCRIPTION METHOD IN THE UZBEK-KARAKALPAK LITERARY WORKS. *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 8(6), 20-26.

Allambergenovich K. M. History and Tradition in the Stories of Golden Orda Literature // *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*. – 2018. – Т. 7. – №. 4. – С. 52-58.

Allambergenovich K. M., Maftuna A. Development Factors of Medieval Storytelling // *INTERNATIONAL JOURNAL OF LANGUAGE LEARNING AND APPLIED LINGUISTICS*. – 2023. – Т. 2. – №. 4. – С. 182-184.

Radjabbaevich, K. N., Allambergenovich, K. M., Dauletbaevich, A. S., Adilbayevna, K. Z., & Gulmanovna, Y. N. (2023). The Dialectal Structure of the Work "Oltun Yorug". *Telematique*, 7739-7744.

Kurbaniyazov, Makhsum Allambergenovich. "THE DIVERSITY OF THE THEME IN THE RABGHUZIY'S STORY." *Культурология, искусствоведение и филология: современные взгляды и научные исследования*. 2018. 56-59.

MASHARIPOVNA, R. K. Formation Of Correct Writing Skills. *JournalNX*, 7(02), 206-210.

Masharipovna, R. K. (2021). THE IMPORTANCE OF DICTIONARIES IN INCREASING LITERACY. *Conferencious Online*, 25-27.

Yuldashevich, O. E. (2023). The Place of Arabic Changes Related to Islam in the Linguistic Landscape of the Turkish People. *Central Asian Journal of Literature, Philosophy and Culture*, 4(7), 83-86.

Oglu, N. O. E. (2020). ETHNOGRAPHIC VOCABULARY OF UZBEK DIALECTS IN KARAKALPAKSTAN. *Евразийский Союз Ученых*, (10-4 (79)), 31-32.

Nurjanov, O. Ethnographisms Denoting Children's Games. *International Journal on Integrated Education*, 4(1), 126-128.

Yuldashev, O. (2023). A LOOK AT THE STUDY OF FOLK PROVERBS. *International Bulletin of Applied Science and Technology*, 3(10), 47-50.

Ashirov, O. (2023). "MUQADIMAT UL-ADAB" QIPCHOQ LAHJASIGA OID QAYDLAR AKS ETGAN MUMTOZ MANBA. *Евразийский журнал академических исследований*, 3(9), 164-167.

Ashirov, O. (2023). BADIY MATNLARDA NUTQIY AKT NAZARIYASIGA DOIR BA'ZI MULOHAZALAR. *Science and innovation in the education system*, 2(10), 27-29.

Ashirov, O. (2022). DIALEKTLARNING BADIY ASAR TILIDAGI SEMANTIK-STILISTIK



XUSUSIYATLARI. *Академические исследования в современной науке*, 1(13), 249-252.

Allambergenova, M. (2021). O‘RXUN-ENASOY OBIDALARINING O‘ZBEKISTONDA O‘RGANILISHI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 1(4), 20-24.



## ETHNOGRAPHIC DIALECTISMS IN THE UZBEK DIALECTS OF KARAKALPAKISTAN

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**Abstract.** This article discusses some features of ethnographic dialect words in the communication of the Uzbeks living in Karakalpakstan.

**Keywords:** ethnography, region, dialect, literary language, dialect

There are many words and terms related to the lifestyle, traditions, customs, material, and spiritual culture of our people formed over the centuries, both in the Uzbek literary and dialectal languages dating back to ancient history and in the represented language. Such words and terms have attracted the attention of many researchers in linguistics. It should be noted that there is a special science of ethnography that studies different types of clans, tribes, nations, and peoples, their origin, lifestyle, traditions, customs, and historical relations, and linguistics has a very close relationship with it, especially dialectology. This is natural, because the people's life, customs, and culture are reflected, first of all, in the words of the language, in the speech of representatives of the dialect and dialect living in a certain region. Some of the ethnographic dialecticisms are used in scientific works, including ethnography, and in fiction to describe local features and characteristics.

Some of the ethnographisms are common to the literary language and



dialects, while the other part is specific only to the dialects and dialects of a certain region and is not found in the literary language. Although researchers have noted the complexity and variety of Uzbek dialects, their linguistic features have not been widely studied from an area point of view. Linguistic scholars of dialects have expressed general opinions in many areas, but their opinions cannot fill all the gaps in their dialectological research. Dialect research requires investigation based on new paradigms beyond traditional methods. A full study of this problem will help to reveal the vague and abstract aspects of the history of the people and the history of our language. Due to the fact that representatives of different nationalities live in this area, their languages also have unique aspects. This situation is also visible in their ethnographic lexicon. If we look at the history, we can see the situation of ‘Ughization’ in many Kipchak dialects under the influence of Oghuz dialects.

Also, the cases of transition from j-speaking dialects to y-speaking dialects are noticeable. This situation is also visible in their common lexicon. The historical process is also reflected in the language of the people of this region. Undoubtedly, the people invented various traditions and customs in the process of social life that determined the way of life of people later. This situation is definitely reflected in their language. Therefore, interest in these lexical units in our language began much earlier. Any language reflects the social life, lifestyle, and life experiences of people, nations, and ethnic units who communicate in that language. For this reason, they recognise the language as the only witness to the stages of people's lives and historical development, which conveys their life experiences from many ancestors to generations, preserves their national identity, and is a symbol of their ethnic cohesion.

As in other areas of the language, the Uzbek language performed the above services and tasks in the area of its branch lexicon and, over the centuries, preserved and passed them on to future generations. But with the passage of time



and social changes in life, development does not allow us to preserve all things in the language. Some language units may be preserved in it as required by historical development, and new language units may be used instead of outdated ones. All this happens because of the requirements of life and social development. One of the linguists who took this into account, F. de Saussure, said: "If we imagine that a language exists only in time, without a public speaking in it (that is, a person lived alone for several centuries), time would not exert its influence on language and no change would occur in language. And, conversely, if we imagine a person is isolated from the period during which a certain language was spoken (or if the person's life stopped at a point), the influence on the language wouldn't have happened..<sup>2</sup>

Therefore, the influence of factors such as time, place, social development, and the structure and character of the language-speaking population is of great importance in the existence of a language. The Uzbek language has also changed under the influence of these social events; many linguistic resources have been forgotten and become out of use, and new language means have been accepted into the language. But it should also be noted that the archaic layer out of use may still be preserved in the spoken language of the people, even if it is not found in written monuments or literary language. For this reason, collecting the preserved linguistic elements of the speech of the inhabitants of the regions and analysing them in bulk is one of the great tasks facing linguists at the present time. One of such elements is the ethnographies used in the Uzbek dialects living in the territory of Karakalpakstan. This lexicon has undergone many changes over time; most of it has disappeared with the passage of time; some of them have been replaced by other equivalents under the influence of a new era; and new names have appeared. Later, these names were enriched by new names borrowed from

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<sup>2</sup>Sossure F. *Курс общей лингвистики. Труд языкознанию/ A Course of General Linguistics.* –М.:1933. –Рр.86-87



Russian and other western languages through the Russian language. Ethnographicisms also have new names due to changes in the social lifestyle of the population in this area, and major changes have taken place in their composition.

"The Uzbeks in Karakalpakstan belong to two large ethnic groups, the Kipchaks and the Oghuzs. This division of Uzbeks into two ethnic groups caused their linguistic differences – the existence of the Kipchak and Oghuz dialects of the Uzbek language.<sup>3</sup> These dialects differ from each other according to some linguistic features. For this reason, the study of the lexical features of the regional dialect provides valuable information for the lexicology and lexicography of the Uzbek language. The Uzbeks of Karakalpakstan live side by side with representatives of the Turkic peoples of Karakalpak, Kazakh, and Turkmen. This leads to the great influence of the languages of the Turkic people and other peoples on the language of this region. Also, there are words denoting ethnic names in historical sources. Some of these words have been preserved in the Uzbek language, while others may have been preserved in the Karakalpak, Kazakh, and Turkmen languages. This situation helps to study the oldest lexis in the history of the language through the materials of these languages and their influence. This, on the one hand, creates an opportunity to study unifying language elements of the Uzbek vocabulary and ambiguous lexical-grammatical events in the history of the language.

Language means of the national language in all regions, lexical units of branches, and various terms related to fields are of great importance both for the development of the literary language and for the development of the science of linguistics. Appearances of ethnographic names in the language of the Uzbeks of

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<sup>3</sup>Ishayev A. *Қорақалпоғистондаги ўзбек шевалари/Uzbek Dialects in Karakalpakstan.*-Tashkent:Фан, 1977. – P.5



the Karakalpakstan region in the languages of neighbouring nations are no exception. Because it is natural that the peculiarities of the language of the inhabitants of this region, its literary language, and its differences from the language of the inhabitants of other regions provide valuable information and sources for both the science of linguistics and the lexical structure of the Uzbek literary language.

The roots of new views in linguistics are connected with the theory of analogy-anonymity at the end of the 19th century and the beginning of the 20th century, which played an important role in ancient Latin philosophy. American linguists such as F. Boas and E. Sepir state in their research that it is impossible to find a direct correspondence between the culture and the structure of the language and that the culture of the people is related to the composition of its vocabulary in the language.<sup>4</sup> E. Sepir's observations on language and culture served as the basis for the formation of ethnolinguistics, a separate linguistic direction that studies the relationship between language and folk culture and traditions.<sup>5</sup> The history of traditions goes back to the beginning of mankind. Primitive society initially had no religious ideas. Traditions were created at the heart of people's work and had a great impact on the development of society and the growth of people's minds. Ethnography is mainly closely related to domestic life and family life processes. The ethnographic lexicon includes all stages of a person's life: lifestyle, what he does, how he lives, all habits characteristic of a person in general, factors related to them, and factors influencing them. Each ethnos, in turn, consists of certain tribes and clans, tribes and communities, social groups, and classes. The national language is the most important factor in the creation and consolidation of these

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<sup>4</sup>Jabbarov I. *Ўзбек халқ этнографияси/ Uzbek Ethnography*, Tashkent: Ўқитувчи, 1994, 3 б.

<sup>5</sup>Nurmanov A. *Танланган асарлар/ Selected collections*. In 3 Volumes, The 2<sup>nd</sup> Volume. Tashkent: Академнашр. 2012, 153 p.



historical units. Because language is the main factor in their free interaction with each other and the establishment of economic and cultural relations,

Indeed, there are diverse, controversial, and even contradictory opinions on the issue of ethnographic dialectics. As we mentioned, the science of ethnography is closely related to the science of linguistics, especially dialectology. This is natural because people's lives, traditions, materials, and culture, first of all, in the words of the language, are reflected in the speech of representatives of the dialect and dialect spoken in a certain region.

### REFERENCE

- Saussure de F., *A Course in General Linguistics*, – M.: 1933.
- Ishaev A. *Қорақалпоғистондаги ўзбек шевавлри*//Uzbek dialects in Karakalpakstan, –Т. "Fan," 1977.
- Jabbarov I. *Ўзбек халқи этнографияси*/ Ethnography of the Uzbek people. –Tashkent, "O‘qituvchi," 1994.
- Nurmonov A. *Танланган асарлар*/ Selected works. Three volumes, the 2nd volume. – Tashkent: Akademyashr, 2012.
- Oglu, N. O. E. (2020). ETHNOGRAPHIC VOCABULARY OF UZBEK DIALECTS IN KARAKALPAKSTAN. *Евразийский Союз Ученых*, (10-4 (79)), 31-32.
- Nurjanov, O. Ethnographisms Denoting Children's Games. *International Journal on Integrated Education*, 4(1), 126-128.
- Нуржанов О.Е., Абдримова К.С., Бободжонова Ю.И. КРАСОТА ЛЕКСИЧЕСКИХ ВЫРАЖЕННЫХ СРЕДСТВ, ИСПОЛЗУЕМЫХ В РОМАНЕ "TESS OF D'URBERVILLES" THOMAS HARDY [BEAUTY OF LEXICAL EXPRESSED MEANS USED IN THE NOVEL "TESS OF THE D'URBERVILLES" BY THOMAS HARDY] // VII INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS OF HISTORY, CULTURAL STUDIES AND PHILOLOGY
- Kilichov, N. R., & Durdona, A. (2022). Vocabulary in the old turkish language.
- Rakhmonov, N., Kurbaniyazov, M., & Kilichov, N. (2020, December). SOME NOTES ABOUT CLASSIC POETICS. In Конференции.
- Radjabbaevich, K. N. (2019). LINGUOAESTHETIC CHARACTERISTICS OF THE LEXICS OF MONUMENT "OLTUN YORUG". ANGLISTICUM. *Journal of the Association-Institute for English Language and American Studies*, 8(6), 35-42.
- Киличов, Н. Р. (2019). ЗАЙМСТВОВАННАЯ ЛЕКСИКА В ПРОИЗВЕДЕНИИ "ЗОЛОТОЙ БЛЕСК" (" АЛТУН ЯРУК"). In ИННОВАЦИОННЫЕ ПОДХОДЫ В СОВРЕМЕННОЙ НАУКЕ (pp. 34-38).
- Киличов, Н. (2022). Қадимги туркий тилдаги синоним компонентли жуфт отлар семантикаси. Развитие лингвистики и литературоведения и образовательных технологий





в эпоху глобализации, 1(1), 40-43.

Киличов, Н. Р. ҚАДИМГИ ТУРКИЙ ТИЛДАГИ СИНОНИМ КОМПОНЕНТЛИ ЖУФТ ОТЛАР СЕМАНТИКАСИ («Олтун ёруғ» асари мисолида).

Dauletbayevich, A. S. (2021). The Expression of the Symbolic Phrases" to Think" in Uzbek-Karakalpak Literary Text. *International Journal on Integrated Education*, 4(10), 57-58.

Abdullayev, S., & Abdullayev, O. (2023). O‘ZBEK VA QORAQALPOQ TILLARIDA IQTISODIYOT SOHASIGA DOIR ZAMONAVIY LEKSIKA. *Talqin Va Tadqiqotlar*, 1(31).

Ibragimova, Z. (2023). FORMATION OF SOCIAL COMPETENCE STUDENTS ON FOREIGN LANGUAGE LESSONS. *Science and innovation*, 2(B6), 48-52.

Abdullaev, D. (2022). Expression of mental relationship in phraseologies.

Davronbek, A., & Dिल्фуза, K. (2023). FRAZEOLOGIZMLARDA GRAMMATIK ME’YOR VA IJODIY QONUNIYATLARNING BIRIKUV USULLARI. *BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, 3(11), 91-94.

MASHARIPOVNA, R. K. Formation Of Correct Writing Skills. *JournalNX*, 7(02), 206-210.

Masharipovna, R. K. (2022, October). TAYANCH KOMPETENSIYALARNI SHAKLLANTIRISH ORQALI ONA TILI DARSLARINING SAMARADORLIGINI OSHIRISH. In *Proceedings of Scientific Conference on Multidisciplinary Studies* (Vol. 1, No. 1, pp. 219-222).

Orazbaev Ergash Yuldashevich (2021). Globallashuv davrida ona tili fanining ahamiyati. *Евразийский научный журнал*, (4), 18-19.

Yuldashev, O. (2023). O ‘ZBEK XALQ OG ‘ZAKI IJODI BO ‘LMISH-MAQOLLARNING O ‘RGANILISHI. *Евразийский журнал академических исследований*, 3(10), 50-53.

Yuldashev, O. (2023). STUDY OF FOLKLORE ASPECTS OF UZBEK FOLK PROVERBS. *International Bulletin of Applied Science and Technology*, 3(10), 37-39.

Ashirov, O. (2023). BADIY MATNLARDA NUTQIY AKT NAZARIYASIGA DOIR BA’ZI MULOHAZALAR. *Science and innovation in the education system*, 2(10), 27-29.

Ashirov, O. (2022). DIALEKTLARNING BADIY ASAR TILIDAGI SEMANTIK–STILISTIK XUSUSIYATLARI. *Академические исследования в современной науке*, 1(13), 249-252.

Allambergenovich K. M., Maftuna A. Development Factors of Medieval Storytelling //INTERNATIONAL JOURNAL OF LANGUAGE LEARNING AND APPLIED LINGUISTICS. – 2023. – T. 2. – №. 4. – С. 182-184.



Radjabbaevich, K. N., Allambergenovich, K. M., Dauletbaevich, A. S., Adilbayevna, K. Z., & Gulmanovna, Y. N. (2023). The Dialectal Structure of the Work "Oltun Yoruq". *Telematique*, 7739-7744.

Kurbaniyazov, Makhsud Allambergenovich. "THE DIVERSITY OF THE THEME IN THE RABGHUZIY'S STORY." *Культурология, искусствоведение и филология: современные взгляды и научные исследования*. 2018. 56-59.

Ruslanovna, A. M. Analysis Of Lexical Units Expressing Spiritual Values In Ancient Written Monuments. *Academicia Globe*, 2(07), 41-45.

Abdullayev, O. (2022). O'ZBEK VA QORAQALPOQ TILLARIDA AXBOROT-KOMMUNIKATSIYA VA MAISHIY SOHAGA DOIR ZAMONAVIY LEKSIKANING LINGVOKULTUROLOGIK TAHLILI. *Новости образования: исследование в XXI веке*, 1(1), 130-133.

Ikrom o'g'li, A. O. (2023). O'ZBEK VA QORAQALPOQ TILI LEKSIKOGRAFIYASINING BOYISH MANBALARI VA USULLARI. *BOSHQARUV VA ETIKA QOIDALARI ONLAYN ILMIY JURNALI*, 3(2), 50-52.



## USING VIDEO MATERIALS IN TEACHING FOREIGN LANGUAGE

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**ABSTRACT:** This article analyzes the effective methods of "formation of linguistic and cultural competence of students using authentic video materials in foreign language teaching". Learning a foreign language can be difficult for any language learner. In the process of language learning, the selection of audio and video materials presented by the teacher to language learners of different ages is carried out step by step. Video materials play an important role in this process.

**KEY WORDS:** Authentic video materials, communicative competence, foreign language, method, teaching method.

In recent years, learning a foreign language and being able to speak it independently has become a basic requirement in various areas of society. In particular, if we look at the global scale, their main requirements for new personnel are to be able to communicate in a foreign language and to be aware of computer technologies. The Decree of the President of the Republic of Uzbekistan No. 1875 on the "National Program of Personnel Training" and "Measures to Further Improve the System of Learning Foreign Languages" adopted by the Oliy Majlis of the Republic of Uzbekistan ``learning shows that the state is a matter of importance. At this point, we should consider teaching a foreign language based on authentic video materials as a solution to the fulfillment of the above requirements and easing the tasks of preparing the learner for real life situations as the main tool of language education based on



communication.

In addition, authentic video materials help in language teaching as an alternative view of the real life situation. The popularization of authentic audio-video materials lies in their ability to create an interactive language environment for language learners, says Russian scientist G.A. Vorobyov. It has also been determined in science that the main part of the data is made up of moving speeches in video materials. The study and research on the application of this method to the lesson led to the following conclusions. - The use of authentic video materials, first of all, provides the language learner with all the features of the spoken language of certain social groups in a specific situation (emotional coloring, clarity for understanding, and its clear reach to the learner) in one or another foreign language ) provides realistic communication. - authentic video materials help to dramatically improve speaking and listening skills, which are of primary importance for language learners. The second unique aspect of using authentic video materials in the lesson is the difficulty of the studied language, the variety of words, the speed of speech, the richness of various lexical units. This helps the language learner to clearly and fluently learn a language that is not his mother tongue. Because the use of puns, sarcasms, lexical units known only to native speakers in the videos presented based on real reality has a very good effect.

There are three traditional stages (PREWATCHING, WHILE-WATCHING AND POST-WATCHING stages) of using audio-video materials in the lesson: - the pre-show stage; (the stage before using the authentic video material) - the demonstration stage (the stage when the video material is shown ) - the stage after the demonstration (the stage of using authentic video material). In order to conduct effective training based on the above-mentioned method and to achieve the intended result, the pedagogue is required to organize the lesson based on the typology of exercises in accordance with the task of each stage. The



first stage is aimed at preparing language learners for the video demonstration, and includes important tasks such as motivating students, getting them interested in the lesson, familiarizing them with the topic, and activating existing knowledge.

We now have more access than ever to video. News programs, adverts, comedies, documentaries, dramas, academic lectures are available in digital format via the internet. Most of these resources weren't originally created as teaching materials. So it serves a real-world communicative purpose. Some materials are authentic resources adapted for language teaching. Authentic material not originally produced for ELT purposes, but adapted to different grades [2]. There are some positive characteristics of using video in the process of learning foreign languages: the class does not require dimming, and therefore, the contact of teacher with learners is continuous; video provides the possibility of using different modes of operation, e.g. freeze frame, using only video track (with audio track turned off) etc.; videos can easily be used for different types of work: individual, pair, group, collective [3]; video equipment allows to split movie into desired number of clips, depending on the objectives of individual needs and characteristics of learners to continue working with each clip separately. When teaching the perception of speech by ear, it is necessary, first of all, to develop aural skills and speech hearing with the support of native speakers. And in this case, it is the authentic audio video texts that allow the students to hear the speech of the native speakers, which reflects the living reality, the peculiarities of the national culture. Most importantly, the authentic material provokes the students' cognitive interest, the willingness to discuss problems, and, therefore, contributes to their motivation to learn a foreign language. If the learner perceives foreign speech, then he begins to realize that all his efforts spent on learning a foreign language were not in vain. Thus, the main task of the teacher at the stage of work with authentic material is the selection of audio or video material that would be



interesting, informative, accessible to understanding, corresponded to the modern reality of a foreign language society and would create favorable conditions for mastering new regional information, behavior of native speakers, would facilitate their familiarity with the people's way of life, its culture [5].

In conclusion, it should be noted that the authentic video material adapted to the audience of language learners on the subject allows the students to see and listen to the necessary information and understand through gestures, to fully understand the cultural characteristics of the presented film. at the same time, a set of goal-oriented exercises based on them serves to increase the communicative competence of the language learner.

#### REFERENCE

1. Alimova .S.F.Morphological classification of language
2. Anvarovna.P,N. (2022) PHILOLOGY STUDENTS FOREIGN LANGUAGE INTERCULTURAL COMPETENCE DEVELOPMENT IN TEACHING ENGLISH. RESULTS OF EXPERIMENTS.
3. Jalilov.J. Chet tilini o`qitsh metodikasi. Toshkent. 2012
4. Nilufar Nematullayevna Zubaydova (2019) The teaching of English for specific purposes. : New York.USA,-30-33-B
5. Effectively Using Videos in the College Classroom [Electronic Resource]. Access mode: [http://citl.indiana.edu/resources\\_files/teaching-resources1/using\\_videos.php](http://citl.indiana.edu/resources_files/teaching-resources1/using_videos.php) (accessed: 03.06.2017).
6. Quillen I. Digital Video Transforms Teaching Practices [Electronic Resource]. Access mode: [http://citl.indiana.edu/resources\\_files/teaching-resources1/using\\_videos.php](http://citl.indiana.edu/resources_files/teaching-resources1/using_videos.php) 03.06.2017).
7. Using Video In The Classroom. An Activity Guide [Electronic Resource]. Access mode:



[http://ddeubel.edublogs.org/files/2011/06/Using\\_Video\\_In\\_The\\_Classroom-20mn397.pdf](http://ddeubel.edublogs.org/files/2011/06/Using_Video_In_The_Classroom-20mn397.pdf).(accessed: 08.07.2017).



## SOCIO-PSYCHOLOGICAL CRITERIA OF THE FORMATION OF RELIGIOUS TOLERANCE IN STUDENTS

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### **Аннотация**

В данной статье раскрывается сущность понятия религиозной толерантности. Также были обсуждены общие и особенности формирования религиозной толерантности среди студентов. Также представлен анализ основных критериев формирования религиозной толерантности.

**Ключевые слова:** религиозная толерантность, студент, характер, индивидуальность, критерий, взаимодействия.

### **Abstract**

This article reveals the essence of the concept of religious tolerance. The general and specific features of the formation of religious tolerance among students were also discussed. An analysis of the main criteria for the formation of religious tolerance is also presented.

**Key words:** religious tolerance, student, character, individuality, criterion, interaction.

### **INTRODUCTION**

In the current cultural-historical situation, psychological consideration of the range of issues related to religious tolerance is not only a topical topic of theoretical research, but also a constant practical requirement of society. Understanding the concept of "tolerance" in various socio-psychological studies depends on the historical experience of each nation. Published in English,





according to the Oxford dictionary[10], tolerance means "the willingness and ability to accept a person or thing without resentment", in French it means<sup>6</sup> "respect for the freedom of another person, his way of thinking, order, political and views". In Chinese it means "to be tolerant - to show generosity to others", and in Persian it means "patience, tolerance, willingness to compromise". In Russian[12], the concepts of "tolerance" and "patience" have a similar meaning. In the Uzbek language, "tolerance is the ability to show tolerance and gentleness towards other thoughts, views, beliefs, actions, customs, feelings, and ideas."

### **METHODS**

The position of considering tolerance as a social relationship or social value is also found in some literature. According to the researcher I.V.Beleshova[2], "Tolerance means a certain quality of interaction between the subject and the object, which is characterized by the willingness to accept the socio-cultural difference of the object with external signs, behavioral characteristics, etc." According to G.U.Soldatova<sup>7</sup>, tolerance characterizes the attitude of individuals and social groups towards each other or recognition and acceptance of each other. Also, according to the author, tolerance is considered as a social value in terms of three important components (behavioral, emotional, cognitive).

### **DISCUSSION**

The first study of the qualities of a tolerant person was conducted by G. Allport in 1954[1]. In his opinion, a tolerant person is a person who treats everyone equally, regardless of their race and creed, who not only tolerates people, but also loves them. Also, tolerance is a reliable attitude of one person towards another person, regardless of belonging to a group. The researcher,

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<sup>6</sup> Corréard M. H. (ed.). Compact Oxford-Hachette French Dictionary. – Oxford University Press, 2013. – P. 331.

<sup>7</sup> Soldatova G. U., Rasskazova E. I. Tolerance, empathy, and aggression as factors in compliance with rules of online communication by Russian adolescents, young adults, and parents //Psychology in Russia: State of the art. – 2019. – T. 12. – №. 2. – C. 79-93.



S.Carpio[3], said that the qualities of tolerance start from childhood. Resilient children grow up in a family that loves them, so the child does not need to suppress his impulses to avoid the anger of the parent. On the contrary, people who believe in certain strict discipline spend their childhood in dangerous conditions. M. Hollman<sup>8</sup> describes the portrait of a tolerant person as follows:

1. Flexibility. A tolerant person does not divide people into two types (for example, "weak and strong"), does not say that there is only one right way to solve a problem, does not divide the environment into "right" and "wrong". Tolerant children do not require clear instructions when studying at school, unlike children who are used to strict discipline, they are ready for uncertainty before starting work, there is no need to explain the situation in categories.

2. Ability to resist disappointment. When faced with limitations, tolerant people do not panic, do not blame others and take responsibility.

3. Innate qualities of temperament (strong and serious nervous system) are the psychophysiological basis for the formation of tolerance values.

4. Inclination to liberal political views. A liberal is a follower of a political and ideological movement in favor of individual freedom that expects progressive social changes, etc.

5. Very high level of education. Education correlates with the level of tolerance; A knowledgeable tolerant parent will raise a tolerant child like himself. Special cross-cultural training increases the level of tolerance. Researcher E. Velthuis classifies a tolerant person a little differently:

1. The ability to empathize. Tolerant people are more socially sensitive than intolerant people, more cautious in their opinions about other people;

2. Self-knowledge. People who are able to reason, who know their

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<sup>8</sup> Hallmann M., Schleich B., Wartzack S. From tolerance allocation to tolerance-cost optimization: a comprehensive literature review //The International Journal of Advanced Manufacturing Technology. – 2020. – T. 107. – №. 11-12. – C. 4859-4912.



achievements and abilities, opportunities and limitations, who criticize themselves, who are not inclined to transfer their guilt and responsibility to others;

3. Pursuit of personal autonomy. Tolerant individuals do not seek help and support from other people, they are independent, active, self-confident people with a strong "Ego" (I defense mechanism);

4. A sense of humor. Resilient people can laugh at themselves and do not tend to be superior to others. Intolerant people have no sense of humor;

5. Tolerance for uncertainty. The lack of information does not discourage tolerant people, they themselves begin to act to compensate for these shortcomings;

6. Philosophy of life. Tolerant people do not seek to exclude or discriminate others, they can accept the personal views of the majority;

7. A sense of internal security. According to M. Verkuyten[11], a tolerant person can have an equal relationship with all people, because his "ego" is able to overcome disappointments, uncertainty, he believes in himself. Based on this classification, it can be said that a person is formed as a person in life. A person who is dependent on society (psychological, socio-economic, cultural dependence) is prone to disagreements and conflict situations, and their successful resolution depends on the presence of certain qualities in a person, including a sense of tolerance for other people's opinions and positions.

S. Rapp<sup>9</sup>, a professor at the University of Bern in Switzerland, determines the presence or absence of tolerance in a person by his upbringing, cultural environment, and moral values of a person. According to the author, the tolerance of a person is the main value in the structure of a person as a characteristic that is formed in the process of education. According to researcher M.R. Norn, only a

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<sup>9</sup> Rapp C., Freitag M. Teaching tolerance? Associational diversity and tolerance formation //Political Studies. – 2015. – T. 63. – №. 5. – C. 1031-1051.



person who is raised on the principles of mutual respect and understanding of others can be tolerant. If a person does not have personal freedom, if the quality of free will is not formed as a personal value, or if there are objective obstacles to the manifestation of this quality, then a person cannot tolerate, cannot accept the attitude of others. So, tolerance means being patient with others and respecting their point of view. This is a universal religious principle, the ability to choose any spiritual direction, a problem that characterizes a person's life in harmony with himself and others as a description of the level of development of the individual and social culture.

A. Kerimov[7] explains the condition of insufficient formation of tolerance with the phenomenon of "intolerance". According to him, an intolerant person is a person who has blind faith caused by ignorance, has many negative characteristics, is impatient, fearful, and seeks fault from someone else rather than from himself. According to such people, his system of views, lifestyle is superior to others. Their frequent meeting in life causes various problems in society. Therefore, it is a fact that does not require proof that various disputes, persecutions and ideological conflicts, divorces, abandoned children, and suicides occur among teenagers.

I.N. Klimuk says that people are only conditionally divided into tolerant and intolerant, that is, every person behaves both tolerant and intolerant in his life. However, in any case, tolerance or, on the contrary, intolerance can become a personal trait. Thus, there are two ways of human development: tolerance and intolerance. The first way is characterized by its individuality, the desire to impose responsibility on the people around it, the constant feeling of the sudden appearance of some kind of danger, and the need for strict discipline. The second is the path of a free, self-aware person who has a positive attitude towards others and is kind to the world.

Yu. V. Paygunova[13] classifies the age-related dynamics of the formation



of tolerance and intolerable characteristics as follows:

- At the junior school age (8-11 years old), emotional tendencies with a tendency to intolerance predominate;
- In the period of young adolescence (12-14 years old), tolerance prevails in all characteristics;
- The emotional and behavioral characteristics of intolerance increase in the older adolescence (15-17 years). According to E.I.Arin's scientific research, the formation of tolerant behavior in children can be realized as a result of bilateral agreement at the macro and micro levels.

The macro level is implemented within the framework of the entire state, and its main goal is to form the consciousness of tolerance of individuals and social groups in a society that preserves behavioral stability as a guarantee of citizen harmony in a democratic state. Implements positive geopolitics in relations with other countries and peoples of the world. In the functional sense, the state and, through it, state bodies, state programs and laws bear a great responsibility for the formation of this quality.

The micro level is the family, the teacher and the individual student. At the micro level, attention is paid to the formation of a small Motherland, distinguished by natural-climate and national characteristics. In such cases, children develop tolerance towards different people living there. According to R.M. Khairullin, the micro level defines the specific characteristics of a certain educational institution or educational process. Within the specified level, each institution has the right to implement educational components, but it is necessary to formulate special principles and a system for the formation of tolerant behavior of children.

When analyzing the criteria for the formation of religious tolerance among students, scientists distinguish several of its forms. According to J.Habermes[5], personal tolerance is based on the value system and is characterized by respect for



a person, responsibility for his life and a sense of recognition. For this type of tolerance, the ability of a person to maintain stability, maintaining relationships, values, and meanings of life that determine the inner world of a person, as well as the perception of the world as a whole and individual behavior are important. J. Newman stated that the formation of religious tolerance in a person in many ways occurs through his socialization. Therefore, it is appropriate to talk about social tolerance in some studies. Social tolerance refers to a person's relationship with society, that is, with different social groups. This interaction involves relating one's own behavior to the behavior of others. According to S. B. Schwartz, a researcher at the Yale University of the USA, in his research on religious tolerance, religious tolerance is manifested as social tolerance based on the social responsibility of a person in terms of morals, values and rights to the members of a social group. Such tolerance is characteristic of a mature person who recognizes social rights not only in front of the individual, but also in front of social groups with their value orientations.

English researcher L.Hegendorn, in the process of analyzing religious tolerance, emphasizes the role of "ethnic tolerance" for society, a concept close to it. "Ethnic tolerance" comes from the general framework of social tolerance types (according to the principle of gender, social status, profession, etc.). Ethnic tolerance is based on the attitude towards others based on their ethnicity. L.G.Pochebut emphasizes that intolerance towards other ethnic groups has ancient roots and often manifests itself at the unconscious level. This idea stems from K. Jung's ideas about the collective unconscious, and modern research confirms the significant influence of various genetic materials on it. Therefore, the formation of inter-racial, inter-national, inter-confessional tolerance is a process related to the influence of personality and social factors. This problem is considered very important in large cities and megalopolises where the population is very diverse.

E.V.Oborina emphasizes the importance of transforming an individual from



an "educated person" to a "cultural person". Religious tolerance is directly related to culture, and a cultured person is characterized by a broad view of the field of cultural diversity. This transition process takes place during the entire life of a person under the influence of a large number of factors, among which upbringing and education stand out. According to T.N. Petukhova, the important task of the society is to accept different social groups and their diversity and to search for methods of interaction between them, determined by the development of communicative culture. According to Z.A.Ageeva, the formation of "religious tolerance" and determination of its criteria are related to the level of communicative tolerance. According to the author, communicative tolerance is determined by the attitude of a person to the people around him: communication with the other party in communication, the level of acceptance of his qualities and behavior. E. B. Coleman and K. White, in their work on tolerance and education, offer a unique classification of tolerance based on the communication process:

- Situational communicative tolerance (manifested in interaction with a certain person, recognized by the following phrases: "This person annoys me. I can't stand him" etc.);
- Typological communicative tolerance (characterized by the attitude of a person to a group of people);
- Professional communicative tolerance (occurring in the field of professional activity, for example, a person's tolerance of coercive policies of consultants, a doctor's tolerance of a patient's capricious behavior);
- General communicative tolerance (means a tendency to be friendly and accepting towards all people). It should be said that communicative tolerance is determined by the characteristics of the individual's character, moral principles, the state of psychological health, and the general level of communication.

## CONCLUSION

Tolerance, as a component of human, cultural, national, spiritual values,



regulates people's behavior, defines its true order and is determined by the achievements of society as a value content.

2. It should not be assumed that the goals of tolerance are formed by themselves during the educational process. Perhaps, the formation of values of tolerance can be realized only when the relevant consciousness of a person is raised and his emotional sphere is developed, or only when it requires a directed educational influence.

3. At the heart of the phenomenon of religious tolerance, it is necessary to remember that there is also the ability to compromise, to assess situations correctly, to respect other people's values, ethnic affiliation, to appreciate the opinions of others, to be empathetic.

### REFERENCES

1. Allport G. W., Ross J. M. Personal religious orientation and prejudice //Journal of personality and social psychology. – 1967. – T. 5. – №. 4. – C. 432.

2. Belasheva I. V. Psychological Stability of a Personality and Capability of Tolerant Interaction as Diverse Manifestations of Tolerance //International Journal of Environmental and Science Education. – 2016. – T. 11. – №. 10. – C. 3367-3384.

3. Caprio S. Treatment of impaired glucose tolerance in childhood //Nature Clinical Practice Endocrinology & Metabolism. – 2008. – T. 4. – №. 6. – C. 320-321.

4. Corr ard M. H. (ed.). Compact Oxford-Hachette French Dictionary. – Oxford University Press, 2013. – P. 331.

5. Habermas J. Religious tolerance—the pacemaker for cultural rights //Philosophy. – 2004. – T. 79. – №. 1. C. 5-18.

6. Hallmann M., Schleich B., Wartzack S. From tolerance allocation to tolerance-cost optimization: a comprehensive literature review //The International





Journal of Advanced Manufacturing Technology. – 2020. – Т. 107. – №. 11-12. – С. 4859-4912.

7. Kerimov A., Shutaleva A. Education as a factor in preventing ethnic conflicts in modern Russia //INTED2017 Proceedings. – IATED, 2017. – С. 1382-1391.

8. Rapp C., Freitag M. Teaching tolerance? Associational diversity and tolerance formation //Political Studies. – 2015. – Т. 63. – №. 5. – С. 1031-1051.

9. Soldatova G. U., Rasskazova E. I. Tolerance, empathy, and aggression as factors in compliance with rules of online communication by Russian adolescents, young adults, and parents //Psychology in Russia: State of the art. – 2019. – Т. 12. – №. 2. – С. 79-93.

10. Stevenson A. (ed.). Oxford dictionary of English. – Oxford University Press, USA, 2010. – P. 613.

11. Velthuis E., Verkuyten M., Smeekes A. The different faces of social tolerance: Conceptualizing and measuring respect and coexistence tolerance //Social Indicators Research. – 2021. – Т. 158. – №. 3. – С. 1105-1125.

12. Нагаева К. Э. Терпение, терпимость, толерантность в русской языковой картине мира //Вестник Московского государственного лингвистического университета. Гуманитарные науки. – 2018. – №. 12 (805). – С. 186-196.

13. Пайгунова Ю. В. Развитие толерантности в онтогенезе личности //Известия Саратовского университета. Новая серия. Серия Акмеология образования. Психология развития. – 2013. – Т. 2. – №. 1. – С. 20-27.



## **PRINCIPLES FOR THE PROVISION OF RETAIL SERVICES IN COMMERCIAL BANKS OF UZBEKISTAN**

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Annotation: This article examines the theoretical and legal foundations of retail services in commercial banks, ensuring the competitiveness of banks, analyzes the banking services provided to the population in banks, and develops recommendations.

Key words: banking services, banking infrastructure, banking product, remote banking, Internet banking, mobile banking.

In the era of rapidly developing “information technologies of the 21st century”, it is difficult to imagine banking activities without modern technologies. The use of modern technologies, the types of services offered, along with the reduction of banking costs, also saves clients’ time. It is known that banks are an integral part of the financial system and act in close connection with the market and the demands of producers. They are at the center of the world's economic life, connecting industry and trade, agriculture and the population, serving the needs of producers and consumers.

The most effective way to ensure the competitiveness of commercial banks is to gain the trust of customers and create all the amenities for them, as well as increase the type, quality and speed of service. To ensure competitiveness, banks feel a great need to introduce modern banking services and use new technologies. As a result of the increase in the standard of living of the population and the acquisition of modern knowledge, their needs for new financial services are increasing. Efficiency, quality, accuracy, safety and reliability of commercial



banking services are the requirements of bank clients. Modern remote banking services can meet these requirements.

In recent years, commercial banks in our republic have been trying to increase the types of services provided to their clients and diversify their activities through the development of retail operations. To this end, banks are actively introducing electronic service technologies, such as ATMs, mobile phones and remote management of their account numbers via the Internet. By introducing remote banking services, a credit institution, in addition to traditional operations, also uses new banking products that more fully and efficiently satisfy the needs of clients. But this is not enough, because in the era of rapidly developing information technologies of the 21st century in real time. There are a number of problems associated with the implementation of banking operations in the mode that are still waiting to be resolved. The expansion of the banking infrastructure in our republic serves to increase the competitive environment between banks, improve the quality and volume of banking services. Commercial banks are diversifying their activities through the development of new banking services, increasing the types of services provided to clients, which is the main factor in the emergence of modern information technologies and new banking products by banks, and, consequently, creating conditions for the development of the banking services market. The incomplete formation of a competitive environment in the banking services market affects the development of banking services. The relevance of the topic is determined by the presence of existing problems and the need to develop ways to solve them in terms of improving retail services provided by commercial banks of the Republic of Uzbekistan.

In modern economic literature, the definition of banking services as “mass operations” is widespread. But this definition does not clarify how services differ from other banking operations. Unlike a banking operation, which consists of collective actions of the bank aimed at achieving a single economic result, the



banking service performs certain tasks that accompany banking operations<sup>5</sup>. E. F. Zhukov divides banking operations into assets and liabilities and includes in the financial services of banks such activities as leasing, factoring, forfeiting and trust operations. Based on the above considerations, we considered that banking services are a set of technically related banking operations performed on the basis of a mutual agreement aimed at meeting the needs of the bank client.

A banking product is a set of interrelated services and bank operations that have a material form intended for sale on the financial market, i.e. a banking product is built as a result of a banking operation, and a banking service is part of it during banking operations. will be friends. Banking services contribute to the optimal execution of banking operations, and banking services, developed and sold together with banking operations, create a banking product. Modern banking services, currently used in world practice, are divided into credit, operational, investment services, as well as factoring services, leasing services, trust operations services, consulting and information services.

In the current period of rapid and intense development and fundamental changes in the economy, the digital economy and a number of advanced digital technologies are coming to our economy. Therefore, the leadership of our Republic has made a number of decisions and is developing a “road map” in order to further improve and facilitate the lifestyle of the population, computerization and further accelerate the development of our country.

Systematic work is being organized in the banking system of the Republic of Uzbekistan to provide electronic banking services to clients. In particular, in the Decree of the President of the Republic of Uzbekistan dated May 12, 2020 “On the strategy for reforming the banking system of the Republic of Uzbekistan for 2020-2025” No. PF-5992 Modernization of banking services, creation of an effective infrastructure and activities of banks are considered as one of the priorities. Much attention is paid to improving the efficiency of the banking



system through automation, as well as the gradual abolition of bank functions not related to the main activity. Also creating the necessary conditions for the widespread introduction of modern information and communication technologies, automation of business processes of commercial banks, expansion of types of remote banking services; reducing the control load, including the load associated with improving the information exchange of banks with regulatory and government bodies, as well as simplifying and automating reporting processes; expanding the number and coverage of remote banking services, including contactless payments; widespread use of automated scoring systems, digital identification and credit pipelines; strengthening information security of banking data and systems; the introduction of new concepts and technologies in the banking sector (fintex, marketplace, digital bank)” indicates the relevance of the topic.

List of used literature:

1. Resolution of the Central Bank of the Republic of Uzbekistan dated August 13, 2015 No. 2709 “On requirements for liquidity management of commercial banks”
2. Decree of the President of the Republic of Uzbekistan "On the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025" No. PF-5992, 12.05.2020.
3. Spilnichenko V.K. Transformation bankovskix platezhnyx sistem v ekonomie Rossii // Ekonomicheskij zurnal. 2012. No. 2 (26).
4. Likhodeeva N. I. Primenenie electronic banka pri zaklyuchenii i ispolnenii bankovskikh dogorovov [Text] / N. I. Likhodeeva // Legal work and credit organization. - 2014. - No. 2. - S. 23-27.
5. Shoira Karshiboyeva Sindarkulovna Assistant at the Yangier branch of the Tashkent Institute of Chemical Technology. Subjects to be taken - Introduction to management, macro- and microeconomics, economics and business management,



engineering economics. (2023). SYSTEM OF CLUSTERING OF UNIVERSITIES IN THE EDUCATIONAL MARKET. Zenodo. <https://doi.org/10.5281/zenodo.10319266>

6. Shoira Karshiboyeva Sindarkulovna Assistant at the Yangier branch of the Tashkent Institute of Chemical Technology. Subjects to be taken - Introduction to management, macro- and microeconomics, economics and business management, engineering economics. (2023). INCREASING THE EFFICIENCY OF THE CLUSTERING SYSTEM OF HIGHER EDUCATIONAL INSTITUTIONS. Zenodo. <https://doi.org/10.5281/zenodo.10319240>

7. Sindarkulovna, K. S. (2023). ALOQA XIZMATLARI KO'RSATISH TIZIMINING MAMLAKAT YALPI ICHKI MAHSULOTDAGI ULUSHINI OSHIRISH. PEDAGOGS jurnali, 33(2), 37-39.

8. Sindarkulovna, K. S. (2023). KICHIK BIZNES VA XUSUSIY TADBIRKORLIK KORXONALARINI RIVOJLANTIRISHDA INNOVATSION MARKETINGDAN FOYDALANISH YO'LLARI. PEDAGOGS jurnali, 33(1), 161-163.

9. I.Tishabayeva, Z.Xatamova, N.Ibragimov, O.Xamdamaova. (2023). O'ZBEKISTON TARIXI FANLARINI O'QITISHDA ZAMONAVIY PEDAGOGIK TEXNOLOGIYALARDAN FOYDALANISH MASALALARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/690>

10. Xamdamaova O.M., Xatamova Z.N., Ibragimov N., Tishabaeva I. (2023). O'ZBEKISTON TA'LIMIDA UZVIY BOG'LIQLIK VA RIVOJLANTIRISH USULLARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/689>

11. Ибрагимов, Н. (2023). РАЗВИТИЕ СИСТЕМЫ КАЧЕСТВА ОБРАЗОВАНИЯ В РЕГИОНАЛЬНЫХ ВУЗАХ ДЛЯ ПОВЫШЕНИЯ ИХ



КОНКУРЕНТОСПОСОБНОСТИ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1091>

12. Ибрагимов, Н. (2023). РОЛЬ СТРАТЕГИЧЕСКОГО ПЛАНИРОВАНИЯ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1116>

13. Ибрагимов, Н. (2023). СТРАТЕГИИ МАРКЕТИНГА В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1069>

14. Ибрагимов, Н. (2023). УПРАВЛЕНИЕ КАЧЕСТВОМ ОБРАЗОВАНИЯ ДЛЯ ПОВЫШЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1068>

15. Ибрагимов Наврўзбек Кимсанбаевич, Рустамов Илхомиддин Абдуқодирович, Хатамова Зумрадхон Назиржоновна, Бурхонов Илёсхон Мухиддинович. (2023). ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИНИ РАҚОБАТДОШЛИГИНИ БОШҚАРИШДА БИТИРУВЧИЛАРНИ ИШ БИЛАН ТАЪМИНЛАШ МАСАЛАСИ. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/688>

16. Ibragimov, N., & Kimsanbayev, A. (2023). DAVLATGA IQTISODIY XAVFSIZLIKNI ZARURLIGI: RAQAMLASHTIRISH VA TAHDIDLAR. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/796>



17. Ibragimov , N., Nabiyev , I., & Abduqodirov , A. (2023). IQTISODIY XAVFSIZLIKNI TA'MINLASH VA UNI HAR TOMONLAMA RIVOJLANTIRISH. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/793>

18. Ибрагимов, Н. (2023). РОЛЬ ИННОВАЦИЙ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1067>

19. Ibragimov Navro'zbek Kimsanbaevich (2023). THE ISSUE OF EMPLOYMENT FOR GRADUATES IN IMPROVING THE MECHANISM OF COMPETITIVENESS OF REGIONAL HIGHER EDUCATION INSTITUTIONS <https://doi.org/10.5281/zenodo.8415277>

20. Ибрагимов, Н. (2023). ИНТЕГРАЦИЯ ИНФОРМАТИКИ В УЧЕБНЫЙ ПРОЦЕСС ВУЗА: МЕТОДЫ И ПОДХОДЫ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1103>

21. Ибрагимов, Н. (2023). РАЗВИТИЕ КРИТИЧЕСКОГО МЫШЛЕНИЯ СТУДЕНТОВ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1566>

22. Ибрагимов, Н. (2023). ПРИМЕНЕНИЕ АКТИВНОГО ОБУЧЕНИЯ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1567>





**WAYS TO INCREASE THE POPULARITY OF RETAIL SERVICES IN  
BANKS OF UZBEKISTAN**

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Annotation: The article explores the scientific and theoretical foundations of retail banking services, studies the practice of their development in developed foreign practice. Also, based on the importance of information technology in the development of retail services, the possibilities of their widespread use were considered.

Keywords: retail banking, remote banking services, deposit, internet banking, mobile banking, client bank, online banking.

The “Strategy of Action for Five Priority Areas of Development of Uzbekistan for 2017-2021” also states that “to reform the banking system, deepen capitalization and increase the stability of the deposit base of banks, strengthen their financial stability and reliability.” promising investment projects and small businesses have been identified and the task of further expanding lending to business entities has been identified.”

In fact, the development of the market for commercial banking services not only allows capital to be channeled into the national economy, but also ensures that the population is informed, speeds up payments and creates a number of other conveniences and opportunities. Based on this, we have to study the experience of foreign countries in the field of retail banking services and introduce the positive aspects of this experience, based on the internal situation in the banking system of Uzbekistan.

Banks are funding or acquiring fintech startups to develop and maintain their



position as “digital” banks specializing in retail services. This situation, observed all over the world, will undoubtedly affect the banks of our country. In a survey and study conducted by Efma and Infosys Finacle, banks (74%) said they increased investment in innovation projects in 2016-17 compared to previous years. 69% of banks said that they have become innovative banks, and 25% of banks consider their innovative activities to be at a high level. More than 40% of banks work with startups and 30% of banks said they have invested in startups [8].

Innovation and digital transformation go hand in hand, and 20% of responding banks have outsourced their retail services to dedicated digital banking. 85% of these banks offer new services and products, and 81% conduct banking transactions using new systems. As a foundation for innovation and digital transformation, 78% of banks strive to offer customers high-quality services and products, 74% of banks strive to implement new systems, and 68% strive to effectively use mobile and social technologies.

The threat posed by fintech and technology companies was estimated at 47% in 2016 and 48% in 2017. Fintech and technology companies are becoming a worthy competitor to banks due to their high adaptability and ability to quickly adapt and innovate. Therefore, banks' collaboration with Fintech startups and technology companies can create opportunities for them to respond to customer and market demands in the future. This situation has a significant impact mainly on developed countries (USA, EU, Brazil, China, South Africa, Australia and similar countries), and banks in these countries have a generally positive attitude towards technological changes and innovative projects, but in banks in developing countries these changes have not received enough attention.

The main competitors of banks in the field of retail services are mobile application payment systems, and 86% of banks in the world say that this threat is very serious and that banks have only two options, the first is to cooperate with



Fintech startups and technology companies. and second, fintech and technology companies are insisting that banks develop products and services. Banks in developed countries are constantly monitoring fintechs. Ralf Hamers, head of ING Group (Netherlands), said that ING Group always studies market demand and supply and cooperates with 45 fintech companies in the field of payment management, system development, mobilization and lending.

To achieve the strategic goal of improving the market for retail banking services in Uzbekistan, banking activities should develop in the following areas:

- standardization and automation of the process of providing retail banking services.

- development of a strategy for the implementation of modern sales, including the development and optimization of the branch system.

- expanding the range of retail banking services and improving their quality.

We believe that solving these problems will further improve the market for retail banking services and satisfy the needs of bank clients.

As a result of analyzing the prospects for the development of remote banking services in Uzbekistan, the following proposals and recommendations were developed:

1. Each commercial bank must develop its own strategic program for the development of remote banking services in commercial banks and the development of a system of remote customer service. As part of this program, it will be necessary to develop a roadmap for the phased transfer of all types of services to remote and online mode. The source of funding, the timing of the implementation of the tasks defined in this roadmap, and the department responsible for the implementation and the launch period of the project should be indicated.

2. Currently, the types of services provided by commercial banks remotely include utility and other payments, card-to-card money transfers, online



conversion, online deposit services, as well as retail lending services in some banks. their type in the next step. In particular, these include sending and receiving funds abroad through integration with international money transfers, including the virtual card issuance service.

3. It is natural that the development of remote banking services will reveal the need for customer identification. Taking this into account, it would be advisable to create opportunities to integrate all mobile banking services from the Ministry of Internal Affairs database if it is necessary to identify a customer service employee.

#### List of used literature:

1. Omonov A.A. Issues of effective resource management of commercial banks. 00.08.07 – the dissertation “Finance, money circulation and credit” was defended for the degree of Doctor of Economics. Tashkent, 2008, pp. 24-25;

2. Goncharuk S. A. Institutional aspect of the development of the banking style segment: dis. sugar economics Sciences: 08.00.10 / North Osset. Mister. flour to them K.L. Kheta-gurova - Shakhti, 2018. - 183 p.

3. Address (2018) Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis, December 23 issue of Xalq sozi newspaper

4. Resolution No. 3620 of the President of the Republic of Uzbekistan dated March 23, 2018 "On additional measures to increase the popularity of banking services"

5. Shoira Karshiboyeva Sindarkulovna Assistant at the Yangier branch of the Tashkent Institute of Chemical Technology. Subjects to be taken - Introduction to management, macro- and microeconomics, economics and business management, engineering economics. (2023). SYSTEM OF CLUSTERING OF UNIVERSITIES IN THE EDUCATIONAL MARKET. Zenodo. <https://doi.org/10.5281/zenodo.10319266>



6. Shoirra Karshiboyeva Sindarkulovna Assistant at the Yangier branch of the Tashkent Institute of Chemical Technology. Subjects to be taken - Introduction to management, macro- and microeconomics, economics and business management, engineering economics. (2023). INCREASING THE EFFICIENCY OF THE CLUSTERING SYSTEM OF HIGHER EDUCATIONAL INSTITUTIONS. Zenodo. <https://doi.org/10.5281/zenodo.10319240>

7. Sindarkulovna, K. S. (2023). ALOQA XIZMATLARI KO'RSATISH TIZIMINING MAMLAKAT YALPI ICHKI MAHSULOTDAGI ULUSHINI OSHIRISH. PEDAGOGS jurnali, 33(2), 37-39.

8. Sindarkulovna, K. S. (2023). KICHIK BIZNES VA XUSUSIY TADBIRKORLIK KORXONALARINI RIVOJLANTIRISHDA INNOVATSION MARKETINGDAN FOYDALANISH YO'LLARI. PEDAGOGS jurnali, 33(1), 161-163.

9. I.Tishabayeva, Z.Xatamova, N.Ibragimov, O.Xamdamaova. (2023). O'ZBEKISTON TARIXI FANLARINI O'QITISHDA ZAMONAVIY PEDAGOGIK TEXNOLOGIYALARDAN FOYDALANISH MASALALARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/690>

10. Xamdamaova O.M., Xatamova Z.N., Ibragimov N., Tishabaeva I. (2023). O'ZBEKISTON TA'LIMIDA UZVIY BOG'LIQLIK VA RIVOJLANTIRISH USULLARI. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/689>

11. Ибрагимов, Н. (2023). РАЗВИТИЕ СИСТЕМЫ КАЧЕСТВА ОБРАЗОВАНИЯ В РЕГИОНАЛЬНЫХ ВУЗАХ ДЛЯ ПОВЫШЕНИЯ ИХ КОНКУРЕНТОСПОСОБНОСТИ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1091>



12. Ибрагимов, Н. (2023). РОЛЬ СТРАТЕГИЧЕСКОГО ПЛАНИРОВАНИЯ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1116>

13. Ибрагимов, Н. (2023). СТРАТЕГИИ МАРКЕТИНГА В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1069>

14. Ибрагимов, Н. (2023). УПРАВЛЕНИЕ КАЧЕСТВОМ ОБРАЗОВАНИЯ ДЛЯ ПОВЫШЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1068>

15. Ибрагимов Наврўзбек Кимсанбаевич, Рустамов Илхомиддин Абдуқодирович, Хатамова Зумрадхон Назиржоновна, Бурхонов Илёсхон Мухиддинович. (2023). ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИНИ РАҚОБАТДОШЛИГИНИ БОШҚАРИШДА БИТИРУВЧИЛАРНИ ИШ БИЛАН ТАЪМИНЛАШ МАСАЛАСИ. SCIENCE AND INNOVATION IDEAS IN MODERN EDUCATION, 1(7). Retrieved from <http://woconferences.com/index.php/SIIME/article/view/688>

16. Ibragimov, N., & Kimsanbayev, A. (2023). DAVLATGA IQTISODIY XAVFSIZLIKNI ZARURLIGI: RAQAMLASHTIRISH VA TAHDIDLAR. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/796>

17. Ibragimov , N., Nabiyev , I., & Abduqodirov , A. (2023). IQTISODIY XAVFSIZLIKNI TA'MINLASH VA UNI HAR TOMONLAMA RIVOJLANTIRISH. Research and Implementation. извлечено от <https://fer-teach.uz/index.php/rai/article/view/796>



[teach.uz/index.php/rai/article/view/793](https://fer-teach.uz/index.php/rai/article/view/793)

18. Ибрагимов, Н. (2023). РОЛЬ ИННОВАЦИЙ В ПОВЫШЕНИИ КОНКУРЕНТОСПОСОБНОСТИ РЕГИОНАЛЬНЫХ ВУЗОВ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1067>

19. Ibragimov Navro'zbek Kimsanbaevich (2023). THE ISSUE OF EMPLOYMENT FOR GRADUATES IN IMPROVING THE MECHANISM OF COMPETITIVENESS OF REGIONAL HIGHER EDUCATION INSTITUTIONS <https://doi.org/10.5281/zenodo.8415277>

20. Ибрагимов, Н. (2023). ИНТЕГРАЦИЯ ИНФОРМАТИКИ В УЧЕБНЫЙ ПРОЦЕСС ВУЗА: МЕТОДЫ И ПОДХОДЫ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1103>

21. Ибрагимов, Н. (2023). РАЗВИТИЕ КРИТИЧЕСКОГО МЫШЛЕНИЯ СТУДЕНТОВ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1566>

22. Ибрагимов, Н. (2023). ПРИМЕНЕНИЕ АКТИВНОГО ОБУЧЕНИЯ В ТЕХНИЧЕСКИХ ВУЗАХ. Conference on Digital Innovation : "Modern Problems and Solutions". извлечено от <https://fer-teach.uz/index.php/codimpas/article/view/1567>



**HOLISTIC ON THE BASIS OF EDUCATIONAL TECHNOLOGY  
"STEAM", THEORETICAL FOUNDATIONS OF SYSTEMATIZED  
KNOWLEDGE-GIVING**

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**Annotation:** In this article, Steam is integrated based on educational technology, theoretical parables of systematized knowledge-giving have been studied.

**Keywords:** Education technology, personality-oriented education, science integration, interdisciplinary interconnection, STEAM education technology, career orientation, technologist-engineering thought.

Integrated into the world community, our country the process of the society of the social and economic changes in the life of a new generation of professionals push the development of necessary theoretical knowledge, it must possess the skills and qualifications to the new requirements is being produced. This is the first scientific knowledge that requires a lot of modern technologies, the country is wide spread, and secondly, the complexity of work and changes in the teaching process of the results is relevant.

The same, in the same context of the republic of Uzbekistan new "on education" of the law (the year 2020 (September 23) and the "National program for training" at takidlanganidek, the main purpose of the education organization – in the community that can provide rise to the level of social development advanced countries of the world, which contributes to the strong-willed, independent-minded, positive to have a quality, educated, prepared and qualified personnel organized to convey the process of the formation of [1,2].

"...Twenty-first century leaders who tsivilizasiyasiga scientific and technical capabilities in the process of his intellectual analysis, synthesis, evaluation,





intellectual and creative abilities as well as cultivate your career in it and if moslanuvchan better than others is the gift of work - this was written almost 30 years ago, the prophecy of firik-comments which put a modern professionals to prepare very specific requirements are identified [3].

As noted in the world declaration on higher education for the xxi century: “...the building the critical mass of qualified and widely educated people not to be able to stand adekvat higher education and research institutions could not have been real and ensuring sustainable development in any country...” [4].

Therefore also has a great development in the future, fair legal, democratic government and the free development of creative thinking of young who aim to build a civil society in our country, the desire to create their own news, and a desire to rise to the level of humanism and one of the main events in the way of the ultimate goal of the education system should be considered. The creativity of students in the teaching process of teachers of higher educational institutions, to seek, to mushohada, modern pedagogical and information technologies aimed at the development of logical thinking, which includes the use of interactive methods according to the purpose .

To resolve this task using the rich spiritual world of the people of the achievements of science and innovation activities, widely base and universal, the concentration of the following times traditional national culture, economic and of science, engineering and technology on the latest achievements of building a system based perfect education, the society for the active-minded, imaginative and innovative ideas, supporting them in practice to prepare qualified specialists in today's society because it has the urgent need for rapid development during the period of active role-minded, imaginative and innovative ideas in practice required of qualified professionals that are effective in supporting them. This, in turn, innovasiyalar the education process, and requires the introduction of modern teaching interactive and creative methods [5].



The above idea-thinking come out this article in higher education, natural-steam technology, which is one of the exact sciences to undergraduate students on the basis of texnolgiyalaridan modern education, higher education in science, education, production, taking into account competition, the essence of the science of physics science, technology, arts and mathematics integration engineering given to approach - professional referral –based profession that was in the future to holistic, is systematized.

The mutual connection of the subject of education is one of the features of the content, and the coordination of educational programs in the process of education tizimlilik principle appears in [6].

Didactic conditions for the mutual connection of the subject, that is, it put on, not only on the educational process and systematized reader-solid knowledge that increases student by mark proficient readers read of interests, theories, ensures that the scientific concept would be in a relationship with. As a result, not only the knowledge, it becomes apparent, generalized and creates the opportunity to apply them in practice. So along with the mutual connection allows the effective use of the subject at the time of the study [7].

The implementation of the mutual connection of the subject is didactic conditions, first of all to the content of the educational material and scientific concepts, laws and theories in order to reveal the essence, secondly in the education of their methods (tracking, educational experiences, and others), as well as the students moved from one science to another and support and targeted series-rdiagnosis is included in[8].

Steam-powered technology on education as the analysis of the literature shows, this science education, technology integration given to technologists-thought muxandislik utilized on the basis of theoretical knowledge, master the skills, qualifications and compensations with life, with practice, will go far towards the development of complex with the production method provided by the time the



students had surrounded us, and the universe are constantly in motion micro makro holistic, integral, integrity mean fahmlab. it will help you to figure out.

Steam technology proficient students on the basis of theoretical knowledge of mathematics and other exact sciences from the basis of science, engineering, design, technology, tied as they are, create their own projects and the device will go to realize the essence of the work, holistic, systematized scientific knowledge, skills, qualifications and opportunities will be able to go.

**STEAM-in an unconventional way is to read the scientific theory of the natural sciences, technology, engineering, arts and mathematics teaching is in harmony with the style.**

Steam-powered technology unlike traditional education does not separate from knowledge, based on the integration of science mastering brings.

Steam - powered technology education students ill-kompetentsiyalarini is focused on the development of technical directions.

Abbreviation of Steam	STEAM content
S	in science-science. Students in the sciences of knowledge, skills, qualifications and skills development on the basis of scientific compensation
T	Technology –technology students in the sciences of knowledge, skills, qualifications and development of modern technologies based on kompetentsiyalarni
E	engineering-engineering. Students in the field of engineering knowledge, skills, qualifications and development kompetentsiyalarni
A	– art. The outlook for students in the field of art and culture, expand their knowledge, skills, qualifications and development



	kompententsiyalarni
M	mathematics – mathematics. Students in the field of mathematics knowledge, skills, qualification and development kompententsiyalarni

Steam-powered technology in the teaching of graduate education sciences on the basis of the basis of non-standard conditions to solve problems arising in education at all stages of the engineering ability and creativity that is necessary in mastering the skills of labor and the development of independent life, an independent life and outlook step in to the shape of bazaviy kompetensiya which is needed. Along with this, the quality of the teachers and scientists of the whole world new and modern techniques and technologies to prepare personnel possessing increased from day to day without steam, which implies that the demand for personnel, engineer-education of the application program in particular is significant.

STEAM (Science – natural sciences, technology – technology, engineering – engineering Art – art, mathematics and mathematics) education through the introduction of students to the integration of science increases the level of literacy is built. On the basis of international experience approach to learning and education to steam education system today the introduction of the attitude changes. Students-students practical skills oraqli to pay attention to will, creativity, adaptation to cooperate with others in achieving greater interoperability develop and learn. During the period of educational and occupational development in all areas of science today on steam new look without understanding clearly the reduction specialists to prepare technological, 'll muxandislik science and mathematics, and will not be implemented. These teaching science in physics with a number of higher education graduates in scientific and technological literacy, and engineering skills compensations the



formation of modern technical systems and technology at the professional level at the same time, the use of technical management system allows you to design and mastering. The main mechanism in the system of continuous education of physics integrasion performs the function of natural, scientific-technical, technological and humanitarian sciences of the body of knowledge within the framework of meta-level teaches the practical aspects of science and higher education will help to strengthen to apply. On the basis of modern requirements of graduate study in the science of physics in the process of mastering the technology of production through the understanding, application, control, and improvement assessment, design, research, management has begun to form. To choose the proper technology is an effective and non-standard thinking and skills of doing business through the formation of new products, services and work can create new methods of influence. That is necessary to master the professional skills of the profession through different independent to the right choice in life, to work, to master new skills to perfection, doing independent work and practical activities that change on your own and quickly to achieve economic, political and social conditions in a flexible, independent education specialists will educate prepared to take in ambiguous situations.

Thus,the STEAM-educational technology on the analysis of the literature shows that educational technologists on the basis of this technology from science foundation-thought muxandislik utilized on the basis of theoretical knowledge,possessed the skills, qualifications and kompetentsiyalar with life,with practice,will go far towards the development of complex with the production method provided by the time the students had surrounded us,and the universe are constantly in motion micro makro holistic, integral, integrity mean to figure out fahmlab and the conclusion helps.

### Literature

1. The law on education of the republic of uzbekistan. T.2020.,September 23.



2. Of the republic of uzbekistan national training program. T.1997 y.
3. Vivian de Landsher. Kontsepsiya "minimalnoy kompetentnosti". // Perspektiv of 1988..№1.
4. Vsemirnaya declaration o vistshem obrazovanii beginning of XXI vek in: Podxodi mary prakticheskie // Vsemirnaya po unesco conference vistshemu obrazovaniyu, Paris, 1998.
5. The president of the republic of uzbekistan "on approval of the strategy of innovative development of the republic of uzbekistan in the years 2019-2021 on" UP-5544-decree no. 2018 y. 21.09.
6. The subject of the shops mejpredmetnix system svyaz po estestvenno-matematicheskogo in the cycle. Sbornik trudov nuchnix Niisimo. Take moscow, 1981., c.10.
7. Khodjamberdiyev M.S. Didactic baases of providing holistic, systematized knowledge on the basi of science. Jornal of ethics and diversity in international communications. 2022-06-01. Volume-2, CHAIR-5. p.88-90.
8. Xodjamberdiev M.S. Tizimlashti are subject of mutual connection, holistic didactic as the basis of knowledge. Nauka I obrazovanie v XXI vek is. N a3-20220621-6, 2022, please. s.293-297.



## SOCIAL PSYCHOLOGICAL FACTORS OF STRESS TOLERANCE OF STUDENTS IN EDUCATIONAL ACTIVITIES

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**Annotation:** This article explores the intricate relationship between social psychological factors and stress tolerance among students engaged in educational activities. The study investigates the impact of social support, coping mechanisms, and other relevant factors on the stress levels of students, ultimately influencing their ability to cope with academic challenges. A comprehensive literature analysis, methodological approach, results, and discussion sections contribute to a deeper understanding of the complex interplay between social psychological factors and stress tolerance in the educational context.

**Keywords:** Stress tolerance, students, educational activities, social psychological factors, coping mechanisms, social support, academic performance.

The academic journey can be a demanding and stressful experience for students, characterized by numerous challenges, including exams, deadlines, and social pressures. This article aims to shed light on the social psychological factors that influence stress tolerance among students engaged in educational activities. By understanding these factors, educators and mental health professionals can develop targeted interventions to enhance students' well-being and academic success.

Numerous studies have highlighted the significant impact of social psychological factors on stress tolerance in the academic setting. Social support,



both from peers and family, has been identified as a crucial buffer against stressors (Cohen & Wills, 1985). Coping mechanisms, such as problem-solving and emotion-focused strategies, play a pivotal role in determining how students navigate stressful situations (Folkman & Lazarus, 1988). Additionally, academic self-efficacy and perceived control have been linked to lower stress levels and better mental health outcomes (Bandura, 1997).

To investigate the relationship between social psychological factors and stress tolerance, a mixed-methods approach was employed. A sample of students from diverse educational backgrounds was surveyed using validated instruments measuring social support, coping strategies, academic self-efficacy, and perceived control. Qualitative interviews were conducted to gather in-depth insights into the subjective experiences of stress among students.

Stress tolerance among students in educational activities is influenced by a variety of social and psychological factors. Here are some key factors that play a role in determining how well students can tolerate and cope with stress in educational settings:

#### Social Support:

- Family Support: The level of support from family members can significantly impact a student's stress tolerance. A supportive family environment provides a buffer against stressors.

- Peer Support: Positive relationships with peers can offer emotional support, understanding, and a sense of belonging, which contribute to stress resilience.

#### Coping Strategies:

- Problem-Solving Skills: Students who possess effective problem-solving skills tend to handle academic challenges better, reducing the impact of stressors.

- Adaptive Coping: Individuals who use adaptive coping strategies, such as seeking social support, planning, and positive reframing, are often better equipped





to handle stress.

#### Personality Traits:

- Resilience: Resilient individuals can bounce back from setbacks more easily. Resilience is often associated with a positive outlook, adaptability, and the ability to learn from challenges.

- Perfectionism: While striving for excellence can be positive, excessive perfectionism may increase stress. Students with unrealistic standards may experience higher levels of stress.

#### Self-Efficacy and Confidence:

- Self-Efficacy: Believing in one's ability to succeed and perform well in academic tasks can enhance stress tolerance.

- Confidence: Students with confidence in their academic abilities are more likely to view challenges as manageable, reducing the impact of stress.

#### Academic Pressure:

- High Expectations: Unrealistic academic expectations from oneself or imposed by others can contribute to stress. Balancing expectations with a realistic assessment of one's capabilities is crucial.

#### School Environment:

- Teacher Support: Supportive and understanding teachers can contribute positively to stress tolerance. A positive teacher-student relationship can create a conducive learning environment.

- Bullying and Peer Pressure: Negative social interactions, such as bullying or peer pressure, can significantly impact stress levels among students.

#### Time Management and Organizational Skills:

- Effective Planning: Students who can manage their time efficiently and organize their tasks are better equipped to handle the demands of academics without feeling overwhelmed.

#### Cultural and Societal Influences:



- Cultural Expectations: Cultural factors can shape individuals' perceptions of success and failure, influencing their stress tolerance levels.

- Societal Pressure: Societal expectations regarding academic performance can contribute to stress, especially in highly competitive educational environments.

Understanding and addressing these social and psychological factors can contribute to the development of effective interventions and support systems aimed at enhancing students' stress tolerance in educational activities. Schools and educational institutions can implement programs that foster a positive social environment, provide coping skills training, and offer resources for mental health and well-being.

The results highlight the importance of addressing social psychological factors in educational settings to enhance students' stress tolerance. Educators and support services should focus on fostering a supportive environment, encouraging positive coping mechanisms, and promoting a sense of control over academic challenges. The findings also suggest the need for tailored interventions for students with lower levels of social support or maladaptive coping strategies.

### **Conclusions and Suggestions:**

In conclusion, social psychological factors significantly influence stress tolerance among students engaged in educational activities. The study emphasizes the importance of integrating interventions that target social support networks, coping skills development, and empowerment strategies to enhance students' overall well-being and academic performance. Future research should explore the long-term effects of such interventions and consider the role of cultural and contextual factors in shaping stress experiences among students. Ultimately, creating a holistic and supportive educational environment is crucial for fostering stress resilience and ensuring students thrive academically and emotionally.



## References

1. Byra, S. & Parchomiuk, M. (2008). Osobowościowe i społeczne uwarunkowania radzenia sobie ze stresem przez studentów pierwszego roku [Personality and social conditions of coping with stress by first-year students]. Lublin: UMCS.
2. Carlson, N. R. & Heth, D. S. (2007). Psychology: the science of behaviour. Pearson Education: New Jersey.
3. Derbis, R. & Baka, Ł. (2011). Znaczenie wsparcia społecznego i zaangażowania w pracę dla związku stresorów w pracy i wypalenia zawodowego [The Role of Social Support and Work Engagement in the Work Stressors-Burnout Relationship]. Czasopismo Psychologiczne [Psychological Journal], 17 (2), 277-287.
4. Heszen, I. (2013). Psychologia stresu. Korzystne i niekorzystne skutki stresu życiowego [Psychology of stress. Positive and negative effects of life stress]. PWN: Warszawa.
5. Istomina, N. H. (2009). Issledovaniye psikhologo-pedagogicheskikh kharakteristik obrazovatel'noy deyatelnosti [Research of psychological and pedagogical characteristics of educational activity]. Yazyk i kul'tura [Language and Culture], 4, 18-25.
6. Kireeva, M. V. (2012). Vedushchiye koping-strategii studentov s razlichnym urovnem stressoustoychivosti [Leading coping strategies of students with different levels of stress tolerance]. Nauchnyye vedomosti BelGU. Seriya: Gumanitarnyye nauki [BelSU Scientific Bulletins. Series: Humanities], 6 (125), 229–233. Krasnova, V. V. &
7. Holmogorov, A. B. (2011). Sotsial'naya trevozhnost' i studencheskaya dezadaptatsiya [Social anxiety and student maladaptation]. Psikhologo-pedagogicheskiye issledovaniya [Psychological and Pedagogical



Research], 1. Retrieved from: URL:<http://psyedu.ru/journal/2011/1/2060.phtml>.



## СОДЕРЖАНИЕ ПОНЯТИЯ ПРОФЕССИОНАЛЬНЫХ КАЧЕСТВ

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**Аннотация:** *В статье анализируется содержание понятия профессиональных качеств студентов инженерных специальностей высших учебных заведений, а также включается представление о том, что профессиональные качества сопровождают человека на протяжении всей его жизни и сочетаются личностные и социальные аспекты профессиональных качеств. В полной мере отражено понятие «психосоциальные качества», проблема совместимости личностного развития и социального контекста профессионального становления отражена также в работах мировых ученых, исследующих профессиональные качества, принцип структуры и системности психических реалий для мировых психологов, исследующих профессиональные качества, генетическая взаимосвязь качеств доказано, что она служит основой исследования формирования уровня самостоятельности, освоения и реализации профессиональной деятельности.*

**Ключевые слова и фразы:** *профессиональное качество, профессиональная востребованность, профессиональное развитие, профессиональное мастерство, динамика, личность, становление, личность, карьера, деятельность.*



**ВВЕДЕНИЕ:** Профессиональные качества «Кто я?» фокусируется на сознательном вопросе. А прогресс будет направлен на профессиональный рост, повышение качества работы, открытия в исследованиях, гибкость в принятии решений. В профессиональном становлении профессиональные качества и развитие тесно связаны: профессиональные качества формируются в процессе профессионального развития, с одной стороны, а с другой стороны, являются важным показателем проявления человека как специалиста. На практике это означает следующее: чтобы достойно занять себя в новой социально-экономической динамичной среде, не сломаться в конкуренции, обеспечить себе благополучное будущее, специалист должен находиться в постоянном развитии, причем в социальных и трудовых условиях. ему следует проанализировать свою позицию. Несмотря на повышенный интерес к проблеме профессиональных качеств, вопросы о природе, структуре, динамике и функциях этого явления имеют некоторую запутанность. Основная причина этого в том, что данная проблема, особенно социальные качества, которые используются вместо профессиональных качеств в общей структуре личности, слабо изучена. Для изучения проблемы профессиональных качеств прежде всего необходимо понять, какое место эта реальность занимает в системе личностных качеств, и какую роль она играет в профессиональном и социальном самосознании человека.

**УРОВЕНЬ ИЗУЧЕННОСТИ ПРОБЛЕМЫ.** В зарубежных источниках обозначены два направления по отношению к исследованию проблемы профессиональных качеств: первое направлено на профессиональное развитие, работу личности над собой, а второе - на социальные аспекты и факторы профессионального становления.

В начале 1970-х годов М. Аргайл писал о связи профессиональных качеств и профессионального становления личности. При этом оно



рассматривается как сложный процесс, включающий: профессиональную подготовку, усвоение требований и стандартов осуществления деятельности, понимание норм поведения внутри профессиональной группы и т. д. Именно взаимодействие с другими людьми в рабочем коллективе позволяет человеку освоить конкретные стандарты профессии, которую он занимает.

Дж. Зоненфельд отметил возникновение и формирование профессиональных качеств в процессе профессионального развития. Карьерный рост сопровождается изменениями различных профессиональных качеств. Происходит переход от индивидуальных, конкретных профессиональных качеств к несколько более общим концептуальным качествам. Именно концептуальные качества определяют рост должности и степень профессионального развития.

В работах Р. Финчмана основное внимание уделяется пониманию профессиональных требований, моральных норм и ценностей в процессе приобретения профессии. Процесс формирования профессиональных качеств проявляется как взаимная совместимость индивидуальных особенностей и социальных влияний в процессе профессионального развития, что позволяет человеку управлять профессиональным самоменеджментом.

В своих обществоведческих исследованиях С. Джошли анализировал профессиональные качества и статус римского населения и пришел к следующему выводу: профессиональные качества связаны с деятельностью и формируются на основе взаимной совместимости официального и неофициального статуса профессии. В соответствии с существующими представлениями о деятельности, названия профессий имеют свои нормативные требования и поэтому сами по себе определенным образом влияют на личность. Помимо содержания деятельности, на



профессиональные качества влияет также система взаимоотношений и взаимодействие человека с окружающими.

К. Макгоуэн и Л. Хартлер основной упор делают на процесс социального обучения, включающий приобретение специальных знаний и навыков, необходимых для реализации профессиональных ролей, а также формирование новых ценностей, установок и состава профессиональных качеств.

**РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЙ И ОБСУЖДЕНИЯ,** Идея совместимости личностных и социальных аспектов профессиональных качеств в полной мере отражена в понятии «психосоциальные качества», под которым понимаются профессиональные качества, связанные с социальными контекстами профессионального развития. При этом выделяется роль социальной среды в развитии личности и осуществлении деятельности.

При исследовании проблемы профессиональных качеств необходимо обратить внимание на литературу, подробно описывающую ситуации, в которых человек реконструирует свое вербальное и невербальное поведение под влиянием профессиональной среды.

Они показали, как интересы коллег по общей деятельности влияют на появление новых профессиональных качеств, изменение индивидуальных качеств и познавательных процессов. Для объяснения «я» следует использовать когнитивные или социокультурные факторы.

Профессиональные качества проявляются в процессе общения с другими людьми и зависят от коммуникабельности испытуемых.

Согласно другой точке зрения, профессиональные качества представляют собой динамический, а также балансирующий процесс. В каждую эпоху, под влиянием социальных и экономических ситуаций, человек по-разному относится к себе. В то же время иногда человек не





может отрицать реалии истории.

Требуется некоторое время, чтобы принять свои новые качества и восстановить свои профессиональные качества. В структуру профессиональных качеств входят три основных блока: система элементов, система ситуаций взаимодействия и система существующей деятельности; первая и третья системы являются основным компонентом структуры профессиональных качеств. Формирование личности происходит на уровне нормативной культурной значимости и имеет важную характеристику, обусловленную индивидуальной биографией. Вот почему в понятии и деятельности человека проявляются личностные предположения, связанные с экспериментальным анализом мира социального и предметного.

Проблема совместимости развития личности и социального контекста профессионального становления находит свое отражение и в работах мировых ученых, исследующих профессиональные качества.

Для психологов мира, исследующих профессиональные качества, принцип структурности и системности психических реалий служит основой для поиска уровня генетической взаимозависимости качеств, исследования их формирования в процессе освоения и реализации профессиональной деятельности. Это традиционная и концептуальная методологическая база мировых исследователей, которая служит: системогенезу в профессиональной деятельности, профессиональному становлению человека, трудовой деятельности и т. д.

В рамках исследования Ю. П. Поваренковой профессиональные качества рассматриваются как реальность, которая является системной, динамичной и сбалансированной, неразрывно связанной с другими элементами профессионального развития человека: профессиональным самосознанием, профессиональной самооценкой, профессиональной деформацией. быть на рассмотрении.



Автор анализирует профессиональные качества следующим образом: а) профессиональность субъекта

направленность его деятельности и ведущий показатель его профессионального развития, б) эмоциональное состояние, возникающее в процессе профессиональной деятельности, профессионального становления и на основе его отношения как специалиста, в) структура, реализующаяся в виде функциональной системы в профессиональной деятельности субъекта.

**ЗАКЛЮЧЕНИЕ.** Профессиональные качества определяются пониманием человеком профессии, принятием себя как специалиста, отличным и полезным для других выполнением своих профессиональных обязанностей.

Проведенные исследования показывают, что профессиональные качества имеют целостный характер и считаются универсальной основой адаптации специалистов к профессиональной деятельности в рамках иной культуры. Это приводит к выводу, что качества многокомпонентны. Помимо высокого уровня профессиональных навыков, способность использовать навыки и компетенции на рабочем месте в новых условиях включает в себя коммуникативные навыки, сформированность эмоционально-волевой сферы, активность, устойчивость, напряженность, устойчивость к стрессу, а также приверженность моральным нормам трудового коллектива.

Анализ этапа приобретения профессии и уровня профессиональных качеств в соответствии с ним показал, что степень идентификации субъекта с профессией может определять возможность выполнения функции профессиональных качеств. Профессиональные качества контролируют и выполняют координирующие и реорганизующие функции: совместимость этих функций обеспечивает профессиональное самосознание и профессиональное развитие.



### Литература.

1. Kelvin Seifert Educational Psychology // The Global Text Project is funded by the Jacobs Foundation, Zurich, Switzerland– NY.: Copyright.
2. Майерс Д. Психология / Д. Майерс; пер. с англ. И.А. Карпиков, В.А. Старовойтова. – 2-е изд. – Мн.: «Поппури», 2006.
3. Qodirov B.R., Qodirov K.B. Kasbiy tashxis metodikalari to'plami. Metodik qo'llanma. T.2003. 96 b.
4. Karimova V.M., Nayitov O.E., Akramova F.A., Lutfullayeva N.X. Psixologiya: Nopedagogik va nopsixologik oliy o'quv yurtlari uchun DARSLIK. – T.: TDIU «Talaba», 2010. – 308 b.
5. G'oziyev E.G', Asomova R. Kasb psixologiyasi. O'quv qo'llanma. T. TDIU. 2009
6. Мурадов С. ПРОБЛЕМЫ ТУШЕНИЯ ПОЖАРОВ КЛАССА Е ЛИЧНЫМ СОСТАВОМ ПОЖАРНОЙ ОХРАНЫ В МИРЕ //International journal of advanced research in education, technology and management. – 2023. – Т. 2. – №. 5.
7. O'G'LI M. S. H. ANALYSIS OF “MEASURES TO ENSURE OCCUPATIONAL SAFETY IN THE FIELD OF CARGO TRANSPORTATION AND LOADING.” //International journal of advanced research in education, technology and management. – 2023. – Т. 2. – №. 9.
8. ЎҒЛИ Р. Х. Ф., СИРОЖИДДИН М. ИЗУЧЕНИЯ УСЛОВИЯ ТРУДА В КОМПАНИИ ЕВРОПЫ. МУРАДОВ СИРОЖИДДИН //International journal of advanced research in education, technology and management. – 2023. – Т. 2. – №. 10.
9. O'G E. L. A. A. et al. PHYSIOLOGICAL AND HYGIENE BASIS OF HUMAN LABOR ACTIVITY //International journal of advanced research in education, technology and management. – 2023. – Т. 2. – №. 11.
10. Husan o'g'li M. S., Shavkat o'g'li E. D. INNOVATIVE SOLUTIONS



TO PROTECT WORKERS FROM DANGEROUS GAS AND TOXIC SUBSTANCES IN HAZARDOUS INDUSTRY ENTERPRISES.

11. Husan o'g'li M. S., Utkir o'g'li Z. U. PRINCIPLES OF PASSING AND DOCUMENTING INSTRUCTIONS ON SAFETY TECHNIQUES.

12. Rayimkulov A., Murodov S. Some Issues of Safety in the Use of Tower Cranes Used in Construction Projects //JournalNX. – C. 301-308.

13. Sul'tonova D. N., qizi Siddiqova M. A. COLOR SCHEME IN THE FORMATION OF THE ARTISTIC ENVIRONMENT OF THE INTERIOR OF MODERN EDUCATIONAL CENTERS //Educational Research in Universal Sciences. – 2023. – T. 2. – №. 14. – C. 109-115.



## REDUCING THE ENERGY CONSUMPTION OF MATERIALS USED IN HEATING DEVICES

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**Abstract:** In this article, we will study about the rational and correct use of materials used in heating devices and foreign technologies for the proposed model.

**Key words:** Heat supply, power plant heat transfer. heat and electricity.

Currently, the demand for energy production, transmission and energy storage devices is increasing day by day in all countries. A lot of work is being done in this regard in our country. The demand for alternative energy has been growing rapidly in the last 10 years. As a basis for this, we can show decisions and decrees on the development of renewable energy in our country and its rational use. Resolution No. PQ-2912 "Consistent implementation of measures to improve the quality and continuity of heat energy supply to consumers, update and modernize the main funds of the heat supply system, fuel Effective and rational use of i-energy resources is the main goal [1-3].

Centralized heat supply was not used in Russia before. In November 1924, 3 municipal power plants were put into operation in the city of St. Petersburg, and for the first time, heat was supplied to several consumers through a public pipeline. In the city of Moscow, this event was carried out by 1928. The thermal and electrical center of the Tashkent Textile Combine, launched in 1928-1930, became the basis for the creation of centralized heat supply in Central Asia. Centralized heat supply in the conditions of Uzbekistan began to develop mainly after the Second World War. It is known that serious problems have accumulated



over the years in this area, which is of vital importance to all of us, and are currently waiting for their solution. Among them, drastic changes in the entire system of heat supply and management, gradual transition to local heat and hot water supply systems using alternative (alternative) fuel and energy sources, in particular, solar energy provision and replacement of old, fuel-consuming boilers with equipment that saves natural gas, modern energy-efficient equipment, adjustment tools, and new technologies in the heating, ventilation, and air conditioning systems of buildings and structures are effective in the conditions of the republic and issues such as widespread use are of particular importance [4-7]. In order to successfully solve these issues, the structure of modern heat, gas supply and ventilation systems, principles of operation, basic equipment, basis of calculation and design, start-up, adjustment. it is necessary to train bachelor specialists who have deep knowledge, qualifications and skills about the rules of testing and use. Heat supply is a major branch of the national economy. About 20 percent of the fuel mined and produced in our Republic is used for its needs every year [8-11]. Centralized heat supply is usually based on the use of large district boiler houses. For example, currently there are 10 thermal centers IM (teplocenters) and 1 Tashkent thermal power center TIEM (thermal electric power plant) in the city of Tashkent (Fig. 1.1). Their annual heat production capacity is equal to 15401000 gigacalories. The total length of heat networks is 1442 km, including main pipelines is 244 km [12-13].

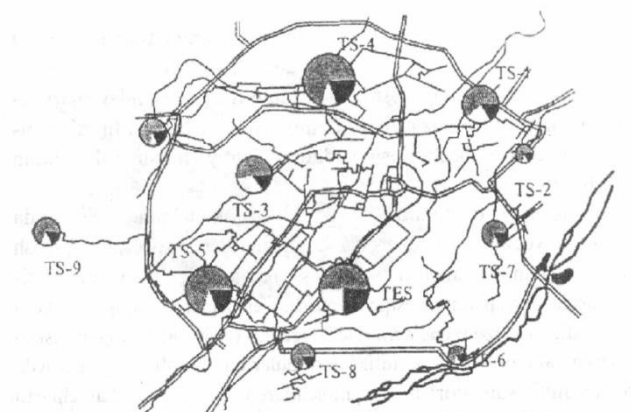




Figure 1.1. Heat sources and heat networks of Tashkent city:

TS-1-TS-10-heat centers IEM-heat electric center.

Tashkent Thermal Power Center - ToshIEM was built to provide heat and electricity to the Tashkent Textile Combine and has been in use since 1939. It was the basis for the creation of centralized heat supply in Central Asia. Centralized heat supply in the conditions of Uzbekistan began to develop mainly after the Second World War [14-15]. At the beginning of the 20th century, due to the introduction of mass production of electric heaters, water heat supply began to develop. As mentioned above, today centralized heat supply is going through a new stage in its development. Because the promising development of centralized heat supply based on the ideas of the thirties of the last century. it can be done mainly by increasing the power of heat sources (in order to increase the radius of heat transfer) and raising the parameters of hot water in networks to a higher level (instead of 150°C to 200-225°C and even up to 250°C). Increasing the reliability of such centralized heat supply systems and their management are usually associated with serious problems. According to modern ideas, heat supply in the future will use alternative fuel and energy sources, in particular solar energy, gradual transition to local heat and hot water supply systems, outdated, fuel-consuming will develop in directions such as replacement of boiler rooms with equipment that saves natural gas, reduction of useless heat loss in heat networks, installation of heat meters at consumers [16].

## REFERENCES

1. Topvoldiyev , N. (2023). KREMNIY ASOSIDAGI QUYOSH ELEMENTILARI KONSTRUKTSIYASI. Interpretation and Researches, 1(1).



izvlecheno ot

<http://interpretationandresearches.uz/index.php/iar/article/view/443>

2. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Xakimov Temurbek Bahodirjon o'g'li. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY, 3(5), 888–893. <https://doi.org/10.5281/zenodo.7969053>
3. Kasimaxunova, A., & Umarova, G. (2023). Issues of Effective Study of Semiconductor Device Properties in Engineering Educational Institutions. Journal of Higher Education Theory and Practice, 23(12). <https://doi.org/10.33423/jhetp.v23i12.6236>
4. M.O. Atajonov, S.J. Nimatov, A.I.Rakhmatullaev. «Formalization of the dynamics of the functioning of petrochemical complexes based on the theory of fuzzy sets and fuzzy logic» AIP Conference Proceedings 2552, 050014 (2023); Published Online: 05 January 2023. <https://doi.org/10.1063/5.0112403>
5. Olimjoniva, D., & Topvoldiyev, N. (2023). ANALYSIS OF HEAT STORAGE CAPACITY OF RESIDENTIAL BUILDINGS. Interpretation and Researches, 1(8). Izvlecheno ot <http://interpretationandresearches.uz/index.php/iar/article/view/518>
6. Alijanov, D. D., & Topvoldiyev, N. A. (2022). Physical and technical fundamentals of photoelectric solar panels energy. Theoretical & Applied Science, 501-505.
7. Donyorbek Dilshodovich Alijanov, ., & Utkirbek Akramjonovich Axmadaliyev, . (2020). The Peculiarities Of Automatic Headlights. The American Journal of Applied Sciences, 2(10), 13–16. <https://doi.org/10.37547/tajet/Volume02Issue10-03>
8. Abbosbek Azizjon-o'g'li, A. GORIZONTAL O 'QLI SHAMOL ENERGETIK QURILMALARINING ZAMONAVIY KONSTRUKSIYAL





9. Parpiev, O. B., & Egamov, D. A. (2021). Information on synchronous generators and motors. *Asian Journal of Multidimensional Research*, 10(9), 441-445.
10. Olimov, L., & Anarboev, . I. (2023). ENERGY CONVERTER BASED ON NANO-STRUCTURED SI. *International Bulletin of Applied Science and Technology*, 3(6), 248–252. Retrieved from <https://researchcitations.com/index.php/ibast/article/view/1852>
11. Sharobiddinov, S., & Mamarasulov, Q. (2023). QUYOSH HAVO ISITISH KOLLEKTORINI ENERGIYA SAMARADORLIGINI OSHIRISH. *Interpretation and researches*, 1(8).
12. Abdumutallib o'g'li, E. A. (2022). Reliability of Collector (Bottle) Set in ACS. *Texas Journal of Multidisciplinary Studies*, 8, 251-255.
13. Olimov, L., Yusupov, A., & Alizhanov, D. (2019). BALIQCHILIK UCHUN INNOVATSION QURILMA. *SCIENCE AND INNOVATIVE DEVELOPMENT*, (6), 103-107.
14. Xolmirzaev, J. YU. (2022). ZONALNOE STROENIE KRISTALLOV V PRIBLIJENII MNOGOZONNOY (KEYNA) MODELI. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(12), 748-753.
15. ME Yulchiev, AAO Qodirov Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks, *THE AMERICAN JOURNAL OF ENGINEERING AND TECHNOLOGY (TAJET) SJIF-5.32 DOI-10.37547/tajet*
16. Zuhritdinov Alisher Faraxidin o'g'li, Yo'lchiyev Mash'albek Erkinovich, Xakimov Temurbek Bahodirjon o'g'li (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY SJIF = 5.955*, <https://doi.org/10.5281/zenodo.7969053>.



## STUDYING THE RESISTANCE OF PHOTORESISTORS THROUGH LIGHT INTENSITY

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**Abstract:** research paper provides an overview of the light sensitivity of photoresistors used in photosensors that detect the position of the sun in solar collectors, photovoltaic modules, and other devices.

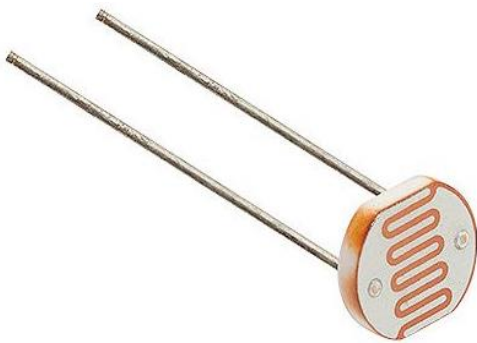
**Keywords:** resistance, intensity, light, sun, photoresistor, photosensor, photovoltaic power stations,

**Enter.** The demand of the countries of the world for electricity is increasing day by day. Electricity plays an important role in the development of production, industry, science and technology. Many countries are worried about the increasing consumption of electricity, because natural energy reserves are exhausted and energy demand is increasing day by day. In particular, energy supply is a problem, so it is necessary to save it and choose an alternative way to obtain energy. Developing countries are gradually moving to the use of alternative energy sources, including Uzbekistan, which has already switched to the use of energy in this regard. In the conditions of Uzbekistan, the use of solar energy is promising. It would not be wrong to say that solar panels are a huge source of



energy for us. The use of solar panels is definitely limited because a solar panel cannot collect a lot of energy while standing still. Nowadays, it is becoming more and more popular to use solar panels to make the most of every sunny day.

**Photoresistor analysis.** High-precision semiconductor devices are widely used to drive solar panels. One of these devices is a photoresistor, because it is very sensitive to external influences. A photoresistor is a semiconductor device whose resistance changes under the influence of light. All its properties definitely change with light intensity. Despite the fact that the resistance of photoresistors is several  $100\text{M}\ \Omega$ , under the influence of light, its resistance can decrease to  $\text{m}\Omega$ . It is convenient to control the solar panels through this property of the photoresistor.



The expression of photoresistor connection to light intensity is as follows.

$$R = \frac{R_0}{e^{\frac{ISt}{kT}}} \quad (1)$$

$R_0$  is the resistance of the photoresistor without light

$R$  is the resistance when exposed to light.

From the first formula, it is known that the resistance of the photoresistor is inversely related to the light intensity. As the resistance value changes exponentially. For our experiment, we determine for the case that the light intensity is  $1000\text{W}/\text{m}^2$  at  $\text{AM}1.5\text{g}$ . Using this formula, we made calculations through



the programming language. Through a programming language, we perform calculations. In this case, we performed calculations using the C# programming language. This programming language is very broad and easy to use. The C# programming language is the leading programming language in the world, and it is very efficient to create algorithms for relating physical entities and quantities. First we introduce our variables and constants. We will create an algorithm for it to perform calculations, and we will analyze it by saving the results obtained from the algorithm. In our experiment, the calculation algorithm determined the light intensity with an interval of  $1\text{Wt/m}^2$ , that is, it was calculated by increasing the light intensity by one standard. We created this graph from the results of the calculations.

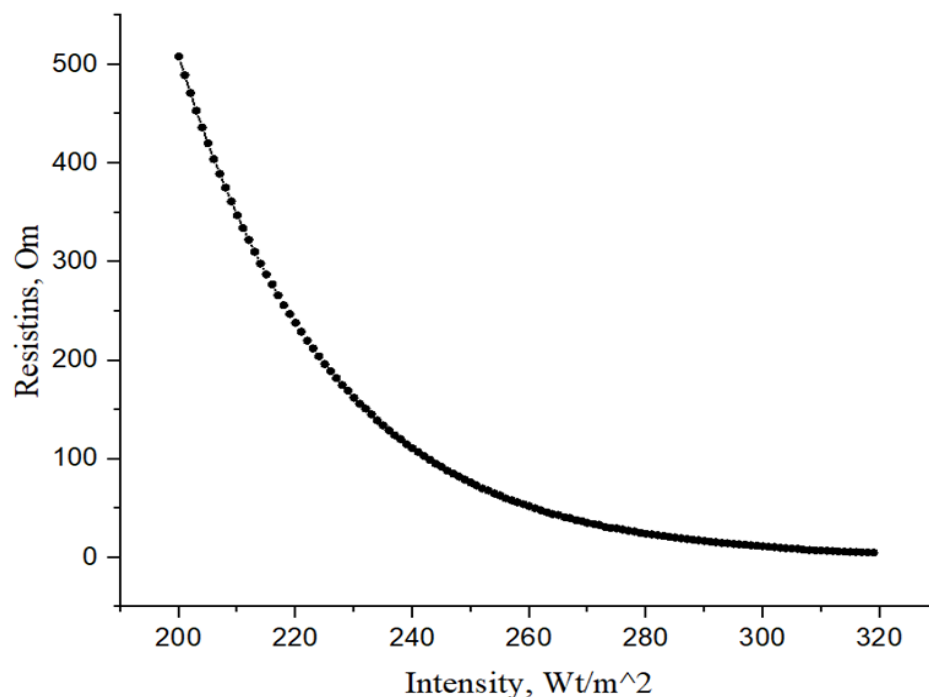


Figure 1. Connection of photoresistor resistance to light intensity.

**Summary.** In conclusion, when we studied the sensitivity of photoresistor sensors to light, we found that they change their parameters better. Therefore, it is



reasonable to use photoresistor sensors for the solar tracking system of PV modules.

### Books

- [ 1 ] Shamshiddinov, M. K. (2021). Povyshenie energoeffektivnosti energosberegayushchego svetodiodnogo osveshcheniya. *Universum: technical science*, (4-4), 74-76.
- [2] Lee JF, Rahim NA. Performance comparison of dual-axis solar tracker vs static solar system in Malaysia. In: 2013 IEEE Conference on clean energy and technology. 2013, p. 102–7. <http://dx.doi.org/10.1109/CEAT.2013.6775608>.
- [3] Hammad B, Al-Sardeah A, Al-Abed M, Nijmeh S, Al-Ghandoor A. Performance and economic comparison of fixed and tracking photovoltaic systems in Jordan. *Renew Sustain Energy Rev* 2017;80:827–39. <http://dx.doi.org/10.1016/j.rser.2017.05.241>.
- [4] Barbosa de Melo K, Kitayama da Silva M, Lucas de Souza Silva J, Costa TS, Villalva MG. Study of energy improvement with the insertion of bifacial modules and solar trackers in photovoltaic installations in Brazil. *Renew Energy Focus* 2022;41:179–87.
- [5] Jamroen C, Fongkerd C, Krongpha W, Komkum P, Pirayawaraporn A, Chindakham N. A novel UV sensor-based dual-axis solar tracking system: Implementation and performance analysis. *Appl Energy* 2021;299:117295. <http://dx.doi.org/10.1016/j.apenergy.2021.117295>.
- [6] Shamshiddinov, M., Kholdarov, A., & Dilmurodbekova, S. (2022). INTEGRATED CHIPS. *Journal of Integrated Education and Research*, 1(1), 541-544.
- [7] Kadirjonovich, SM, Bakhranjon oglu, RB, & Muhammadillo oglu, TS (2022, June). ANALYZE THE 2N4427 NPN TYPE BIPOLAR TRANSISTOR BY



PERFORMING THE FOLLOWING SEQUENCE WHEN DESIGNING A SINGLE-STAGE AMPLIFIER CIRCUIT. In E Conference Zone (pp. 58-62).

- [8] Shamsiddinov, M., & Ismailov, A. (2022). DETERMINATION OF THE MATHEMATICAL EXPRESSION FOR THE EFFICIENCY OF A TWO-SEMICONDUCTOR DIODE RECTIFIER ( $\eta$ ). Central Asian Academic Journal of Scientific Research, 2(5), 616-619.
- [9] Shamshiddinov, MQ, & ogli Parpiev, OB (2021). Use Of Electronic Keys To Increase Energy Savings Of Led Lights. The American Journal of Applied Sciences, 3(5), 39-46.
- [10] MQ Shamshiddinov: "Analysis of light acceptance level of photodiode optical sensor for solar monitoring system in proteus software", INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY. Doi: <https://doi.org/10.5281/zenodo.8329005> , 07.09.2023
- [1 1] MQ Shamshiddinov, ZM Soipova, HR Olimjonova: "Bipolar transistor", Web of Scientist: International Scientific Research Journal ISSN: 2776-0979, Volume 3, Issue 10, Oct., 2022



**THOUGHTS OF THE THINKER AND EDUCATOR ABDULLAH  
AVLANI ABOUT EDUCATION**

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**Abstract:** In this article, Abdullah Avlani glorified the culture of world peoples, science, school and education in his works, called on people to be educated and cultural, saying that morality is a set of behavior patterns and it is necessary to look at the upbringing of children. . shot By studying the opinions of scientists, the moral and educational qualities characteristic of our people were touched upon, as well as the example of the early education of our parents, sincere attitude and excellent behavior in the family.

**Key words:** culture, science, school and education, knowledgeable, ethics, behavior. child, education, virtue, relationships, family.

**Enter.**

Issues such as child development, education, health promotion, national values, love for the Motherland. When he grew up, the “Education” of the thinker Abdullah Awlani is for us either life - or death, or salvation - or death, or happiness - or This is a disaster - his meaningful thoughts. we understand that this is true. It was the educational center of the family - a sacred place that preserves the continuity of each people, ensures the development of national values, is a means of giving birth and raising a physically healthy generation, educating patriotic defenders of this country. A person receives his first education from his family, from the heart of love, mother's milk and his own milk. His influence was



firmly established in nature and in the human heart. a child is formed in every family on the basis of internal, certain laws of perfection, spirit, kindness and decency. As the President noted: “It is clear to all of us that every person belongs to every family in our country. the best dreams and goals, life interests, first of all, are manifested and realized in the image of their children”<sup>3</sup>. This is also a matter of spiritual education of children. it is important. When we look at the upbringing of the children of thinkers and study the thoughts of scientists, the moral and educational qualities of our people are involuntarily embodied before our eyes. And also an example of the early education of our parents, sincere attitude and good behavior in the family.

### **Main part**

The famous teacher, talented poet and teacher Abdullah Avloni was born on July 12, 1878 in Tashkent into a peasant family and studied at the old school. He wrote about this in his autobiography: “I started studying at the Okchinsky district madrasah at the age of 12. From the age of 13, he worked in the summer to help his family and studied in the winter. From the age of 14 I began to write various poems of that time. At that time, I read the Tarjumon newspaper and became aware of the times. Avloni graduated from a madrasah and became a school teacher. He reformed the method of teaching and learning, founded a new type of school, carried out important educational work such as imparting modern knowledge to young student teachers, teaching Eastern and Western languages. He wrote such textbooks as “The First Teacher”, “The Second Teacher” (1912), “Tarikh”, “Turkish Gulistan Yahud Ahlok” (1913), which were a phenomenon for their time. Avloni, who began his creative activity in 1895, created poems, stories, feuilletons and small dramatic works under the pseudonyms “Kabin”, “Shukhrat”, “Hijran”, “Avloni”, “Surayo”, “Abulfayz”, “Indamas”... In his works the poet criticizes backwardness and ignorance of his time and calls people to enlightenment. The thinker, teacher Abdullah Avlani made a great contribution to





the development of education. A teacher who embodies in his work the best traditions of our people, a creator, publisher and public figure. Abdullah Avlani is a “usuli jadid”, that is, schools with advanced methods: “Literature or folk poetry,” “The First Teacher,” “Türk Gulistani, or Ethics,” “The Second Teacher,” “School.” He created textbooks and textbooks like “Gulistoni.”

The famous and famous Abdullah Avlani in his works glorified the culture of the world's peoples, science, school and education, including Quranic suras, hadiths, the rich pedagogical heritage of the Uzbek people - fairy tales, proverbs, riddles and didactic stories. These books use words that encourage people to be educated and cultured. According to the thinker, morality is a set of patterns of behavior. Behavior and kindness in a particular person or the manifestation of evil is a form of existence. Abdullah Avlani in his work “Turkish Gulistan or Morality” describes the education of children in four areas:

It is enough to divide it into sections such as “Teaching time”, “Physical education”, “Education of thinking”, “Ethical education”. The Time of Education section states that education should begin from the day the child is born. “Education Who does this?”, “How is this done?” rushes into the midst of questions and seeks answers to them. “First of all, this is home education. This is a mother's duty. Secondly, the assessment of schools and madrassas is the responsibility of the father, teacher, teacher and the state,” it is emphasized that education is the responsibility of every person - parents, teachers, the state and others. These words of the great enlightener were important and relevant for our people at the beginning of our century. it is equally important and relevant for us today. Because education

- a product of consciousness, but at the same time it is a factor determining the level of consciousness and its development. Therefore, it is impossible to change consciousness without changing the education system. And without changing our opinions and thinking, we will not be able to build a free and prosperous society.



As we see, all these issues are closely related to each other, like a chain," he said earlier. His thoughts and comments are of great value attached to the work of Abdullah Avloni. Education is not a personal issue, but a national issue. It is a social work .The development of each nation and the power of its states are too great for the education of generations. Thanks to this, Abdullah Avloni was the first among Uzbek intellectuals who paid great attention to the education of children. Allama's education is national, not private. I conclude that it is a social work will come. Avloni was the only one who understood education in a broad sense and was not limited to moral education. First of all, he focuses on the need to take care of the health of his child. According to Avlani, in order to have a healthy soul, good morals and knowledge, you must first of all be physically healthy. As Avlani noted, "a person owns a healthy and strong part of the body." this is the most desirable thing. Because a person needs strength and a healthy body to study, teach, study and teach. Physical education, children's health Abdullah Avloni Addressing parents, he emphasizes that the main responsibility for education lies with teachers. Development of children's thinking abilities Formation of a worldview is a sacred duty entrusted to the "attention and conscience" of the teacher... After all, strength, beauty, breadth of thought is service to the teacher. it depends on his upbringing and training," says the teacher. At the same time, thinker Abdullah Avloni: "Education and learning are interconnected processes; there is a slight difference between lessons and learning, even if this is true. separated from each other: "The body is like a body with a soul enriched by it," he says. He expresses a strong opinion that knowledge is the only good and benefit for man. Only in a person brought up in the spirit of science and noble ideas, a sense of the Motherland is formed, love for the Motherland is awakened, and loyalty is allowed. This shows that without these qualities it is impossible to imagine an ideal person. The development of a country depends, first of all, on its children, their spiritual and physical maturity.



Therefore, Abdullah Awlani is a book for young people, designed to acquire knowledge and useful skills. Raising children in the spirit of the spiritual heritage of Eastern thinkers encourages them to study. Avlani also equates ignorance with ignorance and expresses the following thoughts: "Ignorance refers to the uneducated, the uneducated and the ignorant," he says. "Science is a friend in the desert, life is a support on the roads. In lonely moments - a friend, in happy moments - a leader, in sad moments - an assistant between people." "zebu zinat, a weapon in the fight against enemies." The Thinker said: "Beauty is not in the face, brother." Everyone likes good people," he addressed the people. Our words encourage us to be kind so that we can be an example for our children.

### Summary.

As we all know, the holy book and our values, the legacy of the great thinkers of the East, always force us to live by honest work, courage, generosity and generosity, call us to humility, justice and kindness. Of course, it is impossible to imagine unique customs and traditions without spirituality, history and national values. If parents are satisfied, we can conclude that education is today, tomorrow and the future of the child. This is why education is a social phenomenon. Education has existed since the beginning of human society. after all, in order for a person to be the most perfect species on earth, he must first of all be educated. Although the work has been written for almost a century, it has not lost its value. Our people have a saying: "A teacher must first of all be knowledgeable." It is the duty of each of us to use the thoughts, advice and wisdom of thinkers in raising children, expanding and enriching their spiritual horizons, and raising an ideal person.

### Books:

1. Mirziyoyev Sh.M. Humanity, kindness and creativity are the main foundations of our national idea. Tashkent, 2021.
2. Mirziyoyev Sh.M. June 24, 2017 "Khalk Sozi" newspaper



3. Karimov I. High spirituality is an indomitable force. Tashkent. // “Spirituality” - 2008. P. 62.
4. Mardonov Sh.K. Development of technology for an electronic module of didactic support in pedagogy.-T. "Reliable partner".2021,54-60b.
5. Abduzhalilova Sh. “The concept of pedagogical education in the family in the works of Abdurauf Fitrat.” p-ISSN: 26153785 I Volume 5, Issue 1, January 2022
6. The personality of the teacher as a factor in the effectiveness of pedagogical communication. Journal of interdisciplinary innovation and scientific research in Uzbekistan No. 9 06.20.2022173-177b Treasury of proverbs. Collector: M. Azamatov. Compiler of glossary and annotations: Naim Norkulov. T., 1977. S. 18, 30, 44.
7. P. Taranov. Encyclopedia of Higher Intelligence. M., 1999. B-16.



**THE ROLE AND MORALITY OF ENVIRONMENTAL EDUCATION IN  
THE DEVELOPMENT OF THEIR CHILDREN**

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**Annotation;** this moqola reveals the role of environmental education in the development of preschool children and the strengthening of methods to increase their education and productivity through exercise.

**Keywords;** preschool age, environmental education, specialty, emoticon, humor, number poems, speech, development, tasks.

Fiction is an impressive tool for the comprehensive education of children, which makes a huge contribution to the development and enrichment of their speech. Fiction, through poetic images, helps the child understand society, life of nature, human feelings and relationships, enriches emotionality.

- Fiction helps to form feelings of humanity in preschool children, such as empathy, kindness, caring for the little ones, parents and older members of the family.

- Children receive aesthetic and moral imagination from works of art.

- \* Folk works, which contain subtle humor, numbered poems, jokes, are objective means of pedagogical influence on such qualities as laziness, cowardice, stubbornness, whims, just self-reflection (egoism).

- It is necessary to conduct the acquaintance of children with children's fiction taking into account their age opportunities, the level of speech development and the ability to receive literary works.

- The basis of early children's (1-3 years old) acceptance of works of art is their emotional attitude towards works of art, their ability to advance various



tones, react to them, familiar to heroes and care about them.

- The task of the preschool educational institution and the family at this age stage is to develop the foundation for the literary development of children, to form them as future pupils.

"Of adults (educators, parents, et al.) their emotional involvement in the process of reading or narrating a work of art is the most important interpretation of the shshshng, which carries out pedagogical work with children of early age.

- In the process of introducing children of the early age to children's fiction, it is necessary to develop cognitive and speech skills and attitude towards it.

- A child of preschool age (3-5 years old) will have a wide range of opportunities in the field of art, his artistic images, the acquisition of artistic activities. At this age, along with emotional attitude and sensory abilities, artistic thinking also decides.

- The emotional-holistic reception of a work of art by five young people leads to the fact that the child begins to "play" with them, having separated some images and elements of the plot. At this time, he invents it, perfects some plates, weaves his own fairy tales, begins to distinguish literary genres (fairy tales, stories, poems), is able to see some expressive means of language.

\* It is necessary to carry out pedagogical work in two directions on the understanding of preschool children with children's fiction. 1-with the organization of the perception of a work of art as a holistic and completed aesthetic object. 2-Creating the necessary conditions for the development of imagination in children in the process of changing certain artistic images and synthesizing several images.

- In the reception and understanding of literary works by preschool adults (5-7 years old), they develop skills to caress and empathize with heroes; restore the chain of events and establish various meaningful connections within the work and between works; see and understand Open motives in the behavior of heroes.



• A contradictory combination of two opposing principles in the psychological development of preschool older children is their distinctive features: 1-high creative potential, 2 - imitation and striving for normality.

• Interaction of a pre-school adult with a work of art makes it possible to realize its potential for aesthetic, cognitive, social and speech development.

\* Dialogue-preschool should be the leading tool of pedagogical work with older children.

\* Acquaintance with fiction affects the comprehensive development of speech, namely: sound culture, grammatical structure, vocabulary, fluent speech.

1. The importance of children's literature in the comprehensive education of children

2. Introducing children of early age to children's badai literature

3. Introducing children of preschool age to children's fiction

4. Introducing preschool older children to children's fiction

5. The importance of children's fiction in the comprehensive education of children

6. Fiction serves as a powerful, influential weapon of mental, moral and aesthetic education of children, it has a tremendous impact on the development and enrichment of Child speech.

7. In poetic images, fiction reveals and explains the life of society and nature, the world of human feelings and interactions. These patterns vary in their power of influence: in stories, children learn the lustfulness and accuracy of words; in poems, they advance the musicality, tonality of Uzbek speech; folk tales show the clarity and expressiveness of language in front of them, show how rich native speech is in humor, lively and figurative comparisons, expressions.

8. After the children learn to care for the heroes of fiction, they begin to notice the mood of loved ones and people around them. They begin to awaken humanistic feelings-the ability to share someone's pain, do good, resist injustice.



This is the foundation on which principalities, honesty, real feelings of citizenship are brought up. Feelings come before knowledge; whoever did not feel the truth, he did not understand and did not recognize it.

9. People are unique teachers of children. In any works other than folk works, it is difficult to find such an admirable arrangement of sounds that are difficult to pronounce, a surprisingly side-by-side dialing of words that, according to their slang, are barely different from each other. Sloppy jokes, subtle humor, count poems — an effective means of pedagogical influence, laziness, cowardice, stubbornness, whims, only a good "ointment" against such qualities as self-reflection (egoism).

10. A trip to the world of fairy tales develops the imagination of children, their fantasy world, fantasy. Raised in a humanistic spirit based on the best literary examples, children show their fairness in their stories and fairy tales by defending oppressors and the weak, punishing the bad. And of course, children should receive aesthetic, especially moral, visions from the admonition of adults (parents, educators) on the works read, not from answering prepared questions, but precisely from works of art. Excessive exhortation on the work read is great, and often irreparable harm: a work "scattered" with small questions loses all its attractiveness in the eyes of children, as a result of which children's interest in it also disappears. Therefore, it is necessary to fully rely on the educational opportunities of the art mat.

KD.Ushinsky writes; " As long as the child learns his native language, he does not learn only conditional sounds. Perhaps the mother breast of the mother tongue also did not absorb spiritual life and strength. He explains nature to the child in such a way that no other naturalist can afford it, he introduces the character of the people around him, the society in which he lives, his history and aspirations in such a way that no other historian can afford it; He brings the child into folk works, folk poetry in such a way that no other aesthetic is capable of





this, finally he gives the child such logical concepts and philosophical views that, in adbatta, no other philosopher is capable of this"1. In this statement of the great educator, not only the results of mastering the native language, but also the method of learning it: "1 teacher's language is trusted, which not only teaches a lot, but also teaches on the basis of some kind of immaturable method, which is surprisingly easy." Thus, while helping children to master a particular work of art in their native language, the educator also performs the task of comprehensive upbringing.

Each age stage in the preschool period puts its own speech development tasks. Due to the fact that with increasing age, the level of acceptance of literary works also increases, they are gradually complicated. Children develop the ability to listen to poetry. From this it is necessary that adults know the age possibilities of children.

Taking into account the age characteristics of children, we will consider the issues of introducing them to children's fiction at each age stage.

#### LIST OF LITERATURE USED

1. Kayumova N. "Preschool pedagogy". Tdpu publisher T.: 2013.
2. Khasanboeva O. U. et al. Pedagogy of preschool education. T.: Knowledge increases. 2012.
3. .He Was Born In Khasanboeva, Kh.J.Djabborova introducing children to nature methodology. T.: Chulpan. 2007.
4. Q Haydarov, S.Nishanova fundamentals of Natural Science and the environment of children-acquaintance with nature. T.: Teacher. 1992.
5. Mirzamahmudovna, Khujanazarova Nargiza. "THE ROLE OF NATIONAL METHODS IN THE DETECTION AND PREVENTION OF



NERVOUS DISORDERS IN CHILDREN." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 11.11 (2022): 505-507.

6. Hujanazarova, N. "IMPORTANCE OF FAIRY TALES IN MORAL EDUCATION OF PRESCHOOL CHILDREN." International Academic Research Journal Impact Factor 7.1 (2022): 6

7. Mirzamahmudovna, Hujanazarova Nargiza. "LOCAL METHODS FOR DETECTING AND PREVENTING NERVE DAMAGE IN PRESCHOOL CHILDREN." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 12.06 (2023): 148-152.

8. Xo'janazarova, Nargiza. "MAKTABGACHA YOSHDAGI BOLALARDA IJTIMOYIY OG 'ISHLARNING OLDINI OLIH VA QAYTA TIKLASH." Talqin va tadqiqotlar 1.25 (2023).

9. Raximovna, Abdullayeva Nigora. "Methodological Possibilities of Increasing Memory Productivity in Primary School Students." Middle European Scientific Bulletin 17 (2021): 297-300.

10. Abdullaeva, Nigora, and Kamola Yuldasheva. "METHODODOLOGICAL POSSIBILITIES OF INCREASING THE SPECIFICITY OF MEMORIZATION IN CHILDREN OF KIICHIK SCHOOL AGE." International Bulletin of Applied Science and Technology 3.5 (2023): 1100-1104



## CHARACTERISTICS OF CULTURE AND CIVILIZATION AND LAWS OF DEVELOPMENT

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### ANNOTATION

*This article examines the specific features of culture and civilization and the laws of development. The article also makes scientific and philosophical conclusions that culture and civilization are understood as concepts that at first glance mean the same thing, but have different meanings and laws of development. In the article, in the process of studying specific aspects of culture and civilization, the following points are of great importance. If culture is a phenomenon associated with education and the assimilation of social requirements, then civilization is a process associated with the emergence of the state, a sense of citizenship among members of society, and the formation of a sense of respect for state laws.*

**Keywords:** *culture, spirituality, civilization, culture, Medina, urbanity, value, knowledge, education, ethics, knowledge, religion, faith, people, society, state.*

**Introduction.** At first glance, the concepts of culture and civilization seem like terms that mean the material development and spiritual image of society. But



if we think based on the content and essence of these concepts, we will realize that each of them is a set of separate concepts that have their own characteristics and relative independence from each other. When it comes to culture, when we analyze the concept of culture from a philosophical point of view, we understand it as a whole social phenomenon. Culture is the process of human activity, the material and spiritual values created as a result of it, and is a social phenomenon that is an important factor in human development.[1] When studying the historical, scientific-theoretical and practical aspects of the concept of culture, first of all, it is necessary to pay special attention to the etymology of the origin of this concept.

### **Main part**

Today, most of the definitions given to the concept of culture in scientific literature are close to each other in content. In some sources, "culture" is derived from the Latin word "culture", which means education, including "primary cultivation of the land", and in some sources, "culture" - Arabic "medina" means urban"[2], - written as. Culture is a term formed by adding the suffix "iyat" to the Arabic word "Madina", and in Uzbek this word means "belonging to the city" concepts specific to the development of science and enlightenment in their content and essence point to the fact that people have progressed in the urban way of life. We can see that many peoples of the world explain the concept of culture with the term "Kultura" adopted from the Greek language. In our opinion, culture is a product of human conscious activity, mental potential, inner experience, worldly concepts.

Culture is not only a sum of material and spiritual wealth created by the creative activity of people, but also a criterion of the development of society. That is, the sum of knowledge, standards and values in society is embodied in culture. In the study of culture, it is possible not to use traditional ideas about objective laws, causality of events. Culture is always closely connected with man and



cannot live without him. But as a complex, integrated unit of reality, it is independent in its laws of development and existence. It is richer and deeper than the spiritual life of concrete social groups that embody cultural heritage. Culture will always be the largest store of values, a treasure of experiences. Generations of mankind use it and contribute to it.

A person interacts with culture in the following areas:

- firstly, culture adopts it as an object of influence;
- secondly, it operates in a concrete cultural environment as a carrier and representative of cultural values;
- thirdly, it develops culture as a subject of cultural creativity.

During social development, our ancestors passed the path from primitive life to high cultural development. Simple work tools have become the most advanced technological work tools today, dwellings made of wood and stone have become modern houses today. All this is being realized as a result of the tireless work of mankind over the centuries.

Central Asian encyclopedist Abu Nasr Farabi was the first to create a consistent doctrine about the origin, goals and tasks of society in the conditions of the Middle Ages. This doctrine covers many issues of a civilized society - state management, education, morals, enlightenment, religious beliefs, war and peace, labor and others. Culture is not only a collection of material and spiritual values, but also a creative activity. Also, Farabi says in his work "The City of Virtuous People": The outlook of virtuous people has an altruistic, humanistic nature. Their idea of happiness depends on the idea of goodness. Because a person cannot be happy without goodness[3].

So, according to Farabi, the city of virtuous people is the concept of an ideal state in which the idea of goodness is celebrated. The idea of goodness is connected with the concept of "primary existence" in Farabi's views and is deified. According to Farabi, a city of virtuous people can emerge only when a



part of mankind reaches the level of divine consciousness. And the individualistic and egoistic imaginations of the majority lead them to ignorance, and their cities remain ignorant. It can be seen that Farabi is a supporter of socialization, a supporter of living with the pain of the people, a supporter of goodness.

It is worth noting that although the material and spiritual types of culture were recognized in the research conducted in the field of civilization and culture in the former USSR within the framework of Marxist ideology, it was mainly approached from the point of view of historical materialism, that is, any civilization and the development of culture, the cultural development of society as a whole, was first of all connected with economy and materiality. For this reason, in this period, not enough attention was paid to the field of spirituality and its analysis. In this field, except for some scientific works, deep scientific and philosophical researches were not carried out. Rather, it was not possible to conduct scientific work. As a result of this, only the materialistic approach was decided in the research of the fields of civilization and culture, as in all fields.

In the process of researching the specific aspects of culture and civilization, we should pay serious attention to the following. If culture is related to education and mastering of social requirements, civilization is related to the emergence of a state, the formation of a sense of citizenship among members of society, and the formation of a sense of respect for state laws.

**Results and Discussions.** It is very important to distinguish the important elements of culture and civilization in determining the specific aspects of culture and civilization. The following can be cited as important elements of culture:

- Knowledge, understanding, imagination, views and scientific theories.
- Objectification and realization of this knowledge, imagination, views, theories.
- In this process, the formation and improvement of the human personality.

Each of the elements of culture is interrelated, and in the process of the



formation of the human personality, the humanistic and progressive essence of culture is manifested. In the existing scientific literature, there are cases of distinguishing between material and spiritual culture and even contrasting them. Some researchers associate civilization with material culture (technique, technology). In our opinion, it is rather controversial and unprospective to associate civilization with only one aspect of culture. Because in the scientific literature of cultural studies, culture is considered as a whole social historical phenomenon.

The most important features of early civilization include:

- Emergence of the state, emergence of writing.
- Separation of agriculture from crafts.
- Division of society into classes.
- Emergence of cities.

The following can be cited as important signs of modern civilization:

- Existence of the rule of law.
- Seeking to resolve conflicts between states, peoples, and social classes on the basis of common consensus.
- The development of social division of labor worldwide.
- Availability of communication system.
- Formation of planetary consciousness, planetary morality.

In the process of researching the processes of culture and civilization, the scientific heritage left by the scientists of European and Asian countries is of great importance. One such scientist was Oswald Spengler from Germany. The first volume of Spengler's selected works was published under the title "The Decline (Death) of the Western World", which predicted the consequences of civilizational progress. He presented history as a kaleidoscope of eight "organic" cultural and historical types: Egyptian, Indian, Babylonian, Chinese, Greco-Roman, Magical (Byzantine-Arab), Western European, and Maya. The ninth is



the culture of the future, known as Russian-Siberian[4]. According to Spengler, cultures appear “like flowers in the field” with impeccable purpose and leave nothing on the scene as if they had left the scene without a purpose. Spengler described the emergence of culture very beautifully and delicately, but culture does not leave the “scene” aimlessly, but loses its place and importance significantly due to the entry of another new culture. As a result, another civilization will be founded.

The morphology of Spengler's culture informed the Western world of its uncontrolled decline: according to Spengler, rationalistic civilization represents the destruction of the highest moral values of a culture doomed to death. According to Spengler, the great culture of the past seems to have shown the West its destiny, its immediate historical future. Of course, these ideas have been confirmed to this day. Why? A spiritually mature, intelligent society will always be able to create new things, to create the ground for the start of new civilizations in its place. According to Spengler, the comparative analysis of cultures reveals the unity of their fate. Every culture goes through the same sequence of developmental phases, and the main characteristics of each period remain the same in all cultures. All cultures are similar in terms of life expectancy (about 1000 years) and development rates. Historical events related to one culture left their traces in all other cultures. Every culture exhausts its internal creative possibilities, dies and passes to the stage of civilization. At this point, we would say that the end, the highest peak of the development of every culture is the foundation of a new civilization.

O. Spengler writes in the introduction to “Sunset of Europe”: “There is no absolutely right or wrong point of view for the true connoisseur of people”. Spengler also put forward ideas such as: “There are no eternal truths”, “There is no universal morality, there are as many cultures as there are morals”. Of course, there is no “universal morality”, it is impossible. Because each person is a





separate living organism, a single worldview and a single thought. “As many cultures as there are morals” - cultures have survived in different forms from different eras to us, and there are some changes in their practice and approach. But as culture increases, moral standards increase proportionally.

From the second half of the 19th century, the concepts of “civilization” and “culture” began to be differentiated. In the beginning, civilization meant high economic, cultural and spiritual development, and to a large extent religious development (for example, according to Spengler, religion is the basis of every civilization), later spiritual development was more associated with culture. started The essence of culture is now associated with forms and levels of spirituality that represent a high civilization and its great achievements[5].

One of the laws of development of culture is inheritance. That is, the law of passing past experiences to generations on the basis of inheritance. Succession means continuity, continuity, gradualness. This is a vertical development from the bottom up, from a simple expression of culture (imagination, imagination) to a complex view (mysticism, theoretical views). The concrete form of succession is expressed in inheritance. Production, science, technology, examples of monumental art, political, moral, artistic values - developed on the basis of inheritance. Another important law of cultural development is gradualism, that is, evolutionary, gradual development. Each form of culture, form of expression, is polished from generation to generation over the centuries, perfected and developed slowly, step by step, embodying positive values (ancient ethics, art, philosophy, mysticism, culture of the 21st century and b.). Each generation contributes to it, raises it to a new level and passes it on to the next generation. This is an evolutionary process[6].

Mythological thought played a major role in the formation of ancient Eastern culture. This culture is based on tradition. The tradition and experience of the ancestors were evaluated as absolute truth. D.S. Likhachev stated that decency



was connected with the rule of absolute truth. The morality of the ancient Eastern man goes back to the "divinely established" norms and rules aimed at restoring sacred traditions in actions and activities. A.Y. Gurevich says: "The movement of people towards the divine image in the sky connected them with God and became a reality in morality[7]". All people's activities (production, public, family) gain meaning by the extent to which they participate in sacred ceremonies. In traditional society, the words "ancient" and "good" are synonymous, guaranteeing ancient goodness. That is why the house and equipment, clothing and food have changed little for thousands of years. Literary genres and art genres are also stable. New ehrsams not only replaced the old ones, but also restored their "original model". According to I.V. Klochkov, modern people see the world in motion and development. The concepts of "evolution" and "progress" are concepts that pave the way for creating the image of the world.

The word civilization is a Latin word that means citizenship, belonging to citizenship, belonging to the state[8]. Analyzing the concept of civilization, in the process of studying the views of the existing literature on this subject, special attention is paid to the various directions of socio-economic development of society based on the analysis of this concept, which allows us to understand the essence of the concept of civilization as a social phenomenon in general forms. In all sources, it is mentioned that the concept of civilization is derived from the Latin word, and the meaning of this word is citizenship and citizenship.

The Scottish historian and philosopher A. Fergusson (1723-1816) was one of the first to analyze the concept of civilization in the sense of a certain stage of the world historical process. French statesman and philosopher A. Turgot uses this term as a broad concept of development in his book "Friend of Women" or "Treatise on Civilization" published in 1768. In the views of the French Enlightenment, it was recommended to call a society based on reason and justice a "civilized" state or society. The distinction between the concepts of culture and



civilization was put forward by Spengler. He used the concepts of culture and civilization in the context of purely chronological concepts of civilization in the sense of the antipode of culture, i.e. in the sense of characterizing the crisis-like stage of human historical development, while the English sociologist and historian A. Toynbee defined a relatively closed society in the context of this concept. used to express progress. In fact, civilization seems to take precedence over culture in a certain sense. For example, the creation of simple stone tools by primitive people paved the way for civilization, but it was not yet a civilization. By creating tools of labor, primitive man paves the way for further socio-material development, a new way of life, civilization. Because civilization is a concept that represents any socialization process.

**Conclusion.** Villages, religions, ethnic groups, nations, religious groups all have a distinct culture of varying degrees of cultural diversity. There are cultural elements that distinguish European societies from Chinese and Indian societies. Therefore, Chinese, Indians, and Westerners cannot be part of any broad cultural stratum. They form separate civilizations. In a word, civilization is a cultural base formed by a large group of people.

Civilization is the highest level of cultural system characteristic of humans, which distinguishes them from other creatures. It is defined by language, history, religion, customs, institutions, and people's subjective self-definition. Humans have their own degrees of identification: for example, a Roman citizen names himself with different intensities. For example, they may call themselves Roman, Italian, Catholic, Christian, European, or Western. The civilization to which it belongs is the most suitable index by which it can be specified. Civilization is the biggest “we” within which we feel culturally situated, separate from all other subjects.

### References

1. Falsafa o‘quv qo‘llanma. –Toshkent: O‘qituvchi nashriyoti, 2005. -217 b.



2. Хоруженко К.М. Культурология - энциклопедический словарь. Ростов Дон: Феникс. 1997; Bekmurodov M. va boshqalar. Sotsiologiya. – Toshkent: A.Qodiriy nomidagi xalq merosi nashriyoti, 2002.

3. Abu Nasr Farobiy. Fozil odamlar shahri. – Toshkent: A. Qodiriy nomidagi xalq merosi nashriyoti, 1993. -86 b.

4. Madaniyat falsafasi O.Spengler. <https://gigafox.ru/uz/rody/filosofiya-kultury-o-shpenglera-osvald-shpengler---kratkaya/>

5. Будагов Р.А. История слов в истории общества. -Москва: Наука, 1971. – С.124-126 .

6. Абдурахмонов М, Рахмонов Н. Маданиятшунослик. –Тошкент: Алишер Навоий номидаги Ўзбекистон Миллий кутубхонаси нашриёти, 2011. -32 б.

7. <http://library.ziyonet.uz>

8. Falsafa. O‘quv qo‘llanma. – Toshkent: O‘qituvchi nashriyoti, 2005.- 220 b



## PHYSICAL FITNESS OF NATIONAL WRESTLING ATHLETES

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**Abstract:** The merits of our country's wrestlers in carrying the flag of Uzbekistan high in international competitions at the world sports arenas are incomparable. The issue of physical fitness of national wrestling athletes was studied and analyzed in the article.

Key words: sports, national wrestling, development, training, wrestling methods, physical training, kinematics and dynamics.

### INTRODUCTION

Popularization of physical education and sports in new Uzbekistan, promotion of a healthy lifestyle among the population, implementation of specific programs that help to strengthen the health of the population in the field of physical education and sports, wide involvement of young people in sports and consistent measures are being taken to select talented athletes from among them, to form national teams with skilled athletes who provide high results in sports, and to ensure proper participation of the country in international sports arenas. The Uzbek people should be proud of their national sports. As a result of the care of the leadership of our country in the development of physical education and sports, our national sports are developing and becoming more popular. Uzbek national wrestling methods have a long history, and today these wrestling methods are widespread in all Asian countries and among a number of European nations. Eastern thinkers have written about wrestling methods, their formation,



types and skilled wrestlers in their works.

National wrestling is one of the means of raising a physically fit and spiritually mature person. Currently, national wrestling types are developing widely in our country. Athletes of our republic have been successfully participating in Asian, European and world championships.

The Bukhara style of wrestling, which is considered the national wrestling of Uzbekistan, became "Kurash" as a result of the scientific, methodological and practical researches of advanced experts. With this, the fight became more attractive and enjoyable.

Currently, secondary schools, vocational colleges, and higher education system teach national wrestling methods in the process of physical education. The pedagogical process of training professional athletes in wrestling circles of sports schools is being improved in accordance with the requirements of the time. The process of training professional wrestlers is a multi-stage and pedagogical process that requires regular physical, technical-tactical, theoretical and spiritual preparation of wrestlers, as well as hard work.

Thanks to independence, the Uzbek struggle has spread to all continents of the globe, the resounding of the Uzbek language of struggle, halal, stop and other words of all nations and peoples has recognized the Republic of Uzbekistan, the Uzbek people, by the whole world community. is a clear example of the fact that it is obtained. Based on the importance of Uzbek wrestling in the education of young people, it is appropriate to carry out the following activities in order to educate our young people as well-rounded, healthy, spiritually mature people.

#### DISCUSSION

Physical training of a wrestler is one of the important components of sports training and is a process aimed at developing physical qualities - strength, endurance, flexibility, agility and quickness.

The main tasks of physical training are:



Improving the level of health of athletes and the functional capabilities of various systems of their body.

Development of physical qualities in a unit that meets the unique characteristics of sports wrestling.

Physical training is divided into general, auxiliary and special training.

The general physical fitness of a wrestler is the foundation, necessary basis for achieving high results. It mainly provides the solution of the following tasks:

All-round harmonious development of the wrestler's body, increase of its functional capabilities, development of physical qualities.

Increase the level of health.

Proper use of active rest during intense training and competition.

General physical training includes the collection of various tools. Among them, exercises performed in shells and with shells, exercises performed with a partner on a special trainer, general developmental exercises taken from other types of sports: acrobatics, athletics, sports games, suzi, etc. are distinguished. Auxiliary physical training is designed to create a special basis necessary for effective performance of a large volume of work aimed at the development of special movement skills. It has a rather narrow and specific direction and solves the following tasks:

Developing qualities that are more specific to fighting.

Selective development of muscle groups that are largely involved in the wrestler's movements. As advanced means of auxiliary physical training, such exercises are used, which, according to their kinematic and dynamic structure and neuromuscular tension, are suitable for the main actions performed by the wrestler during the competition. Among such exercises, the following can be distinguished: execution of various methods of struggle by pointing; exercises performed on special training devices; exercises with wrestlers' mannequins.



The special physical training of a wrestler is aimed at developing the qualities of movement in strict accordance with the requirements imposed by the characteristics of the wrestlers' competition.

The special physical training of wrestlers is mainly carried out on the wrestling mat and is aimed at developing the most important movement qualities in movement skills. That's why competitive exercises involving various possible complications are used as the main means of special physical training.

Such complex exercises increase the impact on the body of the wrestler. For example, throwing a partner in a heavier weight category, training competitions are performed by changing partners, etc. All these exercises provide an opportunity to develop one or another mechanism of energy supply, have a complex effect on the training of the wrestler and at the same time increase his physical and technical-tactical preparation.

All the indicated types of physical training are inextricably linked. Inadequate evaluation of any types of physical training during the training will ultimately prevent the improvement of sports skills. Therefore, it is very important to observe the optimal ratio of the types of physical training indicated during training. Its numerical expression is not considered a constant size, but changes depending on the wrestlers' qualifications, their special characteristics, the period of the training process, and the current state of the body.

Strength and the methodology of its development. "Strength", which is a physical quality, means the ability of a wrestler to overcome the opponent's resistance or resist him due to muscle tension.

The following types of strength are distinguished: general and special, absolute and relative, quick and explosive, strength endurance.

General strength is the strength displayed by an athlete without reference to specific movements of the wrestler. Special strength is shown by the athlete in special movements corresponding to the competition movements. Absolute





strength is characterized by the power capabilities of the athlete, which are manifested in the movements of a very large nature. In wrestling, it is important for getting one-on-ones with power.

Relative strength, that is, the strength corresponding to 1 kg of the athlete's weight, is an indicator of the wrestler's ability to overcome his personal weight. It is important to perform these methods quickly.

Quick strength is reflected in the ability of muscles to quickly perform movements associated with overcoming relatively small external resistance.

Explosive power describes the ability to manifest large stresses in a short time according to its intensity.

Endurance is the athlete's ability to exert muscle tension for a relatively long time. The following techniques are used to develop the wrestler's strength: repeated tension; short-term maximum voltages; growing more and more weights, percussion, joint effect; variability; isometric tension techniques.

The method of repeated stresses is that the athlete repeats the exercise with weights equal to 70-80% of the maximum weight while performing the exercise "to the last breath". This method involves performing a series of strength exercises. Each series - "until the last breath", 3-4 series in total, the rest interval between series is 3-4 min.

One type of repeated stress method is the dynamic stress method. It is characterized by performing exercises at a limit speed of 20-30% of the maximum weight. In this case, large muscle tension is achieved not due to heavy weight, but due to high-speed movement.

The short-term maximum tension method is currently the most effective for increasing absolute muscle strength. It involves working with weights at the limit and close to the limit. In muscle training, the style of maximum tension is manifested in simulators and in one approach using one or two movements, in exercises performed with a heavy barbell (silent, swinging, lifting a hand, sitting



and standing). A total of 3-4 approaches are performed during the training. Rest interval between approaches - 3-5 min. The progressive weight method involves gradually increasing the amount of resistance during one training session as well as the next.

It is recommended to start with a weight equal to 50% of the weight that the athlete can lift 10 times (10 MT) in the first approach. In the second approach, the exercise is performed with a weight of 75% from 10 MT, and in the third approach - with a weight of 100% from 10 MT. A total of 3 approaches are performed during the training. Rest interval between approaches is 2-4 min. In each approach, the exercise is performed at the limit speed until clearly exhausted.

The percussive method is based on the percussive stimulation of muscle groups by using the kinematic energy of the falling weight and the weight of the individual body. Absorption of the energy of the decreasing weight by the exercising muscles helps the muscles to move to an active state, the rapid development of working tension, and creates the possibility of additional tension in the muscle. This ensures the speed and speed of the next pushing action and the rapid transition from the backlog to the work to be overcome.

As a method of using a percussive method of developing the explosive power of the legs, we can say high jump exercises performed with high or long jumps. The exercise is performed by falling to the ground from a height of 70-80 cm with the knees slightly bent, and jumping up quickly and violently. Jumps in series: in 2-3 series, 8-10 jumps are performed in each series. Rest interval between series is 3-5 min. Exercise is done twice a week.

The joint effect method depends on the fact that the development of the strength capabilities of the wrestler occurs directly during the performance of specialized exercises. At the same time, the wrestler's strength skills and technical-tactical movements are developed and improved. As an example of the use of the joint effect method in wrestling, such exercises can be given, in which a



wrestler improves his technical movements with an opponent of a heavier weight class.

It is very important to determine the optimal size of the weight. An excessively large size leads to a violation of the composition of movement skills, which in turn has a negative effect on movement technique. Variation method mainly involves performing special exercises with weights of different weights. Exercises are performed serially with partners of different weights. In one series, first 10-12 throws are performed with an opponent of a heavier weight category, then 15-16 throws are performed with an opponent of the same weight category, after which 10-12 throws are performed with an opponent of the same weight category. A total of 3 series will be performed. Rest interval - 3-4 min. The variant method is especially effective in developing quick-strength qualities (moderate, small).

Endurance and the method of its development. Endurance of a wrestler is the ability to perform actions at a high speed during the entire competition and to conduct several competitions with intensity during the entire competition. A high level of endurance allows a wrestler to master large training and competition tasks, to fully realize his movement skills in competitive activities.

### CONCLUSION

When doing such exercises, a number of methodological conditions must be met:

- 1) warm-up exercises must be included before starting exercises;
- 2) setting specific goals, for example, touching a certain point of the body or object;
- 3) performing stretching exercises serially in a certain sequence: for hands, for body, for legs;
- 4) perform relaxation exercises between series of stretching exercises;
- 5) gradually increasing their amplitude while performing exercises;



6) when performing exercises, it should be taken into account that the most basic method of developing mobility is the method of repetition.

Flexibility can be greatly increased during a training session consisting of moderate stretching exercises of 25-50 repetitions, depending on the individual abilities of the participants, twice daily for a month or two.

#### References.

- 1.F.A.Kerimov. Sport kurashi nazariyasi va usuliyoti. Toshkent 2001.
- 2.N.X.Azizov. Belbog'li turkiston kurashi. Toshkent: O'qituvchi 1998.
- 3.A.Atoyev. Yosh o'smirlar o'zbek kurashini o'rgatish uslubiyati. Toshkent «O'qituvchi» 2005.
- 4.K.Yusupov. Kurash halqaro qoidalari texnikasi va taktikasi. Toshkent 2005.
- 5.R.S. Salomov. "Sport mashg'ulotlarining nazariy asoslari" O'zbekiston Davlat jismoniy madaniyat instituti Toshkent 2005 yil.238-bet
- 6.Goncharova O.V. Yosh sportchilarning jismoniy qobiliyatlarini rivojlantirish Toshkent., O'zbekiston Davlat jismoniy madaniyat instituti 2005 yil - 171 b.
- 7.Учебное пособие под.ред. А.Н.Бородиев, И.Б.Голдштейн, Н.Б.Самойлов. Русский рукопашный бой. Москва 2001.
- 8.Практика рукопашного боя. Учебное пособия под/ред. К.Борисов 2003. г.
- 9.Джиу джису С.Иванов – Катанский. Москва 1996 г.
- 10.Каратэ – до Донеск С.А.Лапшин. Москва 1991 г.
- 11.Пособие по защите и обезоруживанию при ударах ножом. Илхамов И.Р. Тошкент 1998.
- 12.Методическое руководство для первого года обучения. 1998 г.



13.Наставление по физической подготовке Вооружённых Сил Республики Узбекистана. Ташкент 1999.

14.A.Abdusattorov, A.A.Istomin Dzyudo kurashi Toshkent 1993.



## METHODOLOGY OF USING MOBILE AND GAME EXERCISES IN THE TRAINING OF YOUNG FOOTBALL PLAYERS

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**Abstract:** This article describes the development of dexterity, grasping, aiming, logical and quick thinking qualities of young football players with the help of mobile games and game exercises, as well as the views of experts on this topic.

**Key words:** action games, football, psychophysiological factors, movement amplitude, game exercises.

### INTRODUCTION

Games provide great educational opportunities for the formation of qualities of determination, courage and will. It is also evident in the analysis of some features of psychological processes such as intuition, perception, attention, memory [N.Rakhmatov. A. Sattarov. 5]. Various actions in action games have a positive effect on the emotions of young players. Most importantly, qualities such as dexterity, dribbling, aiming, which are important in football, are improved. During the game, children run, jump, crawl, and as a result, their muscles and sensory organs develop. As a result of this, the skills of being able to subordinate their decisions to the rules of the game are formed and refrain from rude behavior, to act quickly when necessary, to think quickly and to find a way to get out of a difficult situation. will learn.

### LITERATURE ANALYSIS AND METHODOLOGY



A number of studies have shown that specially selected action games are the most suitable form for learning and developing individual characteristics, not only during qualifying, but also during the training of young players. Techniques like these mean that the movement skills necessary for a player are mastered, refined and strengthened. As a result, it becomes possible to use them in the game, when fighting for the ball.

The elements of action games and sports games are one of the most important means of training skilled players, and according to a number of experts, they are the basis for easy learning of game methods. Games involve correct repetition and improvement of actions. In this regard, the motor development performed by the player during the game creates a basis for the coach to conduct the right physical training.

"The game was born with the child as if it were an idea, it became his companion or friend. But we think it's good that it will last for a long time. "The game attracts people's attention due to its huge and sometimes invisible educational side and wide pedagogical possibilities," said one of the experts. The game provides great educational opportunities for the formation of the qualities of determination, courage and will. Also, it is clearly invisible in the analysis of some features of psychological processes such as intuition, perception, attention, memory.

#### DISCUSSION

Various actions in action games have a positive effect on the emotions of young players, strengthen their will, develop courage and independence. The most important thing is that the qualities of dexterity, aiming, aiming and logical thinking, which are important in football, are improved. During the game, children run, jump, crawl, and as a result, their muscles and sense organs are formed. As a result, the skills of subordinating one's decisions to the rules of the game are refined, one refrains from rude behavior, one is able to act quickly when



necessary, think quickly and find a way out of a difficult situation. grows. In the process of training based on active games, young players develop their movement, skills and abilities quickly, and their amplitude of movement and assessment skills improve. The ability to analyze the action, to distinguish certain qualities in it, develops. As a result of the action, he begins to understand that it depends on the qualities of its performance. In order to achieve good results, he begins to perform actions with endurance. All this allows basic movements, exercise techniques.

## RESULTS

Along with simple and moderately complex games with 7-10-year-old children, if the children are sufficiently prepared, then more complex games can be played as a team [A .Sattarov,3]. In such a situation, a team game is formed, the ability to understand each other develops.

"The third is a plus." 10-12 people will participate

Preparation. A circle with a diameter of 8-10 meters is drawn in the center of the field. The players are in pairs and stand in a row around the circle at a distance of 1-2 meters. The coach appoints two starters: a runner and a receiver.

Game details. At the sound signal, the fleeing person tries to get away from the person who is catching up, then unexpectedly stops in front of one of the pair. The player standing behind starts running away. If the player standing behind becomes the catcher, the game will be more interesting.

Variant. Those who stand in pairs put their legs wide, and the running player must crawl between the legs.

The goal. The game helps to improve the skills of running, reaction speed and fast running, agility.

"We hunt rabbits." 10-16 people participate

Preparation. A circle with a diameter of 10 meters is drawn in the center of the hall (field).





The participants in the game are divided into two teams of 6-8 people. One of the teams ("rabbits") stands in a circle. "Hunters" with a volleyball stand outside the circle line.

Game details. According to the sound signal, the "hunters" do not enter the circle and try to touch the ball to the "rabbits", in this situation the "rabbits" run to a safe place in the circle. The "rabbits" who hit the ball leave the game and begin to perform one of the four pre-arranged additional exercises.

The game continues until all "rabbits" are knocked out. After Shin, the teams exchange places. The team that eliminated the players of the opponent's team from the game in the shortest or specified time (for example, in three minutes) is considered the winner.

The rule of the game. "Hunters" do not have the right to set foot in the circle (does not count forward). The "rabbit" that has left the line of the circle is out of the game. If the ball touches any part of the body except for the head (the ball can be returned with the head) (it does not count if it comes from the ground or a partner), it is considered to have hit a "rabbit". In this game, it is necessary to achieve team actions by passing the ball to each other.

Variant. If the ball hits from a kick, the "rabbits" are out of the game.

The goal. The game strengthens the skills of catching, passing and throwing the ball. Improves orientation, reaction, resourcefulness (choosing a place), agility, accuracy of movement.

"Wolf in his lair". 10-12 people play

Preparation. Two parallel lines with an interval of 80-100 cm ("hive") are drawn in the center of the field. Two "houses" are drawn on opposite sides of the hall (field). One or two starters ("wolves") are selected to settle in the "nest". The rest ("rabbits", "lambs", "goats") stand behind the line of one of the houses.

Game details. At the signal, the "animals" try to run to another house, to their "mother". In this way, they jump from "nest" to another. "Wolves" try to touch



them. Those who are caught perform an additional physical load (for example, 10 pull-ups and 10 sit-ups) and return to the players. Whoever does not get caught even once is considered the winner.

The rule of the game. Passes will be only at the signal. It is not possible to land on the "nest". "Wolves" have no right to leave their dens.

Those caught (stopped) or turned back in front of the "nest" are considered caught. Maneuvering in front of the "nest" is allowed, but it is necessary to jump over it. The number of distances between lines and "wolves" can be increased.

The goal. The game helps to improve running, long jump, maneuvering, develops orientation, ingenuity, bravery.

"Who is faster." 4-10 people play.

Preparation. A circle with a diameter of 10-12 meters is drawn in the center of the field, pillars are installed to go around the corners of the hall. Players with the ball stand in a circle.

Game details. According to the sound signal, the players voluntarily wrestle with the ball, trying to keep their coach in sight. with (throwing the ball) they run towards the nearest post, go around it and return to the circle. The last two players (late) go to the "improvement" area and fulfill the task of the coach. The game starts from the beginning. Those who remain in the circle are declared winners.

The rule of the game. If the ball crosses the circle line during the scrum, the offender will receive the first warning. After the second warning, this player moves to the "improvement" area. Participants should not touch someone else's ball or push the opponent with their hands. During training, the coach can change his position.

Variant. Instead of fighting, you can feint the ball and push it with stops.

The goal. The game improves technical elements in the conditions of a complex competition, develops agility, orientation in space, speed of reaction to visual signals.



"Faster to the flags." 10-16 people play

Preparation. Two parallel lines are drawn on opposite sides of the field. One of them is "own house", the other is "foreign house". A pole is installed 8-10 meters away from "own house". Players are divided into two equal teams. According to the result of the draw, the players of one team (for example, those in white clothes) will receive one volleyball or soccer ball.

Game details. The number one player (A, G) of the teams who has the ball kicks the ball from the "home" line with the arch of his foot towards the "alien home", and he quickly starts towards the post. , bypasses it and returns to the "other house". Players in black uniforms must catch the ball and try to touch the ball to the running player individually or at the expense of each other.

The rule of the game. As soon as the player of the opposing team (A, G) catches the ball (it is not possible before that), his partners can go to the upper side to receive the ball "from their house". The player who hits the ball gets a point. After all players occupy the initial position, the second player (B, D, then B, E) enters the game. After a certain time (5th minute) the teams exchange places. The player with the lowest number of points is declared the winner.

The goal. The game develops quickness, agility, coordination of movements, improves the technique of kicking the ball with the arch of the foot, catching the ball, forms a team game.

"For the opponent's ball". 6-10 people play.

Preparation. Players are divided into two teams of 3-5 people.

Game details. At the signal, the first players kick as far as possible into the "field" with the ball of their feet and move towards the opponent's ball. The player who takes his place first gets 1 point, the second player gets 0 points. Then, according to a certain signal, other pairs of players kick the ball, etc. The team with the most points is the winner.

The rule of the game. After hitting the ball, it is not possible to touch your



own ball again, to destroy the opponent.

The goal. The game helps to improve the skill of hitting hard, develops strength and quickness.

Mixed relay: 8-meter sprint - stop - jump as if hitting the ball with the head - 5-meter sprint - push the ball "mock-like" - run back to the starting point. Breathing for 2 minutes (4 times of 30 seconds). Voluntary ball fighting

Mixed relay race: running - jumping over 3 hurdles in athletics - running around the flags as a snake - running for 30 meters.

Jumping, long jump and 25-meter hurdles relay

Running, gymnastic chair running, jumping and hurdling or step-by-step relay

"Mock-like" relay with two balls Pushing the basketball and moving until it hits the net, catching the ball and running to the starting point.

## CONCLUSION

In the process of training based on action games, movement skills and competencies are quickly formed in young players, amplitude of movement, and evaluation skills are improved. The ability to analyze the action, to distinguish certain qualities in it, develops. As a result of the action, he begins to understand that it depends on the qualities of his performance. In order to achieve good results, he begins to perform actions with endurance. All this makes it possible to perform basic movements and exercise techniques.

## References.

1. B.Nigmatov, F.Ho`jayev, K.Rahimqulov. Sport o`yinlari. Toshkent ilm ziyo. 2007 yil
2. T.S. Usmonxo`jayev, O. `Tursunov Jismoniy tarbiya nazariyasi va uslubiyoti». Tashkent O`qituvchi.. 2004 yil.
3. A.,Sattarov.,M.B.Aliyev, T.S.Usmonxo`jayev, X.X.Sagdiyev. Sport o`yinlari-Futbol. Toshkent 2012. Ilm ziyo.



4. Футбол дарслик ЎЗЖТИ нашрети 2006 й.



## EFFECTIVE USE OF ACTION GAMES IN IMPROVING THE PHYSICAL FITNESS OF YOUNG VOLLEYBALL PLAYERS

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**Abstract:** The article contains information about the use of mobile games as a physical tool to improve the physical fitness of young volleyball players, as well as information about the series of national mobile games.

Key words: young volleyball players, physical training, action games, technical training.

### INTRODUCTION

Mass participation in physical education and sports should become a daily need of schoolchildren, at the same time, the game of volleyball plays a role in the comprehensive development of schoolchildren, in forming a healthy lifestyle, and in raising them to become well-rounded people. , serves as the main factor in getting rid of lawlessness and other negative vices.

A lot of action games came from abroad and became nationalized. Because the content, purpose and essence of our religion corresponded to the climatic conditions of our country, the social work and living culture of the population. For this reason, it should not be surprising if there are opinions about the action games of other nations that are part of the national action games.

Based on the scientific-theoretical opinions of famous scientists M.Murodov, U.Koraboyev, MJabborov, J.Toshpolatov, A.Atoyev, R.Abdumalikov, T.Usmonkhoyayev and the contents of the games, national action games are divided into the following categories can:



1. Games related to natural scenery, science. Examples of such games as "Plant Plant", "Potato Planting", "Rain", "Father Frost" can be shown. These games serve to educate the physical and mental qualities of the participants, such as vigilance, dexterity, endurance, based on actions such as the ability to avoid weather changes, cold and rain.

2. Games related to the animal world. This includes "Birds fly away", "The hawk has come, run away, my child", "Wolves and hunters", "Wolves in the zoo", "Geese", "Fox and rooster", "Itvaqaig'a". and many similar games are examples. In these games, together with virtues such as mutual relations, good and evil, and self-care, all physical qualities are cultivated. On this basis, children can be interested in the animal world and feel the need to protect it.

3. Games related to work. Human activity is determined by mental and physical work. They can also be found in the content of action games.

The series of mental work games includes "Counting games", "Write and think of numbers", "Say the name or item sequentially and in a shuffle", "Jump and sing", "Draw a picture quickly". , "Shape making" and similar activities include games.

There are also a lot of action games that reflect physical labor. Ulaiga "Cracking fire", "Herd ball" (shepherd), "Double plowing" (plowing the ground, running), "Hanging out", "Pulling", "Carrying", " The donkey rode", "Pedestrian race", "Train" and others. In their content, the ways of working, the methods of its implementation are embodied in qualities that express endurance.

In general, in all national sports games, mental and physical work are combined and mainly serve to educate physical fitness.

4. Complex and simple action games used in mass cultural events (holidays, weddings, various ceremonies, sports competitions, etc.), i.e. organized for the purpose of demonstration and competition. They include fighting elements, horse games, kopkari-ulak, racing, goalkeeping, stone lifting, tug-of-war, shoulder



wrestling, "cockfighting" and others. enters.

5. Games that serve to train physical qualities are also divided into different categories. Examples include:

Games related to speed: "Trap", "Who is first", "Insiz kuyon", "Running on all fours" (crawling), "Stuttering birds", "The third is more", various relays and others;

Strength games: "White bone", "Chilik", "Shoulder kom-kai", "Donkey rode", "Tug of rope", "Wrist strength test", "Hand pull" and others;

Games about endurance: "White poplar, blue poplar", "Get out of the circle", "Alamon poyga", "Dorboz", "Lame crow", "Lover" (gardkam), "Swordsmen", "Five Stones", "Nine Stones", "Burn Your Back", "Bota Solde", "Tortishmachak", "Kozboglash", "Bekin-machak", "Who Came", "Zuv-zuv" » and others.

The complex and simple national games of the Uzbek people, whose names are mentioned above, along with training the physical qualities of people at all ages, directly serve to form and further improve human virtues in them.

#### DISCUSSION AND RESULTS

In the development of qualities such as dexterity, compactness, perseverance, perseverance, and resilience in young volleyball players, one should not limit oneself to only active games in physical education classes. In their spare time, it is appropriate to ensure that they can freely engage in sports games, gymnastics, athletics, and wrestling in the yard, street, and fields. It is necessary to use the game in a timely manner.

The physical fitness of young volleyball players is the basis for the formation of skills, vital qualities and skills necessary for work and defense of the Motherland.

Combining the qualities of a YOUNG volleyball player, the individual abilities of athletes and their technical-tactical training in a purposeful manner ensures high sportsmanship.





Currently, physical training in all types of sports consists of two parts, general and special. It serves as a basis for general physical training. In turn, technical training itself is a powerful tool for special physical training of all systems of the athlete's body.

When choosing general physical training equipment for young volleyball players, it is necessary to consider the following important rules.

Exercises should be close to the character of the nervous system of the volleyball player and the mode of operation of all the systems of the body. Exercises should help to develop special qualities. For example, some acrobatic exercises with elements of one-on-one combat, exercises performed in pairs with resistance from a partner, etc.

The exercise should be enriched with the development of movement coordination and various movement actions in changing situations. For example, sports games: volleyball, soccer, gymnastics, etc.

Exercises should serve for faster recovery of other movement and central nervous system activity of athletes. These include walks, cross-country, action games, leisurely sailing and other games that take place in the air under special conditions.

It is necessary to distinguish two groups of exercises in special means of physical training.

A) exercises aimed at developing specific muscle groups and qualities necessary for an athlete in volleyball.

B) exercises aimed at improving groups of volleyball techniques and technical elements of movements. In special physical training, it is especially important to develop the movement qualities necessary for a volleyball player and to improve the elements of volleyball technique. The following important rules should be taken into account when choosing and conducting exercises for a volleyball player's special physical fitness:



V) choosing exercises that correspond to the nature and structure of movements and are directly related to static-dynamic exertion with movements. For example, individual movements of an athlete, imitation exercises, exercises in the form of a game, etc.

G) Using exercises aimed at developing certain muscle groups that perform the main thrust in their actions. Exercises with weights and on simulators for the development of leg and abdominal muscles.

Such a selection of special exercises develops a complex of movement qualities and improves the technical aspects of the athlete's movement.

The contingent of participants is their age, physical development, functional status before the start of training and the level of training;

The number of training sessions per week, per day:

Volume, intensity, level of mental effort and emotional activity of training work.

It is known from experience that most of the skilled volleyball players use enough general and special physical training during the training period, and during the competition they reduce them to a minimum or do not use general physical training.

Using comprehensive physical training tools throughout the year, including during the competition, combining it with technical-tactical and other types of training helps to increase sports skills and achieve high results.

It is especially important for volleyball coaches to correctly plan physical, technical and tactical training sessions during the year, periodic and individual training sessions, and coordinate their size and intensity.

Pedagogical requirements for the organization and conduct of mobile games in the use of mobile games as a physical tool for improving the physical fitness of young volleyball players.

Choose a game. A well-chosen game is an important condition for the



success of education and training. When preparing for the game, the teacher must determine the main tasks of the lesson, taking into account the composition of the participants, their age characteristics, as well as their physical fitness. Sometimes a good game is chosen, but it can go badly. Such situations occur as a result of not matching the interests and passions of the participants of the selected game, and the educational tasks are not fulfilled.

When choosing a game, the teacher should know how the training will be conducted (if it is conducted in the style of a lesson, the game will be conducted in its first, second or final part, during a break, etc.). If the game is held in winter, more active games should be chosen that will activate the students and evenly distribute the physical load.

The choice of the game is directly related to the venue. In small or not so large narrow halls, the game can be played while standing along the line, in which the participants of the game take turns. All games that can be played in a large hall or on a sports field will be played. If the game is played outdoors, it is necessary to take into account the weather and the temperature of the air (especially during winter). When the air temperature is low, all the participants of the game take an active part in playing the game, and the physical load is evenly distributed to all the participants. In the summer, in hot weather, it is better to use games with less movement or in which the participants take turns.

The choice of game also depends on the hardware required for the game. Not having this equipment for the game can prevent it from being organized.

## CONCLUSION

It is an important task of the teacher to correctly determine the actions performed in the game. Before starting the game, it is necessary to take into account the nature of the work and the mood of the players. If the game is played after classes with physical or mental effort (supervision work or similar



activities), games with less or moderate movement should be chosen for young volleyball players.

During training, it is necessary to take into account the speed and general mobility of the games and alternate them. For example, it is useful to have a toss game after a game where all participants run at the same time.

Slowing down the pace of the game, that is, reducing the speed of movement in the game, is one of the ways to conduct the actions in the game at a certain standard. In the game, children are very excited to do physical exercises. Therefore, the teacher must not only act according to their mood, but also take into account the young characteristics, fitness and health of the volleyball players. The teacher should monitor the condition and actions of the players separately, and should not forget to control the game. The specific standard of actions is determined by the method of conducting the game, taking into account the conditions of the game.

Physical qualities of volleyball players are developed through the use of action games in improving the physical fitness of young volleyball players.

The efficiency of technical and tactical training of young volleyball players increases.

## REFERENCES

- 1.T.S.Usmonxujaev, I.I.Burnashev, .A.Meliev, B.B.Sipchofm."500 harakatli o'yinlar". O'quv qo'llanma."Vektpshsux) • R1ui\$". 2010 yil
- 2.Usmonxo'jayev T.S., Xojayev F. Harakatli o'yinlar. T., 1992.
- 3.Usmonxojayev T.S, Meliyev X. Milliy harakatli o'yinlar. 2000.
- 4.Xo'jayev F., Rahimqulov K.D., Nigmanov B.B. Sport va harakatli o'yinlar o'qitish metodikasi. 2008.
- 5.Qosimov A.Sh. Harakatli o'yinlar. 1983.



6. Normurodov A.N. O'zbek milliy o'yinlari. T., 1999.

7. Usmonxojayev T.S., Xo'jayev F. 1001 o'yin. T., 1990.



**PEDAGOGICAL AND PSYCHOLOGICAL DEVELOPMENT AND  
SOCIAL RELATIONSHIPS OF PRE-SCHOOL CHILDREN**

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Annotation: this article examines issues such as the social psychological development of preschool children as well as their access to social relationships. Social and personal development is the development of a positive attitude of the child to himself, to other people, to the surrounding world and to the communicative and social competence of the child. At the moment, the most important basis for the full-fledged social and personal development of the child is his positive self-awareness: his abilities, confidence, he is very well loved.

Key words: aesthetic, intellectual, preschool age, individual, communication skills, constructive material.

Creating conditions for comprehensive development of preschool children intellectually, morally, aesthetically and physically requires. Improvement of the educational process should be carried out on the basis of assessment of the level of development of children and their readiness for general primary education, as well as their social, personal, emotional, speech, physical and creative development.

All parents realized that their growing children were successful in communicating with their peers. After all, through communication with children, character and behavior are formed in society and in individuals. Therefore, social adaptation is very important for preschool children. To go to any collective, people need time to learn and "discover" themselves, and children learn to live in



a community, which directly affects their development.

Social development of children of preschool age includes the child's learning of society's values, traditions and culture, as well as social characteristics of a person that help him live a comfortable life in society. In the process of social adaptation, children learn to live by certain rules and take into account the norms of behavior.

In the process of communication, the child has a social environment, which is provided by his immediate environment: parents, kindergarten teachers and peers. Social potential is realized due to the child's active communication and information exchange. Children who are socially irresponsible often reject the experiences of others and do not communicate with adults and peers. This can lead to antisocial behavior in the future due to the lack of acquisition of cultural skills and the loss of necessary social qualities.

Social and personal development is the development of a child's positive attitude towards himself, other people, the world around him, and children's communicative and social competence. Currently, the most important basis for a child's full social and personal development is his positive self-concept: confidence in his abilities, he is good, he is loved.

In the senior preschool age, great attention is paid to the formation of a unique holistic idea: the teacher encourages children to listen to their feelings, to talk about their feelings and experiences. The organized joint activity of the teacher and children is aimed at finding the child for his place in the society of his peers, emphasizing his Self, putting himself against others, taking an active position in various social relations, where I I act equally with others. This ensures the child's development of a new level of self-awareness, solves the problems of socio-moral development and upbringing of preschool children.

The child learns to understand that his acceptance by others depends on the



acceptance of others. Self-knowledge, an adequate attitude towards oneself creates the need for an appreciative attitude towards the people around. In preschool age, the role of emotional experiences that a child receives as a result of living in a moral situation and making moral choices is very important. The teacher creates conditions for the formation of the experience of moral activity in an older preschool child. The main qualities that determine the successful social and personal development of a preschool child:

- Positive attitude of the child towards himself (self-esteem, self-awareness, self-confidence formation);
- Positive attitude towards other people (adequate interpersonal relationships with adults and peers built on the basis of cooperation, mutual responsibility);
- Value directions; communication skills (adequate communication with adults and peers);
- Social skills (adequate behavior in different situations).

In addition, in the process of self-evaluation of a person, his evaluation is connected with the public and with the evaluation of members of the public, whose opinion is important for a person for certain reasons. As for the child's concept, at preschool age it is still poorly structured and very flexible.

From the age of 4, the child has the first thoughts about what can happen. The child's cognitive activity becomes unusually active and constant, its main driving force is interest. The child can already move freely and is fluent enough to ask questions and understand the answers received. Parents must not suppress the cognitive activity of the child.

A child's use of the pronoun "I" is an indicator of his growing sense of identity. The meaning of a unique name in the concept of a child. Even before the child begins to speak, he already knows his name and reacts to it. This name is then included in the "Image" and used as a means of self-realization.





The most important task of the child's individual experience is to provide the cognitive part of his self-image with real knowledge about himself, his abilities and possibilities. The evaluative influence of adults on the child has both emotional and cognitive elements, so they direct his attention not only to the good and bad aspects of their behavior, but also serve as models for forming ideas about themselves. From this point of view, the nature of the influence of adults' assessment is of decisive importance in the process of forming the ideas of the preschool child about his own abilities.

Juvenile evaluation has the most negative impact on how children perceive the results of their actions. This causes children to mistrust, conflicts, disagreements and even refusal to work.

Overestimation of adults has a double effect on the behavior of a preschool child: it can distort the child's ideas in the direction of exaggerating the results of his actions; or on the contrary, it mobilizes his strength, stimulates the child's optimism and confidence in achieving good results.

Information about his abilities collected in individual experience in a preschool child, when confirmed in the experience of communicating with others, becomes constructive material for the formation of an Image. Therefore, the role of the clear evaluative influence of adults in the formation of the child's objective ideas about himself is so great. The experience of communicating with adults is the main source of evaluative influence for a child, under the influence of which he forms an attitude to the real world, to himself and to other people. The dependence of the preschool child's behavior on the influence of adults is inversely proportional to the age of the child: the younger the child, the less critical he perceives the opinions of adults, and his ideas about his abilities are based only on the concrete results of the activity. In older preschool years, adults retain the same authority over the child as they do over the toddler, but their assessment of the preschool child is based on the prism of these results and



conclusions, prompting the child in his personal experience. In the process of forming the child's ideas about his abilities, the experience of contact with peers is primarily a context for comparison with "beings like himself" and serves as a basis for acquiring the basic skills of collective life. In addition, communication with peers is a means of exchange of evaluative opinions at the same time, as a result of which the child has the opportunity to see himself through the eyes of his peers.

**Conclusion:** In conclusion, it can be said that the formation of clear ideas of the child about himself implies a harmonious combination of his personal experience and the knowledge and knowledge about himself that the child collects through communication with other people. If this harmony is disturbed due to the lack of individual experience or favorable conditions for the child's communication with others, then his ideas about himself will gradually begin to deteriorate depending on higher or lower levels. Attitude towards others, communication and social skills are formed in the process of interaction with people around the child. Thus, the number of situations in a child's individual activity is about twice as large as his relationship with someone, 2-3-year-old children mainly communicate with adults. This communication of the child takes the form of turning to the adult when there is any difficulty or with the purpose of the game (for example, they grab a toy and then hide it behind their back). In three-year-old children, these appeals are also related to the requirement to evaluate the results of their activities.

#### List of drugs used

1. Geraskin Yu. N. "The program of emotional development of older preschool children". Magu - 2005
2. Dubrovina I.V., Lisina M.I. "Young characteristics of mental development of children." M - 2005



3. Vygotsky "Psychology". М - 2007
4. Petrovsky V.A. "Development of social emotions in preschool children". М - 2006
5. Smirnova E.O. "Child Psychology". М - 2003
6. Uruntaeva G.A., Afonkina Yu. A. "Seminar on preschool psychology." Academy - 2000
7. L.F. Obukhova "Children's psychology." М - 2000 year
8. Kozlova S.A. "Theory and methodology of introducing preschool children to social reality". 1998
9. Kozlova S.A. "I am a person": Program for introducing a child to the social world // Preschool education. - 1996. - No. 1.
10. Абдуллаева, Н. Ж., & Комилова, Ф. М. (2020). Значимость формирования организаторских качеств у будущих учителей в развитии современной педагогики. *Наука и образование сегодня*, (6-1 (53)), 42-43.
11. Abdullayeva, N. J. (2020). EXPERIENCE AND THEORETICAL BASES OF INTERNAL CONTROL SERVICE ACTIVITIES IN THE PUBLIC SECTOR. *Экономика и социум*, (5-1 (72)), 13-15.
12. Abdullayeva, N. J. (2020). ISSUES OF REFORMING ACCOUNTING AND REPORTING IN THE PUBLIC SECTOR. *Мировая наука*, (4 (37)), 6-9.



## FORMATION OF PEDAGOGICAL ETHICS OF FUTURE PRIMARY CLASS TEACHERS

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**Abstract.** This article presents the history of pedagogical ethics, information on improving the pedagogical skills and pedagogical ethics of future elementary school teachers.

**Key words:** Professional skills, knowledge, skills, competence, talent, factors, communication, pedagogue.

Sudden changes taking place in society, various problems related to human education are also reflected in the pedagogical process. Socio-economic relations, intense competition in the market economy has an impact on "teacher-pupil" and "teacher-student" relations. Only as a result of learning, humanity acquires creativity in the field of work and creativity, work based on social and moral standards, and the ability to communicate with other people through personal relationships. English scientist Dj. Simon called knowledge "a way of forming a person for society." The famous Russian writer and publicist N. G. Chernyshevsky in his works emphasizes that knowledge includes three perfect components: comprehensive knowledge, knowledge that invites thinking, knowledge that develops noble feelings. Knowledge is conveyed to the mind and thinking of the young generation only due to the high professional skills of the teacher. However, at the same time, the teacher must have high humanity and ethics. Pedagogical scientist M.A. Verb says that pedagogical ethics is an important basis of a teacher's professional culture. It is known that ethics (Greek ethos - character, custom) is the science of norms and rules of behavior, human



interaction. Pedagogical ethics, based on the standards of universal ethics, determines the normative and moral positions that the future teacher should follow in the process of communication with people in his environment, colleagues, students, and their parents. In humanitarian pedagogy, for centuries, its best representatives have been saying that ardent love for children is the starting point of ethical standards. In this, the emotional and value relations towards the child are manifested in different ways. The main pedagogical idea of scientists such as J.J.Russo, L.N.Tolstoy, R.Steiner was to love children and give them as much creative freedom as possible in accordance with the needs of communication depending on their age. Scientists such as I.G.Pestalotsti and Ya.Korchak confidently emphasized that it is necessary not only to love children, but also to share their joys and sorrows. R. Owen and A.S. Makarenko, taking care of their students, taught them to live happily in the future life. In the science of pedagogy, some scientists have emphasized in their research that they are in favor of the strictness of the teacher towards children. However, no matter what scientists say about harshness and rudeness, it is still impossible to achieve spiritual harmony between teachers and students without feelings of close relationship with children, politeness, sincere understanding of each other, and caring. V. A. Sukhomlinsky rightly called it the alpha and omega of the educational process. Ya. A. Komensky believed that all institutions where children receive education in the last periods of the Middle Ages should be like "workshops that glorify humanity". Later, famous scientists such as I.I. Betskoi, N.I. Pirogov, P.P. Blonsky, M. Montessori also wrote about it in their works. Humanitarian feelings towards children, that is, to be kind and caring, to understand and take care of them from the heart, are especially extremely relevant in the process of today's global changes, science and technology, computer and modern information and communication technologies.



The humanity of a primary school teacher is reflected in the Law "On Education", in the reforms carried out in the field of education in our country, and in the observance of the rules on their rights and freedoms, which are defined in various documents on education and protection of children accepted at

the international level. The UN Convention on the Rights of the Child (November 20, 1989) states that every child has the right to complete education, to engage in arts and sports, and to have a free and personal opinion. Russian pedagogue Ya. Korchak in his "Regulations of the Children's Home" listed the rights of children to play, to keep secrets, to be attentive to their problems, to be demanding, to protest, and the rights of the child to think freely. It is emphasized that coercive actions against children, that is, suppressing someone's opinion, destroying their pride, using corporal punishment, restricting their freedom, and depriving them of food and sleep are not allowed. These norms apply equally to social and family education. The spectrum of ethical qualities of a teacher, which is manifested in his interactions with his students in class and outside of class, is extremely wide and diverse. Special research conducted in pedagogy on this issue shows that primary school students in educational institutions appreciate the sincerity, politeness, kindness, fairness of their teachers, helping students to understand some problems related to the subject being studied, the desire to help them understand the material given in the lesson, kindness, they appreciate honesty, hard work, restraint and calmness, recognition of the student's ability to know and curiosity, patience, demandingness and a number of other qualities of pedagogical professional importance. However, students mostly value sincerity, honesty, and sincerity in their relationship with the teacher. The well-known scientist M. O. Knebel stated that the science of pedagogy requires qualities that are close to the mother's qualities in relation to the child. In his book "Pedagogy of Poetry" ("Pedagogical Poem"), he wrote about the need for a teacher to give his



heart to his young students, just as a mother gives her children the best virtues she has. This is the main content of the teaching profession. Giving your heart to children is both difficult and joyful. Therefore, it is difficult because it requires not only mental but also physical effort. That's why, happily, the answer to all the efforts, difficulties and hardships of the teacher flows back to him like the energy of youth. In order to ensure the mutuality of pedagogical requirements in the family and in various educational institutions for the formation of a student as a person, a young teacher and educator should choose reliable and tested methods of communication. Each teacher has an informal "code of ethics" that he strictly adheres to in his interactions with colleagues in his pedagogical team. What can a teacher who has graduated from a higher pedagogical educational institution and joined the pedagogical team as a young specialist start his career? This difficult question is sure to put all young teachers in an exciting position.

We ask you to adhere to the following recommendations using the teachings of master teachers with many years of experience:

1. Don't be in a hurry to criticize the traditions and work process that have been polished over the years in the educational institution and propose new rules that you like "right out the door". Try to understand the situation in the team, the successes and failures of your colleagues, representatives of different generations.

2. When discussing a co-teacher's open class or teaching style, especially in the presence of leaders, start by talking about his achievements and positive aspects. With this, you will help your colleague morally.

3. It is not polite to blame the group of students, the head of the class, and the parents if the students cannot complete the assigned tasks or behave undisciplined in the class where you directly teach. The reasons for failure should be found in your methodological mistakes in your professional activity.



4. If you do not agree with the comments and objections of your senior, respected colleague or institution's administration regarding your pedagogical activity, you should not take a position of compromise, but you should not strain the relationship either. It is best to provide evidence that strengthens your position and try to prove your opponents wrong.

5. Remember: your benevolence, enterprisingness, politeness, desire for mutual cooperation at work, willingness to recognize the best experience, support a new initiative - create a favorable environment for successful activities and are the main factor in the emergence of a good creative mood in the work team. Therefore, pedagogical ethics is an important part of pedagogical skills. It should be remembered that the effectiveness of mutual relations (teacher - student) often depends on the observance of pedagogical tact. References:

1. Abdullaeva N.J. Formation of professional responsibility in future teachers as a pedagogical problem. International scientific journal volume 1 issue 8 uif-2022: 8.2 | isn: 2181-3337

2. Ladenko I.S. Deyatelnostnyy um (Deyatelnost. Znak. Lichnost). - Moscow. - Smysl. -2001. -392 p.;

3. Simonov V.P. Diagnostika lichnosti i professionalnogo masterstva prepodavatelya: Uchebnoe posobie dlya studentov pedvuzov, uchiteley i slushateley FPK.- M.: Mejd. ped. Academy, 1995.- 189 p.

4. Semenov I.N. Psychologie reflexii v organizatsii tvorcheskogo protsessa myshleniya: Autoref. diss. doctor of psychology. science - M., 1992.- 52 p.

5. Абдуллаева, Н. Ж., & Комилова, Ф. М. (2020). Значимость формирования организаторских качеств у будущих учителей в развитии современной педагогики. *Наука и образование сегодня*, (6-1 (53)), 42-43.

6. Abdullayeva, N. J. (2020). EXPERIENCE AND THEORETICAL BASES OF INTERNAL CONTROL SERVICE ACTIVITIES IN THE PUBLIC





SECTOR. *Экономика и социум*, (5-1 (72)), 13-15.

7. Abdullayeva, N. J. (2020). ISSUES OF REFORMING ACCOUNTING AND REPORTING IN THE PUBLIC SECTOR. *Мировая наука*, (4 (37)), 6-9.



## **DEVELOPMENT OF INCLUSIVE COMPETENCE IN FUTURE PRIMARY CLASS TEACHERS**

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**Abstract:** In this article, inclusive education, its content, and the activity of providing knowledge to children who are brought up in this type of education are highlighted. At the same time, the inclusive educational environment and its requirements for pedagogues and the essence of inclusive pedagogical competence were discussed.

**Key words:** Inclusive education, theory and technology of inclusive education, inclusion, integration, social integration, competence, dialogical nature.

For every country and state, the education of the young generation of this country is today's step towards the future, providing them with knowledge in accordance with the educational standards that meet modern requirements. It is necessary for every teacher to fully study all the conditions and conditions necessary for working with children with learning disabilities. Despite the fact that this field of education is new in the field of education of the Republic of Uzbekistan, the work carried out in our country on the education of children with disabilities is reflected in the activities carried out in cooperation with the world organization for the protection of children, UNICEF. Countries with developed inclusive education on a global scale and the results of research conducted in this field remain the most pressing issue of the day in the education of children with physical disabilities in inclusive education. This, in turn, requires a special plan and programmed complex research.



Inclusive education is a certain innovation for the local education system, so it requires competent management at all stages of its modeling and implementation. The effectiveness of inclusive education includes the creation of a number of conditions, the main ones of which are:

1. The readiness of specialists to implement the inclusive pedagogical process (includes all types of preparation: - personal, professional, psychological, etc.),

2. Humanitarian education system, including formation of moral and psychological environment in the community; - organization of correctional support and psychological pedagogical support for the development and socialization of children.

A master's degree prepared in the direction of "Psychological Pedagogical Education" can become a coordinator in the field of supporting the socialization of children in the conditions of inclusion, ensuring the implementation of the mechanisms of effective functioning of inclusive conditions and parameters. Therefore, it is necessary to acquire knowledge, skills, and abilities that will allow to successfully solve the problems of supporting inclusive education subjects in the process of personnel training at the bachelor's and master's level. Currently, the course "Theory and Technology of Inclusive Education" has been established, which involves introducing students to the innovative practical psychological field, providing students with an understanding of the essence and methods of implementation of inclusive pedagogy, the theory and understanding of the practice of pedagogical activity in the conditions of educational inclusion. helps to develop, develops creative abilities. The purpose of the course is to develop students' understanding of the theoretical foundations and practical mechanisms of building an inclusive educational environment. In inclusive education, it consists in the formation of competencies that ensure solving the problems of monitoring the child, the teacher, and the family.



In modern science and practice, terms such as integration, mainstreaming, and inclusion are used to define and describe the pedagogical process of joint education and upbringing of healthy children and disabled children. The term "integration" comes from the Latin word *integrare* - to fill, to fill.

The term "social integration" appeared in pedagogy in the 20th century. and was first used in the United States from the 60s of the 20th century in relation to the problems of racial and ethnic minorities. This term entered the discourse in Europe and began to be used in the context of the problems of the disabled. The concept of mainstreaming (in English mainstream, that is, alignment, reduction to a common pattern) in foreign literature refers to the strategy of students with disabilities to communicate with their peers within the framework of various free time programs, which allows them to expand their social contacts. As a rule, no educational goals are set here. Inclusive education is a term used to describe the process of teaching children with special needs in general education (public) schools. Inclusive education is education that gives every child the opportunity to join the general (unified, integrated) process of education and upbringing (development and socialization), despite the existing physical, intellectual, social, emotional, linguistic and other characteristics. and allows the growing person to become an equal member of society, reduces the risk of separation and isolation. In general, inclusive education is the process of developing general education, which implies the availability of education for all, which ensures the opportunity for children with special needs to receive education. The concept of "inclusive education" (French *inclusif*) is relatively new for our country (it was used in the late 90s). Federal Law No. 273-FZ of December 29, 2012 "On Education in the Russian Federation" (Article 2) defines inclusive education as education for all students, taking into account the diversity of special educational needs. defined as ensuring equal access. individual capabilities. The practice of inclusion became



possible due to the spread of ideas and principles of normalization in society. The concept of normalization was formed in Europe in the 1960s, according to its ideas, every person is valuable, regardless of what kind of person he is and what success he can achieve; all people have the right to a decent human life; society should create such opportunities for everyone, which shows the need to provide education opportunities for all categories of children, to include specialized correctional pedagogical support for children who need special education. The term "inclusive education" is more modern and reflective. The new vision is not only about the education system, but also about the place of a person in society. Inclusion involves solving the problem of teaching disabled children by adapting the educational space, reforming the school environment to the needs of each child, including the educational process, (redesigning classrooms to meet the needs and requirements of all children without exception planning, necessary instructional manuals according to the type of developmental deviation of the child, psychological and methodological preparation of teachers, etc.). Thus, inclusion refers to the inclusion of children with special educational needs in public institutions, where it is important to remove all barriers to the full participation of each child in the educational process.

The dialogic nature of pedagogical interactions allows the child to be himself and opens the way for him to trust himself, his inner world and the other world, and not see himself and others through the prism of inferiority. man Achieving confidence is the basis of a life-affirming human strategy, and its foundation is laid through childhood experiences. Inclusive competence of the pedagogue Here, pedagogues engaged in inclusive activities allow professional culture, communication with the surrounding world, development of your abilities, self-realization and success (Khutorskoy A.V., Starova N.M.). Competence is a measure of the actualization of competencies related to the self-



activation of a graduate in the relevant activity during their development (Subetto A.I.).

From the point of view of competence-based approach to professional pedagogical activity, many studies make sure that it has become an integral part of it. Competency-based approach makes a great impression as it is considered as the foundation of the changes implemented in the educational system, as a resource for the qualitative development of professional skills and the quality of education in general. The implementation of inclusive practice is related to the distribution and meaningful description of the teacher's competence as a set of personal and professional qualities that are clearly realized in the innovative conditions of the inclusive environment, which allows him to successfully solve problems related to the organization of teaching. will give. It is necessary to educate and educate all children, without exception, taking into account the specific characteristics of their educational needs. The interdependence of the level of the teacher's professional activity as a subject of educational practice and a child's self-development has been proven in acmeology for a long time. The teacher's competences serve as a means and condition for the development of the competences of his students.

List of used literature:

1. Kovalev E.V., Staroverova M.S. Education integration (inclusion) Education and innovative research (2022 6.2) ISSN 2181-1709 (P) 152 Education and innovative research 2022. 6.2 as a natural stage of education system development // Inclusive education. Number 1. - M.: Center "School book", 2010. - 272p.

2. Nazarova N.N. Integrated (inclusive) education: 2010. No. 1. P.77-87. 3. Organization of inclusive education for children with disabilities: Textbook / Otv. ed. S. V. Alekhina, E. N. Kutepova. - M.: MGPPU, 2013.-324p.



4. Suntsova A.S. Theory and technology of inclusive education C 898: textbook. Izhevsk: "Udmurt University" publishing house, 2013.110 p.

5. Lipsky I.A. Social pedagogy. Methodological analysis: Textbook. M.: TC Sphere, 2004.320p.

6. Nazarova N.M. Theoretical and methodological foundations of educational integration // Inclusive education: methodology, practice, technology: Proceedings of the international scientific and practical conference (June 20-22, 2011, Moscow) / Editorial board: S.V. Alekhina and others. M.: MGPPU, 20011. S. 9-11.

7. Novikov A.M. Educational methodology. M.: "Egves", 2002.

8. Peregudov F.I., Tarasenko F.P. Introduction to Systematic Analysis: A Textbook. guide for universities. M.: High. Shk., 1989.367 p.

9. Internet sites: [www.Norma.uz](http://www.Norma.uz). [www.gazeta.uz](http://www.gazeta.uz) [www.lex.uz](http://www.lex.uz)

10. Абдуллаева, Н. Ж., & Комилова, Ф. М. (2020). Значимость формирования организаторских качеств у будущих учителей в развитии современной педагогики. *Наука и образование сегодня*, (6-1 (53)), 42-43.

11. Abdullayeva, N. J. (2020). EXPERIENCE AND THEORETICAL BASES OF INTERNAL CONTROL SERVICE ACTIVITIES IN THE PUBLIC SECTOR. *Экономика и социум*, (5-1 (72)), 13-15.

12. Abdullayeva, N. J. (2020). ISSUES OF REFORMING ACCOUNTING AND REPORTING IN THE PUBLIC SECTOR. *Мировая наука*, (4 (37)), 6-9.



## METHODS OF SPEECH SKILLS FORMATION IN THE DEVELOPMENT OF CHILDREN'S SPEECH

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**Abstract:** The article gives opinions and recommendations on the formation of speech skills in children based on the use of methods of speech development of children of junior school age. These recommendations can be used by pedagogues in the school education system.

**Keywords.** Imitation, communication, direction, practical activity, intellect, environment, education, development.

**INTRODUCTION.** Speech development of children of primary school age is a complex pedagogical and psychological process, which does not consist only in imitating the speech heard by the child. This process is related to the development of communication activities in children and, first of all, the need for communication. The child's orientation to new aspects of existence - the transition from practical activities to studying the world, and then people, their relationships, creates the need for new means of communication that serve new purposes. Expanding the child's lexicon allows him to master a wider and more diverse expression of his experiences. For the modern and full development of speech, interaction with the people around him is necessary to enrich the content of the child's need for communication. The reason for children's acquisition of speech is that the basis of their communicative activities is the organization of





need-motivation, and its composition has changed. In the verbal stage, the child develops slow speech. The main importance of the period leading up to this stage is that it creates the conditions necessary to move to the next stage - the stage of the emergence of active speech. In the second stage of the child's acquisition of active speech, three main aspects are distinguished: emotional relations; relations during joint activity (cooperation), sound and light relations. Each considered aspect of the child's communication with adults helps him to accept the communicative task set before him by adults, which requires the use of words as a conditionally accepted tool for mutual understanding in society. In addition, each considered aspect of the communicative factor to one degree or another and in its own way helps children to solve the communicative task, that is, to use speech. At the third stage of speech development, its material (vocabulary and grammar) is inextricably linked to the child's need for communication with adults and its content, changing the task of communication. This leads to the acquisition of new, more complex and comprehensive aspects of the child's speech. The fact that speech occupies a decisive place in the mental formation of a child increases the importance of the conditions and factors that support its development at various stages. The issue of the driving forces of the development of speech is of particular importance due to their intense and spontaneous implementation. Determining the forces that stimulate or slow down the development of children's speech is the key to organizing pedagogical efforts in this process with clear goals.

#### LITERATURE ANALYSIS

"Truly, language and thought cannot live without each other," writes A. M. Borodich - Although language and thinking cannot live without each other, they do not represent the same phenomenon. Thought is the end of objective existence, and language is a means of conveying and strengthening thoughts to



other people. It is known that the development of the speech of school-aged children is carried out in various types of activities: in the activities of familiarization with natural objects; in teaching literacy; in game activity; in the performance of various works in the process of socially useful work. However, as shown by A.M. Borodich, F.A. Sokhin, Ye.I. Tikheeva, O.S. Ushakova, A.P. Usova, A.P.

Fedorenko and other researchers, the development of speech occurs in specially planned and organized activities. its implementation is desirable in all respects. At the same time, in order to achieve the best results in the organization of activities, it is necessary to comply with the following requirements: planning activities taking into account their purpose, content and duration of implementation; clearly defining the independent activities of children in the activities of solving speech tasks of an analytical-synthetic nature, establishing connections between subjects, distinguishing similarities; clearly defining the content of the activity, time and method of solving specific issues of an educational nature; arousing children's interest in speech formation activities; maintaining consistency between planned activities. It is known that the tradition of using signs in speech is not controlled by anyone. It is necessary to remember and use the established tradition. Therefore, in order to acquire speech, it is necessary to know the tradition of using language signs (their combinations, their interchangeability. In this regard, one of the researchers, L.P. Fedorenkova, G.A. Fomichevalar, puts forward a methodologically important idea: "Get the child to speak to teach, they write, to make it easier to understand the meaning of language material (training the organs of speech), language signs, lexical-grammatical signs (training the intellect), to teach him to express the appreciation of existence using lexical-grammatical signs (training respect and feelings) , it means to help to facilitate the remembering of literary standards". Agreeing with a reasonable approach to the acquisition of speech by a child, we draw our attention



to the fact that the authors of this manual often use "help", "training" and other expressions -he, but they pay little attention to how to help and practice. In order to prepare the child for successful studies at school, it is necessary to create appropriate conditions for him to acquire all the riches of his native language.

### DISCUSSIONS

It is necessary to implement the development of children's speech on the basis of an appropriate program. In this program, the range of knowledge about the environment and the size of the vocabulary, speech skills and abilities that should be formed in children at each age stage are determined, and it should provide for the education of certain qualities of this person (approachability, politeness, health, modesty). The speech development program is based on scientific principles and is aimed at the comprehensive development of the child's personality. The speech development program is implemented in the educational, play, work and household activities of the child.

In the conditions of public education, it is considered the leading means of forming children's speech. Teaching the mother tongue is a process of planning and purposeful development of children's cognitive abilities, assimilation of the simplest knowledge about the world and relevant vocabulary, formation of speech skills and abilities. The main form of education of children of preschool age is educational activities. The following types of activities can be distinguished for didactic purposes: • activity of introducing new material; • activities related to strengthening knowledge, skills and abilities; • activities related to generalization and systematization of knowledge; • final activities or audit (control) activities. Activities related to teaching children their mother tongue should be carried out in each group, taking into account the age of the children and the level of speech development of each child. Because the content of knowledge, their composition, the choice of methods and methods, the number of activities held per week, the



duration of each activity depends on it. , it is recommended to conduct in the form of stage performances. They should be not only entertaining, but also educational.

The development of children's speech between 3 and 5 years old should be emotional. In this, exhibitionism, game methods and didactic games are widely used. Activities related to the development of children's speech between the ages of 5 and 7 have a specific task - that is, they are intended to prepare children for studying at school. In educational activities, the pedagogue should develop the ability to carry out educational activities in addition to speech tasks (being attentive, listening to the teacher's task, understanding and clearly performing it, being able to think in front of a group of children, simple evaluation of the answer of a peer can give, etc.) also performs the task. □ In the case of proper education, by the age of seven, a child acquires oral speech and can communicate freely with older relatives and peers; □ takes the initiative in the dialogue and expresses his opinion, knows how to attract the interlocutor's attention, respond to him with words, actions and words; □ express their thoughts in the form of simple sentences and short texts; □ uses different parts of speech, allusions, comparisons and synonyms in expressing opinions; □ begins to show a critical attitude to the speech, tries to correct it grammatically, due to this, word weaving ends, and the number of grammatical errors in the speech decreases; □ pronounces all the sounds in the mother tongue correctly. Many speech communication and skills in children are formed outside of classes. In children's preschool education organizations, communication of children with adults (pedagogues, medical nurses, teaching assistants, etc.) takes place in various types of activities. RESULTS.

During the study activity, the pedagogue forms independent speech activity in them. Children's vocabulary and knowledge acquired in educational activities are strengthened and activated. The participation of the pedagogue in the games



helps to enrich the vocabulary and cultivate the culture of speech communication. In the process of organizing construction games, the teacher identifies and activates a large group of words that are difficult for children (determining the quality, quantity, volume and location of things in space, etc.).

Textual, dynamic musical games, dramatization games help to form the expressiveness of the child's speech, practice the correct pace, breathing, and good diction. In the process of many games, children get acquainted with artistic texts, remember them and begin to use them independently. With the help of didactic games, children's knowledge about the environment is strengthened, vocabulary is strengthened, clarified and activated. Didactic games are used to practice speaking skills (interrupting phrases, changing words, weaving stories, etc.). Household activities create great opportunities for the child to communicate with adults. In order for household activities to serve as a means of speech development, the pedagogue should lead them. In the course of properly organized household activities (eating, dressing, gymnastics, travel, etc.), that is, if the pedagogue, especially in small groups, the pedagogue explains in detail the names of household items, their parts, quality, characteristics, purpose of use, with them Children's vocabulary will be enriched if they perform the appropriate actions and interpret it, if children learn, teach them to use household vocabulary. If the pedagogue uses similes, comparisons, synonyms, folk works (proverbs, proverbs, fairy tales) widely and skillfully in his speech, his speech will be concise and expressive. Children's fiction serves as a powerful tool for the comprehensive development of children, it has a great impact on the development and enrichment of children's speech. Children's books reveal and explain to the child the life of society and nature, the world of human feelings and relationships in poetic images. The artistic word enriches the child's speech, makes it unique, expressive, helps to understand the beauty of mother speech.



## CONCLUSION

One of the main tasks of general secondary school pedagogues is to form the correct oral speech of children as a result of mastering the artistic language of their people. This general task consists of the following special tasks: education of sound culture of speech, enrichment, strengthening and activation of vocabulary, improvement of grammatical correctness of speech, formation of oral (dialogic) speech, development of fluent speech, education of interest in artistic speech, teaching literacy preparation. Conducting teaching activities with children in two forms of oral speech - dialogue and storytelling - will continue to develop their rapid speech. In the process of forming the grammatical system of school-age children's speech, it is necessary to form the skill of performing exercises in correct speech.

## REFERENCES:

1. Kholmatova, Z. T., & Kholikova, D. M. (2022). MODEL OF DEVELOPING AND DEVELOPING INNOVATIVE THINKING SKILLS IN STUDENTS. *International Journal of Philosophical Studies and Social Sciences*, 2(4), 190-195.
2. Dilobarkhon, K. (2019). The importance of modern innovation in education. *European Journal of Research and Reflection in Educational Sciences* Vol, 7(12).
3. Kholikova, D. (2020). INTELLECTUAL ACTIVITY OF CREATIVE THINKING VERBAL TEST "UNUSUAL USE". *PEDAGOGICAL SCIENCES*, 22.
4. Makshitovna, K. D. (2022). Pedagogical Problems of Child Raising in the Uzbek Family. *Spanish Journal of Innovation and Integrity*, 5, 542-546.
5. Kholmatova, Z. T., & Kholikova, D. M. (2022). MODEL OF FORMATION AND DEVELOPMENT OF INNOVATIVE THINKING SKILLS IN STUDENTS. *International Journal of Philosophical Studies and Social*



Sciences, 2(4), 139-144.

6. Kholikova, D. (2021). *Vozmojnosti diagnostici effektivnosti kompensatsionnogopodkhoda v obuchenii*. *Society and innovation*, 2(9/S), 239-252.

7. Абдуллаева, Н. Ж., & Комилова, Ф. М. (2020). *Значимость формирования организаторских качеств у будущих учителей в развитии современной педагогики*. *Наука и образование сегодня*, (6-1 (53)), 42-43.

8. Abdullayeva, N. J. (2020). *EXPERIENCE AND THEORETICAL BASES OF INTERNAL CONTROL SERVICE ACTIVITIES IN THE PUBLIC SECTOR*. *Экономика и социум*, (5-1 (72)), 13-15.

9. Abdullayeva, N. J. (2020). *ISSUES OF REFORMING ACCOUNTING AND REPORTING IN THE PUBLIC SECTOR*. *Мировая наука*, (4 (37)), 6-9.



## EVALUATION OF CREATIVITY IN STUDENTS

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**Abstract:** What is creativity? Can creativity be assessed? If so, how? This article was created as a result of scientific research to find answers to the same and similar questions. The article also comments on approaches to creativity in education.

**Key words and phrases:** creativity, assessment of creativity, creativity in education, student, creative approach.

### INTRODUCTION

When talking about the field of education, if there is a discussion about the existence or development of creativity in its participants, in addition, the topic of creativity assessment, the conversation will inevitably turn into important questions, such as those mentioned above. In these matters, one can see that many people have strong opinions about assessment, particularly standardized assessment. And most of them share the same strong opinion that creativity can or should be measured in this way.

### RESEARCH MATERIALS AND METHODOLOGY

He was convinced that it is important to set aside some time to clarify the questions asked in the abstract. Rather than simply answering questions with yes or no, making the topic more debated—asking questions that allow for a more nuanced dialogue—can be interesting and useful for both educators and learners





in pedagogy and psychology.

was considered. For example: What exactly is meant by assessment? Are there certain aspects of creativity that are more susceptible to assessment than others? Are there particular approaches to observation, documentation, and measurement that are more or less appropriate for a construct like creativity? Can some assessment approaches help students develop creativity? Why? It's no secret that trends around the world change constantly and very quickly. These trends will not fail to affect education, study, learning, employment and, of course, the life of the whole society. Creativity is a trend that has developed rapidly in the 21st century and is causing many traditions to change. Creativity! Yes, it can be said that it is just a skill. But based on the knowledge based on both theoretical and practical and the results of the research conducted in this regard, below are facts and a wider observation about why creativity is becoming one of the most important factors. First of all, it is necessary to answer what creativity actually is. Creativity - this is a phenomenon that contributes to the creation of something new and useful. In other words, the most necessary tool for creating a new abstract thing (artwork, music, idea or start-up) or physical invention (machine, device or robot) is creativity.

### RESEARCH RESULTS

Now, when it comes to creativity assessment, why is it so difficult to deal with the idea of "Creativity Assessment"? Why is the combination of these words marked as a surprising contradiction for many? One reason for the difficulty in integrating assessment and creativity in practice can be argued to be that the mental models of creativity and assessment are incompatible.

### EVALUATION OF CREATIVITY

In order to record the result of the creativity assessment, the questionnaire



"Creativity assessment" was conducted with the selected respondents. According to the results of the ex-post questionnaire, 13% of the respondents had a low level of creativity. That is, it can be observed that they have a low level of creativity, independence, non-standard attitude, originality, and flexibility. 50% of the respondents showed a medium level and 37% showed a high level. It can be seen that the students with average level of creativity, non-standard attitude to the problem, creative attitude, creative non-standard approach skills are at an average level, and they are relatively active and meaningful participation in the pedagogical process. It should be noted that the respondents who showed a high level of activity, initiative, organization, original thinking, communication, flexibility of their thoughts.

#### DISCUSSION

For certain issues, such as creativity and assessment, students' cultural models influence how they integrate reason and practice. The methods and questionnaires used in the study to achieve higher scores also explore students' cultural models, reason and practice. was to form a unity. Assessment of the level of creativity of students studying in higher education institutions and the student team is also reflected in the proper organization of organized lessons.

#### CONCLUSION

As a result of monitoring the activities of students studying in higher education institutions and the teachers who teach them, interviews conducted with them, questionnaires conducted, students' creative approach, ability to express creative attitude, creative ability skills, research skills and became the basis for the development of certain stage technology of their development.

#### LIST OF REFERENCES:

1. Cramond, B. & Wang, L. (2012). The audacity of creativity assessment. In S. Hunsaker (ed.), Identification of students for gifted and talented education services: Theory and practice, pp. 337–361. Mansfield, CT: Creative Learning



Press.

2. Dewey, J. (1938/2008). *The Later Works of John Dewey, Vol. 4, 1925–1953: 1929: The Quest for Certainty (Collected Works of John Dewey)*. Carbondale, IL: Southern Illinois University Press.

3. Guilford, J. P. (1950). Creativity. *American Psychologist*, 5, pp. 444–454.

4. Wasson, P. (1983). Realism and rationality in the selection task. In J. St. B. Evans (Ed.), *Thinking and reasoning: Psychological approaches* (pp. 44–75). London: Routledge & Kegan Paul. Zimmerman, C. (2000). The development of scientific reasoning skills. *Developmental Review*, 20, 99–149

5. Абдуллаева, Н. Ж., & Комилова, Ф. М. (2020). Значимость формирования организаторских качеств у будущих учителей в развитии современной педагогики. *Наука и образование сегодня*, (6-1 (53)), 42-43.

6. Abdullayeva, N. J. (2020). EXPERIENCE AND THEORETICAL BASES OF INTERNAL CONTROL SERVICE ACTIVITIES IN THE PUBLIC SECTOR. *Экономика и социум*, (5-1 (72)), 13-15.

7. Abdullayeva, N. J. (2020). ISSUES OF REFORMING ACCOUNTING AND REPORTING IN THE PUBLIC SECTOR. *Мировая наука*, (4 (37)), 6-9.



## **FUTURE TEACHERS HAVE PEDAGOGICAL SKILLS CONDITIONS OF SUBSCRIPTION**

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**ANNOTATION.** This article discusses the content of future teachers' pedagogical skills and the requirements for a skilled pedagogue.

**Key words:** pedagogical ability, pedagogical technique, society's requirements, pedagogical skill, high-level culture, national pedagogy, national values, owner of moral soul, ideological treasure, professional activity.

**INTRODUCTION.** A teacher is a person with a very high level of culture. He needs to know a lot. Nowadays, he should be aware of the achievements and news in the field of science he is studying. In order to teach students daily activities, he should regularly study, learn, fill and deepen his knowledge. So, the main thing of a pedagogue, pedagogic skill is independent study. It is clear to everyone that after the independence of Uzbekistan, there were great changes in the field of education, in terms of restoration of national morals, and in terms of the further development of national values. It should not be forgotten that the great future of the state is young people who have deep knowledge and pure morals. Pedagogical skill is not an innate or hereditary trait, but a product of research and creative work. At the core of this multifaceted pedagogical activity is creative work. If we look at the professional skills program of the pedagogue in practice, then the first place is its integral quality-skills.



The content of the concept of teacher's pedagogical skills can be explained as follows:

1. A high level of culture, a high indicator of knowledge and intelligence.
2. He has excellent knowledge of his subject.
3. Thorough mastery of knowledge in the fields of pedagogy and psychology, and ability to use them in professional activities.
4. Perfect knowledge of educational methods.

Pedagogical skill system is the following interrelated main consists of components:

1. Obedience to the requirements of pedagogical humanitarianism.
2. Perfect knowledge of professional knowledge in connection with other disciplines.
3. Having pedagogical skills.
4. Mastering the secrets of pedagogical techniques.

Among all professions, the teaching profession has a special and important social importance. After all, the teacher is the architect of the maturity of the soul of the young generation, a person who gives education and training to young people. Today, he trains young people ideologically and politically, teaches them the laws of nature, society, social life, development of thinking, prepares young people for work, helps them master the secrets of professions and social-economic situations that are important for society. solves. This responsibility requires the teacher to be a skilled master of his profession, to have an educational impact on the students, and to develop their interest, ability, talent, faith and practical skills in every way. It requires a professional to find them.

To do this, constantly improve the professional skills, skills and qualifications of teachers, take care of them in every way, create the necessary conditions, provide necessary material, scientific-methodical and technical support, creative teachers' it is necessary to help to regularly increase initiative.



LITERATURE ANALYSIS AND METHODOLOGY. In the higher education of pedagogy, the process of adaptation to education is carried out with the help of staff serving future teachers, elements of the material base and many other tools. A perfect pedagogical system was created by Jan Amos Comenius. Relying on the advanced ideas of his time, he made a call to teach everyone everything. His great treatise "Great Didactics" is one of the first works of theoretical pedagogy.

J.J. Rousseau (1712-1858), (I.G. Pestolotsy, A. Destervenrg, R. Owen (17711-1858), A.N. Radishchev (1749-1802), V.G. Belinsky, A. Gersen, I.I. Pirogov, N.G. Chernishevsky ( 1822-1899), the services of N.D. Dobrolyubov are great. K.D. Ushinsky made a great contribution to the development of the theory of pedagogy. He is called the father of Russian pedagogy. It is considered an indispensable condition for any discipline to stand out and function normally. .

RESULTS. Pedagogy teaches that the purpose of education changes depending on the requirements of society and the age characteristics of students. Reveals the components of education and the connections between them. Based on this, it summarizes the experiences in the field of education and shows the prospects and ways of the future development of education. Today, in the period of independence, in the spirit of the ideas of independence, the time has come to restore the ancient folk tradition, to use rich and colorful folk pedagogy in education. Genres such as epics, fairy tales, lapar, proverbs, quick sayings, and riddles, which have not lost their essence in the work of modern education, are of great importance in the education of the young generation in the period of independence.

The ability of a teacher to analyze himself in having professional competence

is considered significant. Self-analysis in professional activity by a pedagogue



is the study of the nature of their practical actions. Himself through analysis, the pedagogue will have the opportunity to objectively evaluate himself. After all, it is important for pedagogues to have the qualities of professional competence that they have the skills of self-assessment. Self-evaluation (SEO) is a person's self-evaluation through self-analysis. Self-assessment provides the subject with an assessment of his personal capabilities, an objective assessment of himself, and self-satisfaction. Self-assessment should help a person to reveal his abilities on his own. Self-assessment is difficult, but a person can be directly trained for it. As with any specialist, a number of factors affect the pedagogue's ability to evaluate himself effectively.

**DISCUSSION.** Pedagogical profession is individual in its essence. The vital role of every pedagogue is to be a master of his work, a master is expressed as very advanced, knowledgeable or skillfully performing his work. Pedagogical skills are visible in his work. First of all, a pedagogue should be well versed in the laws and mechanisms of the pedagogical process. In this sense, the general skills of the pedagogue and his pedagogical technique are of great importance. Skill is a special power. It is impossible to become a master at a high or low level. Mastery may or may not be attained. A real master is beautiful only during his work. Achieving pedagogical skills is achieved with certain personal qualities of the pedagogue. Pedagogical skill represents the development of pedagogical activities, acquisition of pedagogical techniques, as well as the personality of the pedagogue, his experience, civil and professional status. Pedagogical skill as a category has its own scientific basis. The scientific approaches of recent years have made it possible to draw the following conclusion in relation to this situation: pedagogical skill is understood as a bright manifestation of individuality in professional activity.

**CONCLUSION.** Despite the fact that there are so many definitions of



pedagogical skill, some aspects of skill are definitely expressed in them. Pedagogy is an honorable but very difficult profession. To be good, it is not enough to master pedagogical theory. Because in the pedagogical theory, the general laws and rules of teaching and upbringing of children, generalized methodical ideas are stated, attention to the individual characteristics of young people is emphasized. Preschool education life is a small pedagogical process and is very diverse. There are situations that do not correspond to the pedagogical theory.

This requires extensive knowledge, thorough practical training, high pedagogical skills and creativity from the pedagogue.

#### REFERENCES

1. Akhmedzhanov M.M., Khojaev B.Q., Hasanova Z.D. Pedagogical skills - Bukhara State University, 2014
2. G.I. Khasanova "Advantages of using customized teaching technology in the educational process" Jizzakh: 2020. 420 pages. 223-225b
3. Manzura, N. (2021). Sustainable Activity in the Teaching Profession and Its Foundations. Journal of Psychology and Education, 58(2), 1339-1345
4. Abdurakhmonovna, N. M. (2021). Pedagogical and Psychological Aspects of Professional Sustainability of Future Teachers.
5. Content of developing the creative abilities of teachers of higher education institutions. Khasanova Gulnoza Ilhomovna
6. Norquziyeva, M. (2021). Spiritual and moral education of students based on folklore: spiritual and moral education of students based on folklore. Journal of preschool education, 2(2). izvlecheno noun





<https://presedu.jspi.uz/index.php/presedu/article/view/832>

7. Vygotsky L.S. Pedagogical psychology. - M.: "Pedagogy", 1999. -S. 321.

8. Abdurakhmanova R.B. Stanovlenie professionalnoy napravlenosti pedagog and psychologist Autoref. dis. sugar psycho. science – Tashkent, 2005.-22 p

"A specialist who is a skilled master of his profession, highly cultured, has a deep knowledge of his subject, is able to analyze the fields of related sciences well, and has mastered the methods of education and training perfectly." Based on the essence of this definition, the content of the concept of teacher's pedagogical skills can be explained as follows:

1. A high level of culture, a high indicator of knowledge and intelligence.
2. He has excellent knowledge of his subject.
3. Thorough mastery of knowledge in the field of pedagogy and psychology,

among them

be able to use it in professional activities.

4. Excellent knowledge of the methodology of educational work.

Pedagogical skill system is the following interrelated main consists of components:

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generation, a person who gives education and training to young people. Today, he trains young people ideologically and politically, teaches them the laws of nature, society, social life, development of thinking, prepares young people for work, helps them master the secrets of professions and social-economic situations that are important for society. solves. This is the responsibility of the teacher to be a master of his profession, to teach the students educational

It requires a professional to influence and find ways to develop their interests, abilities, talents, beliefs and practical skills in a comprehensive way.

To do this, constantly improve the professional skills, skills and qualifications of teachers, take care of them in every way, create the necessary conditions, provide necessary material, scientific-methodical and technical support, creative teachers' it is necessary to help to regularly increase initiative.

Based on this, the science of "Pedagogical skill" serves to train skilled teachers, it is a science that teaches the secrets and skill of professional activity of teachers and educators and provides information about its improvement. learns the essence of pedagogical skills in teachers, the ways, means, and forms of developing their professional activities within the requirements of the present time.

mutual cooperation, communication tactics, speech culture, thinking, organization and implementation of the educator's spiritual-educational and educational work, in this process it teaches the features of being able to control behavior and emotions, and one's own profession provides information about the system of developing pedagogical activities. Pedagogical skills are improved during the pedagogical activities of teachers.

Pedagogical activity is the labor activity of specially trained teachers who are accountable to the society and the state in order to prepare the young generation for life and work. Future teachers should know the following



components of activity in the course of their pedagogical activities:

The purpose of pedagogical activity.

- Object and subject of pedagogical activity.
- Tool of pedagogical activity.

A teacher who does not understand the essence of the pedagogical process and does not have deep respect for the child will not have an idea that ensures the effectiveness of education and human development. The task of the pedagogical process is to impart knowledge, educate, and develop, and determines the criteria of teachers' activity. The activity of teachers is a means of action of the pedagogical process. To the subject of the pedagogical process, to the person being educated, to the student and group of students, and to the individual student, the subjects of the pedagogical process are parents,

teachers, educators, class team, pedagogical team are responsible and they carry out education and upbringing activities based on the requirements of the society. A teacher's achievement of positive results in his pedagogical activity is determined by how well he can apply his professional skills, i.e. acquired knowledge, in his life and practical activities. The system of abilities necessary for effective pedagogical activity of teachers: knowledge, ability to understand the child, observation, speech skills, organization, ability to see the future, distribution of attention, correct assessment of the situation, emergence timely elimination of all kinds of possible conflicts, making students interested in learning.

In order to solve the tasks and tasks related to the profession from the content of this science, to manage the educational process, to approach it from the point of view of pedagogic-psychological teaching, to model education in the spirit of our national traditions based on modern methods, - information on the necessity of teacher skills and systems of their improvement for the implementation of advanced pedagogical technologies in the educational process



are included.

Accordingly, the subject of "Pedagogical skills" is aimed at forming professional knowledge and abilities in teachers, educating creativity, acquiring skills, abilities and qualifications, teaching about pedagogical technique, pedagogical cooperation, pedagogical politeness, speech culture. gives information.



## THEORETICAL APPROACHES TO EVALUATING THE EFFECTIVENESS OF DIGITAL MARKETING IN TRANSFORMING THE FINANCIAL MANAGEMENT SYSTEM

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**Abstract:** This article presents the theoretical views of scientists regarding the correct evaluation of the possibilities of effective digital marketing in the process of transforming the financial management system in the activities of business entities and its use.

**Key words:** financial management, digital marketing, marketing opportunities, marketing technologies, performance evaluation, digital transformation, artificial intelligence, small business and private entrepreneurship.

### Introduction.

Modernization of production in business activities in Uzbekistan, technical and technological renewal, formation of a competitive environment for economic sectors, mastering the production of fundamentally new types of products and technologies, ensuring the competitiveness of national goods in domestic and foreign markets, as well as entrepreneurship consistent measures are being taken to improve the management of the activities of its subjects based on digital technologies. In this regard, the President of our country, Shavkat Mirziyoyev, said, "In order to achieve development, it is necessary and necessary to acquire digital knowledge and modern information technologies. It gives us the opportunity to take the shortest way to rise" [1] and it is not for nothing that they say.

Within the framework of the national program "Digital Uzbekistan-2030", the implementation of priority projects on the digital transformation of the



financial and banking system is considered as the main task. [2]

In turn, it is expected that by 2025 there will be about 30 smart cities in the world, 5% of them will be located in North America and Europe, which is also a proof of the perspective of digital marketing. Digital marketing is becoming big business, with data from 2022 showing that marketing budgets will account for an average of 11.2 percent of company revenue. In the US, this equates to more than \$196 billion in annual industry spending. In Great Britain it is 24.2 billion US dollars [3].

As a proof of these arguments, it is possible to see that in the West alone, the companies that are forming in accordance with digital opportunities and promoting them more widely are becoming effective business representatives (for example: Apple, Microsoft, Facebook, Alphabet, AT&T, Amazon, Verizon Communications, such as Google) [4].

### **Analysis of literature on the topic.**

Theoretical approaches to evaluating the effectiveness of digital marketing in the transformation of the financial management system are reflected in the scientific research of a number of domestic and foreign scientists. In particular, Russian researchers M.V. Zakharova, M.A. Kurasova, T.V. Deynekin, V.M. Komarov, S.A. Mikhalev and S.G. Pesikov looks at evaluating the effectiveness of digital marketing from the perspective of digital marketing communications.

### **Research methodology.**

Methods and approaches such as theoretical and practical study, induction and deduction, analysis and synthesis were used in the preparation of the article.

### **Analysis and results.**

Considering the fact that not all aspects of the issue have been fully explained in the theoretical and practical developments on the evaluation of the effectiveness of digital marketing in the transformation of the financial



management system in our country, we consider it appropriate to reflect on this issue, referring to the research works of foreign scientists.

T.V. Considering the effectiveness of Internet advertising, it is noted that most of the methods of evaluation of effectiveness are based on the analysis of information about visits to websites created by technical means (external counters and analytical systems, log files and advertising placement systems). emphasizes. The difference in the communication aspect of digital marketing is to evaluate the user activity on the website in terms of the actions they perform: landing pages, registrations, applications, orders, sales, etc.[5] Thus, T.V. Deinekin considers a comprehensive approach to evaluating the effectiveness of advertising activities on the Internet, highlights four main stages of the communication process between an advertiser and Internet users in Internet marketing (Table 1).

T.V. Dynekin provides the maximum possible number of pointers. Currently, every free analytical system (Yandex.Metrika», Google Analytics, etc.) is provided and captures many other data. However, based on the specifics of this research, small businesses monitor a number of key indicators, such as the number of visitors and cost, actions on landing pages (sites), targeted inquiries (applications), orders, sales, etc. goes

**Table 1**

**A system of performance indicators at the stages of the communication process between advertisers and Internet users**

Stage	Performance indicators	
	Communicative	Economical
Display advertising	Number of impressions, number of unique impressions, audience	Cost to place an ad, cost per thousand impressions,



message	overlap, frequency of impressions	cost per thousand unique impressions
Interest	Impression rates, recall rates, recognition rates, clicks, unique clicks, responses (impressions per click)	Cost per click, unique click cost
Visit the website	Number of unique users, number of visits, frequency of visits, number of new users, geographical distribution of users, number of page views, depth of views, website paths, duration of visits	Cost per unique user, cost per visit
Movement	Number of moves	Number of orders, number of customers, number of sales, sales volume, average purchase amount, average number of sales per customer, cost per action, order value, sales price, customer value, order frequency

According to the study, digital marketing technologies are seen as "changing the processes of interaction with the target audience" and small organizations only convert a high part of this interaction into results (bids, orders and sales). they analyze from the point of view. Small businesses use the indicator "targeted requests (applications) of potential customers" as a way to establish communication between digital marketing and traditional marketing





activities. We believe that small businesses need mechanisms that allow them to coordinate and target groups or clusters of indicators that influence the quality of the target audience and the ability to convert to a real buyer.

It should be noted that reducing the effectiveness of digital marketing to the cost of actions in the form of clicking on advertising materials does not always guarantee addressing the target audience, that is, a user may click on a link, but it may not be relevant to the target market of the advertised product.

Ideas for evaluating the effectiveness of an advertising company on the Internet M.V. It was developed in the work of Zakharova, in which pricing models for evaluating an advertising company are considered. Based on the analysis of price models, the author found that the advertising company has a two-stage feature: they use various methods of digital marketing (banners, text blocks, advertising in search engines, catalogs, etc.) is a company website whose performance is measured using pricing models.

Development of ideas for evaluating the flow of information resulting from the use of digital marketing methods M.A. Kurasova and it was reflected in the works of S.G.Pesikov, M.A. Kurasova points to the continuity of digital marketing effectiveness assessment and emphasizes the need to fix user paths in an analytical system, and believes that each user path should be tracked from the moment they enter the site to the moment they exit [6]. At the same time, the considered indicators do not show in detail the process of conversion of information flow from Internet marketing communications to the actions of visitors on landing pages, which only reflect the overall effectiveness of advertising in Internet marketing.

Transition to evaluation of online advertising effectiveness in the context of enterprise efficiency It was reflected in S.G.Pesikov's work. The author considers the effectiveness of Internet advertising as a multifactorial concept that includes social, economic, and legal effects, and emphasizes that the estimate of



the cost of contacting the user is limited. In communications, factors such as attention, preference, and the continuity of the user's access to the resource are important.

S.G. The approach to evaluating the effectiveness of Internet advertising presented by Pesikov reflects the interaction of economic and communicative effectiveness indicators, which is fair, because each communicative effect in Internet marketing has a reasonable economic generalization. But considering only basic and relevant needs seems a bit artificial.

In our opinion, the flow of information in Internet marketing should be changed based on Internet marketing communications directed to specific landing pages when necessary to meet the needs of the user (or opt out of the flow by refusing to respond to ads and visit the site).

Focusing on the following considerations, we consider it appropriate to dwell on the relationship between the concepts of "Internet traffic" and "information flow" in marketing. Information flow means an orderly movement of information characterized by its direction, intensity, density and usefulness [7].

Thus, we can conclude that Internet traffic in marketing is a type of information flow that includes units of the target audience of the enterprise. However, taking into account the lack of clear theoretical approaches to the concept of "traffic" and the limitations of the relationship of this concept with other types of business flows, the marketing concept of Internet traffic in this article refers to the process of interaction with the target audience on the Internet of the concept of "Internet marketing information flow". considered as a synonym that can be defined as the movement of information about the results of conversion, in terms of the validity of considering the characteristics of the information flow of digital marketing, the author relies on relevant studies of marketing flows [8].



1) The transition to considering the flow of information is related to the main important feature of digital marketing technologies. They are considered from the point of view of three types of processes (communication, conversion and monetization processes) that are changed by changing the properties generated from information flows. The basis for the formation of the information flow of digital marketing is created in various forms of changing internet marketing communications affecting the online and offline environment (omnichannel marketing features) [9]. Digital marketing communications are converted into applications (requests) for the goods, works and services of enterprises, which, in turn, become commercial and financial flows of enterprises.

2) Information flow characteristics of Internet marketing are presented in advertising systems, search results, social output and other communication channels of Internet marketing. The characteristics of the landing pages of Internet sites are determined by the information field in which the flow of information is directed (the quality of the sales offer of the organization presented in text and multimedia content, types of feedback, completeness of the description and other characteristics of the landing pages).

3) In this study, taking into account the indicator of "targeted requests (applications) of potential customers and the formed classification of Internet marketing technologies, the conversion of communications into targeted requests (applications) of potential customers and subsequent sales is influenced by digital marketing processes. and can be described in terms of the changes in information flows that shape digital marketing technologies. In this case, there is an interaction of two different information flows of digital marketing:

4) Information-communication flow (IKP) of digital marketing, which includes communication data about digital marketing activities (number of clicks, number of impressions, coverage);

5) Information and financial flow of digital marketing (IFP), including



financial information on digital marketing activities (cost of targeted action, cost of program, cost of order, cost of sale). Turning to information flows in terms of determining the specific features of the formation of information-communication and information-financial flows of digital marketing M.I. It allows to complete the functional features of external and internal conversion provided by injection.

If, according to M.I. Ukolov's approach, external conversion is considered as a share of the site's audience, a standard marketing effect that can convert it to customers, then external conversion not only changes the site's audience, but also the communication processes that occur in advertising systems includes.

Consequently, the information and communication flow of digital marketing is formed in the change of the information provided in the internet site audience and internet marketing communication advertising systems. Then the main task of external conversion is to convert the flow of information and communication into communications with the target audience (clicking on ads), which then lead to targeted actions (pages, registration, messages through feedback forms, etc.) becomes

The main interest is what happens after the flow of information and communication is transformed into targeted actions. In digital marketing, targeted action (CPA) distinguishes visitors who have shown interest but are not interested in a company's products. Then there are two possible actions for the visitor:

1) the visitor leaves the landing page of the website after determining that the product does not meet his needs (or for other reasons). Such a visitor temporarily leaves the commercial relationship (can be returned with special advertising campaigns using redirection methods) or permanently becomes a non-target audience unit for this organization;

2) expresses the desire to continue cooperation with the visiting company and move to the next stage of trade relations. This behavior of the visitor is



described as the conversion of the target action into a target request (application). A visitor to the landing page of the site sends a targeted request (application) for the company's goods, works and services.

In addition, according to M.I. Ukolov, in the process of internal conversion, targeted inquiries (applications) of potential customers are converted into buyers (and not individual website visitors). The process of converting a potential customer's inquiry into a purchase is not based on the characteristics of the organization presented on the website (the site did its job by converting the contact into an application), but on the conversion process of the organization from the targeted inquiries (applications) of potential customers to information and real customers.) and money flow expressed by the quantity and quality of sales (Internet marketing monetization technologies), that is, begins to depend on the ability to interact with financial flow. As we noted at the beginning of the study, monetization is considered along with communication and conversion as a separate process of Internet marketing that forms digital marketing technologies.

Therefore, the information and financial flow of digital marketing is formed as a result of changes in the website audience in the form of target requests (applications) of potential customers and information provided in the process of evaluating the economic efficiency of Internet marketing (monetization).

The review of the processes of changing information flows that make up digital marketing technologies is aimed at the change of the form of information flow as a result of the influence of external and internal conversion on the landing pages of Internet sites. This leads not only to the consideration of communicative and economic efficiency (T.V. Deynekin, A.Y. Muzika, V.M. Komarov, etc.), but also to the determination of the effectiveness of the website's landing page - conversion efficiency.

When considering the change in digital marketing information flows under



the influence of the conversion process, E.P. Mikhaleva and S.A. The works of Fedotov are noteworthy [10]. The authors consider conversion in Internet marketing in relation to the levels at which the target audience - visitors to the web pages - are located, and calculate the performance indicators that occur when the potential target audience interacts with the organization's website. determine.

A step-by-step approach to considering the conversion of Internet sites allows you to identify the main stages of information flow changes. All of these include website pages, target audience source site pages, online advertising campaigns, and advertiser website pages.

Thus, many researchers consider different types of metrics to evaluate the effectiveness of digital marketing. The main problem is that modern digital marketing allows us to analyze more than a hundred different indicators and indicators. Based on the theoretical study of the specific characteristics of digital marketing activity indicators of small business enterprises, it was found that the main characteristic of evaluating the behavior of site visitors depends on the duration of actions. So, if a visitor is not only interested in advertising and enters the site, but also contacts company managers, asks for a price list, asks questions and leaves communication information, joins a group on a social network and performs other actions 'ng, we can conclude that it is active. Even if the visitor has not sent an application describing his purchase intention, his activity indicators allow to make decisions about the prospects of such a visitor to lead to a purchase and the prospects of a selected segment of the target audience for a small business.

In the dissertation, the work of researchers who considered the indicators of digital marketing effectiveness in terms of activities and actions performed by the user on the organization's website was analyzed. Thus, T.V. Deinekin [11], L.M. Kapustina and I.D. Mosunov [12], A.Y. Muzika, as well as foreign digital



marketing practitioners J.R. Saura, P. P. Sanchez, and L. M. Cerda-Suarez [13] consider the following performance measures. (See Table 2)

**Table 2**

**Activity and actions performed by the user on the Internet site are a measure of efficiency**

<b>№</b>	<b>Measurements</b>	<b>Description</b>
1	Number of shows	total number of advertising communications. Each time an advertisement is displayed, an advertising communication is established. The data source is determined by each standardized internet marketing advertising system (Yandex.Direct, Google.Adwords, Facebook.Ads, Target.Mail, etc.);
2	Number of visitors (pass through advertisement or click)	unique users who visited the organization's website as a result of the advertising effect (advertising contacts in the form of impressions);
3	CTR (click-touch-rate)	click-through rate, the ratio of the number of clicks on ads to the total number of impressions. In our opinion, this is the first indicator of information flow conversion, because it reflects the transition of user attention to interest by clicking on the ad;
4	Target actions on the page	the number of targeted actions on the page (application in feedback forms, contacting an online consultant, sending one's contact information, etc.);
5	On-page targeted inquiries	readiness, message about the intention of the target audience units to make a transaction (purchase of



	(applications) (leads)	goods, work or services);
6	sale (sale)	purchase of goods, works and services of enterprises by the target audience (website visitors);
7	Conversion	the ratio of the number of goals achieved to the total number of visitors.

As you know, conversion is divided into external and internal. External conversion determines the change in the flow of information and communication in advertising systems of digital marketing communications. Internal conversion determines the change of information and financial flows on the organization's website in the form of information provided in the processes of targeted inquiries (applications) of potential customers and evaluation of economic efficiency (monetization) of digital marketing.

The process of converting digital marketing indicators based on the activity and actions of users on the Internet D.A. Livshin and L.I. given by Voronova [14]. Researchers focus on conversion as a factor in the success of an advertising company, considering this concept as the percentage of users who pass certain stages on the way to purchase.

Thus, the information flow of interaction with the target audience is changed on the landing pages of the organization's website, which makes it possible to include conversion efficiency in the groups of indicators for evaluating the effectiveness of Internet marketing technologies. The group of indicators that combine the communicative, economic, and conversion efficiency of landing pages of Internet sites and are the most suitable for the specific characteristics of small business activities are the indicators for evaluating the effectiveness of Internet marketing based on the activity and behavior of visitors to the Internet site. This allows to create a system of indicators for evaluating the effectiveness





of digital marketing technologies in small enterprises.

Each digital marketing technology includes indicators of communicative efficiency, conversion efficiency of website landing pages, and economic efficiency.

The flow of information and communication is primarily determined by the indicators of communicative efficiency, as it includes information about the impressions, clicks and actions of the target audience on the landing pages of the websites of the organizations that are converted during external conversion processes.

Thus, the basis for the systematization of indicators for evaluating the effectiveness of digital marketing technologies in small business is the behavioral approach to the evaluation of effectiveness, taking into account the actions of visitors - target audience units - on the landing pages of the organization's website. A system of indicators was formed and mathematically described to evaluate the effectiveness of digital marketing technologies in terms of changing the flow of information. Information and communication flow (ICP) and information and financial flow (IFP) are highlighted. Each of the digital marketing technologies includes communicative, conversion and economic efficiency indicators. A type of conversion efficiency is proposed, which describes the conversion of communicative efficiency indicators into economic efficiency indicators of digital marketing technologies.

### **Conclusions and suggestions**

1. As part of the study of the technological nature of digital marketing, the author adopted methods and decisions in the field of changing the processes of interaction of the target audience with digital marketing communication channels aimed at obtaining specific market results, taking into account the existing limitations in the activities of small enterprises. defined in the concept of digital



marketing technologies as a set of tools. Also, a classification was made based on the study of digital marketing processes, including communication, conversion and monetization technologies of Internet marketing.

2. A system of indicators for evaluating the effectiveness of digital marketing technologies in terms of changing information flows was formed. The information-communication and information-financial flows of digital marketing were determined within the research, and their interaction allows to evaluate the communicative, conversion and economic efficiency of digital marketing technologies.

3. A methodical approach to the development of digital marketing technologies, the process of transferring the company's target audience from less targeted to more targeted quantitative and behavioral characteristics of costs was formed, which allows to take into account the unique forms and indicators of digital marketing. It allows to describe the process of interaction between classic and digital marketing in terms of complementing the flow of information with classic marketing performance evaluation indicators that can be digital in digital marketing analytical systems and accepted by small businesses. will give.

4. The scientific-theoretical foundations of marketing in the digital environment have been formed in accordance with the stages of ICT development, and modern digital marketing technologies have a high potential to influence consumers by introducing elements used in direct and indirect traditional marketing activities. To date, the main reason why the management of economic entities does not accept all the possibilities of the digital environment is that they perceive the costs of implementing digital technologies to be high. Also, it is extremely necessary to recognize digital transformation in the business environment as an optimal direction in solving several tasks aimed at increasing marketing efficiency.

**1. List of used literature:**

2. [https://uz.wikipedia.org/wiki/Raqamli\\_Iqtisodiyot](https://uz.wikipedia.org/wiki/Raqamli_Iqtisodiyot)
3. 3. Decree No. PD-6079 of the President of the Republic of Uzbekistan dated October 5, 2020 on the approval of the "Digital Uzbekistan-2030" strategy and measures for its effective implementation // Information on national legislation base, 06.10.2020, No. 06/20/6079/1349.
4. <https://megatrands.ru>
5. Top 100 Digital Companies I/ Forbes (publishing house) <https://www.forbes.com/top-digital-companies/list/#tab:rank> (murojaat sanasi: 01.12.2021y.)
6. Дейнекин Т. В. Оценка эффективности предпринимательской деятельности в сфере интернет-рекламы: автореф. дис. ... канд. экон. наук: 08.00.05. – М., 2003. – С. 19–23.
7. Курасова М. А. Совершенствование маркетинговой деятельности предприятий на основе внедрения интернет-технологий: автореф. дис. ... канд. экон. наук: 08.00.05. – М., 2005. – С. 19.
8. Рязанцев В. Д. Большая политехническая энциклопедия. – М.: Мир и Образование, 2011. – С. 355.
9. De Cleen, P. Flow marketing: Content, Conversatie, Conversie: Go with the flow. – Amsterdam: Lannoo Campus, 2018. – 200 p.
10. Самойлов И. В. Знание-центрическая методика перехода предприятий к деятельности на основе интернет-маркетинга // Креативная экономика. – 2011. – № 1. – С. 117–123.
11. Михалева Е. П., Федотов С. А. Оценка эффективности мероприятий интернет-маркетинга // Известия Тульского государственного университета. Серия: Экономические и юридические науки. – 2015. – № 3-1. – С. 92.



12. Дейнекин Т. В. Оценка эффективности предпринимательской деятельности в сфере интернет-рекламы: автореф. дис. ... канд. экон. наук: 08.00.05. – М., 2003. – 32 с.

13. Капустина Л. М., Мосунов И. Д. Интернет-маркетинг. Теория и практика продвижения бренда в сети: монография. – Екатеринбург: Изд-во Урал. гос. экон. ун-та, 2015. – 102 с.

14. Saura J. R., Palos-Sanchez P., Cerda-Cuarez L. M. Understanding the Digital Marketing Environment with KPIs and Web Analytics // Future Internet. – 2017. – Vol. 9, no. 76. – P. 1–13.

15. Лившин Д. А., Воронова Л. И. Математическое моделирование в маркетинге при построении рекламных кампаний // Современные наукоемкие технологии. – 2014. – № 5. – С. 209.



**SOCIAL AND ETHNOPSYCHOLOGICAL ADJUSTMENT FACTORS OF  
MILITARY SERVANTS AND THEIR FAMILY MEMBERS**

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**Abstract.** The article analyzes existing psychological perspectives on the problem of psychological adaptation of military families. The essence of adaptation of women in the family of military personnel is considered in the works of various authors, including the psychological aspects of adaptation of women in the family of military personnel. Objective and subjective criteria of socio-psychological adaptation of military servicemen's family have been determined. The health care of women in the family of military personnel is analyzed, depending on their personal adaptation potential. Ethnopsychological adaptation of military servicewomen is considered. The similarity of the components of flexibility with the structure of communicative competence is noted.

**Key words:** adjustment, psychological health, personal adjustment potential, educational adjustment, ethnopsychological adjustment, microsocial adjustment.

**Introduction:** In order to increase the prestige of military service in our country, special attention is paid to the issues of ensuring social protection of military personnel and their family members.

Summarizing the opinions of military psychologists on the studied problem allows to determine the objective and subjective criteria of socio-psychological



adaptation of military personnel. Objective criteria include:

a) adaptation to education - effectiveness and success of educational and professional activities;

b) service-disciplinary adjustment

importance - success in the performance of official tasks, requirements of regulations, orders of commanders and superiors;

v) microsocial adjustment - self-affirmation, a high enough status, a prestigious position in the team as a result of the absence of conflicts with colleagues;

Subjective criteria include:

a) military serviceman's satisfaction with his professional status within the team, maintenance of interest in military profession, military specialty, development of professional interests - motivational flexibility;

b) positive-constructive attitude to team relations, lack of aggressive-conflict or passive-submissive attitude towards others;

c) the presence of adequate, sufficiently high self-esteem with a positive "self-image" ("I-concept"), which implies the absence of internal conflicts, emotional exhaustion, etc. [7].

The generally accepted point of view in military psychology is that adaptive potential determines a person's ability to adapt and is one of the integral indicators of a military person's personality. This statement is based on the recognition that a person has the ability to successfully adapt to a changed environment and the main determinant of the constructive way of development of this process. Its main components are: neuropsychic stability, communication skills, behavior regulation and moral normality.

The identification of communicative abilities as one of the factors of successful adaptation of military servicemen's family confirms the relevance of studying the communicative abilities of women of military servicemen in order to



enrich theoretical data with empirical data, as well as to find new patterns of influence on the studied concepts. In the study conducted by A. G. Maklakov, the dependence of the maintenance of the professional health of military personnel on their personal adaptation potential, as well as the specificity of situations requiring the greatest mobilization (for example, the primary adaptation situation) was analyzed. (to the terms of service). The potential of personal adaptation is considered by the author as a holistic characteristic of a person's mental development, which determines the effectiveness of military-professional adaptation and the possibility of maintaining the professional health of military personnel. A.G. is one of the most important features of personal adaptive potential from the point of view of maintaining mental health. Maklakov refers to the level of neuropsychic stability, self-esteem of the individual, the level of conflict, existing behavioral norms and orientation to the requirements of the community, as well as the presence of communication environment and external social support.

Starting to consider the factors influencing the social adjustment and adjustment of military personnel and their family members, we will cover this issue based on materials taken from the works of various authors. Among the many approaches that reveal the content of social factors, we will focus on the most characteristic ones.

Among the factors of social adjustment O.V. Romashov distinguishes objective and subjective. Objective factors are factors that are less dependent on the adapter. Among them, socio-economic conditions and legal legislation specific to the place of residence of the adapter, potential opportunities for the development of the regional labor market and vocational guidance services, the scope of vocational retraining, the qualitative and quantitative characteristics of the workforce, the promotion of existing labor , specialization of industry, etc.

Subjective factors represent a set of certain personal characteristics and



qualities that form a certain behavior: self-confidence, politeness, self-expression, determination, objectivity, etc. includes:

- socio-demographic characteristics of the adapter (gender, age, education, qualification, work experience, social status, etc.);
- socio-psychological (level of aspirations, willingness to work, practicality, speed of orientation to the production situation, self-control and ability to act rationally, communication skills, self-awareness, etc.) the ability to create a sense of responsibility. , etc.);
- sociological (the level of professional interest, the level of material and moral interest in the efficiency and quality of work, the existence of a value orientation to training and education, etc.)<sup>1</sup>.

Important subjective factors for the successful adaptation of military personnel and their family members, as well as personality orientation, character, temperament, self-concept, abilities and social motivation.

The materialization of the actions of the adapter in the new social environment includes the influence of the direction of the individual - the set of stable motives that guide his activity and are relatively independent of the existing reality. In general, a direction is a general characteristic of an adapter that describes the target it is aiming for. An adapter can have a social (collective), personal (egoistic) or business orientation. Depending on this, he sets one or another goal. Achieving a set goal indicates a comfortable fit. If insurmountable obstacles appear on the way to the goal, they can lead to maladaptation.

An important place in adaptation is occupied by the self-awareness of the adapter, that is, the level of consciousness that realizes and evaluates its knowledge, abilities, needs, interests and value directions in the future activity in a new social environment. realized. Social adaptation is influenced by personality traits, which reflect a set of stable and important forms of individual characteristics. all the diversity of his attitude to himself, to the people around





him, to his activities. They are indispensable and leave a serious mark on the result of adaptation and can reduce or increase its effectiveness. The presence of a person's abilities (natural talent) allows us to assess how effectively he can act in a civilian environment.

Military sociologists present the correct understanding, selection and active implementation of the directions of spiritual-ethical and socio-economic values as crucial conditions for improving the life efficiency of military personnel and their family members. In this regard, the important tasks of increasing the efficiency of the daily activities of this contingent are as follows: 1) determining (taking into account) its value directions; 2) development (planning) and implementation of proactive management decisions (measures) for timely correction in a favorable direction, and thus to prevent the occurrence of crisis events and their possible negative socio-economic consequences it is desirable to analyze and forecast its changes.

In conclusion, it should be noted that an important place in adaptation is occupied by the adapter's self-awareness, that is, the level of consciousness that realizes and evaluates his knowledge, abilities, needs, interests and values in his future activities in a new social environment. . Social adaptation is influenced by personality traits, which reflect a set of stable and important forms of individual characteristics. All the diversity of his attitude to himself, to the people around him, to his work, they are inseparable and can leave a serious mark on the result of adaptation and reduce or increase its effectiveness. The presence of a person's abilities (natural talent) allows us to assess how effectively he can act in a civilian environment.

List of used literature.

1. Abramovich N.Ya. Jinshchina i mir muzhskoy kultury. — M.: Svobodnyi put, 1913.-113p.



2. Abulkhanova-Slavskaya K.A. Strategy. - M.: Mysl, 1991. 299p.
3. Abulkhanova-Slavskaya K.A. Lichnost v protsesse deyatel'nosti/ Psychology lichnosti. T.2. Chrestomatia. — Samara: Izdatelskiy Dom "BAKRAX", 1999.-S. 153-161
4. Adam'yants T.V. V poiskakh imidja (kak stat telezvezdoy), M., Dobraya kniga, 1995. 219p.
5. Amyaga N.V. Samoraskrytie i samopred'yavlenie lichnosti v obshchenii// Lichnost. Obshchenie. Group processes. M., 1991. — S. 37-74
6. Anan'ev B.G. O metodax sovremennoy psichologii: Psichodiagnosticheskie metody. L., 1976. - 401 p.
7. Anan'ev B.G. Chelovek kak predmet poznaniya. L.: LGU, 1968. - 399p.
8. Anastasia A. Psychological testing: Per. s ang.: V 2-x kn. — M.: Pedagogy, 1982.-318p.



## PSYCHOLOGICAL CHARACTERISTICS OF DEVELOPMENT OF COMMUNICATION CULTURE IN STUDENTS

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**Abstract:** This article describes various methods of improving communication culture among students. Also, the possibilities of improving the communication culture of students, the ways of educating the model of behavior corresponding to the actions expected from each of the people affected by mutual communication are described in detail.

**Key words:** communication, culture of communication, communication, logic, tact, social activity, imitation at a young age.

We understand today that communication culture in a person is defined as a process. The transmission of information occurs because the source of the information acts on it. Relating to established concepts and theories of psychology and bringing them into communication is logic. The psychology of communication is a human thing related to intelligence and harmony. It is possible to learn and use this understanding in developing successful communication maps. When I take communication skills classes, I feel that it is more about the purpose and formation of my messages than the language I use to communicate. The students do not appreciate me or my communication. Obviously, recognition is achieved through the words that reach them, but the real connection to effective communication is the psychology behind it. This made me realize that there is a great opportunity to work on the culture of communication. Communication refers to the effort to connect with another, and psychology is a behavioral science. Gone are the times when human behavior was unknown - we observed it internally and concepts were established. In the same way, the



psychology of communication is clearly visible. I am not someone who gives a model of the psychology of communication. It is an attempt to broaden the understanding of psychology's role in communication.

Psychology and communication go hand in hand and fill the gap in understanding complex behavior in all areas of life. We need to anticipate behavior. Understanding the psychology of communication is like making a single color out of the multiples scattered around us. It is a combination of felt-observed-written and reflected things. Communication is an important condition of human life and activity. It is with the help of communication that people have the opportunity to work together to reduce their nature and satisfy their individual needs. In the process of communication, certain images and models of human behavior are formed, and later they become part of a person. A person's thinking, the ability to analyze and evaluate the world and his image is formed in the process of communication. The Polish psychologist E. Melibruda, who made a detailed assessment of this problem, states the following: "Communication is as important as air for us in interpersonal relations."

Research methodology. In the article, it is very difficult to give a single correct definition to the communication culture of students as it is a very complex process. Therefore, the content of the concept of communication can usually be defined by emphasizing some of its aspects:

A) communication - the process of establishing and developing communication, characterized by the need for cooperative activity.

B) communication - interaction of subjects through the sign system.

Analysis and results: In the textbook "General Psychology" published under the editorship of psychologist A.V. Petrovsky, communication is recognized as a process consisting of information exchange, interaction and mutual understanding between two or more people.

In the textbook "General Psychology" published by M.G.Davletshin, it is



stated that communication is an interaction between two or more people consisting of the exchange of information of an affective evaluative nature and knowledge. Published under the direction of M.G.Davletshin. In the short explanatory dictionary of Psychology, communication is defined as follows: communication is the interaction of two or more people.

In accordance with the above definitions, communication can be generally defined as follows: communication is a process of interaction between at least two people, during which information is exchanged, relations are established and developed.

The importance of communication in human life is immeasurable. A human child becomes a person in the process of communicating and interacting with others. Through communication, a person acquires social experience and culture. If a newborn person is deprived of the opportunity to communicate with others, he will never become a person, that is, he will lag behind in his mental development. After all, human mental development begins with communication. Human society cannot exist without communication. It is communication that forms a community of individuals working together. It is necessary to communicate between individuals in order to create a plan of cooperation and realize it. Collaborative activities are organized and implemented through communication. At the same time, new relations and connections are formed between people during the activity. So, communication and activity are closely related. When people engage in communication, they ask questions, give orders, request, explain something, and at the same time set the goal of influencing others and explaining this to them. The goal of communication reflects the need for people to work together. In this case, communication is manifested as interpersonal interaction, that is, a set of communication and interactions that arise in the process of joint activity of people. Joint activity and communication takes place under conditions of social control. Society has developed a structure of special behavior patterns as social



norms. One person can play different roles in different communication tasks. For example, there is a director in the workplace, a patient who obeys the doctor's instructions when he is sick, a good child of elderly parents in a family, a hospitable family head. The interaction of people in different roles is governed by role expectations. Whether he likes it or not, the people around him expect him to behave in accordance with a certain pattern. The condition for the immediate success of the culture of communication is to maintain a model of behavior that corresponds to the actions expected from each of the interacting people. The ability of a person to copy what others expect from him, what he is ready to hear and see in him is called tact. It is known that tact is an important component in pedagogical activity. In particular, the pedagogical process is based on the organized activities of teachers and students. Therefore, the teacher should not forget that the pedagogical process is made up of a group of students and should not neglect the personality of each student. The loss of psychological contact with students, even for a short period of time, causes serious consequences.

The development of communication culture in higher education institutions is a complex socio-psychological process, which does not consist only of imitating the speech heard by a person, but is also related to the development of communication culture in students and the need for communication. and the content of this activity and the extent to which it is organized have an effective effect on development. Because during properly organized cultural communication activities and daily interactions with the surrounding people, the mental, physical and moral development of the child improves. That is why knowing children's social activity and forming useful habits in the child , the organization of communication culture mechanisms is a decisive factor in the development of positive character traits.

In conclusion, it should be said that the culture of communication can be formed from a young age in the family, under the influence of the social



environment, as a result of awareness and upbringing. The fact that we adults are role models for young people comes from our communication with each other. From golden words (my dear, turn around, learn, you are very wonderful, today you are different, you have opened up, your clothes fit very well) in our daily life. we need to use more.

By imitating the communication of adults, young people develop the art of communication and culture in them. When forming the culture of personal communication, it is necessary to take into account the person's age, gender, profession, and worldview. So, communication is formed in an integral connection with thinking

References: 1.

Mirziyoyev Sh. M. Together we will build a free and prosperous, democratic country of Uzbekistan. Speech at the joint meeting of the chambers of the Oliy Majlis dedicated to the inauguration ceremony of the President of the Republic of Uzbekistan. Tashkent: Uzbekistan, 2016. - 56 p.

2. According to the decree of President Sh. M. Mirziyoyev dated February 7, 2017, Action Strategy on the five priority areas of development of Uzbekistan in 2017-2021. 4, p.

3. M.A. Maksudova Communication psychology T.2006.p.119

4. Stephen.R.Covey 7 skills of successful people.N.2020.384-p 5. D. Carnegie. About how a person can be confident in himself and how to influence people while speaking in public. T. 2018 6. Maksudova M. Psychology of communication. Tashkent. 2011 7. Karimova V.M. Social psychology. Tashkent. 2007



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