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## CROSS-CULTURAL NARRATIVES: HOW LITERATURE SHAPES AND REFLECTS IDENTITY ACROSS BORDERS

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### Keywords

Comparative literature, cross-cultural narratives, cultural identity, globalization, migration, literary analysis, empathy, intercultural understanding

### Annotation

This article examines the intricate relationship between literature and cultural identity in a globalized context. Through a comparative analysis of cross-cultural narratives, it investigates how literature reflects and shapes individual and collective identities amid the challenges of migration and cultural exchange. By focusing on various literary texts, the article highlights the role of storytelling in fostering empathy and understanding among different cultures, ultimately contributing to a broader discourse on the significance of literary engagement in an interconnected world.

### Introduction

In a world increasingly characterized by globalization, migration, and cultural exchange, literature plays a crucial role in shaping and reflecting identities across borders. Cross-cultural narratives – stories that weave together diverse cultural perspectives – serve as invaluable resources for understanding the complexities of human experience in a multifaceted world. These narratives enable readers to explore how individual and collective identities are constructed, negotiated, and expressed through the lens of various cultural backgrounds.

This article examines the ways in which literature serves as a medium for exploring themes of identity, belonging, and displacement in the context of cross-cultural interactions. By comparing literary works from different regions and traditions, we aim to uncover how authors engage with and respond to issues of cultural heritage and globalization. The exploration of migration, shared histories, and intercultural dialogues within these narratives highlights the significance of literature as a means of bridging divides and fostering empathy among diverse communities.

Through this analysis, the article will not only showcase the rich tapestry of voices that emerge from cross-cultural literature but also demonstrate how these stories reflect the struggles and triumphs of individuals navigating their identities in an interconnected world. In doing so, it seeks to illuminate the transformative power of storytelling, illustrating how literature can foster understanding and appreciation for the richness of human experience across cultural boundaries. Ultimately, cross-cultural narratives contribute to a deeper dialogue about identity and belonging in our increasingly diverse society.

### Methodology

This article utilizes a comparative literary analysis framework to explore how cross-cultural narratives shape and reflect identities across borders. The methodology involves a



systematic selection of literary texts from diverse cultures, focusing on those that engage with themes of migration, identity, and cultural interaction. Drawing on the works of scholars such as Mikhail Bakhtin, who emphasizes the role of dialogism in literature, and Homi K. Bhabha, who discusses the complexities of cultural hybridity, this analysis seeks to uncover the interplay between narrative structure and cultural identity. [1]

Selected texts will include a range of genres—novels, poetry, and short stories—from authors hailing from various global regions. Each work will be analyzed through close reading techniques to identify central themes, motifs, and narrative devices that reflect cultural contexts and identity formation. The work of Edward Said, particularly his concept of Orientalism, will inform the examination of how literature can both challenge and reinforce stereotypes across cultures. [2]

Secondary literature, including critical essays and theoretical frameworks from scholars such as Gayatri Chakravorty Spivak, who discusses subaltern voices, will further contextualize the primary analysis. [3] Additionally, interviews and commentary from authors will be incorporated to gain insight into their perspectives on cultural representation. By synthesizing these academic insights and narrative analyses, this study aims to highlight the transformative power of literature in fostering cross-cultural understanding and identity exploration.

### Research Analysis

The investigation of cross-cultural narratives reveals significant insights into how literature functions as a site for identity formation and cultural exchange. Scholars emphasize the interplay between identity and narrative, with Homi K. Bhabha arguing that cultural identity is not a fixed essence but a fluid construct shaped through the process of cultural interaction. Bhabha's concept of "third space" suggests that literature operates as a transformative space where hybrid identities emerge, allowing for innovative perspectives that challenge traditional notions of nationality and culture. [4]

Furthermore, Mikhail Bakhtin's theory of dialogism provides a valuable lens for understanding how narrative voices interact across cultures. Bakhtin posits that every literary work is a product of diverse influences and dialogue, which is particularly evident in cross-cultural literature. This dialogic nature allows readers to engage with multiple perspectives, facilitating a deeper understanding of cultural nuances and identity complexities. [5]

Additionally, Edward Said's exploration of Orientalism is crucial in this context, as it critiques the stereotypical representations of the East by the West. [6] Said's analysis highlights how literature can serve both to perpetuate and to deconstruct cultural stereotypes, thus influencing readers' perceptions of identity across borders. Works that challenge Orientalist tropes foster critical dialogue about cultural representation and empower marginalized voices.

Lastly, Gayatri Chakravorty Spivak raises important questions about the agency of subaltern voices in literature. [7] Spivak's assertion that the subaltern cannot speak underscores the necessity of including diverse narratives to understand the multifaceted nature of identity. By prioritizing texts that amplify underrepresented voices, this research illuminates the transformative potential of literature in fostering empathy and crossing cultural divides.

In summary, cross-cultural narratives play an essential role in shaping and reflecting identities by engaging with diverse voices, challenging stereotypes, and fostering a dynamic dialogue between cultures.

### Discussion

The exploration of cross-cultural narratives reveals profound insights into the ways literature shapes and reflects identities in an increasingly interconnected world. Scholars like K. Bhabha emphasize that cultural identity is fluid and constantly evolving, which literature illustrates through its ability to transcend geographical and cultural boundaries. [8] Bhabha's concept of the "third space" allows for the emergence of hybrid identities, suggesting that literature can serve as a transformative medium where diverse cultural influences converge, thereby enriching our understanding of identity.

Mikhail Bakhtin's notion of dialogism further complements this understanding, emphasizing that texts are not isolated entities but rather dialogues within larger cultural conversations. [9] In cross-cultural narratives, this dialogue becomes particularly relevant as authors weave together various voices, perspectives, and experiences. By engaging with multiple narratives, readers encounter a richer tapestry of identities, which fosters empathy and challenges monolithic cultural assumptions.

Moreover, Edward Said's critique of Orientalism highlights the role of literature in constructing and deconstructing cultural stereotypes. [10] Literature can reinforce harmful narratives but also has the potential to challenge Western-centric depictions of the "Other." Works that resist Orientalist tropes empower authors from the Global South to reframe their identities and challenge dominant narratives. Such transformations in literature not only reflect the diverse realities of marginalized voices but also contribute to the broader discourse on cultural representation.

Finally, Gayatri Chakravorty Spivak's assertion regarding the invisibility of subaltern voices underscores the importance of incorporating diverse perspectives in cross-cultural narratives. [11] By prioritizing these voices, literature becomes a platform for previously silenced identities, prompting critical reflection on power dynamics in cultural exchanges. Ultimately, the examination of cross-cultural narratives highlights literature's significant role in shaping identities, fostering understanding, and bridging cultural divides.

### Conclusion

The examination of cross-cultural narratives reveals literature's crucial role in shaping and reflecting identities across borders. As demonstrated throughout this discussion, literature not only serves as a mirror reflecting diverse cultural experiences but also acts as a bridge that connects disparate identities. Scholars such as Homi K. Bhabha have illuminated the dynamic nature of cultural identity, asserting that it is always in flux rather than static. This perspective emphasizes that literature can facilitate hybrid identities through the intersection of various cultural influences, fostering a dialogue that transcends traditional boundaries.

Furthermore, Mikhail Bakhtin's concept of dialogism underscores the importance of multiple voices within literature, highlighting how narratives can create a rich tapestry of cultural exchanges. This multiplicity encourages readers to engage with a variety of perspectives, ultimately enhancing empathy and understanding among different cultural groups.

Edward Said provides valuable insights into the power dynamics of representation in literature, reminding us that narratives can perpetuate stereotypes or challenge them. As

literature continues to confront and deconstruct these narratives, it empowers marginalized voices and allows for a reimagining of identity that defies simplistic categorizations.

Gayatri Chakravorty Spivak's work further enriches this discourse by advocating for the inclusion of subaltern voices, emphasizing the necessity of diverse representations in literary conversations. By prioritizing these perspectives, literature becomes a vital means of acknowledging and celebrating the complexities of identity in a globalized world.

In conclusion, cross-cultural narratives not only shape our understanding of identity but also invite continuous dialogue about cultural exchange and representation. As we navigate an ever-evolving landscape of identities, literature remains an essential tool for fostering greater empathy, understanding, and connection across diverse cultural contexts..

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## REGARDING THE POSSIBILITY OF POETIC EXPRESSION OF PUNCTUATION MARKS

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**Annotation:** The article cites opinions on the possibilities of poetic expression of punctuation. Punctuation marks “meaning that cannot be expressed by lexical and syntactic means in writing text, expressing ottenks of meaning” needs are introduced as opposed. The meaning that gave rise to the need for the introduction of punctuation marks, especially the meaning ottenkas, make up a large part of the poetic content. Accordingly, the expressive significance of punctuation marks acquires a special essence and significance in artistic speech than in other forms of speech.

**Key words:** punctuation marks, poetics, syntactic unity, atov sentences, artistic-aesthetic purpose, phonopoetic means, poetic content

But it is observed that today's linguistics sees them more in a sentence as a means of formalizing the mutual grammatical-substantive relations of different syntactic units, and that such a view takes on a stereotypical appearance in many. In reality, however, the verbal form of speech is assigned to intonation to define the status and ensure the connection of syntactic units in a sentence, while punctuation marks are used for the purpose of expressing this tone in writing. On this basis, punctuation marks can be said to “formalize” the status of the syntactic unit in writing. This provides evidence that punctuation is, first of all, a means of expression.

The transformation of the pursuit of perfection in the expression of poetic content into a leading trend in artistic creation led to the fact that from the point of view of formal linguistics, punctuation marks that provide a grammatical-substantive connection of syntactic units began to be widely used to represent the most subtle, yet important points of poetic content. As a result, there began to be a lot of cases when strict rules regarding the use of punctuation softened somewhat in the face of the goal of expressing poetic content, and sometimes the end was denied.

In general, the concept of norm is relative, and its variability is normal. “Written speech at the present stage consists of three units of parts: graphics, orthography, punctuation” . From this conclusion, which was made about the components of written speech in 1974, taking as a basis the darkened separated part, it can be understood that the norm indicated for written speech was different by the time the thought was said, and, moreover, the possibility of further renewal was preserved. Therefore, it is necessary to treat such cases as the result of the need for expression, knowing that it is natural to withdraw from the rules for punctuation in artistic speech.

Deliberate deviation from existing norms (with a specific artistic and aesthetic purpose) means of poetic expression in general (phonopoetic means, word repetition, syntactic methods, etc.) as a condition of occurrence, it makes punctuation a means of expression. The situation that perceived the current norms as strict and perfect, as an addressant deviation

(or error), is the norm for the poet who uses it for the purpose of expression. Because the creator consciously carries out this deviation, what he wanted to say was that the reader imposed the transmission on the punctuation mark in which the Fail was used. In linguistics, "the rules of punctuation are drawn up with the intention of making a tenuous statement of thought, feeling in writing... His (punctuation marks - T.T.) with its application, there is also the opportunity to read the text easily and correctly", the recognition itself allows the creator to freely use punctuation marks.

The reader, who is well aware that the content of a literary work is realized on the basis of various means, also sees this as normal to deviations from a holistic norm. Because at the beginning of the reading, the reader prepares himself to read a work of art and approaches it as an unusual, novel, original phenomenon of Bedouin in all respects. It is natural for a student in such a mood to look for content from any other that is encountered at the time of reading and automatically realize the content that is intended to be expressed through the tools listed above. In particular, expressiveness associated with punctuation can also be included in the order of these. It seems that such poetry requires a certain preparation from the reader reading experience.

"Different characters are used to make a sentence by gathering words and saying them together so that the "mind" is comfortable to understand. All of these are suddenly called "Standing signs" or simplex "standing". "This is one of the most concise and appropriate given definitions for what we call punctuation, from which it is not difficult to understand that punctuation is, above all, a means of expression. The definition consists of two important substantive parts. I.e. (a) to form a sentence by summing up the words together; (b) let the "mind" understand conveniently. The goal of making a sentence is to transmit information ("mind"), but it is not enough just to "collect and Bale words together" to transmit informations. Perhaps it is possible to express an opinion with the content combination of words, but how it is transmitted and "conveniently understood" in written speech largely depends on the intonation organized by means of punctuation marks.

The assessment of punctuation marks as a means of expression points to the fact that its possibilities are extremely wide. The role of these signs in the expression of poetic content is just a glimpse of the wide range of possibilities implied. Its most primary function is to formalize syntactic units in writing and to organize the rhythmic-intonation construction of speech. These two processes follow strictly defined generalizing rules. Such a process can be equally observed in artistic speech, as in other forms of speech.

"Entered the twenty, independence - my son,"

the first comma and dash in this stanza formed a tone representing syntactic units, formalizing their syntactic status in writing. Accordingly, these punctuation marks can be said to be a means of expression, but not directly valuable in the expression of poetic content. That is, these punctuation marks served to distinguish one of the few contents that can be understood from the mutual arrangement of words in a sentence. And the activated content, along with other parts, has acquired artistry. The expressiveness of punctuation marks in this place is indirectly realized. (That is, the punctuation mark itself had its effect on the content, not directly, but through the vasmun it was activating.) Without the above two punctuation marks in mind, the stanza converges on a single cross-sectional form to represent a single thought. That is, the lyrical hero is realized that he is transmitting information to his son about the entry of Independence into the twenty. With the use of punctuation marks as above,

however, the sentence takes the form of two cross-sections, and the fact that the Independence is in the twenty and that he is a child to the lyrical Hero (dear, immature in sight, etc.) is understood. In this place, the expressive function of the punctuation mark was carried out before the transmitted information became an artistic phenomenon.

Any appearance of withdrawal from the existing rules associated with the use of punctuation marks can be called individual norms of the author, the voluntary use of punctuation marks. The syntactic unit serving the expression of poetic content and the purpose of organizing intonation is considered as a means of expressing poetic content in relation to the punctuation marks applied. Russian scholars look at the issue as a separate branch, evaluating it as "poetic punctuation", and pointing out that "it does not conform to grammatical rules at all" from the quality of its most important feature. It should be noted that such use should be assessed as a positive "opportunity" only for the poet and prose writer.

Relying on the above, it would be correct to say that while the punctuation marks encountered in the composition of a work of art are all instruments of expression, not all of them are instruments of poetic expression. Such polefunctionality of punctuation is also evidenced by the explanation of "the cytilistic functions of punctuation and the properties of expressing emotionality".

"Punctuation is the sum of the only laws-rules on the application of punctuation marks" from the reason for the above features when the word goes about artistic speech" views such as lose their value. Relying on the above, it will be correct to evaluate the punctuation marks used in poetic speech as a graphic unit and look at it as a means of poetic expression.

The fact that a punctuation mark is a means of expression or a means of poetic expression is characterized by what purpose it is applied, and not by what punctuation it is or in what position it is applied. Accordingly, two important properties of punctuation marks applied as a means of poetic expression:

- a) the choice of the same one of the alternative punctuation marks as a specific goal;
- a) the choice of the same one for a specific purpose among alternative punctuation marks;
- b) it will be appropriate to emphasize the deliberate application contrary to the current norms.

"Punctuation is the sum of the only laws-rules on the application of punctuation marks" from the reason for the above features when the word goes about artistic speech" views such as lose their value. Relying on the above, it will be correct to evaluate the punctuation marks used in poetic speech as a graphic unit, a means of poetic expression.

The first verse of Chulpan's poem "from the book of nature" is after "the spring" "... the punctuation mark is applied. In this place, the sentence "the spring" is at the same time in full harmony with the syntactic unit that we call the "atov sentence", which embodies a certain landscape in front of a person. Once this part is evaluated as a sentence, a dot, interrogative, plural dot, or exclamation mark must be placed at the end of the sentence. But the poet, after this part, applied one of the alternative punctuation marks, many points, from which, of course, a certain artistic goal was intended. The poet at the same time is in no hurry to express his experiences associated with the "the spring". If the sentence was followed by a dot, exclamation, or interrogative mark, the expression goal of the creator would be activated along with the "the spring", and the content would be judged by the reader as a "the spring" in the creator's position. With this, the reader focuses not all his attention on the bruise, but on the contrary, on the second part, which he describes, comments on. In contrast, the



application of a multiple point constitutes the acquisition of a certain tin between the two parts of the stanza (a process that occurs asocially in the mind of the reader aware of the multiple point's applicability positions). The "readability" (reactivation) of a sentence along with multiple points creates conditions for the revitalization of the "the spring" in the reader's imagination. The poet's vision of forming a "personal the spring" in the eyes of the reader is "... clarifies the reason for the use of the punctuation mark.

It should be noted that in the imagination of the reader, the imagination associated with the revived the spring goes beyond the influence of the creator. In addition to having an individual appearance, everyone's brood also has in many cases common features such as peace, calmness, light, warmth, hope for tomorrow, celebration, rejuvenation. The artistic purpose of the creator is to activate in the imagination of the reader not only the spring, but also the above-listed experiences associated with it. With this, the creator achieves his goal of increasing the level of influence, while providing the reader with a picture of the rainbow in his imagination – a picture of "the peaceful sleep of the Earth is disturbed". When compared, the poet, who aims to transmit negative experiences to the reader, first moves it from a neutral state to a positive one, thereby increasing the power of the "the spring".

In conclusion, intonation has great expressive value in any form of speech. In particular, in artistic speech, especially in a lyrical work, its expressive value increases even more.

The problem of expressing intonation in writing is largely eliminated by the feature of punctuation. In general, it is appropriate to explain the introduction of punctuation marks by the need to express intonation in writing. It is used under strict rules in other forms of speech, unlike artistic speech, and it is fully suitable for the nature of the types of speech provided for. In the form of artistic speech, punctuation marks, like other means of expression, also acquire an expressive value in a new way, which causes creativity, imagination and experience.

Over time, the introduction of poetic methods of expression into other forms of speech is natural, since humanity always needs expressive perfection.

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# LIMIT THEOREM FOR A STATISTIC PROPOSED BY V. HEFDLING

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**Annotation:** The article first proves a limit theorem for a sequence of random variables called "U-statistics," introduced by V. Hefdling. The proven limit theorem generalizes the result of V. Hefdling's theorem to the case where the number of samples is a random variable. In the theorem, it is not required that the observation results of the sample size  $N_n$  are independent of the  $\xi_i$  where  $(i = 1, 2, \dots)$ ; however, as  $n \rightarrow \infty$  there must exist a sequence of numbers -  $k_n$  with  $(k_n \rightarrow \infty)$  and a positive random variable  $N_0$  such that,  $\frac{N_n}{k_n} \xrightarrow{P} N_0$  is required.

**Keywords:** Generalized statistics, sample size, normal distribution, independence, random variable,  $U$ -statistics, sequence of positive integer-valued random variables, distribution function, symmetry with respect to arguments.

Let us assume that  $\{\xi_i\}$  - is a sequence of independent identically distributed random variables (r.v.). We form a statistic of the form:

$U_n = (C_n^k)^{-1} \sum_{1 \leq i_1 < i_2 < \dots < i_k \leq n} f(\xi_{i_1}, \dots, \xi_{i_k}) = (C_n^k)^{-1} \sum_{(n,k)} f(\xi_{i_1}, \dots, \xi_{i_k})$ , which is commonly referred to as  $U$ -statistics. Here,  $f(\xi_{i_1}, \dots, \xi_{i_k})$  - is some function symmetric with respect to its arguments. We denote:

$$\theta = Mf(\xi_1, \dots, \xi_k), \quad f_m(x_1, \dots, x_m) = Mf(x_1, \dots, x_m, \xi_{m+1}, \dots, \xi_k) \\ (m \leq k), \quad l_2 = Df_1(\xi_1).$$

$U$ -statistics were first introduced by W. Hoeffding [1], and under the condition

$$(H): \quad Mf^2(\xi_1, \dots, \xi_k) < \infty, \quad l_2 \neq 0$$

proved that the sequence of random variables

$$Z_n = \frac{\sqrt{n}}{k\sqrt{l_2}} (U_n - \theta) - \text{is asymptotically normal with parameters } (0,1).$$

Subsequently, various properties of  $U$ -statistics were intensively studied with a deterministic sample size. The limiting behavior of  $U$ -statistics with a random sample size was examined in works [2], [3], and others.

Assuming  $\{N_n\}$  - be a sequence of positive integer-valued random variables defined on the probability space  $\{\Omega, \mathcal{F}, P\}$ , where the sequence of random variables  $\{\xi_n\}$  is also defined.

In work [2] it was proven that if as  $n \rightarrow \infty$  the sequence of random variables.  $\left\{\frac{N_n}{n}\right\}$  converges to one in probability, then

$$P(Z_{N_n} < x) \rightarrow \Phi(x) = \int_{-\infty}^x e^{-u^2/2} du \quad (1)$$

This work also obtained the rate of convergence in the limiting relation (1). In work [3], relation (1) was proven under the condition

$$\frac{N_n}{n} \xrightarrow{p} N_0 \quad (n \rightarrow \infty),$$

where  $N_0 > 0$  – is a discrete random variable.

The present work is dedicated to proving a theorem about the asymptotic behavior of U-statistics with a random sample size. The proven theorem generalizes the result of work [3] to the case when  $N_0$  – is an arbitrary positive random variable.

**Theorem:** Let the conditions (H) and  $(A_0)$  be satisfied:

There exists a sequence of numbers such that  $\{k_n\}$ ,  $k_n \rightarrow \infty$  as  $n \rightarrow \infty$

and a positive random variable  $N_0$  such that  $\frac{N_n}{k_n} \xrightarrow{p} N_0$  as  $n \rightarrow \infty$ . then for any  $A \in \mathcal{F}$ ,

$$P(A) > 0$$

$$P(Z_{N_n} < x/A) \rightarrow \Phi(x) \text{ as } n \rightarrow \infty.$$

Note that for  $k = 1$  и  $A = \Omega$  the theorem coincides with the theorems of Y. Modyorody [5] and Y. Blum, D. Hanson, Y. Rosenblatt [6].

First, we will prove the following lemma.

**Lemma.** If  $Mf^2(\xi_1, \dots, \xi_k) < \infty$ , then for any  $h$  ( $h = 1, 2, \dots, k$ )

$$\delta_h = Dg^{(h)}(\xi_1, \dots, \xi_h) < \infty,$$

where  $g^{(1)}(x_1) = f_1(x_1) - \theta$ ,

$$g^{(h)}(x_1, \dots, x_h) = f_h(x_1, \dots, x_h) - \theta - \sum_{j=1}^{h-1} \sum_{(h,j)} g^{(j)}(x_1, \dots, x_j), \quad (h = 2, \dots, k).$$

Proof of the lemma. By the theorem proven in work [1] for each  $i = \overline{1, k}$  it holds that

$$M(f_i(\xi_1, \dots, \xi_k) - \theta)^2 = \zeta_i < \infty \quad (2)$$

Considering the symmetry of the function  $f(\xi_1, \dots, \xi_k)$  it was proven in [1] that

$$M(f_i(\xi_{\alpha_1}, \dots, \xi_{\alpha_l}) - \theta) (f_j(\xi_{\beta_1}, \dots, \xi_{\beta_j}) - \theta) = \zeta_l, \quad (3)$$

where  $l$  – is the number of common indices among  $(\alpha_1, \dots, \alpha_l)$  and  $(\beta_1, \dots, \beta_j)$ . Since

$Mg^{(h)}(\xi_1, \dots, \xi_h) = 0$ , it follows from (3) that  $\delta_h$  can be expressed as a linear combination of the quantities  $\zeta_1, \dots, \zeta_h$ . Hence, from (2) we obtain that  $\delta_h < \infty$ .

Next, for convenience, we will state one theorem from [1] and some known lemmas.

**Theorem [1].** Let's assume that  $Mf^2(\xi_1, \dots, \xi_k) < \infty$ . then

1) the following decomposition holds:

$$U_n = \theta + \sum_{h=1}^k C_k^h V_n^{(h)} = \theta + k V_n^{(1)} + R_n,$$

where  $V_n^{(h)} = (C_n^h)^{-1} \sum_{(n,h)} g^{(h)}(\xi_1, \dots, \xi_h)$ ,  $R_n = \sum_{h=2}^k C_k^h V_n^{(h)}$ ;

2) for each  $h = \overline{1, k}$  the sequence of random variables

$S_n^{(h)} = C_n^h V_n^{(h)}$  is a martingale.

**Lemma 1 ([5]).** Let  $\{\mu_n\}$  – be a sequence of r.v. and  $\mu_0$  – be some r.v. such that

$$\mu_n \xrightarrow{p} \mu_0 \quad \text{as } n \rightarrow \infty.$$

Let  $a, b$  ( $a < b$ ) be points of continuity of the c.d.f.  $P(\mu_0 < x)$ . Let's assume that

$$A_n = (a \leq \mu_n < b), \quad A_0 = (a \leq \mu_0 < b).$$

then as  $n \rightarrow \infty$

$$P(\bar{A}_n A_0 + A_n \bar{A}_0) \rightarrow 0.$$



**Lemma 2 ([6]).** Let  $\{\mu_n\}$  - be a sequence of non-degenerate r.v. and  $A_n$  - be some event depending on the r.v.  $\mu_{k_n}, \mu_{k_n+1}, \dots, \mu_{m_n}, \quad (m_n \geq k_n)$ .

Assume that  $k_n \rightarrow \infty$ , as  $n \rightarrow \infty$ .

Then for any  $A \in \mathcal{F}$ ,  $P(A) > 0$

$$P(A_n A) - P(A_n)P(A) \rightarrow 0 \quad \text{as } n \rightarrow \infty.$$

**Lemma 3 ([7]).** Let  $\{\mu_n\}$  - be a sequence of r.v. and  $\mu_0$  - be some positive r.v. such that as  $n \rightarrow \infty$

$$P(\mu_n < x) \rightarrow P(\mu_0 < x)$$

at every point  $x$  that is a point of continuity of the c.d.f.  $P(\mu_0 < x)$ . Then for any  $\varepsilon > 0$  there exist points  $0 < a < b < \infty$  and  $n(\varepsilon)$  such that for all  $n > n(\varepsilon)$

$$P(a \leq \mu_n < b) > 1 - \varepsilon.$$

**Proof of the theorem:** Without loss of generality, assume that  $k_n = n$ . For any  $\varepsilon > 0$  we choose numbers

$$0 < a = b_1 < b_2 < \dots < b_{m-1} < b_m = b < \infty$$

from the set of continuity points of the c.d.f.  $P(N_0 < x)$ , such that

$$P(a \leq N_0 < b) \geq 1 - \frac{\varepsilon}{3}$$

and

$$\max_{1 \leq i \leq m} |b_i - b_{i-1}| = \varepsilon_m \rightarrow 0 \quad \text{as } m \rightarrow \infty.$$

Let us denote

$$\begin{aligned} A_0 &= (a \leq N_0 < b), & A_0^{(j)} &= (b_{j-1} \leq N_0 < b_j), \\ A_n &= (an \leq N < bn), & A_n^{(j)} &= (nb_{j-1} \leq N < nb_j), \end{aligned}$$

where  $N = N_n, n_j = [nb_j]$ ,  $[x]$  - is the integer part of  $x$ . After some straightforward transformations, we obtain

$$\begin{aligned} Z_N &= Z_{n_{j-1}} + \sqrt{N} \left( U_N - U_{n_{j-1}} \right) \frac{1}{\sqrt{N}} + Z_{n_{j-1}} \left( \sqrt{\frac{N}{n_{j-1}}} - 1 \right) = \\ &= Z_{n_{j-1}} + \eta_{Nj} + \gamma_{Nj}. \end{aligned} \quad (4)$$

Let us assume that

$$B_{n1} = \left( \max_{n_{j-1} \leq \alpha \leq n_j} |\eta_{\alpha j}| \leq \varepsilon \right), \quad B_{n2} = \left( \max_{n_{j-1} \leq \alpha \leq n_j} |\gamma_{\alpha j}| \leq \varepsilon \right).$$

Then from equation (4) and the definitions used, it is easy to verify the following:

$$T_n^- \leq P_A(Z_N < x) \leq T_n^+ + P_A(\bar{A}_n), \quad (5)$$

where

$$\begin{aligned} T_n^\pm &= \sum_{j=1}^m P_A(Z_{n_{j-1}} < x \pm 2\varepsilon, A_n^{(j)}) \pm \sum_{j=1}^m P_A(\bar{B}_{n1}, A_n^{(j)}) \pm \sum_{j=1}^m P_A(\bar{B}_{n2}, A_n^{(j)}) = \\ &= \Sigma^\pm \pm \Sigma_1 \pm \Sigma_2, \quad \text{and } P_A(\cdot) = P(\cdot/A). \end{aligned}$$

By Lemma 1, there exists a number  $n_0(\varepsilon)$  such that for  $n > n_0(\varepsilon)$

$$\left| \Sigma^\pm - \sum_{j=1}^m P_A(Z_{n_{j-1}} < x \pm 2\varepsilon, A_0^{(j)}) \right| \leq \varepsilon \quad (6)$$

The sequence of r.v.  $\{Z_n\}$  possesses the property of  $R$ -mixing with a limiting distribution  $\Phi(x)$  [3]. Subsequently, there exists a number  $n_1(\varepsilon)$  such that for  $n > n_1(\varepsilon)$

$$\left| \sum_{j=1}^m P_A(Z_{n_{j-1}} < x \pm 2\varepsilon, A_0^{(j)}) - \Phi(x \pm 2\varepsilon)P_A(A_0) \right| \leq \varepsilon. \quad (7)$$

Since, due to Lemma 3  $P(\bar{A}_n) \leq \varepsilon$ , then from (5) - (7) for sufficiently large  $n$  we have the following inequality:

$$\begin{aligned} \Phi(x - 2\varepsilon) - \Sigma_1 - \Sigma_2 - \frac{\varepsilon}{P(A)} - 2\varepsilon &\leq P_A(Z_N < x) \leq \\ &\leq \Phi(x + 2\varepsilon) + \Sigma_1 + \Sigma_2 + \frac{\varepsilon}{P(A)} + 2\varepsilon \end{aligned} \quad (8)$$

Clearly, for  $n_{j-1} \leq N \leq n_j$

$$0 < \sqrt{\frac{N}{n_{j-1}}} - 1 \leq \varepsilon_m.$$

Now, returning to the reasoning used in (6) and (7), we assert that for a given  $\varepsilon > 0$  there exist numbers  $n(\varepsilon)$  and  $m(\varepsilon)$  such that for  $n > n(\varepsilon)$ ,  $m > m(\varepsilon)$

$$\Sigma_2 \leq \varepsilon \quad (9)$$

To estimate  $\Sigma_1$  from above, we use Theorem [1], resulting in:

$$\begin{aligned} \Sigma_1 &\leq \sum_{j=1}^m P_A \left( \max_{n_{j-1} \leq \alpha \leq n_j} \sqrt{\alpha} \left| V_{\alpha}^{(1)} - V_{n_{j-1}}^{(1)} \right| > \frac{\varepsilon k \sqrt{l_2}}{2}, A_n^{(j)} \right) + \\ &+ \sum_{j=1}^m P_A \left( \max_{n_{j-1} \leq \alpha \leq n_j} \sqrt{\alpha} |R_{\alpha}| > \frac{\varepsilon k \sqrt{l_2}}{2}, A_n^{(j)} \right) = \Sigma_{11} + \Sigma_{12}. \end{aligned} \quad (10)$$

It is clearly visible that

$$\begin{aligned} \Sigma_{11} &\leq \sum_{j=1}^m P_A \left( \max_{n_{j-1} \leq \alpha \leq n_j} \frac{1}{\sqrt{\alpha}} \left| \sum_{i=n_{j-1}}^{\alpha} (f_1(\xi_i) - \theta) \right| \geq \frac{\varepsilon k \sqrt{l_2}}{4}, A_n^{(j)} \right) + \\ &+ \sum_{j=1}^m P_A \left( \frac{n_j - n_{j-1}}{n_{j-1}} \cdot \frac{1}{\sqrt{n_{j-1}}} \left| \sum_{i=1}^{n_{j-1}} (f_1(\xi_i) - \theta) \right| \geq \frac{\varepsilon k \sqrt{l_2}}{4}, A_n^{(j)} \right) = \\ &= \Sigma_{11}^{(1)} + \Sigma_{11}^{(2)} \end{aligned} \quad (11)$$

By Lemma 1 in the expressions  $\Sigma_{11}^{(1)} + \Sigma_{11}^{(2)}$  the event  $A_n^{(j)}$  can be replaced with the event  $A_0^{(j)}$ , that is to say, for any  $\varepsilon > 0$  there exists a number  $n_2(\varepsilon)$  such that when  $n > n_2(\varepsilon)$

$$\left| \Sigma_{11}^{(1)} - \sum_{j=1}^m P_A \left( \max_{n_{j-1} \leq \alpha \leq n_j} \frac{1}{\sqrt{\alpha}} \left| \sum_{i=n_{j-1}}^{\alpha} (f_1(\xi_i) - \theta) \right| \geq \frac{\varepsilon k \sqrt{l_2}}{4}, A_0^{(j)} \right) \right| \leq \varepsilon, \quad (12)$$

$$\left| \Sigma_{11}^{(2)} - \sum_{j=1}^m P_A \left( \frac{n_j - n_{j-1}}{n_{j-1}} \cdot \frac{1}{\sqrt{n_{j-1}}} \left| \sum_{i=1}^{n_{j-1}} (f_1(\xi_i) - \theta) \right| \geq \frac{\varepsilon k \sqrt{l_2}}{4}, A_0^{(j)} \right) \right| \leq \varepsilon. \quad (13)$$

Using initially Lemma 2 and then Kolmogorov's inequality, we find numbers  $n_3(\varepsilon)$  and  $m_3(\varepsilon)$  such that for  $n > n_3(\varepsilon)$ ,  $m > m_3(\varepsilon)$

$$\sum_{j=1}^m P_A \left( \max_{n_{j-1} \leq \alpha \leq n_j} \frac{1}{\sqrt{\alpha}} \left| \sum_{i=n_{j-1}}^{\alpha} (f_1(\xi_i) - \theta) \right| \geq \frac{\varepsilon k \sqrt{l_2}}{4}, A_0^{(j)} \right) \leq \varepsilon \quad (14)$$

Since the expression  $\frac{1}{\sqrt{n_{j-1}}} \sum_{i=1}^{n_{j-1}} (f_1(\xi_i) - \theta)$  has the property of  $R$ -mixing with a limiting distribution (x). we assert that there exist numbers  $n_4(\varepsilon)$  and  $m_4(\varepsilon)$  such that for  $n > n_4(\varepsilon)$ ,  $m > m_4(\varepsilon)$

$$\sum_{j=1}^m P_A \left( \frac{n_j - n_{j-1}}{n_{j-1}} \cdot \frac{1}{\sqrt{n_{j-1}}} \left| \sum_{i=1}^{n_{j-1}} (f_1(\xi_i) - \theta) \right| \geq \frac{\varepsilon k \sqrt{l_2}}{4}, A_0^{(j)} \right) \leq \varepsilon \quad (15)$$

From (11)-(15) for sufficiently large  $n$  and  $m$ , we obtain

$$\Sigma_{11} \leq c\varepsilon \quad (16)$$

(Here and further,  $c$  is a constant that does not depend on  $n, m$  и  $\varepsilon$ ).

It is not difficult to obtain the following inequality:

$$\Sigma_{12} \leq \sum_{h=2}^k P_A \left( \max_{na \leq \alpha \leq nb} \left| S_{\alpha}^{(h)} \right| \geq \frac{\varepsilon k \sqrt{l_2} C_{[na]}^h}{4(k-1)\sqrt{nb}C_k^h} \right)$$

Since  $DS_n^h = C_n^h \delta_n$  and due to Theorem [1]  $S_n^h$  is a martingale, applying Kolmogorov's inequality for martingales gives us:

$$\Sigma_{12} \leq \sum_{h=2}^k \frac{16(k-1)^2 (C_k^h)^2 nb C_{[nb]}^h \delta_h}{\varepsilon^2 k^2 l_2 [C_{[na]}^h]^2} = \frac{c \delta_h}{\varepsilon^2 n},$$

whence for  $n > \frac{c\delta_h}{\varepsilon^3}$  we have

$$\Sigma_{12} \leq \varepsilon . \quad (17)$$

From (10), (16) and (17) it follows that for sufficiently large  $n$  and  $m$

$$\Sigma_1 \leq c\varepsilon . \quad (18)$$

Due to the arbitrariness of  $\varepsilon > 0$  from (8), (9) and (18) we conclude the proof of the theorem.

Following the work of [8], theorems are stated in which the existence of a limiting distribution for a deterministic sequence is assumed, and under corresponding additional conditions, the existence of a limiting distribution for sequences with a random index is asserted. We will call these transfer theorems. Works [9] and [10] are devoted to the study of transfer theorems for sequences of terms in the variational series in cases where independence between the random index and the original sequence of random variables is not assumed (the so-called "dependent scheme"). The theorem we proved is a transfer theorem for  $U$ -statistics in the case of a "dependent scheme."

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## GENERAL, SPECIFIC AND PRIORITY CHARACTERISTICS OF CONCENTRATION AND ATTENTION IN THE EDUCATIONAL PROCESS

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Methodology of primary education chair teacher

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### Annotation

In this article, the improvement of these technologies in terms of the structural content of various concentration training models has been thought about. Also, a one-time study of a topic, section or entire academic discipline, ensuring their solid assimilation; direction of the educational process towards the development of creative activity of students; creating favorable conditions for cooperation between teachers and students, successful integration of theory and practice, and the formation of unique knowledge and skills in students; it is clearly shown that it is necessary to use a set of forms of educational organization that adequately implements the holistic process of cognition

**Key words:** concentration, attention, types of attention, Intensity, pedagogical terminology, creative activity, scientific research, educational day, class-lesson system

### Аннотация

В этой статье совершенствование этих технологий с точки зрения структурного содержания различных моделей тренировки концентрации думало. Также единоразовое изучение темы, раздела или всей учебной дисциплины с обеспечением их прочного усвоения; направление образовательного процесса на развитие творческой активности студентов; создание благоприятных условий для сотрудничества преподавателей и студентов, успешной интеграции теории и практики, формирования у студентов уникальных знаний и умений; наглядно показано, что необходимо использовать совокупность форм образовательной организации, адекватно реализующую целостный процесс познания.

**Ключевые слова:** концентрация, внимание, виды внимания, интенсивность, педагогическая терминология, творческая деятельность, научные исследования, учебный день, классно-урочная система.

Concentration - Latin "con" (cum) - together and "centrum" — Center-the accumulation of something in a certain place.

The word "concentration" (concentration) basically means two:

1. Physics or chemistry: the amount of a substance within a certain amount of volume or mass. For example, the concentration of salt in the solution.
2. Mental focus: concentration of attention in one place, focusing all attention on one task or activity. For example, it is important to have a high concentration in learning a lesson.

Attention is the involvement of a subject's activity in an object or phenomenon. It is a necessary condition for the effectiveness of any conscious activity. Sources of optimal arousal in certain areas of the cerebral cortex form the physiological basis of attention.

Attention is divided into two types:

1. Involuntary (passive) attention. Involuntary attention is generated regardless of the desire of a person under the influence of some external cause. Such attention does not require willpower from a person. The power of the trigger is of great importance to attract attention; for example, the beauty, brightness, sharp smell and other properties of a thing involuntarily attract attention.

2. Optional (active) attention. In voluntary attention, psychic activity is consciously attracted to a certain thing with a predetermined goal. This type of focus requires willpower; therefore, this focus is also known as volitional focus. The entire conscious activity of a person is carried out mainly through the means of voluntary attention.

Attention plays a key role in the process of receiving and processing this information. This involves filtering information using directed attention and excluding information that is not needed.

Concentration, on the other hand, is the process of directing and maintaining a long-term focus on a task or activity. This involves focusing attention on a specific goal and avoiding distractions. Concentration requires achieving and maintaining long-term attraction.

Concentration and attention are processes in close contact with each other. While attention is focused on receiving and processing more information, concentration requires effective management of these processes in the long run. Concentration and attention are important in a person's efficiency, educational process and life. Although they are in close contact with each other, they have their own characteristics. Let's give a broader overview of their commonalities, differences and which one should be given priority.

#### Commonalities

Attention and focus: both concepts are important in the perception and processing of information. They involve human processes of receiving information, directing attention to a point, and filtering information.

Learning process: concentration and Focus are both important in the learning process. Attention is needed to quickly and efficiently receive information, and concentration is necessary to carry out long-term tasks. For example, in a mathematics lesson, attention is important because it ensures the acceptance of new information, but concentration helps in solving long-term issues.

#### Differences

Duration: attention is often short-lived, requiring attention to a specific task. Concentration, on the other hand, is long-term and requires long-term attention retention to complete a given task. .

Intensity: attention can change quickly and focus on multiple tasks at the same time. Concentration, on the other hand, requires a fully focused focus on one task.

Ingredients: attention is a component of concentration. With the help of attention, it is possible to perform long-term tasks by receiving information and then concentrating.

Which one should be given priority?

Which one should be given priority in the educational process depends on a particular case, both equally important. Because they complement each other. Attention helps to receive information quickly and efficiently, while concentration is important in long-term storage and application of that information. The effectiveness of attention comes from concentration, and vice versa. However, in long-term tasks, concentration should be prioritized, as this ensures

complete completion of the task. Also concentration interprets the primacy in the following types:

**Stability:** concentration requires long-term and stable attention. For example, a researcher can work for several hours or even days to solve a problem, focusing their attention on that problem.

**Persistence:** in the process of concentration, a person must fully focus on a task, without spreading his attention. For example, the photographer Mukhim needs to fully concentrate on his camera in order to capture a moment.

Attention, on the other hand, is in the following aspects:

**Mobility:** attention can change rapidly, which means that a person can focus on several things at the same time. For example, a teacher can answer several students' questions at the same time during the course of a lesson.

**Breadth:** attention can be broad, meaning that students can focus on several things at the same time. This helps them to receive and process different information at the same time in the learning process. For example, in the course of a written work, the reader can both read the information and write down his thoughts.

If we focus on the above - mentioned tariff of concentration concentration-mental attention. This represents the active type of attention.

Research carried out in Kazan in the late 19th century by employees of the RAO SSO Research Institute finally introduced the concept of "concentrated education" into the pedagogical lexicon.

In pedagogical terminology, the concept of "concentrated education" has long been firmly established. It cannot be said that it is used everywhere in the literature on didactics, but it would also be wrong to say that it is not included in the pedagogical thesis. For example, in the 1920s and 30s, it began to be widely used in the description of the method of cyclic teaching in Soviet didactics: "the cyclic system is sometimes called a concentrated teaching system, since the teaching material is concentrated at small intervals". The concept of "concentration" firmly entered the lexicon of scientists engaged in various studies in the 1970s.

The organization of teaching in such a system was considered by many authors and named differently by them. For Example, G.A.Kitaygorodskaya uses the term "intensive preparation". V.G.Anushkin, Yu.N.Kulyutkin, G.D.Glazer on the "education of stsic"; M.P. Shchetinin, G.V.Serkutyev, V.S.Bezrukova-about the "bathing method"; L.Efremenko, G.I.Ibragimov uses the term "concentrated training". Linguistic analysis A.A.The term "concentrated learning", implemented by Ostapenko, in the opinion of many, fully reveals the essence of this pedagogical phenomenon: "combining each topic into blocks, reducing the number of days, aimed at a deeper study of the attention of teachers and students, are disciplines studied in parallel during the week." Conditions and various aspects of this pedagogical Technology M.P.Shchetinin, V.S.Bezrukova, G.I.Ibragimov, N.N.Nozaдзе, G.V.Serkutyeva, N.M.Talanchuk et al.A.Ostapenko was considered in 2014.

While the concepts of "concentrated education" and "concentrated teaching" are related, they have different meanings:

1. Concentrated education:

- This method of education implies intensive study of educational materials in a short time. Students gain in-depth knowledge of a particular subject or field over a period of time.

- For example, Summer Intensive Courses, short-term trainings or special programs.

2. Concentration training:

- This teaching method is carried out by the teacher by focusing the attention and attention of the students in one place. This technique is used for students to better understand and assimilate the material.

- For example, through activities that attract attention, interactive methods or specific strategies.

Thus, concentrated education refers to a short-term, intensive educational process, while concentrated teaching is the sum of methods that ensure the concentration of students ' attention and its effective management.

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## APPLICATIONS OF PROBABILITY THEORY AND MATHEMATICAL STATISTICS TO OTHER DISCIPLINES.

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**ABSTRACT :** This article presents the relationship between Probability Theory and Mathematical Logic and the application of Probability Theory to Mathematical Logic, Binomial Law of Probability Theory and Poisson's Law in economics, physics, biology, chemistry and medicine.

**Key words:** Poisson's law, distribution function, mathematical expectation, variance, moments, correlation coefficient, density function, regression equation.

**Introduction:** The possibilities of probability theory and the science of mathematical statistics are very wide and rich. He boldly penetrates not only physics, astronomy, biology, economics, but also medicine, linguistics, environmental protection, and the study of various phenomena with his verification laws. Acceleration of socio-economic development of the country requires, in turn, complex mathematical calculations to create and launch new technologies.

The science of probability theory studies the forms of existing things in matter (distribution function, mathematical expectation, variance, moments, correlation coefficient, regression equation) in relation to quantitative relationships among other sciences. In the process of studying these quantitative relationships, he uses the methods of scientific research, the methods of intersubjective inductive description.

Studying the applications of probability theory to other subjects will increase students' learning efficiency, help them to get full and solid knowledge, and give better results.

As an example, the application of the binomial law of probability theory and Poisson's law to biology and medicine can be cited.

Example 1. There are 10,000 bacteria in a bucket of water. The probability of the presence of bacteria in a drop of water taken at random is 0.001. Find the distribution law of the number of bacteria in a randomly taken drop.

Solving. We use the Poisson formula.

$$P_n(k) = \frac{e^{-\lambda} \lambda^k}{k!}, \quad \lambda > 0; \quad k = 0, 1, 2, \dots$$

$$n = 10000; \quad p = 0,001$$

$$\lambda = np = 10000 \cdot 0,001 = 10$$

$$1. \quad \text{No bacteria in the drop } P_n(0) = \frac{10^0}{0!} e^{-10} = e^{-10} \quad k=0$$

$$2. \quad P_n(k) = \frac{e^{-\lambda} \lambda^k}{k!}, \quad \lambda > 0; \quad k=1; \quad P_n(1) = \frac{e^{-10} \cdot 10}{1!} = 10 \cdot e^{-10} \text{ there is 1 in the}$$

drop.

$$3. \quad P_n(2) = \frac{e^{-10} \cdot 10^2}{2!} = \frac{1}{2} \cdot 10^2 \cdot e^{-10} \text{ there is 1 in the drop.}$$

Example 2. The probability of spreading the virus in the air is 0.7. Find the probability of a virus appearing in 6 samples (experiment).

$$\text{Solving, } p=0.7 \quad q=0.3 \quad P_n(m) = C_n^m p^m q^{n-m}$$

$$a) \quad P_6(0) = C_6^0 (0,7)^0 (0,3)^6$$

$$b) \quad P_6(1) = C_6^1 (0,7)^1 (0,3)^5$$

.....

$$P_6(6) = C_6^6 (0,7)^6 (0,3)^0$$

The possibilities of the theory of probability and the science of mathematical statistics are very wide and rich. He is boldly entering not only physics, astronomy, biology, economics, but also medicine, linguistics, environmental protection, and the study of various phenomena with his verification laws. To accelerate the socio-economic development of the country, it will be necessary to apply the basic laws of probability theory to create and launch new technologies. Binomial law of probability theory is used in biology and chemistry Poisson's law is used in economics. For example, Example 1.

$Y_t$  –  $t$  – national income in

$J_t$  –  $t$  – net cost per year,

$C_t$  –  $t$  – annual consumption (for defense, education)

that is, the mathematical model of the economic balance

$$Y_t = J_t + C_t$$

given by the formula, the binomial relationship is found.

An example of two. There is a connection between the science of probability theory and mathematical logic, or the application of the science of probability theory to the science of mathematical logic. It is known that the probability of any event

$$0 \leq P(A) \leq 1$$

is known to be in the range; these marginal  $\{0,1\}$  numbers give the probability of an improbable event and the probability of an inevitable event. And in mathematical logic,  $\{0,1\}$  gives the concepts of "false" and "true" reasoning. Based on this, it is possible to solve the problem in both ways using probability theory operations and their schemes, it is possible to apply probability theory.

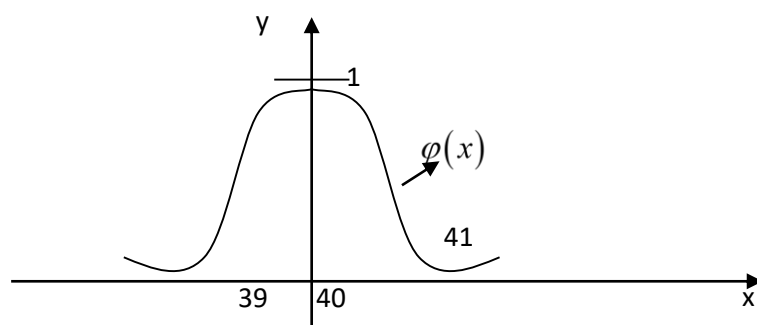
Example 3. Distribution function of a random variable distributed according to the normal law

$$\hat{O}(x) = \frac{1}{\sigma\sqrt{2\pi}} \int_{-\infty}^x e^{-\frac{(t-a)^2}{2\sigma^2}} dt$$

Its density function

$$\frac{d\hat{O}(x)}{dx} = \varphi(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(t-a)^2}{2\sigma^2}}$$

$a$  -mathematical expectation,  $\sigma^2$  -dispersion. There are applications of this density function in the shoe factory as follows  $\varphi(x)$



such a graph is used. At the intersection of the coordinates, size 40 men's shoes, 41, 42, ..., or 39, 38, ..., the length of the ordinate indicates the number of shoes ( $x$  - million).

Size 38 for women and size 36 for children are placed in the center.

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## EFFECTIVENESS OF USING STUDENT-CENTERED METHODS IN LEARNING FOREIGN LANGUAGES

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### ABSTRACT

This paper analyses the innovative and quite interesting methods we have in teaching English language. We may have a number of teaching methods in between traditional and modern. Everybody has their own understanding and conclusions on teaching English language. We have been completely bounded with traditional methods of teaching and understanding where the present day learners felt uncomfortable a bit. Learner's mind will never be static it is ever growing and ever changing. Whatever the teaching methodology can be, but teaching must be learner's centered. However, this paper scrutinizes the difference between traditional and practical teaching and thereafter learning. This treatise practically examines that how learners are being affected by the traditional methods of teaching as well, besides it has portrayed that how learners expect teaching and learning process. There has been a misunderstanding between traditional methods and practical methods always. Somehow teachers and learners should agree each other in order to fill the gap between the generations of these methods.

**Key words:** Renaissance; orthodox; integral; inquisitive; agitated; jeopardizing; immerse; atmosphere; intuitively; evaluated; database; anagrams; hangman; elocutions; tedious; precautions.

### Introduction

English, the official language of the entire world is a very tricky language to teach. In fact, every language varies to teach. English is a very old language and has undergone many forms changes from Proto English derived from the Latin and the German culture to the Modern English which was established after in the post Renaissance period. Each version was simpler than it's previous. Present day English is the simplest adaptation of a very old Language and yet it is still difficult to teach this language effectively especially to those who speak English as a second language.

### Problems with current methodologies

In today's world English is taught in a very orthodox manner. The basic teaching is needed. Teaching the alphabets and the formation of the words is essential and a must. But there is something that is even more important. The children must be able to speak the words and understand their meaning before writing them down. The foundation to teach English can only be taught using the orthodox methods of teaching the alphabets and the



words and the rules. But then teaching only the rules is found to be boring by most students and it is

because of this that they lose interest in learning the language. Although there is no way other than the traditional one to teach the basics of the language these methods must be tweaked a bit so as to appeal to the students. When it comes to teaching English to students of higher classes who already know the basics the traditional methods generally tend to yield poorer results than innovative methods. This has already been proven by methods implemented like use of stories, poems, movies, books and newspapers etc. These methods help the students learn the language better without them actually realizing and also it keeps their interest. This paper will provide a few of such methods to teach English Language.

### **Enacting the stories**

Stories form a very integral part of teaching a language. These stories help teach the students about the formation of sentences and how to express their thoughts and a lot of other things and plus they help in keeping the students interest alive as the story's end is something that every student wants to know. It appeals to the inquisitive nature of the students. Any unfinished story always keeps the mind of the reader agitated. Although this method of using stories has been implemented the procedure of teaching the language through it is generally not right. The evaluation procedure of testing the students in their proficiency over the language is through questions based on the story. This is generally not that effective. Due to this the students generally tend to take up the stories as a chapter rather than looking at it as an interesting read. A story is supposed to appeal to the creative part of the brain. It helps us be more imaginative, by trying to visualize the things that are happening inside the story. It should not only teach them the language but it should also help them in extracting a lesson from the story. Keeping questions for evaluation kills the entire idea of imagination for the students look at the story as something that they need to learn for answers.

There is a better way of using the stories to English using stories. The students can enact the stories or the plays. In this way the students are personally engaged with the stories. They can bring their own interpretation of the character to life. It is interesting for the students to understand the characters and put themselves in their positions. It engages their creativity by allowing them to create the entire set, assign the characters and play it out according to what they had imagined. It also helps them understand other people

interpretation of the story and helps them have a healthy conversation about it which again helps them in learning the language. It removes the dull aspects and makes the learning more colorful without jeopardizing the learning of the language. It may not be perfect but it will leave a deep impression on their mind.

The story will help them learn the language as they will be enacting it by dialog which they will themselves extract from the stories and also modifications can be made to the plays to help the students be more interactive and creative. They can add more lines, characters, change the ending, and bring in an interesting twist etc. The more creative the modification, more are the points awarded to the team. This also leads to personality development and helps them work as a team player and all the way the student was learning the language.

For example if Julius Caesar was taught using the traditional methods of questions and answers the student would never understand the deep emotions of Brutus, the cunningness of Cassius, the loyalty of Antony, the tragedy of war, the brilliance in Antony's speech and many other such aspects of the story for which the story of Julius Caesar was written by Shakespeare. Similar is the case with all great stories such as Christmas Carol, Harry Potter, and all the epic stories. Emotions help define the story and they form a very important aspect of the language and one's personality. If these emotions are left out then it would be very difficult to express ourselves. On the other hand if such stories are enacted then every intention of the story becomes clear.

The students have to immerse themselves into the atmosphere of the story and they have to put them in their positions. This entire process has many benefits besides being a very effective method of teaching the language; it helps preserve the literature, which is nothing but our culture. This method brings about the total learning experience that was meant to be provided by the story and in the end the student will definitely be able to answer questions without even preparing for it as an exam, besides the entire process is fun and not at all boring.

Hence it ensures the learning process is complete.

### **Teaching through conversations**

Conversations are by far the most useful ways of teaching the language. When a child learns his or her mother tongue it is by the conversations that takes place between them and others or by listening to the conversations made by the others. The child is never taught the language but is still able to percept the meaning and learns it automatically to use it in day to day life. No one ever teaches the kid the characters of the language or how to make sentences or the grammar of that language. The conversations alone teach the children.

Hence conversations form a very important part of the teaching process. The sentence construction and the grammar is not something that can be entirely taught by rules. They have to be taught intuitively. That can only happen through a lot of reading and a lot of listening. This can be taken care of easily as every conversation needs a topic. The topic can be given to the students in form of written documents which they have to first read then form an opinion and then have a conversation about it or it can be spoken out and then they can listen, understand and also take part in the conversation.

The participation and other aspects of the conversation can always be evaluated through points which will also push the students to take part in the conversation. These conversations have to be general. They have to happen as if friends are talking to each other. This way the students are comfortable in expressing themselves in the best possible way. This process may take some time but in the end it would be the most efficient one in teaching the language.

### **Teaching through games**

This is a very interesting method of teaching. Students and children generally tend to like games and want to play them more and more. Traditional methods dictated for study and games to be separate but the fact remains that the students tend to be more interested in playing games rather than sitting down to study. Any logical reasoning would dictate us to combine the two aspects to solve the problem. The games part of learning would help the students keep their interest as the desire to win is very strong. It keeps us going and when included with different aspects of learning the learning process would continue almost throughout the day without the children getting tired or bored of studying.

**Word games**

The most important part of any language is the vocabulary. To understand the meaning of the words and to use them in day to day life is a very difficult task and games can help the students overcome this difficulty. Games like scrabble, housie etc. have been designed for this specific purpose. These games are just based on words and help the students develop their vocabulary. In addition to these very simple games can be played to help improve the word database of the students such as simple dictation competitions, synonym competitions, words puzzles, anagrams and hangman. All these games are very addictive and help a lot in improving our vocabulary as whenever the student hears a new word the first question that comes up is "what is its meaning?" and in this way the vocabulary improves and most of the times we don't even have to consult the dictionary.

**Competitions**

Most of the times competitions like debates and elocutions also help the help the students a lot in learning the language as the aspect of the competitions keep them at the best in conversations. It forces them to use the best possible construction of sentences to put forward their opinions and to use good vocabulary etc.

This is a very important tool in helping them learn the language. Also these competitions help them address large crowds which is again is a very important part of personality development.

**Creative assignments**

Up till now most of the techniques that we discussed required a greater amount of effort on the student's part. This method requires effort on the teacher's part. Assignments help the students learn something on their own and most of the times they have to research on something then write something up on it. This method although effective is most of the times very tedious. This method of approach is very appropriate for sciences and engineering although when it comes to languages the students should be given assignments in which they have to modify something that already exists.

If the students are just given assignments like „write a story or a poem or a report“ then most of the students crack because not everyone can come up with a story or even if they come up with one they cannot write it down. In such case the students should be given the base knowledge and data and then ask them to modify the data for example the students can be given a base story and then ask them to modify a part of it.

This engages their creativity and also helps them overcome their difficulty of writing. Above all it lifts the pressure of creating completely new. Invention is very difficult especially when we are being forced to do it. In this way the students are not forced to complete the assignment and then they can do it whole heartedly and hence complete the learning experience that can be gained from the assignment.

**Help from the multimedia**

Multimedia sources like songs, movies, TV series, magazines, newspapers play a very vital role in improving our language. We don't even realize that they have helped us. We just wake up one fine day and realize that we are better than it than we were yesterday. Such sources can be used to help the students improve their language. But great precautions must be taken. This method should be used in the final stages of learning as that is the only place where there is no scope of damage as most of the movies and songs etc. use colloquial

English most of the times which is grammatically wrong and it is very important that the students understand that fact so that they do not use that form of the language in their everyday usage.

Apart from that this source is very helpful as it does not feel like education. This is something that the students will do in their spare time. The songs are the best way to communicate how to use a language to express our feelings. Movies are a very common past time but apart from that most of the times they are also very instructional and educational.

Also this method appeals to the students as most of the times they are able to connect with the songs and the movies which help them understand the meaning of expressions, usage of tools of the language like comparisons, personifications etc. These sources help them understand why such tools are necessary and also help them understand their usage.

Hence this method is again very effective in teaching the language. Traditional methods of reading newspapers and books, novels are also very good methods to teach the language. When the traditional methods are modified along with some innovative ideas the entire learning and the teaching process is enriched and guarantees a success in efficient learning. These are some of the innovative and creative ways of teaching the English Language.

### Conclusion

The languages play a very important role in our lives. They help us express our emotions. They help us explain what we want. They help us to communicate and hence are the prime tools to express who we are. Thus the knowledge of a language and its proper utilization is very important as it defines us. If languages were not there to help us communicate there would be no difference in our communications and the way the animals communicate. Hence the ways the languages are taught play a very vital role in a person's life.

Since English is the official language of this world it is of utmost importance that this language has to be taught in such a way that it will help us not just to speak and write and listen but to communicate. That is the purpose of the language and that is what it must be used for. Hence innovative methods help in bringing a change and most of the times for the better. It helps the students learn faster and in an efficient, interesting and an interactive manner and it is the teacher's responsibility to leave the traditional methods and make way for new and better methods for the students benefit.

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## THE ACTIVITIES OF THE INTERNAL AFFAIRS BODIES TO COUNTERACT THE COMMISSION OF CRIMES BY MINORS: ANALYSIS, PROBLEMS AND WAYS TO ELIMINATE THEM

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**Abstract:** The article considers in detail a number of targeted measures to counteract the commission of crimes by minors, which are one of the main activities of internal affairs bodies, the implementation of preventive measures against them and the protection of the rights of minors. In particular, early prevention of offenses among minors and youth; raising legal awareness and legal culture of minors; Large-scale systematic work on the protection of their rights was analyzed and opinions were expressed on further liberalization of criminal penalties imposed on them, prevention of juvenile crimes.

**Keywords:** minors, juvenile offenses, prevention of juvenile crimes, guarantee of the rights of minors.

To date, a number of targeted measures are being implemented in our republic to counteract the commission of crimes by minors, implement preventive measures and protect the rights of minors: early prevention of offenses among minors and youth; increase legal awareness and legal culture of minors; further liberalization of criminal penalties imposed against them, protection of their rights and freedoms; large-scale systematic work is being carried out.

In our country, developed on the principle of “From an action strategy to a development strategy”, the priority is to turn the principles of justice and the rule of law into the most important and necessary condition for development In order to fulfill the tasks in the development strategy of the New Uzbekistan for 2022-2026 and the state program for its implementation in the “Year of Glorification of Human Value and active Mahalla” it is necessary to conduct research on the study and prevention of juvenile delinquency, which indicates the need to study this topic.

Despite the ongoing work to ensure the rights and legitimate interests of the child, the number of crimes committed by minors remains significantly unchanged.

In particular, due to the insufficient organization of preventive measures by psychological inspectors for minors, together with preventive inspectors, mahalla activists and educational institutions, in 2022 the number of crimes committed by minors amounted to 2,404 (2,404/2262), an increase of 142, or 6.3 percent, compared to the same period last year.

The largest weight of crimes committed falls on the share of Ferghana – 67.7% (1st place), Tashkent city - 12.8% (2nd place), Tashkent –10.6% (3rd place), Namangan 7.1% (4th place) and Surkhandarya 5.9% regions.

Minors committed crimes such as 1,162 burglaries, 171 hooliganism, 137 frauds, 78 robberies, 74 grievous bodily harm, 42 rapes, 29 carjackings, 21 robberies and 10 murders.

In the context of the mahalla, the largest number of crimes among minors was registered in the mahalla "Oybek" of the city of Fergana - 17, in the mahalla "Sunbula" of the city of Kokand -13, in the mahalla "Uchkuprik" Uchkuduk district – 9, in the mahalla "Uchkuduk" of Chirchik city – 9, "Kamolot" of Chirchik city, "Wakf Chorsu" of Kokand city, "Yangiabad", "youth" of Ferghana city – 8, in the mahalla "Marifat" – 8, in the mahalla "Gulistan" of Termez city - 7, in the mahalla "Abad" of the city of Kokand - 5.

For example, on the night of March 2, 2022, a student of school No. 28, owned by MTB of the city of Kokand, born in 2007.t. citizen A., who was on the territory of the mahalla "Wakf Chorsu", broke a window in a retail store owned by B and stole electronic cigarettes for 300 thousand soums, a surveillance camera for 800 thousand soums and money for 300 thousand soums, causing material damage.

The causes of crimes, insufficient organization of preventive measures conducted by psychological inspectors for minors together with territorial inspectors of prevention, activists of the mahalla and the school administration, untimely participation of A minor in classes, participation in various sports or craft or similar target groups for meaningful leisure, as well as, as a result of neglect of parents or persons, their The basis for the commission of this crime is being created.

As a result of the proper and insufficient organization of preventive measures, legal propaganda among students of secondary schools conducted by psychological inspectors in the republic, 2,404 crimes committed during 2022 involved 2,089 schoolchildren compared to the same period last year.

Today, as a result of improper organization of preventive work with minors who are on preventive registration in the internal affairs bodies, especially with previously convicted persons, they are allowed to re-commit crimes.

At the same time, the identification and registration of persons prone to committing offenses and crimes on the ground is sharply increasing, as well as the commission of crimes by certain categories of persons as a result of improper targeted preventive measures with them.

By Decree of the President of the Republic of Uzbekistan No. 5050 dated April 2, 2021, positions of inspectors-psychologists for minors consisting of 2,000 staff units were introduced in district and city internal affairs bodies (currently these states have been transferred to the National Guard) and the places of their direct service in secondary educational institutions have been determined.

As a result of preventive measures carried out by psychological inspectors in 2022 with 89,098 students with difficult upbringing, 62,312 have changed for the better.

However, in Tashkent 5,203, Karakalpakstan 3,527, Andijan 3,511, Samarkand 2,445, Tashkent region 2,427 and Ferghana 2,357, preventive measures with students with difficult upbringing have not changed for the better due to improper organization.

The crimes committed by schoolchildren were analyzed in the context of schools for 3 years and attached to the senior staff of the internal affairs bodies in 2,155 schools whose students committed crimes. In respect of 29,583 parents who did not fulfill their obligations, administrative measures were taken in accordance with article 47 of the Administrative Code. 1,321 minors left without parental care were provided with social and legal assistance with placement in Social and Legal Assistance Centers.

Currently, in 6 months of 2024, 1113 of the minors placed in social and legal assistance centers were returned to their parents or persons replacing them, 4 were placed in a republican educational institution for boys, 6 - in family orphanages, 114 - in guardianship and guardianship authorities, 11 - in specialized educational institutions.

Based on the above, in order to further improve the social legal protection of minors, we considered it advisable to make the following proposals:

1) development of indicators to determine the mechanism for allocating budgetary funds to social and legal assistance centers for specific social purposes, as well as the effectiveness of their use;

2) expanding the practice of financing socially oriented projects by centers of social and legal assistance by allocating a clearly oriented social order from the form of a state grant;

3) an increase in the volume of implementation by the management bodies of the Ministry of Internal Affairs through the centers of social and legal assistance of the tasks and functions performed;

4) provision of social and legal assistance in the preparation of training programs and manuals on the discipline "Crime prevention" coverage of the activities of the centers, organization on its basis of continuous special training courses for representatives of government agencies and civil society institutions;

5) the introduction of the practice of organizing, together with civil society institutions, annual public hearings of the heads of social and legal assistance centers on issues related to ensuring the protection of the rights and legitimate interests of minors, the Public Chamber and the territorial Chambers of Communities;

6) support the specialization of social and legal assistance centers and stimulate the activities of the staff of this institution.

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## ANALYSIS OF THE ONGOING REFORMS IN THE INVESTIGATIVE SERVICE OF THE INTERNAL AFFAIRS BODIES

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### АННОТАЦИЯ

Ушбу мақолада муаллиф томонидан сўнгги йилларда ички ишлар органлари тергов хизматида амалга оширилган ислохотлар хусусан шахснинг ҳуқуқ ва эркинликларини ишончли ҳимоя қилиш, тергов соҳасига ахборот технологиялари, халқаро стандартлар ва илғор хорижий тажрибани жорий этиш каби бир қатор ислохотлар ўрганилиб таҳлил қилинган. Таҳлил асосида тегишли хулосалар қилинган.

### АННОТАЦИЯ

В данной статье исследован и проанализирован ряд реформ, проведенных автором в последние годы в следственной службе органов внутренних дел, в частности надежная защита прав и свобод личности, внедрение в сферу расследования информационных технологий, международных стандартов и передового зарубежного опыта. На основании анализа были сделаны соответствующие выводы.

### ANNOTATION

This article examines and analyzes a number of reforms carried out by the author in recent years in the investigative service of the internal affairs bodies, in particular, reliable protection of personal rights and freedoms, the introduction of information technologies, international standards and advanced foreign experience into the field of investigation. Based on the analysis, the relevant conclusions were drawn.

**Калит сўзлар:** тергов, тергов бўлинмалари, ахборот технологиялари, ички ишлар органлари, ҳуқуқ ва эркинликлар.

**Ключевые слова:** следствие, следственные подразделения, информационные технологии, органы внутренних дел, права и свободы человека.

**Keywords:** investigation, investigative units, information technology, internal affairs agencies, human rights and freedoms.

It is known that a person, his life, freedom, honor, dignity and other inalienable rights and freedoms are considered sacred and guaranteed by the State by law.

Over the past period, many changes and additions have been made to criminal legislation in our country aimed at liberalizing the system of criminal penalties, in particular, differentiation and individualization of responsibility, expansion of alternative types of punishment to imprisonment.

Only when the rule of law is ensured will the idea of “for the sake of human dignity” be fully reflected in our lives. It is expected that the Oliy Majlis and the Message of the Head of our country to the people of Uzbekistan will serve to radically improve the lives of our people.

The main goal of this message is to ensure the protection of human rights by improving legislation in any way. Indeed, human value begins with freedom, and the fruit of our reforms

in recent years also reflects the image of humanity. This appeal set the highest priorities in many areas, including taking another important step towards judicial and legal reform.

In general, in subsequent years, the reforms of the internal affairs system also acquired a dynamic character, in connection with which many decrees, resolutions and departmental normative legal acts were adopted. Concepts and programs have been developed and implemented.

In particular, in order to reliably protect individual rights and freedoms, introduce information technologies, international standards and advanced foreign experience in the field of investigation, a number of reforms were carried out in the investigative service.

In particular, a working group of industry specialists has been formed in the Investigative Department of the Ministry of Internal Affairs, a modern methodology for investigating crimes related to fraud, illicit trafficking in psychotropic substances, human trafficking and theft in a widespread virtual space has been developed and put into practice.

Since September 2021, an "innovative virtual Investigative polygon" has been created in all territorial investigative departments, which is now being effectively used to enhance the experience of investigators and interrogators.

During court sessions, investigators and interrogators acquire appropriate skills in understanding and eliminating shortcomings that may be made during the investigation.

In order to identify the causes of crimes and the conditions that allow them, prevent crimes, reduce the risk of turning citizens into victims and increase their legal awareness and legal culture, the Investigative

Department and units of subordinate investigative bodies conduct open dialogues and meetings in mahallas and educational institutions. In order to increase the professional potential of employees, the Ministry adopted a resolution dated March 30, 2021 "On measures to further improve the system of continuous professional development of employees of investigative departments of internal affairs bodies".

The Investigative Department has organized weekly Saturday training sessions in videoconference mode with the participation of territorial divisions, while on Fridays and Saturdays of the week, the Investigative Department conducts training sessions for 30 young investigators and interrogators of the republic.

In continuation of the reforms, in order to train qualified personnel in the field of crime investigation, Decree No. UP257 of the President of the Republic of Uzbekistan dated November 28, 2022 "On the introduction of a qualitatively new system of training qualified personnel in the field of crime investigation" was adopted.

This Decree establishes that investigators and interrogators are trained at the law enforcement Academy in courses of professional retraining, professional retraining and advanced training in the form of primary specialization.

We are now living in a turbulent information age. Today, it is necessary for the information services of government agencies to become a leading force in providing people with timely and reliable information.

Based on these requirements, the official website has been launched "Tergov.uz" Facebook Instagram and Telegram social media pages have been opened on the you tube website, and direct communication with individuals and legal entities has been established. At

the same time, a new platform has been created that can communicate directly electronically with the head of the investigation department.

Through this system, a direct transparent dialogue with citizens is established, most importantly, vagrancy of citizens is prevented. In order to organize the participation of suspects and accused persons held in pre-trial detention facilities in investigative actions through a video conferencing system together with the Supreme Court of the Republic of Uzbekistan, investigative units were connected to the video conferencing platform provided by UZTELECOM JSC.

Thus, the practice of participation of suspects and accused persons held in pre-trial detention facilities in investigative actions through a video conferencing system has been established.

In addition, cases of application of procedural coercion measures that restrict individual rights are included in the unified electronic accounting system. The introduction of this system into practice made it possible to keep electronic records of the application of procedural coercion measures to suspects or accused persons that restrict their rights, and monitor them online.

In recent years, significant work has been carried out in our country to introduce modern information technologies in the judicial and legal sphere. In particular, thanks to the digitalization of the activities of judicial and law enforcement agencies, their openness and transparency have been ensured, and close cooperation has been established with civil society institutions, the media and the general public.

In order to further digitalize investigative activities and establish a unified electronic document management system in pre-trial case management, the Decree of the President of the Republic of Uzbekistan No. PP-105 "On measures to introduce a unified system of interdepartmental electronic interaction in pre-trial case management" was adopted.

In accordance with the resolution, an operational information exchange has been established between 29 State bodies and organizations to ensure prompt receipt of information necessary for the consideration of applications, reports and other information about crimes at the stage of pre-trial proceedings in the case and conducting an inquiry and preliminary investigation in a criminal case.

These reforms are designed to raise the activities of the investigative units of the internal affairs bodies to a qualitatively new level. Currently, the internal affairs bodies are training, retraining and advanced training of investigators and interrogators, taking into account the personnel of investigative units and the weight of criminal cases, as well as further improving the effectiveness of the activities of internal affairs bodies to investigate crimes:

- to contribute to the improvement of the knowledge of investigators and interrogators in the field of information technology, the widespread introduction of specialized training programs on the methodology of disclosure and investigation of cybercrimes, acceleration of training in these areas;

- continuation of the construction of additional special premises in investigative units equipped with audio and video recording systems of investigative actions;

- travel to the regions, critically review the investigation and investigation process and study the positive experience and apply it in other regions;

- considering that the bulk of the personnel of the investigative units are young employees, improving their professional and practical skills through distance learning of employees using a video conferencing system implemented between the Investigative Department and its territorial divisions, as well as involving relevant specialists directly in the territorial investigative departments;

- further acceleration of direct dialogue with citizens, a sharp reduction in the number of appeals by timely and prompt provision of appropriate explanations on issues of interest to them;

- The main goal is to prepare and introduce draft laws in accordance with the established procedure to eliminate gaps and contradictions in legislation and improve criminal, criminal procedure and administrative legislation.

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Decree of the President of the Republic of Uzbekistan No. PP-105 "On measures to introduce a unified system of interdepartmental electronic interaction in pre-trial case management".







## THE GOAL OF IMPLEMENTING GENDER EQUALITY IS TO ACHIEVE SIGNIFICANT RESULTS

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**Abstract:** this article discusses the problems of gender equality in our country and their solutions. At the same time, the development and progress of management in the relations between men and women in the management of society and state affairs, as well as the tasks, relevance and importance of the gender equality strategy were analyzed and the need for further expansion of gender equality was revealed.

**Key words:** oppression, violence, openness, gender equality, strategy, politics, economy, women, men, society, law.

In recent years, achieving equal rights and opportunities for women and men, ensuring their equal participation in the management of society and state affairs, supporting women from a socio-legal point of view, as well as preventing women from oppression and violence Wide-scale reforms aimed at protection from violence are being implemented.

Legality, democracy, openness and transparency are the main principles of ensuring gender equality.

Within the framework of the gender strategy, the concept of gender equality means the equality of rights and opportunities of women and men in all spheres of life and activity, including politics, law, culture, education, science, and sports.

The main goal of the gender strategy is to ensure real equality of women and men, regardless of race, nationality, language, religion, social origin, faith, personal and social status.

What is gender equality?

What is gender equality? equality between men and women is one of the basic human rights. Also, gender equality is the basis of economic and social development. The concept of "gender" was introduced into our national legislation by the Law of the Republic of Uzbekistan "On Guarantees of Equal Rights and Opportunities for Women and Men" dated September 3, 2019, according to which gender means women and girls. It is a social aspect of the relationship between men that is manifested in all spheres of society's life and activity, including politics, economy, law, ideology and culture, education and science.

Also, with this law, gender statistics - state statistics containing information on the status of women and men in all spheres of public life and activity, separately for each gender, of individuals of different genders. the part that reflects the relevant situation in all spheres of socio-political life, sheds light on gender issues and relations in society, gender-legal expertise - normative legal documents and their drafts guaranteeing equal rights and opportunities for women and men Concepts such as analysis of compliance with the principles of provision have also been included in our legislation.

Article 1 of this law states that the purpose of this law is to regulate relations in the field of ensuring equal rights and opportunities for women and men. powers in the field of

provision, guarantees of equal rights and opportunities for women and men in the field of public service, equal participation of women and men in competitions for holding positions in the public service, election guarantees of equal rights and opportunities for women and men in the exercise of their rights, guarantees of equal rights and opportunities for women and men in the economic and social spheres, guarantees of equal rights and opportunities for women and men in labor relations, family relations and child upbringing. Guarantees of equal rights and opportunities for women and men, guarantees of equal relations in the performance of housework are established in the field.

Also, in this law, if a person believes that he has been directly or indirectly discriminated on the basis of gender, he has the right to appeal to the competent authorities or the court, in which the state duty is not charged to the person who has been directly or indirectly discriminated on the basis of gender, women and payment of fees for legal services provided by lawyers during the consideration of cases of violation of the equal rights of men in courts in accordance with the procedure established by law, their it is also provided that it will be reimbursed at the expense of the state.

The main tasks of the gender strategy are:

expansion of women's ownership of land and property;

To support the equal participation of women and men in all spheres of society's life and activities, including politics, economy, law, culture, education, science and sports, and to provide equal opportunities for them to take the lead in decision-making. create;

increase the political activity of women, change the negative views related to their place in society;

guaranteeing equal rights and opportunities for women and men in the field of employment, as well as creating decent jobs, developing women's entrepreneurship, expanding women's opportunities to receive loans from commercial banks;

to encourage women and men to study throughout their lives, to increase their medical culture in family planning and to strengthen their reproductive health, to promote a healthy lifestyle among them;

creation of effective organizational and legal mechanisms for combating human trafficking and forced labor, preventing oppression and violence, identifying and eliminating them;

strengthening the family, increasing the responsibility of all family members in family relations, preventing early marriage, marriage between close relatives, early childbirth and family separation;

budget planning in promoting the principles of gender equality, equal realization of the rights and opportunities of women and men, integration of gender issues into budget processes, improvement of gender statistics management;

implementation of comprehensive measures to improve Uzbekistan's position in international rankings and indexes assessing gender equality, women's entrepreneurship, oppression and violence against women and men;

increasing the role of parliament, civil society institutions and media in achieving the national goals of ensuring gender equality in the field of sustainable development and expanding the rights and opportunities of all women;

gender tenglik sohasidagi xalqaro shartnomalardan kelib chiqadigan majburiyatlarning bajarilishini ta'minlash, O'zbekiston Respublikasining milliy manfaatlariga mos bo'lgan xalqaro shartnomalarni ratifikatsiya qilish bo'yicha chora-tadbirlarni amalga oshirish.

Gender equality, that is, the equality of men and women, is one of the basic human rights. Recent studies show that this factor is the basis of the highest level of economic, social and political development. Because according to experts, work teams consisting of 50/50 men and women, especially if they are engaged in mental work, show several times higher results than a team consisting of only men. In addition, gender equality is an indicator of the country's level of democratic development. So, in order to join the ranks of developed countries and attract more and more investments to our country, we should attach sufficient importance to this indicator.

There are issues that require increasing the attention of women in the development of the state and society, socio-economic, education, healthcare and other socio-economic spheres. In particular, it is necessary to ensure the expansion of women's participation in decision-making on current issues of state and community management on an equal basis with men.

**CONCLUSION.** Significant results are expected from the implementation of gender equality. In particular, it expands the practice of appointing women to leadership positions of state bodies in the upper and lower system. By introducing a temporary quota system in state bodies with gender imbalance, balance between women and men is ensured. Providing employment to women in need of social protection and underprivileged families, especially in rural areas, increasing the effectiveness of work on creating decent working conditions and providing them with social support, as well as self-employment. The most important thing is to prevent cases of harassment and violence against women in the workplace, and to end the negative attitudes towards women in the society. Ensuring gender equality, first of all, serves to accelerate the socio-economic and political development of our country, which means to increase the well-being of the people, to solve many problems in society, and to change our daily life for the better.

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## THE PEDAGOGICAL MASTERY OF THE TEACHER IN TEACHING TECHNICAL SUBJECTS

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**Abstract:** This article discusses the pedagogical mastery of the teacher in teaching technical subjects.

**Keywords:** Pedagogical knowledge, competent specialist, art of teaching, person-nel training.

Currently, the successful implementation of the national program for personnel training in our country largely depends on the activities of teachers and the enhancement of their professional reputation. The cultivation of a well-rounded, healthy generation is contingent upon the teacher's level, preparedness, dedication, and attitude toward educating and nurturing the youth within the continuous education system.

The teacher fulfills the social mandate of society; therefore, in preparing highly qualified specialists, they must meet certain social, political, pedagogical, and personal requirements. A teacher should possess a strong belief in the idea of independence, have well-developed scientific thinking, hold relevant qualifications in their profession, and be a deep knowledge bearer of their subject. They must also master pedagogical communication, pedagogical-psychological, and methodological knowledge and skills, quickly resolve various pedagogical tasks, and be able to sense and analyze situations.

Moreover, a teacher should have the ability to select the most effective methods and tools for pedagogical influence. The education of the generation that represents the future of independent Uzbekistan is a delicate and extremely demanding process that requires significant attention. Thus, the teacher must closely observe the development processes of students and learners with enthusiasm and meticulousness. While managing the educational process, the teacher must be a holder of pedagogical knowledge and skills. Only then can they grasp the essence and dialectics of pedagogical phenomena, the methods of pedagogical labor, and the profession and technology of teaching, thus attaining a high level of professional pedagogical mastery. A teacher who possesses pedagogical knowledge and skills must first understand the methodological foundations of pedagogy, the laws and factors of personal development, and the essence, goals, and objectives of the national program for personnel training. Most educators working in the education system have a deep understanding of the necessity and importance of pedagogical mastery in the educational and developmental process.

For this reason, they strive to continuously improve their skills, acquire modern knowledge and experiences that meet today's high standards, and engage in creative work. However, we must also acknowledge that some educators in educational institutions do not fully appreciate the importance of enhancing their pedagogical skills. They show little interest in studying the requirements of the Law on Education and the national program for personnel



training more deeply, and they tend to superficially regard the scientific nature of the educational process, its relevance to contemporary demands, and its connection to real life and practice. They often forget the scientific and ideological unity of the subjects being taught. This leads to an insufficient level of knowledge among students and learners, causing them to fall behind in mastering educational curricula.

When discussing the process of implementing a continuous education system and the need to educate and nurture the younger generation as desired, it becomes clear that this is an extremely complex and multifaceted task that can only be accomplished by teachers with qualified pedagogical mastery.

Thus, teaching is a significant art. This art cannot be easily or automatically achieved by any educator. It requires a strong desire and enthusiasm for the teaching profession, a deep understanding of the demands of the time, and a commitment to consistently enhance one's scientific, social, and political level along with pedagogical mastery. Only those who are equipped with a strong sense of independence, patriotism, and dedication to their work can succeed in this field.

Pedagogical mastery is not an innate talent or a characteristic passed down from generation to generation; rather, it lies in the pursuit of knowledge and creative labor. Therefore, pedagogical mastery is not a standard or one-size-fits-all approach for all teachers; instead, it is formed and developed through each teacher's individual work on themselves and their creative efforts.

In this process, it is essential for other teachers to learn from the pedagogical skills and experiences of an advanced teacher, creatively apply these insights, and enrich their own work with progressive practices. A teacher's pedagogical skill is primarily evident in classroom or lecture hall activities, as these educational sessions are the core of a teacher's role in an educational institution. Therefore, teaching should be scientific, ideologically sound, accessible, and connected to real life and the students' level of preparedness.

In the educational process, there should be lively communication, mutual respect, and genuine relationships between the teacher and students, with collaborative effort to achieve common goals. Lessons, lectures, and other educational activities that are shallow in content, disconnected from practical experience and real life, and filled with general statements and empty moralizing, conducted superficially for formality's sake, do not interest students and fail to provide them with adequate intellectual and ideological nourishment. Thus, educational sessions must be organized in a way that stimulates diverse viewpoints, scientific thinking, and convictions in students, cultivating their intellectual curiosity and engagement with the subject.

The effectiveness of the educational and developmental process depends on the teacher's scientific competence, reputation among youth, personal qualities, scientific talent, experience, pedagogical skills, and friendly relations with students. The effectiveness of a teacher's pedagogical activities is also linked to the extent to which their abilities are developed. Such abilities are formed and refined through activity and include comprehension, explanation, communication, gaining respect, and interpersonal skills.

Pedagogical skill and mastery do not come easily to teachers. Those who choose this profession must continuously study, learn, and search, engage in creative labor, swiftly understand the realities of our independent country, and deeply feel the importance of their work for the nation. When considering a teacher's pedagogical mastery, one must focus on

their awareness, dedication to national values and ideology, breadth of knowledge and thinking, and commitment to their responsibilities. In particular, the broad scope of thinking is crucial in pedagogical skill, as a person cannot attain excellence without comprehensive knowledge and thoughtfulness.

Indeed, individuals solve issues primarily through thought. Therefore, those striving for pedagogical mastery must constantly expand their knowledge and update the ideas and concepts that have a moral and ethical impact on students. For this, they must read and learn extensively. When evaluating a teacher's pedagogical mastery, their ability to organize and deliver high-quality education holds significant importance.

In continuous education, organizing lessons and lectures comprehensively is a primary duty of the teacher. Topics covered at a high level remain in the minds of young people for a long time and influence the formation of their faith, beliefs, and ideology. For this reason, a teacher's scientific competence, attitude toward their responsibilities, passion for mentoring youth, and pedagogical skills are initially reflected in their lessons and lectures. The quality of a teacher's work is often judged by the level of their lessons and lectures.

In mastering the art of teaching, the educational sessions organized by the teacher serve not only as a tool for deep learning but also as a mirror reflecting the growth of independent Uzbekistan, faith in the future, and the capabilities of our people's intellect and hard work. It shows what is necessary to become a worthy citizen and builder of society.

In summary, today it is essential that young people feel thoroughly satisfied with their teacher's lessons. They should be inspired by scientific aspirations, develop their thinking, and nurture a passion for practical work, creative abilities, learning, and labor. They should feel not just grades but a sense of gaining knowledge, skills, and moral nourishment after each session. The meaningful, engaging, and comprehensible nature of education helps connect the hearts and spirits of teachers and students, strengthening mutual respect and trust. For this, teachers must thoroughly master their subjects and teaching methods, exhibit high cultural standards typical of an educator-mentor, respect and love their students, show interest in their lives, understand their emotional state, exercise patience, manage their emotions, and pay attention to personal appearance and attire. They must have a refined speech culture, be active in community activities, and, especially, serve as advocates for scientific, educational, and cultural activities among the public.

Only then will our students, the future of our country, speak of their mentors with great respect and deep gratitude. To achieve this, each teacher, as stipulated in the Law on Education of the Republic of Uzbekistan, must possess the necessary knowledge in their field, demonstrate high professional preparation, and uphold strong moral values.

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## CONCEPT AND CLASSIFICATION OF STATE AWARDS IN THE LEGAL INCENTIVE SYSTEM OF THE REPUBLIC OF UZBEKISTAN

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**Abstract.** The article examines the concept and classification of state awards within the legal incentive system, legal incentive measures for awards, legislation on awards, law enforcement practices, description of the grounds for awards, and characteristics of state awards. Based on this analysis, suggestions and recommendations are provided.

**Keywords.** Legal incentive, legal incentive system, award, state awards, optimization of award policy, grounds for awards, state awards in the incentive system.

Legal incentives are complex in structure. State awards are considered the most important and universal means of incentives. State awards are used to regulate all spheres of public life. The importance of this tool for society is determined by the effective influence of incentives on the consciousness and behavior of individuals.

When discussing awards as the most effective legal incentive, it is possible to highlight aspects that fundamentally distinguish them from other types of incentives (privileges, immunity, etc.): legal incentives are provided for performing socially beneficial legal actions, including conscientious fulfillment of one's obligations and outstanding service.

State awards are one of the important forms of incentives used to ensure the development of all spheres of public life, as well as to strengthen friendly relations between Uzbekistan and foreign countries. The significance and value of incentives are manifested in their positive impact on the consciousness and behavior of specific individuals.

A comprehensive study of state awards is aimed at systematizing existing knowledge about this form of incentives and drawing certain conclusions, including identifying the mechanism of influence in the formation of its active-positive personality traits; developing the main concepts of the analyzed legal phenomenon; justifying the effectiveness of determining the reasons for the absence of influence on the effectiveness of the institution of state awards; identifying the principles of interdependence of its constituent parts, the presence of their characteristic features; developing proposals and recommendations for

At the same time, the analysis of legal incentives helps to show the place and significance of state awards in the system of legal incentives. State awards are distinguished as an independent form of state legal incentives and can be classified as follows: determining the status of legal entities (changing the legal status of the subject of law, content); regulated by the norms of constitutional law (classification by subject of legal regulation); providing additional incentives (classification by benefits); paying only for high service (characterizing the degree of significance) [1. - 16 c.].

State awards are a form (measure) of high positive incentives, associated with great responsibility, fame, and respect. Its transfer will be carried out in an official, solemn manner. The nomination of a worthy candidate for the award is an art necessary in a country that needs heroes. Therefore, awards are a very serious issue and require appropriate state policy.

At the same time, the system of state awards is constantly changing and improving in accordance with the development of society.

In any policy, science, which shapes ideas in various spheres of society's life, is of great importance. In such a stimulating policy, the importance of science is incomparable, it is precisely it that should illuminate the path of this policy, create conditions for its effective implementation.

To optimize the awarding policy and ensure the full development of state activity in this area, an independent discipline and a special subject of study - the law of awards - is required [2. - p. 222].

At the beginning of the 20th century, Russian legal scholar P.A. Sorokin addressed this issue. In his opinion, while the science of crime and punishment (criminal law) had become overly extensive, the science of heroic deeds and rewards, or if necessary, the law of awards, had not even found a place among academic disciplines [3. - p. 77].

According to Professor A.V. Malko, the science of award law gradually contributes to the formation of an independent branch of legislation - legislation on awards. Currently, a sub-branch of legislation is being formed at the intersection of constitutional, administrative, and labor laws, with its general and special parts, as well as the awarding process, taking shape.

Increasing the effectiveness of the state awards system depends on a set of measures that need to be implemented within the framework of the state's incentive policy. In our view, the policy of rewarding refers to the directions of activity carried out by state authorities in the field of recognizing individuals, their collectives, and regions for their outstanding services to society and the state.

The analysis of legislation on awarding, the systematization of law enforcement practice, and the characterization of the grounds for awarding allow for the identification of the following features of state awards: First, they are established by the highest body of state power. In accordance with Article 78 of the Constitution of the Republic of Uzbekistan, the establishment of state awards and titles constitutes the joint powers of the Legislative Chamber and the Senate of the Oliy Majlis of the Republic of Uzbekistan. Second, they are the highest form of official recognition for citizens and other subjects. Third, they are valid throughout the territory of the Republic of Uzbekistan. Fourth, decrees of the President of the Republic of Uzbekistan on the conferment of state awards are announced in the media. Fifth, they have a specific symbolic representation in the form of orders and medals. The Law on the Establishment of Orders and Medals in the Republic of Uzbekistan and the Regulation on Orders and Medals enshrine their external characteristics. Sixth, the factual basis for the presentation of state awards is the outstanding services demonstrated. Seventh, the legal basis for awarding state honors is a factual composition that encompasses a system of legal facts: the achievement of outstanding service results by the subject; submission of a nomination; coordination of the nomination by various state bodies; adoption of a legal act on conferring a specific award to the honored person (organization). Eighth, they change the legal status of the awarded person. In this respect, state awards differ from other types of incentives, such as honorary certificates, valuable gifts, or promotions in service. Ninth, they belong to a specific person.

The efforts of members of society to achieve the tasks and goals facing the state are regularly encouraged. - Б. 69-72. In Uzbekistan, "state awards and honorary titles are the



highest form of rewarding citizens for high merits in the economy, science, culture, art, protection of the Motherland and other spheres of public life" [4. - Б. 471.

The Russian scholar V.M. Duel defines the state award as follows: "A state award is an official form of higher incentive, which is used by a state body to positively evaluate the high service of a certain legal entity, has a certain external symbolic expression (orders, medals) and creates a legal consequence in the form of a lifelong change in the legal status of a subject." - 16 c.].

The prize, as the most important form of moral, state-official approval of the activity of the incentivized subject (characteristics of the awarding process: awarding in a triumphal situation, wide coverage in the media, etc.), as a rule, provides for the provision of certain material goods, benefits to its owners. The combination of moral and material incentives in awards increases its effectiveness, defines priority areas of development, and requires the joint use of incentive aspects (spiritual and material).

Based on the fact that state awards are enshrined in legislation as the highest form of official incentives, it is necessary to study their characteristics, goals, and functions from the perspective of the legal incentive system of the object of study.

At the same time, an analysis of the legislation on state awards shows the presence of factors that negatively affect the functioning of the awards institution. On the one hand, there are cases of legal regulation of state awards, and on the other hand, this issue has not been fully and comprehensively studied from a theoretical standpoint.

State awards are state incentives for socially useful activities. Incentive refers to the public recognition of a person's socially useful activity through awards for their achievements. Individual achievements can be realized in various fields and at different levels. The circle of persons who have achieved such success is also established by law.[5]

Analyzing the concept of "reward," it is assumed that a person is rewarded in the form of gratitude for doing useful work. Awarding is carried out through direct rewarding. Every person, in the course of carrying out their labor activity, profession or specific research, can create discoveries, innovations that are beneficial to the masses, or as a result of sincerely carrying out their labor activity, profession or specific research, achieve results that are socially beneficial to the masses. Those who are recognized as the most acceptable will be awarded state awards. Each incentive shall have the following aspects:

- 1) the beneficiary is financially and morally encouraged; his achievements are publicly recognized and positively evaluated; have a legal character; are carried out by authorized entities in the established order;

- 2) for the legal or public services of the beneficiary.

Generalizing the above, the state award can be defined as follows: the state award is the highest form of awarding citizens for great merits in economics, science, culture, art, protection of the Motherland, state building, education, healthcare, protection of human rights, charitable activities and other services to the state.

Foreign citizens and stateless persons who have rendered services for the Republic of Uzbekistan may also be awarded state awards of the Republic of Uzbekistan. In addition, one person shall be awarded, as a rule, one order, medal or certificate of honor. Honorary titles are also not awarded repeatedly.

According to Article 6 of the Law of the Republic of Uzbekistan dated December 22, 1996 "On State Awards" (with amendments and additions to this Law by the laws adopted on August 28, 1996, August 29, 1999, August 29, 2000, August 29, 2003, December 3, 2004), the presentation for awarding state awards shall be submitted by the Chairman of the Council of Ministers of the Republic of Uzbekistan, the Chairman of the Senate of Ministers of the Republic of Uzbekistan, the Chairman of the Legislative Chamber of the Oliy Majlis, the Chairman of the Constitutional Court, the Supreme Economic Court, the The presentation of foreign citizens to the award is carried out in agreement with the Ministry of Foreign Affairs.

The presentation of citizens to the next award is carried out three years after the previous incentive. In exceptional cases, citizens may be presented without taking into account the time spent on prior incentives. Decrees of the President of the Republic of Uzbekistan on awarding state awards shall be published in the mass media.

Article 2 of the Law of the Republic of Uzbekistan "On State Awards" states that the title of "Uzbekistan Hero," "Orders, medals, honorary titles and the Certificate of Honor of the Republic of Uzbekistan are considered state awards."

The title of "Uzbekistan Hero" and the medal "Golden Star" were established as a high-level award in the Republic of Uzbekistan. According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated May 5, 1994 "On the establishment of the title of "Uzbekistan Hero" and the establishment of the Supreme Decoration - the medal "Oltin Yulduz," the title of "Uzbekistan Hero" is a high-level award and is awarded to citizens of the Republic of Uzbekistan for their heroic service to the state and the people.

Article 11 of the law lists the orders of the Republic of Uzbekistan, which are: the Order of "Mustakillik," the Order of "Amir Temur," the Order of "Jaloliddin Manguberdi," the Order "Buyuk xizmatlari uchun," the Order of "El-Yurt Hurmati," the Order "Fidokorona xizmatlari uchun," the Order of "Mehnat Shuhrati," the Order of "Soglom Avlod uchun" of I and II degree, the Order of "Shon-sharaf" of I and II degree, the Order of "

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan "On the Establishment of the Order of Independence" dated May 5, 1994, the Order of Independence is awarded to citizens of the Republic of Uzbekistan for their significant contribution to the establishment and strengthening of an independent state of law, ensuring peace and development in the republic.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated April 26, 1996 "On the Establishment of the Order "Amir Temur," by this order, citizens of the Republic of Uzbekistan are awarded for outstanding merits in strengthening statehood, outstanding contributions to the development of architecture, science, literature and art, including military skills.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated August 30, 2000 "On the Establishment of the Order "Jaloliddin Manguberdi," this order is awarded to military personnel who have demonstrated high military skills, heroism and courage in protecting the borders of the Motherland, the soil of our motherland, the independence of our country and preserving it as a puppy's eye.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated August 29, 1996 "On the Establishment of the Order "Buyuk Xizmatlari Uchun," citizens of the Republic of Uzbekistan and citizens of foreign states are awarded with this order for significant services in the development of science and technology, economy and culture,

significant contribution to the development of interstate cooperation and the implementation of domestic and foreign policy of Uzbekistan.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated August 28, 1998 "On the Establishment of the Order "El-Yurt Hurmati," this order is awarded to citizens of the Republic of Uzbekistan who have made a significant contribution to strengthening the independence of the country, its economic power, raising national spirituality, culture, who are worthy of their work, scientific, public work and diligence, and patriotism.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated August 29, 2003 "On the establishment of the Order "Fidokorona xizmatlari uchun," this order is awarded to individuals who have made a significant contribution to the economic and cultural development of the country, strengthening the country's defense capability and ensuring national security, peace and stability in society, strengthening interethnic solidarity, ensuring the well-being of the people, recognizing their contribution to the development of the country with their knowledge and experience, serving as exemplars of selflessness

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan "On the Establishment of the Order "Mehnat Shuhrati" dated August 30, 1995, this order is awarded to citizens of the Republic of Uzbekistan for their great work contributing to the development of the economy and culture, the improvement of the well-being of the people, the preservation of peace and stability in Uzbekistan.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan "On the Establishment of the Order of Honor" dated August 30, 1995, citizens of the Republic of Uzbekistan are awarded with this order for selflessness and courage in defending the Motherland, for great merits in strengthening the defense power and national security in Uzbekistan, increasing the combat readiness of the armed forces and ensuring law and order.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated May 5, 1994 "On the Establishment of the Order of "Dustlik," by this Order, citizens of the Republic of Uzbekistan are awarded with great achievements in the work of strengthening friendship, mutual understanding and harmony among representatives of all nationalities and nationalities living in Uzbekistan, for the development of friendship and multilateral cooperation of the people of Uzbekistan with the peoples of other countries.

It is known that in the life of society, the importance of healthcare workers for the preservation of people's health and their healthy lifestyle is unparalleled. It is precisely for this reason that in our country, valuing the services of medical workers, encouraging them to work on themselves, continuously improving their professional qualifications, and encouraging the acquisition of medical knowledge are an integral part of the state's stimulating legal policy. The Law of the Oliy Majlis of the Republic of Uzbekistan dated March 4, 1993 "On the Establishment of the Order "For a Healthy Generation," the Decree of the President of the Republic of Uzbekistan dated January 6, 1999 "On the Support of the International Ibn Sina Foundation," the Resolution of the President of the Republic of Uzbekistan dated December 1, 2005 "On Improving the Labor Payment System for Medical Workers" make a significant contribution to the introduction and promotion of high-quality services in the field of medicine.

On March 4, 1993, the President of Uzbekistan issued a decree on the establishment of the Order "For a Healthy Generation." The main purpose of such a high award is to protect

motherhood and childhood, strengthen the health of the younger generation, educate them spiritually, morally and physically, and encourage people who have made a worthy contribution to the work of instilling in them a sense of patriotism and love for their homeland - Uzbekistan. - B. 94].

On the basis of the above proposal, the XII session of the Supreme Council of Uzbekistan, held on May 7, 1993, adopted a Law on the establishment of the Order "For a Healthy Generation." According to the Law "On the Establishment of the Order "For a Healthy Generation," the order is considered two-level (I and II degrees). Level I is considered a higher level. For high merits, they are awarded with this order for a period of 3 years. As a rule, they are first awarded with the Order of the II degree and then the Order of the I degree. (articles 2-4 of the law).

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan "On the Establishment of the Order of Honor" dated August 30, 1995, citizens of the Republic of Uzbekistan are awarded with this order for selflessness and courage in defending the Motherland, for great merits in strengthening the defense power and national security in Uzbekistan, increasing the combat readiness of the armed forces and ensuring law and order.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated May 5, 1994 "On the Establishment of the Order of "Dustlik," by this order, citizens of the Republic of Uzbekistan are awarded with great achievements in the work of strengthening friendship, mutual understanding and harmony between representatives of all nationalities and nationalities living in Uzbekistan, for the development of friendship and multilateral cooperation of the people of Uzbekistan with the peoples of other countries.

Article 12 of the law establishes a rule on medals, which are: "Oltin Yulduz" medal, "Jasorat" medal, "Sodiq xizmatlari uchun," "Shuhrat" medal.

The medal "Jasorat" may be awarded to citizens of the Republic of Uzbekistan or non-citizens of the Republic of Uzbekistan for their courage in maintaining public order, saving people's lives, state and public property during natural disasters, fires and other emergency situations.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated May 5, 1994 "On the Establishment of the "Shuhrat" Medal, this medal is awarded to citizens of the Republic of Uzbekistan and citizens of the Republic of Uzbekistan who have achieved great achievements through their honest work in the development of the economy, science and culture of the republic, the upbringing of the younger generation in the spirit of patriotism and loyalty to the ideas of national independence and social development.

According to the Statute of the Law of the Oliy Majlis of the Republic of Uzbekistan dated July 6, 2007 "On the Establishment of the Medal "For Loyal Services," this medal is awarded to citizens of the Republic of Uzbekistan who have demonstrated high professional skills, devotion to military and patriotic duty. for great merits in strengthening the defense capability and national security of the country, increasing the combat effectiveness of the Armed Forces of the Republic of Uzbekistan and ensuring human rights in Uzbekistan. In some cases, persons who are not citizens of the Republic of Uzbekistan may also be awarded the Medal "For Loyal Services."

Honorary titles are of particular importance in the award system. Honorary titles are a recognition of the high merits of people of certain professions in society and are part of spiritual and moral incentives.





There are honorary titles such as People's Artist and People's Protector, and today many of our compatriots are awarded these awards. However, there is no difference between an artist and a singer, and there are no legal norms regulating their status. Therefore, state awards, as the main and important form of incentives, constitute the core of state incentive policy. The improvement of the state awards system allows for the full implementation of stimulating policies.

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## LEGAL BASIS FOR ENSURING THE SECURITY OF PERSONAL DATA: PROBLEMS AND SOLUTIONS.

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**Annotation.** This article discusses the analysis of the legal basis for directly ensuring the security of personal data, as well as proposals for solving the problems encountered in this direction in the country, based on regulatory documents.

**Key words:** personal data, identification, biometric and genetic data.

Today, it is no secret that the rapid penetration of information and communication technologies into the life of society increases the well-being of a person's daily life. However, there is another side of the coin that cannot be overlooked. We are talking about the possibility of direct negative impact on privacy of individuals through these modern information and communication technologies.

During the past 12 months of 2021 alone, the number of offenses under Article 462 of the Civil Code of the Republic of Uzbekistan, i.e. "Breach of the Law on Personal Information" was 247, while in the 9 months of this year, this indicator has increased by almost 12% to 277. [1]. Given that the current year 2022 still has 3 full months to go, the number is likely to be even higher. These numbers were not made in vain. Today, in our country, the cases of violation of the requirements of legal documents on personal data are increasing in some cases without knowing, and in some cases intentionally.

From the above, it can be understood that today the regulatory legal documents ensuring the safety of personal information in our country are perfect in order to respond to any attacks. After all, one of the criteria for assessing the privacy of a person is the safety of his personal information.

At this point, today in our country, the Law of the Republic of Uzbekistan "On Personal Information" (O'RQ-547 dated 02.07.2019), which is intended to ensure the security of personal information of individuals, Administrative (22.09.1994) and Criminal Liability (01.04. 1995) codes, the Cabinet of Ministers "On approval of the regulation on the state register of personal databases" (No. 71 of 08.02.2020), It is possible to cite the decisions "On the requirements for material bodies containing biometric and genetic data and technologies for storing such data outside of personal databases" (No. 570 dated 05.10.2022) and the existence of a number of similar normative legal documents.

Although there are a number of regulatory legal documents on personal data in our country, as stated by S.A. Nurumbetova, it is necessary to constantly update these regulatory legal documents based on the requirements of the time [2, p.29].

Article 4 of the Law of the Republic of Uzbekistan "On Personal Data" defines personal data as follows: personal data is defined as information recorded electronically, on paper and (or) in other physical form, relating to a specific natural person or allowing him to be identified. given [3].

It is known that biometric and genetic data are among the personal data that allow identification of a specific person. After all, every person can change his/her name, surname, patronymic, place of birth, time, education, profession, property during his/her lifetime in accordance with the law. However, no matter how much a person wants, he cannot change his anatomical and physiological characteristics in any way. Because these features are individual for each person [4].

The analysis of modern trends shows that today many genetic studies are being conducted in the world to collect biometric and genetic data of mankind, to analyze their group affiliation in terms of geographic, racial, ethnic, hereditary and psychophysiological characteristics.

It would not be an exaggeration to say that these researches serve the development of mankind, but also serve the creation of biological weapons by some companies. There are also those who obtain personal information and commit various frauds, greed, insults or other inhumane actions for malicious purposes.

Article 27 of the Law of the Republic of Uzbekistan "On Personal Information" stipulates that the protection of personal information is guaranteed by the state [3]. However, in our country there are systemic problems that are becoming more and more urgent in ensuring the security of personal data. In particular, a number of problematic situations related to operators processing personal data can be mentioned, below these problems will be systematically analyzed sequentially.

For example, operators processing personal data must be registered in the State Register of Personal Databases at the State Personalization Center in accordance with the relevant clauses of the Resolution No. 71 of the Cabinet of Ministers of the Republic of Uzbekistan dated August 8, 2020 "On Approval of the Regulation on the State Register of Personal Databases"[5 ].

According to the requirements of the Law "On Personal Data" of the Republic of Uzbekistan, biometric and genetic data can be processed only with the consent of the subject. It is also mentioned that biometric and genetic data in electronic form should be provided with systems that exclude their unauthorized use.

Article 33 of the Law of the Republic of Uzbekistan "On Personal Information" establishes liability for violation of the legislation on personal information [3]. Based on this article, it is provided that the guilty persons who violated the requirements of this law will be prosecuted based on Article 462 of the Code of Administrative Responsibility of the Republic of Uzbekistan and Article 1412 of the Criminal Code [6; 7].

However, the problem is that the mechanisms for early detection and formalization of administrative violations in cases of violations of the legislation on personal data have not been established.

In recent times, various organizations, enterprises and individuals in our republic have been increasingly using biometric data (facial image, fingerprints, medical diagnostic analysis results, genomic DNA, RNA information, etc.) [8] for personal identification.

In particular, biometric data of individuals are used for entering and exiting the buildings of state, non-governmental agencies, and private enterprises, for customer registration, or for other purposes, and personal biometric data is stored on computers, servers, and other data-carrying devices. However, the monitoring of the causes and conditions of violations that may occur in the field of obtaining, using, storing, transmitting

and distributing these biometric data with the consent of the owner, according to the requirements of the law, is not being carried out sufficiently.

As a result of this, there are real threats to the rational use of the information of the citizens of the republic about the person protected by the law for legal purposes. In accordance with Article 280 of the Code of Administrative Responsibility, it is established that the verification and (or) control of compliance with the rules, the violation of which causes administrative responsibility, shall be carried out by an authorized official of the relevant body entrusted by law [6].

Today, the competent state body in the field of personal data in our country is the State Personalization Center under the Cabinet of Ministers. This provision is reinforced by the Law of the Republic of Uzbekistan "On Personal Information". But today in this direction the following: A number of organizational, legal and technical problems arise in the full implementation of these tasks by Maraz, as the number of operators registered in the state registry is increasing and they are operating in all regions of the republic.

In our opinion, automated biometric identification systems of the authorized body, processing of personal biometric data, research of digital information storage devices, and illegal use of biometric and genetic data are essential for detecting and taking legally effective measures against possible violations of personal information, in particular in the field of biometric and genetic data processing. should be implemented by structures with capacity.

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## SUBJECT: DEVELOPMENT OF FIELD PROBLEMS IN C++ PROGRAMMING LANGUAGE

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**Keywords:** C++ programming language, construction, engineer, software, Bechtel, Flour, AECOM, project, process.

**Annotation:** C++ program is intended to introduce automatic calculations in solving engineering problems for representatives of the engineering field in the field of IT technology. The working process of the program is shown.

C++ is a programming language based on C, which in turn is derived from B and BCPL. C was derived from B by Dennis Ritchie and was first used in 1972 by Bell Labs on the DEC PDP-11 computer.

C++ was created in the early 1980s by Bjarne Stroustrup based on the C language. C++ has many additions, but the main one is that it allows programming with objects. The C++ programming language allows you to create a wide variety of programs, including operating systems, games, software, software libraries, etc. C++ is run-time efficient and uses resources efficiently.

C++ is supported by many software and hardware platforms and by the general public. C++ also plays an important role in the field of civil engineering in many developed countries around the world. These countries are USA, Japan, Germany, China. etc. In the USA, C++ is widely used in many construction companies, including Bechtel, Flour, and AECOM.

In many construction companies of Japan and Germany, the C++ programming language increases the efficiency of projects. In Chinese companies, where the construction industry is developing rapidly, C++ allows to speed up project processes even more.

If the C++ programming language is widely used in construction companies in Uzbekistan, it will open wide opportunities in the construction sector, and in the future, its further expansion in this field can be observed.

The reason we use it is because the C++ programming language is so efficient that it can run simulations quickly and perform complex calculations, allowing programmers to establish a strong connection between hardware and software.

In conclusion, it can be said that the C++ programming language increases work efficiency in all areas and creates a wide range of possibilities. The C++ programming language is widely used in construction companies, in the implementation of difficult mathematical calculations in the design work, and in software, road and construction modeling software. By further optimizing the C++ programming language, robots used in construction, automated systems creation and management programs can be created.

For example: in C++, a number of areas can be calculated in the program to collect the costs of an apartment with a square meter and a room of 4 m. Examples include materials, energy costs, utilities and locations. The calculations that are taken into account here are the costs for using the apartment to wet it, which is based on specific parameters. For example,

adding energy required for soaking, organizational soaking issues (thermal imager, welder panels and features) or other parameters.

For now, I'll try to write the code to write the program, given a string in the example below. In the code, we calculate the total energy, utility and comfort costs for a 4-room, 111 m<sup>2</sup> home.

In the example:

Total area of the apartment: 111 m<sup>2</sup>,

Height: 4 m

Exposure to energy (e.g. for electricity or injury)

```
#include <iostream>
```

```
std nom maydonidan foydalanish;
```

```
// Funktsiya: Maydonning umumiy hazhmini hhisoblash
```

```
float haqidaHajm(float maydon, float joy) {
```

```
    qaytish maydon * joy;}
```

```
// Funktsiya: Energiya harajatlarini baho
```

```
float haqidaXarajat(float hajm) {
```

```
    // Masalan, 1 m3 energiya uchun 0,5 kVt soat zarur deb olamiz
```

```
    float energiyaBirM3 = 0,5; // kVt soat / m3
```

```
    qaytariladigan hajm * energiyaBirM3;}
```

```
int main() {
```

```
    // Ma'lumotlar
```

```
    float maydon = 111; // m2
```

```
    float kattalik = 4; // m
```

```
    int xonaSoni = 4; // honalar soni
```

```
    // Hisoblash
```

```
    float hajm = hajmHajm(maydon, kattalik);
```

```
    // Energy harajatlarini aytib
```

```
    float xarajat = Xarajat(hajm);
```

```
    cout << "Apartment umumiy haajmi: " << hajm << " m3" << endl;
```

```
    cout << "Harajatlari energy: " << xarajat << " kW soat" << endl;
```

```
    qaytish 0;}
```

Description:

doubleVolume(): Boo function calculates area and volume of total orcal quartering.

medicalCost(): Boo function calculates energy costs by checking the cost (0.5 kW h of energy received per 1 m<sup>3</sup>).

Exit: The program calculates the total cost of area and basic quartering and calculates the associated energy costs.

Longer code models may require the input of Energy, Energy, or other parameters for loss, damping materials, and overhead costs.

If you have any questions about costs or parts, I can help you figure them out.

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## THE ROLE AND SIGNIFICANCE OF NATIONAL AND UNIVERSAL VALUES IN THE SPIRITUAL DEVELOPMENT OF YOUNG PEOPLE

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**Abstract:** This article scientifically substantiates the great importance of young people's spiritual growth for the future of society. It should be noted that national and universal values are one of the main factors in the spiritual development of youth. The importance of integrating national and universal values for the spiritual growth of young people is taken into account. It is explained that this process always creates an atmosphere of creativity, equality, and friendly relations in our society, and that spiritual development is ensured only through highly educated youth. The article highlights that human rights form the foundation of universal values, representing common and respected principles for peace, justice, and development in society.

**Keywords:** integration, property, treasury, human rights, freedom, empire, domination, independence, war, peace, captivity, liberty, health and well-being, development. In the world, "raising young people as physically and spiritually mature individuals remains a crucial task for us in today's complex times." Currently, the "Youth of Uzbekistan - 2025" concept is being developed, and a National Youth Policy Assessment Index is being introduced as a unified criterion for working with youth and evaluating its effectiveness. The integration of national and universal values into the consciousness of young people is a crucial task in shaping the moral culture of youth and has been elevated to the level of state policy. "Recognizing our high responsibility to present and future generations in building a humane democratic state and an open, just society where human life, freedom, honor, and dignity are considered the highest values" There is a growing need to unite our multinational people through the harmony of national and universal values in the spiritual growth of young people. In the global community, national and universal values, in illuminating their essence and content, are inextricably linked to the past, present, and future development (according to the yesterday-today-tomorrow system) of many peoples (ethnicities, nations) in the world, and are expressed as an integral part of world civilization. National and universal values are the property and treasure not only of individual peoples and nations but of all humanity. As a philosophical analysis of national and universal values, the formation of human qualities in young people such as friendship, hospitality, humanity, moral purity, generosity, politeness, modesty, cleanliness, cheerfulness, good nature, courage, sincerity, kindness, love for the motherland and its people, piety, honesty, honor, diligence, respect for the past, national pride, patriotism, and devotion to one's nation is considered one of the priority social issues. The spiritual elevation of young people is of great importance for the future of society. It should be emphasized that national and universal values are among the main factors in the spiritual development of youth. The integration of national and universal values is crucial for the spiritual growth of young people. This process should create an atmosphere of creativity, equality, and friendly relationships in our society. Spiritual development can only be achieved



through highly enlightened youth; therefore, it is very important to provide them with proper guidance. Human rights form the basis of universal human values, creating an environment for peace, justice, and development in society. These encompass principles that are common and esteemed for all humanity.

Justice and equality; The principle of providing equal opportunities to all people develops a sense of fairness in young people.

Justice and equality are the fundamental principles of social relations.

Justice is ensuring the correct and proportional distribution of rights, obligations, and interests, recognizing the dignity of each person, protecting human rights, and establishing social justice. Justice requires a decent attitude towards all people in society and respect for their rights. Equality means ensuring equality in the use of rights, opportunities, and resources for every person. Equality is based on the principle of providing equal opportunities to all people in society, not limiting minimum opportunities based on their differences (for example, gender, race, age). Justice and equality are interconnected: justice is realized when it ensures equality. If there is no justice in society, equality will also be ineffective, because some people may be given more opportunities than others. At the same time, injustice can also lead to inequality. These concepts are often important in state policy, economic systems, and social initiatives. To ensure justice and equality in society, civil society organizations, state bodies, and international organizations must be active. A philosophical analysis of national and universal values is of great importance in the spiritual development of young people. Several important elements should be taken into account in this process:

a. National values: each nation has its own historical, cultural, and religious traditions. National values play a significant role in the development of young people as individuals, shaping their worldview, morality, and social relationships. National values help young people understand the history, traditions, and cultural heritage of their people.

b. Universal human values: Universal human values include concepts such as human rights, justice, freedom, kindness, and cooperation. This will teach young people to live in a global society, play an important role in expanding their worldview and developing their ability to cooperate with other nations.

c. Philosophical analysis: a philosophical analysis of national and universal values allows young people to think deeply about the meaning of life, moral norms, and human relationships. Philosophy not only ensures the intellectual development of young people, but also strengthens their ability to make moral decisions.

c. Development Strategies: To shape the moral culture of youth, it is necessary to integrate national and universal values in areas such as education, family upbringing, and community activities. In this process, it is very important to use advanced methods in pedagogy and psychology.

d. A sense of responsibility: the awareness of one's own responsibility, the formation of a sense of responsibility to society among young people is also an important issue. Acceptance of universal values in conjunction with national traditions strengthens mutual understanding between people.

A philosophical analysis of national and universal values serves as a key factor in the spiritual development of young people. This process should be enriched with new effective methods in accordance with the demands of the time.

Value is a concept used to demonstrate the universal, social, moral, and cultural-spiritual significance of specific events in reality. Everything that is important to a person and humanity, such as freedom, peace, justice, social equality, enlightenment, truth, goodness, beauty, material and spiritual riches, traditions, customs and other values. Values are divided into two types: material and spiritual values. This concept is defined from the perspective of the field in which research on value has been conducted in the social sciences. However, value is a category specific to axiology. Interpreting value from the perspective of axiology allows for the study of its essence, content, objective basis, forms of manifestation, and properties as a category. The category of value is used not only to express the economic value of objects and things, but also to express the value of forms, circumstances, objects, events, events, requirements and procedures, etc., which have some significance for society and the individual. Under the influence of social processes, people's views on values change. Depending on historical necessity, this value sometimes comes to the forefront of social development. For example, when the enemy invades the country, the value of freedom increases, at the end of imperial rule - independence, during the period of war - peace, in captivity - freedom, in illness or sickness - health. Values, as a product of socio-historical development, have their own historical roots, development, and hereditary aspects. Values arise as a set of things, events, actions that are useful for work, production activities, relationships between people, and become a spiritual phenomenon that directs the activities and behavior of individuals, social groups in a certain direction, setting the appropriate norm.

Values are universal, national, and personal, while values that express the most important aspects, laws, and relationships of the universe, nature, and society are universal in nature. Such values are eternal values that do not lose their significance. National values are values related to the life, lifestyle, language, culture, spirituality, customs and traditions, past and future of a particular nation, nation, people. Personal values can be recognized as values related to a person, their activities, lifestyle, beliefs, meaning of life, manners, and beauty. According to the scientist-value scholar O. Muslimonova, some scholars associate the emergence of values with human production and labor activity. However, understanding values and a value-based attitude towards the world depend primarily on a person's spiritual potential. The scientific and philosophical definition of value will always change and deepen its essence and content in connection with the spiritual and intellectual potential of the era, the current level of scientific research. Value also implies the objective existence of events and phenomena that are important for the individual, group, and society. In the gradual improvement of social development, only values tested in historical experience acquire universal content.

In the scientific work of Eastern thinkers, the issue of morality occupies a central place in the upbringing of the younger generation as a mature individual in the spiritual world. Starting from Kaykovus's "Kabusnama," the works of Abu Nasr al-Farabi, Abu Rayhan al-Biruni, Abu Ali ibn Sina, "Kutadgu Bilik" ("Knowledge that brings happiness") by Yusuf Khos Hojib, "Hibatul Haqaiq" ("Gift of Truth") by Ahmad Yugnakiy, "Al-Adab al-Mufrat" ("Famous poems of the world") by Imam Ismoil al-Bukhari, "Al-Khafrat" ("Famous poems The issues of education and upbringing, morality in Kashfi's works are written briefly and reasonably as a standard, a model, and a norm of morality for many. According to Koshifi, the quality of a person depends on the teacher he receives. He says, "Emanent is the ability to protect one's

heart from bad words and bad behavior, to respect oneself and others." The idea close to his opinion can be seen in the work of A. Navoi. "A decent person is the best of all people and is more attractive to all people," he acknowledges. In this way, the human characteristic of these people is measured and emphasized by their decency and morality, and they call on all people to be good-humored. In A. Navoi's work "Mahbubul Kulub," ideas of morality and ethics are put forward. His only dream is hope, his ideal is love for man, sincerity, human qualities. It is emphasized that the formation of spiritual and moral education for young people, as a place for national and universal values, is linked to the emergence of skills such as patriotism, freedom, justice, courage, friendship, upbringing, morality, honor, honesty, hard work, and kindness in their upbringing.

Among the scholars, D.M. Kenjaev's "The Role of Islamic Values in the Views of the Jadids and the Spiritual Reform of Society" was thoroughly analyzed, A.Zh. Murtabaeva conducted practical research based on "Categories of Satisfaction and Honor," L.M. Plekhanova "Linguistic study of the role of human (humanistic) values in the cultural development of society and their reflection in language." A.A. Khuseynova conducted "Analysis of Universal Values in the Views of A. Jami." Zh.K. Aksakalova studied the "Sustainable Development of the Family Institute in the Context of Family Relations and Value Devaluation, as well as the Psychological Aspects of Forming Family Values in Youth," and created methodological programs for trainings. A.A. Romanyuk studied the "role of historical and cultural values in issues of civil law" from the perspective of societal development, and according to A.I. Antonov, the transformation of the family in society is a unique reflection of the global crisis of the social institution of the family, which occurred due to the formation and development of a consumer society. As a result, the state of family production, the joint work of parents and children, the involvement of women in social production, the priority of personal and individual values over family values has arisen. the fundamental scientific work "Philosophy of Values" by Professor Zh. Tulenov, in particular, on the problems of values in many areas, has made a significant contribution. At the stage of development of New Uzbekistan, the attitude towards axiological doctrine as a priority of national and universal values towards the spiritual growth of youth has changed in a positive direction. Research shows that the criteria for evaluating values have become an objective necessity, raising pressing scientific and philosophical problems based on the harmonization of national values with universal human values. In studying these problems, professors K. Nazarov, A. Begmatov, B. Tuychiev, Z. Kodirova, S. A'zamhodjaeva, G. Makhmudova, G. Ruzieva, G. Gofforova, K. Tulenova, N. Shermukhamedova, F. Yuldasheva, T. Ortikov, O. Muslimonova, and M. Kahhorova paid attention to the problem of values in their works, but they mainly focused on the development of cultural and educational, national,

The works of such scientists as Ibrahim Karimov, M. Abdullaev, I. Saifnazarov, U. Koraboev, A. Mukhtarov, and A.A. Kambarov, as well as doctoral and candidate scientific works dedicated to this topic, have paid attention to certain aspects of the issue. According to Professor A.A. Kambarov, in order for the structure and functions of society to take their present form, socio-political, scientific, and religious influences sometimes served good, and sometimes serve harm. However, it is explained that scientific and religious values, as well as their synergistic paths, have played an important role in the foundation of modern social development.

In conclusion, it should be noted that the study of the place and role of national and universal values in the life of society has practical significance and serves, first and foremost, to

humanize society, rationally resolve conflicts between peoples, nations, and states, resolve regional conflicts, contagious diseases, environmental crises, poverty, and other problems that concern the global population. For example, religious values serve as a chain between national and universal values, and as a result, religious and transcendental values are harmonized with secular values.

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## FEATURES OF THE USE OF COMBAT DRONES IN MODERN ARMED CONFLICTS

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**Abstract.** In given article the analysis of designs, principles of work and features of application modern UAV, their advantages over usual aviation.

**Keywords.** FPV – drone, unmanned aerial vehicles (UAV), camera, operator, virtual reality (VR) video-spectacles, construction.

During modern military conflicts, UAVs solve a considerable range of problems, essentially enhancing the overall efficiency of army group actions. They are applied to conducting aerial reconnaissance and detecting objects (control stations), warehouses, communication centers, clusters of vehicles and enemy armies, delivering real-time information about them to the control station for organizing attacks, and providing guidance for means of attack. Combat UAVs, also known simply as UAVs or drones, appeared much earlier than many realize. However, with the development of technology, the capabilities of drones began to expand. They have been equipped with aviation rockets, bombs, and other weapons. As it turns out, they are effective offensive tools capable of targeting both land and sea-based objectives. Modern UAVs are also becoming increasingly automated, with some capable of carrying out combat missions in fully autonomous mode [1].

It is proposed to delve into this type of weaponry, its variations, capabilities, and prospects in more detail. The content is as follows:

1. FPV Drones
2. Combat Quadcopters (Multicopters)
3. Unmanned Aerial Vehicles
  - 3.1. Missions UAVs Can Undertake
  - 3.2. Advantages of UAVs
4. Kamikaze Drones
5. Primary Drawbacks of UAVs

**FPV drones** (First-Person View or "the view from the first person") are UAVs equipped with cameras whose images are transmitted wirelessly to virtual reality goggles or special video goggles worn by the operator. Thanks to this technology, the operator, sitting in a comfortable location, experiences the sensation of being in the air and sees everything as if they were inside the drone. FPV drones are unmanned aerial vehicles that allow the pilot to immerse themselves in the flight experience without leaving the ground. Today, FPV drones have found wide application in various fields, from entertainment and photography to military operations. In this article, we will discuss the design and operation principles of FPV drones, as well as their types and advantages over conventional multicopters.

FPV drones have a design similar to that of multicopter, consisting of a frame, electronics, motors, and a gyroscope. Recently, new FPV drones designed for military use have begun to emerge. They are equipped with special means for dropping ammunition, use secure communication channels, and are resistant to enemy electronic warfare systems.

Advantages of FPV drones over conventional multicopter:

1. High Speed: Their small size, lightweight, and aerodynamic design allow FPV drones to achieve higher speeds than their traditional counterparts.
2. Sensation of Flight: FPV UAVs provide a first-person view, allowing the operator to feel as if they are inside the drone. This immersive experience helps pilots to deeply engage in flight operations.
3. Precise Control: Through the goggles, operators have a UAV's-eye view of the surroundings, enabling them to maneuver the drone more accurately and navigate through various obstacles.
4. Enhanced Aerial Photography and Videography: FPV UAVs offer unique perspectives for capturing aerial photos and videos. The ability to see what the UAV sees allows operators to creatively approach shot composition and capture dynamic footage.



Thus, military personnel currently use FPV drones for aerial reconnaissance, surveillance, and direct combat operations. The maneuverability of these devices and their ability to operate in risky environments make them effective military assets. As scouts, their main advantage lies in their ability to gather information without risking personnel. These UAVs can observe enemy movements, identify various objects, and collect other reconnaissance data. Due to their high maneuverability and compact size, they can access hard-to-reach areas and gather valuable intelligence without being detected. Additionally, FPV drones can serve as support assets for operations, acting as observation posts to gather data on enemy positions, obstacles, and other relevant information. Finally, equipped with various munitions, FPV drones can be transformed into kamikaze UAVs, detonating upon impact with a target, causing damage. As demonstrated in operations in Ukraine, FPV drones are capable of targeting even enemy armored vehicles with remarkable precision [2].

**Combat Multicopter:** Multicopter are perhaps the most common type of UAV used in military operations, as they are simple and inexpensive devices. They offer advantages such as

high maneuverability, quick deployment, and ease of operation. A standard multicopter configuration consists of four electric motors and four propellers. Two of the propellers rotate clockwise, while the other two rotate counterclockwise. This rotation provides lift. Multicopter are inherently unstable aerodynamically, as they lack wings. Therefore, onboard computers stabilize their flight by adjusting the frequency of rotation of the propellers.

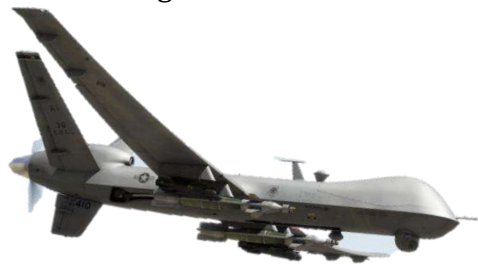
**Multicopter can hover in place, make turns, and perform other maneuvers. To move forward, the motors at the front decrease in frequency, causing the copter to tilt forward, while the rear motors increase in frequency to provide the necessary thrust.**

It is worth noting that there are hexacopters, which have six propellers and motors, and even more advanced models with eight propellers. The latter have high payload capacities, allowing them to transport cargo. There are also models capable of evacuating wounded personnel.

However, multicopter are most often used for reconnaissance purposes. They can also be equipped with firearms or light grenade launchers to engage enemy personnel and vehicles. Sometimes, military personnel even use commercially available consumer drones equipped with improvised explosive devices or grenades for attacking enemy targets. A significant challenge for military drone manufacturers is the development of high-precision targeting systems and optical systems. However, this challenge is likely to be addressed in the near future, further enhancing their effectiveness as weapons [3].

**Unmanned aerial vehicles**, or UAVs, typically refer to aircraft without pilots on board, including both multicopter and fixed-wing UAVs that resemble planes. In fact, they encompass both types. Currently, they are considered one of the most promising weapons.

Although the first UAV capable of military tasks appeared in 1948, combat UAVs were widely adopted only in the 1990s and 2000s. Thanks to modern technologies, their capabilities have approached those of attack planes and bombers, and they even surpass many aircraft in terms of flight duration.



Multipurpose UAVs in the USA, the most well-known being the MQ-9 Reaper and MQ-1 Predator. The MQ-9 Reaper is a heavy-class reconnaissance and attack drone. It is heavier than the Bayraktar and Orion and can carry payloads weighing up to 1700 kg. Russia is currently testing a similar drone named "Hunter".

Advantages of UAVs: In modern warfare, where armies are becoming increasingly technologically advanced, UAVs have the potential to become one of the leading types of weaponry.

**UAVs are currently used for: conducting aerial reconnaissance; updating fire missions; creating decoy targets for the enemy and executing direct strikes [4].**

The spectrum of tasks performed by UAVs will only expand with the advancement of science, technology, and engineering. One of the main advantages of UAVs is their low cost compared to manned aircraft. A conventional UAV can be ten times cheaper than a plane or helicopter, and considering the expensive infrastructure required for manned aircraft, the difference in total costs can be hundreds of times. UAVs are mobile and easier to operate and maintain. Moreover, they can perform combat missions in conditions where human pilots would face extreme physical strain.

**The main advantage of UAVs is their low cost compared to manned aircraft. Frontline combat UAVs cost between 5 and 7 million dollars. While this may seem substantial, it pales in comparison to the cost of fifth-generation fighter-bombers like the Su-57 or F-35, which can reach 100 million dollars. Additionally, the purchase of an aircraft is just the beginning; training pilots is also necessary.**

Certainly, UAV operators also require training, but as mentioned earlier, many modern UAV actions are performed automatically. They can take off and land on their own. Another significant advantage of UAVs is that operators do not risk their lives when carrying out combat missions. UAVs can be made in any size, including the smallest, as they do not require a pilot cabin. Furthermore, UAVs do not experience physiological stress, allowing them to perform various maneuvers.

**Tasks performed by UAVs:** As mentioned earlier, the primary task of UAVs is aerial reconnaissance. However, their capabilities have significantly expanded in recent years. They can conduct bombing raids on land and sea targets, intercept aerial targets, provide fire support, designate targets, relay data, and deliver payloads. The list of tasks performed by UAVs will continue to grow as their capabilities expand. For this reason, many experts consider them one of the most promising weapons of the future [5].

**Kamikaze drones** can be classified as a separate type of UAV, also known as smart bombs or loitering munitions. An example of these is the American "Switchblade" and the Russian "Lancet".

**The Switchblade is equipped with an engine, advanced guidance systems, and a warhead. It can be programmed to independently attack targets located several kilometers away from its launch point. Its most interesting feature is its ability to loiter around a designated target and strike when the moment is right.**







After being launched from a mortar, the Switchblade deploys wings, transforming into a small cruise missile. The lighter version of this drone can operate within a radius of 10 km and has a flight duration of about 10 minutes. It can attack autonomously during this time. The device is propelled by an electric motor, allowing it to fly silently at speeds of up to 160 km/h. The heavier version of the Switchblade can attack targets up to 40 km away and has a flight duration of 40 minutes, flying at speeds of up to 185 km/h. Due to its high speed, silence, and small size, the kamikaze drone is difficult to detect and nearly impossible to intercept, making it even more effective than conventional UAVs, which are relatively easy to shoot down. Although the UAV cannot be retrieved after launch, the operator can cancel the attack and redirect the drone. Smart bombs can be used to engage enemy armored vehicles and infantry, and some models can target aerial threats. Essentially, these drones can fulfill fighter functions [6].

**Recently, the Russian Federation has begun to actively deploy combat UAVs against the Ukrainian army. Russian experts predict that the mass deployment of the "Lancet" kamikaze drone will significantly change the situation on the front lines.**



The "Lancet" is a loitering munition, a drone capable of hovering for an extended period, tracking a target, and swiftly attacking by diving onto it. The latest version, "Lancet-3", has a maximum horizontal flight speed of 110 km/h and can reach speeds of up to 300 km/h when attacking a target. It has a range of 40-50 km and carries a warhead weighing about 12 kg, making it capable of remaining airborne for about an hour.

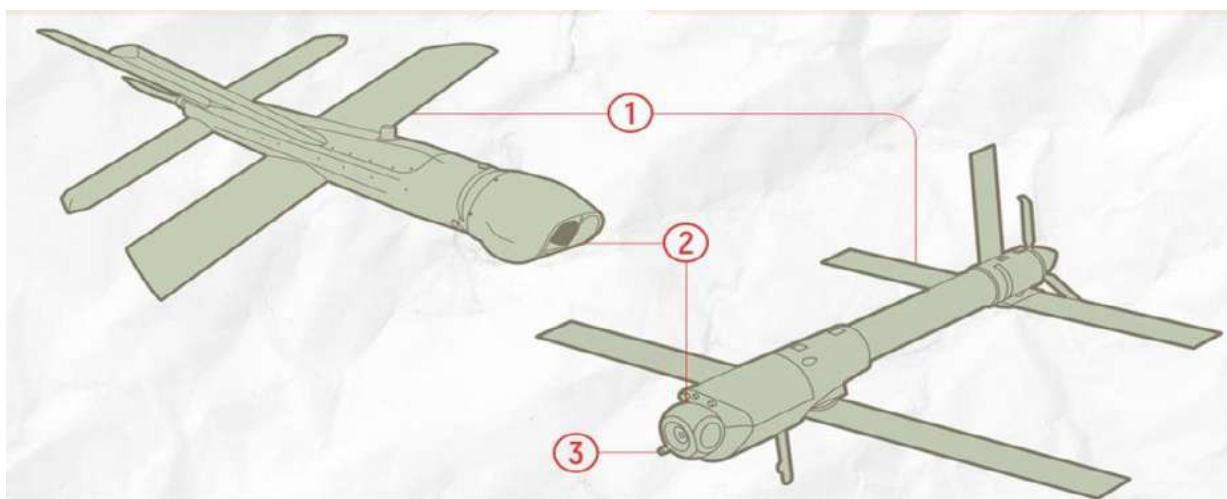
**Primary drawbacks of UAVs:** The role of UAVs has greatly increased in modern military conflicts, and there have been instances where they have determined the outcome of battles. However, it is impossible to consider this weapon ideal at present. The main drawback lies in the vulnerability of remote-control systems. The enemy can jam or intercept drone controls, rendering the device unusable or, worse, turning it against its own forces.

UAVs also have other drawbacks. For example, their signals can be intercepted by the enemy's air defense systems with relative ease, posing serious risks, ranging from physical destruction to reprogramming and attacks on friendly positions [7].

**In conclusion**, UAVs are becoming increasingly significant players in military operations, and their importance in future conflicts will only grow. Any potential drawbacks of UAVs can be mitigated with careful tactics. For example, using UAVs in conjunction with other forces, such as tanks or artillery, can increase their effectiveness while reducing the risk of losing drones. In recent conflicts, various tactics involving UAVs have been widely employed, resulting in significant damage to enemy targets and personnel.

A comparison of the Kamikaze drones "Switchblade-600" from the USA and "Lancet-3" from Russia, both of which are widely used on battlefields by warring factions to directly attack enemy air defense and artillery installations, as well as armored vehicles and troops.

UAV "Switchblade-600" Kamikaze drone (USA)	UAV "Lancet-3" Kamikaze drone (RF)
Type <b>once-through striking kamikaze drone</b>	Type <b>once-through striking kamikaze drone</b>
Purpose <b>defeat overland integer</b>	Purpose <b>defeat air and overland integer</b>
Begin production <b>2014 - a present time</b>	Begin production <b>2016 - a present time</b>
The Operator <b>1 person</b>	The Operator <b>1 person</b>
The Mass <b>23 kgs</b>	The Mass <b>12 kgs</b>
Range of the flight <b>70 km</b>	Range of the flight <b>40 km</b>
The Velocity (the max) <b>150 KPH</b>	The Velocity (the max) <b>110 KPH</b>
Length of the flight <b>40 minutes</b>	Length of the flight <b>1,5 h</b>
The Combat part <b>cumulative, mass 4 kgs</b>	The Combat part <b>fragmentation-hugh-explosive, mass 5 kgs</b>
The Type of the start <b>from transport-triggering</b>	



- 1 «Lancet-3» has double X- figurative wing, beside «Switchblade-600» wings direct.
- 2 The Optical module «Lancet-3» is located inwardly main part drones, beside «Switchblade-600» module open.
- 3 The Antenna-transmitter "Lancet" is found inwardly, beside UAV USA she is situated in main part.

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## COSTABILITY OF TEACHING ENGLISH IN HIGHER TECHNICAL INSTITUTIONS

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**Abstract:** This article highlights the relevance of English language teaching in higher technical institutes. The importance of the English language in the training of specialists in technical sciences, the fact that this language is the main tool in global information exchange and international technical cooperation was analyzed. The authors reviewed the modern approaches and methods of the English language teaching process in technical education and substantiated the effectiveness of the communicative approach and special teaching materials focused on the technique in the development of students' language skills. It is emphasized that teaching English is an integral part of forming the professional competencies of students of technical sciences.

**Key words:** English language education, higher technical institutions, professional competence, technical sciences, communicative approach, special educational materials, global information exchange, international cooperation.

### Introduction.

In the conditions of modern globalization, higher technical education should be formed in accordance with international standards. In this process, learning English plays an important role in the professional development of technical students. Today, when technologies are developing at a rapid pace, English is gaining importance as the main tool in processes such as international scientific and technical information exchange, reading and analysis of technical documents, as well as training and cooperation abroad.

Teaching English in higher technical institutes is not limited to providing linguistic knowledge, but is aimed at preparing students as competitive personnel in the international labor market. Therefore, applying a professionally oriented approach in the process of teaching English, developing students' technical terms and professional communication skills is one of today's urgent problems.

This article analyzes the relevance of teaching English in technical institutes, the possibilities of using modern teaching methods and technologies in this regard, as well as the role of language learning in the training of technical specialists.

### Methodology.

In this study, the following methodological approaches were used to study the process of teaching English in higher technical institutes:

1. Theoretical analysis: advanced foreign and local scientific and literary sources related to teaching English in technical areas were studied. In particular, the theoretical foundations of the communicative approach, professionally oriented teaching and technologyization of the educational process were analyzed.

2. Empirical research: Questionnaires and interviews were conducted among students of technical institutes, and their needs in English language and their attitudes towards educational materials adapted to professional activities were studied.

3. Experimental work: An experiment was conducted on the application of specially developed professionally oriented English language textbooks and educational materials to the educational process. During the test, communicative and interactive methods were used, including project work, analysis of technical texts, and simulation of professional communication.

4. Comparison method: The results of groups trained by traditional and modern methods were compared, and the effectiveness of new approaches was determined.

5. Statistical analysis: The results of the experimental work were analyzed by mathematical and statistical methods, and the reliability of the obtained data was ensured.

Through these methodological approaches, actual problems and their solutions in the process of teaching English in technical institutes were identified, and effective pedagogical mechanisms were developed in this direction.

#### **Literature review:**

Scientific-literary sources on teaching English in technical educational institutions create a basis for studying the current problems of this field. In the analysis of the literature, the following areas were mainly considered:

##### **1. Theory of vocationally oriented language education**

The ESP (English for Specific Purposes) model, developed by D. Hutchinson and A. Waters, is the main theoretical basis for a professionally oriented approach to language teaching. This approach involves the formation of language skills in accordance with professional needs. In local literature, the works of A. E. Mamajanov and S. Karimova present versions of this model adapted to the Uzbek educational system.

##### **2. The importance of a communicative approach**

The concepts of the communicative approach developed by J. Harmer and S. Thornbury were considered as an effective tool in the formation of professional communication skills relevant for technical students. Variants of this method adapted to technical sciences have been studied in foreign literature.

##### **3. Adaptation of educational materials to technology**

The material development approaches developed by C. Dudley-Evans and T. Johns for teaching reading, writing and analysis of technical texts and documents are important. These approaches serve as a basis for the development of professional language skills in technical institutions. The works of I. Shukurov are often used in local research.

##### **4. Use of digital technologies**

The role of digital educational technologies in English language teaching is highlighted in many foreign studies, including P. Blended Learning model. The works of A. Johnson and local experts H. Torayev on the integration of this approach into technical directions and the use of interactive platforms give clear instructions.

##### **5. Analysis of international experiences**

Modern methods of teaching English in technical education in foreign education systems, including project-based learning and problem-solving approaches, were analyzed. In this regard, the researches of N. Ellis and E. Wright became the main source for studying international experiences.



This literature review provides a theoretical and practical basis for the effective use of communicative approach, digital technologies and professionally oriented materials in teaching English in technical institutes.

**Discussion:**

The relevance of teaching English in higher technical institutes is increasing in the process of adapting to the requirements of modern education and technology. The results of the research showed that the following issues are important for the effective organization of the process of teaching English in the technical direction:

**1. Effectiveness of professionally oriented approach**

Experiments have shown that English language textbooks and special educational materials adapted to technical subjects increase interest in language learning among students. Texts and assignments based on professional terms serve to prepare students for the real work environment. This approach was an important factor in the formation of students' ability to use technical terms correctly and professional communication skills.

**2. Application of communicative methods**

By using the communicative approach, it was observed that the interest and participation in practical communication among students increased significantly. Interactive activities, including modeling of technical situations and project-based assignments, made the language learning process not only effective, but also fun.

**3. Integration of digital technologies**

The use of modern digital technologies in English language teaching, such as interactive platforms and mobile applications, has greatly helped to strengthen students' knowledge and organize the independent learning process. This approach has expanded the possibilities of individual approach and independent learning among students.

**4. Appropriate approaches to student needs**

During the research, it was determined which English language skills are more important for technical students. They believe that understanding technical texts, reading and writing technical documents, and participating in technical discussions are key skills. Therefore, more attention was paid to these directions in the lessons.

**5. Problems and their solutions**

During the analysis, it was found that some students have difficulties in learning a foreign language. This was mainly due to the lack of motivation in language learning and lack of confidence in oral communication. To solve this problem, the introduction of gamification (gamification) elements in teaching and tasks based on group cooperation have been effective.

The discussion of this study shows that the use of professionally oriented, innovative and communicative methods in the process of teaching English in technical institutes, the creation of educational materials suitable for the needs of students, serves to increase the effectiveness of the educational process. At the same time, it was found that the use of digital technologies is important in increasing students' interest in learning.

**Summary.**

According to the results of this research, it has been proven that the process of teaching English in higher technical institutes is of great importance in the formation of professional competencies of students. During the research, the main problems related to the effective teaching of the English language in technical education were identified and ways to solve them were developed.

The following main conclusions were made:

1. It has been confirmed that vocationally oriented teaching is a relevant approach in learning English for technical students. Skills for working with special terms and technical documents have become an integral part of students' professional training.

2. It has been proven that the use of communicative methods is effective in improving students' language skills and increasing students' activity in the educational process. Project-based work in groups, modeling of technical situations, and development of oral communication took an important place.

3. The use of digital technologies greatly helped in diversifying the educational process, increasing student motivation and developing their independent learning skills.

4. Taking into account the needs of students became important in the adaptation of educational materials and the use of effective pedagogical methods. Skills such as reading and writing technical texts and correctly understanding professional terms were found to be priorities for technical students.

5. Innovative methods, including elements of gamification and group work, were introduced to increase interest in learning English among students through motivational approaches.

The results of this research indicate the need to introduce new pedagogical technologies, develop professionally oriented educational materials and use methods suitable for students' needs in the process of teaching English in higher technical institutions. These approaches serve to prepare technical students as competitive specialists in the international labor market.

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**ABDUKHOSHIM ISMAILOV TOOK THE PLACE OF  
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**Abstract:** This article is devoted to the analysis of the place of the well-known musicologist and creator Abduhoshim Ismailov in the development of Uzbek musical performance art. It describes the creative approaches of Abduhoshim Ismailov in the performance of the national instrument, his pedagogical activities and his contribution to the national music culture. Also, the article examines the importance of his works on the modernization of musical instruments and his creative heritage in promoting the national music art at the international level. The study shows the relevance of highlighting the unique creative style of Abduhoshim Ismailov in the performance of the national instrument and promoting it to the young generation.

**Key words:** Abduhoshim Ismailov, Uzbek musical performance, national music culture, musical instrument modernization, music pedagogy, creative heritage, international acquaintance.

**Introduction.**

The performance of Uzbek national instruments occupies a special place in the world music culture with its rich historical traditions and unique performance styles characteristic of art. The contribution of well-known musicologists and creators in the development of this field is immeasurable. One such person is Abduhoshim Ismailov, whose creativity and scientific activity are of great importance in bringing Uzbek musical performance to a new level.

Abduhoshim Ismailov is known for his creative approach and pedagogical skills in modernizing national musical instruments, forming unique performance styles and promoting them internationally. He is recognized not only as a skilled performer, but also as a person who sets an example in preserving the musical heritage and passing it on to the younger generation. This article analyzes the contribution of Abduhoshim Ismailov to the performance of the national instrument, his creative activity and influence on the art of music.

This research is aimed at deepening the understanding of the history of Uzbek national musical performance and introducing the creative heritage of Abduhoshim Ismailov to the general public. This makes it possible to preserve the national cultural heritage and make a new contribution to its development.

**Material:**

Abduhoshim Ismailov's creative activity played an important role in bringing the national musical performance of Uzbekistan to a new level. His creative approaches were formed on the basis of deep knowledge of national musical traditions and successful combination of modern performance techniques. During his creative career, Ismailov was

engaged in perfecting national musical instruments, expanding their technical capabilities and enriching performance styles.

One of the most important achievements of Abduhoshim Ismailov is the modernization of national musical instruments and introduction of new technical capabilities. In his career, he worked on expanding the sound range of instruments such as tor, rubob, dutor, and adapting their performance capabilities to modern requirements. This made it possible to successfully use national musical instruments not only in traditional music, but also in modern genres.

Ismailov not only worked on musical instruments, but also paid great attention to creating a special repertoire for the performance of national instruments. The works written by him are distinguished by their artistic excellence, musical precision and expansion of performance possibilities. Through this, he played an important role in promoting national instruments at the international level.

Abduhoshim Ismailov's pedagogical activity is also noteworthy. He trained a number of great specialists in the performance of the Uzbek national musical instrument and used modern pedagogical approaches in this regard. Ismailov paid special attention to the formation of not only technical skills, but also respect for national culture and a creative approach in young performers.

Also, his work is of great importance in preserving the creative experience in the performance of national musical instruments and passing it on to the next generation. Even today, his works and performance styles are actively studied in national music schools and performed by the younger generation.

In this article, Abduhoshim Ismailov's contribution to the national musical performance and the importance of his creative heritage in enriching the Uzbek music culture were analyzed in depth. His works served to bring national musical performance to a new level and had a significant impact on the development of this field.

#### **Literature review:**

National and foreign sources, scientific articles and researches of musicologists are important in studying the place of Abduhoshim Ismailov in Uzbek musical performance. This article analyzes the available scientific sources about his creative heritage and activities, and highlights their main conclusions and scientific views.

In national musicology, studies on Abduhoshim Ismailov's work are mainly focused on his performance style, pedagogical activities, and his contribution to the modernization of musical instruments. In particular, articles and monographs written by artists of Uzbekistan serve as the main source for studying Ismailov's creative directions. In these works, it is emphasized that his performance style is based on national traditions and is combined with modern performance techniques.

For example, in the article of Uzbek musicologist A. Rasulov, Ismailov's work on the modernization of national instruments is described in detail. In the research, the technical changes that he introduced to instruments such as the string and rubob, the effect of these changes on performance possibilities and the high level of playing national musical works were noted.

Also, scientific articles published by the Art Institute of Uzbekistan discuss Ismailov's pedagogical activity, innovative approaches and methodical methods used in teaching the performance of national instruments. These studies shed light on his contribution to the



development of national music schools as a pedagogue and reveal his place in the education of young performers.

Although there are few foreign sources dedicated to the work of Abduhoshim Ismailov, they cover his work on the international promotion of national musical instruments. In several articles written by foreign researchers, his participation in international music festivals and thereby increasing interest in the performance of national musical instruments are recognized.

However, it was revealed during the analysis that not enough comprehensive studies have been conducted about his creative activity. This shows the need for a deeper study of Ismailov's creative heritage and the need to expand scientific analysis in the future.

In conclusion, the analysis of the available literature confirms the great contribution of Abduhoshim Ismailov to the performance of the national instrument. These literatures, on the one hand, serve as a source for illuminating his creative activity, and on the other hand, serve as a basis for new scientific directions for a more in-depth study of his musical heritage.

#### **Discussion:**

In the process of analyzing the role and contribution of Abduhoshim Ismailov in the performance of the Uzbek national musical instrument, it was found that his creative activity had a significant impact on the development of the national music culture. He served to bring Uzbek national music to a new level through his performance methods, modernization of musical instruments and pedagogical approaches.

Firstly, Ismailov managed to increase the level of performance of national instruments by expanding their technical capabilities. His technical changes to instruments such as rubob and thor served not only to preserve national traditions, but also to harmonize them with modern musical genres. This created a solid basis for popularizing national musical instruments at the international level.

Secondly, Ismailov's pedagogical activity is aimed at introducing new approaches in national musical education. His focus on teaching students in-depth national traditions, as well as mastering modern techniques, ensured high efficiency in training young performers. As a result, his students were recognized not only in Uzbekistan, but also in the international music scene.

Thirdly, Ismailov's works on national instrument performance enriched the national musical repertoire. His creative approaches created new opportunities for combining artistic expression and technical skills in the performance of national music works. These works are widely used in national music schools due to their artistic value and performance requirements.

However, in the course of the analysis, it became clear that no complete scientific research has been conducted on his creative heritage. The issues of further study of Ismailov's creative activity and preservation of his legacy for future generations are still relevant. In particular, it is necessary to analyze his activities on the international music scene and his contribution to the development of national music in this area. Abduhoshim Ismailov's contribution to the performance of the Uzbek national musical instrument not only enriched the national music culture, but also served to make it known at the international level. His creative heritage, performance methods and pedagogical approaches are an integral part of Uzbek music culture, and preservation and promotion of this heritage in the future is one of the important tasks for the development of national culture.



**Conclusion:**

Abduhoshim Ismailov is a person who left a bright mark in the performance of the Uzbek national musical instrument as a unique creator and performer. His creative activity, work on modernization of national musical instruments and musical heritage made a great contribution to the development of Uzbek music culture. Technical and artistic innovations introduced by Ismailov to national instruments played an important role not only in the performance of traditional musical works, but also in harmonizing modern genres with national instruments.

Ismailov's pedagogical approaches and efforts to educate the young generation started a new stage in the national musical education system. His students have become high representatives of national musical performance, which confirms his success as a pedagogue. Also, his creative heritage and works aimed at enriching the national musical repertoire serve to popularize Uzbek musical performance at the international level.

Analyzing the creative and pedagogical activity of Abduhoshim Ismailov in this article, his contribution to bringing national musical performance to a new level was determined. However, it became clear that further scientific research is necessary for the in-depth study of his international activities and creative heritage.

Abduhoshim Ismailov's creative achievements and rich heritage continue to develop national culture and convey it to the younger generation. His work serves as an important resource for promoting Uzbek music culture on a global scale and preserving national values. Therefore, scientific and practical in-depth study, preservation and promotion of his heritage is one of the urgent tasks before the national music art.

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## DEVELOPMENT OF STUDENTS' MUSICAL PERFORMANCE SKILLS IN TRADITIONAL SINGING LESSONS

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**Abstract:** This article is devoted to the development of musical performance skills of students in traditional singing classes. It highlights the role of traditional singing lessons in the educational process, the importance of education as an important tool in the formation and development of performance skills. In the course of the study, the effectiveness of innovative approaches and practical training to improve executive skills is analyzed. By mastering traditional methods and techniques in singing, students develop not only musical culture, but also the ability to understand the rich heritage of Uzbek folk music. This article presents suggestions and recommendations aimed at improving singing skills based on advanced pedagogical technologies.

**Key words:** Traditional singing, music performance, performance skills, educational process, pedagogical technologies, practical training, folk music, music education.

### Introduction.

The art of traditional singing is an integral part of Uzbek music culture and embodies rich traditions that represent the cultural and spiritual heritage of the nation. The development of this art and its transmission from generation to generation directly depends on the performance skills of singers and the process of delivering this skill. Today, in the process of music education, educating students on the basis of traditional singing serves not only to develop their performance skills, but also to help them understand the cultural significance of folk music.

Traditional singing lessons play an important role in the formation of musical performance skills. These lessons not only improve performance skills, but also encourage students to creative research, preservation and development of national musical heritage. At the same time, increasing the effectiveness of the educational process by combining modern pedagogical technologies with traditional methods has become an urgent issue.

This article examines the role of traditional singing lessons in the educational process, its impact on the development of students' performance skills, as well as ways to improve performance skills using modern approaches. The article is aimed at studying the theoretical and practical aspects of the art of singing, based on the analysis of best practices in this regard and making suggestions.

### Methodology:

In this study, complex research methods were used to study the development of students' performance skills in traditional singing classes. The research was carried out on the following methodological basis:

Scientific literature on music education, pedagogical and methodical manuals, existing studies and articles on national music performance were analyzed. The theoretical aspects of the development of traditional singing and music performance were studied.

In traditional singing lessons, the progress of the educational process, methods aimed at developing students' performance skills were observed. During the observations, the teaching methodology and the factors influencing the level of students' learning were noted.

Special pedagogical approaches aimed at developing students' musical performance skills were tested. During the experiment, ways of developing performance skills were studied based on the combination of traditional and innovative methods.

Interviews were organized with students and their teachers. During the interviews, feedback was collected on the problems encountered in the course of the lesson, the needs of students and the development of their performance skills.

The results of the experiment and observation were analyzed, and effective methods of developing musical performance skills in traditional singing lessons were determined. Pedagogical recommendations were developed based on the results.

The results of this research show the importance of traditional singing lessons in improving students' performance skills. It is also a basis for studying the possibilities of using innovative approaches in improving the educational process.

#### **Literature review:**

The analysis of scientific literature, which illuminates the theoretical and practical aspects of the art of traditional singing and music performance, served as an important basis for this research. During the research, a number of works dedicated to Uzbek music culture, folk art and singing art were studied. Below is a brief analysis of the main literature on this topic and the approaches presented in them:

Studies on Uzbek folk music and traditional singing art (Sharof Boshbekov, Yunus Rajabi, Komiljon Otaniyozov, etc.) revealed the methodological aspects of traditional music, its role in performance and educational significance. In these sources, the performance of folk music is defined by its specific performance technique and essence.

Scientific works highlighting pedagogical approaches to traditional singing education, including scientific articles on music education by Uzbek and foreign scientists, pay special attention to the role and importance of national music in the development of students' performance skills. Their approach includes effective methods of developing students' creative abilities and bringing them closer to national music.

Works written on the integration of modern pedagogical technologies in music education, in particular, research on the use of interactive methods in music education, emphasize the effectiveness of innovative approaches in improving performance skills. This literature suggests an educational model based on the combination of traditional and modern methods.

International sources have studied the unique aspects of folk music education, global pedagogical approaches that serve to improve students' performance skills. These studies make it possible to compare the performance of national music with international experience.

The analysis of these literatures shows that it is important to combine national traditions and modern pedagogical approaches in the development of performance skills in traditional singing lessons. This not only improves performance skills, but also helps students think creatively and form their own musical identity.

**Discussion:**

The results of the research showed that traditional singing lessons play an important role in the development of students' musical performance skills. In this process, it is necessary to use special methodical approaches to increase students' interest in national musical heritage, develop their creative thinking and improve performance skills.

During the discussion, the following main aspects were identified:

1. The role of traditional singing in the educational process

Through traditional singing lessons, students learn the styles of folk music and have the opportunity to apply them in performance. This plays an important role in improving their performance skills. Especially mastering the melody, rhythm and performance styles characteristic of folk music encourages students to creative research.

2. Effectiveness of using innovative technologies

The use of modern pedagogical technologies, including multimedia tools and interactive methods, serves to improve traditional methods. For example, the use of audio and video materials allows students to learn music samples and performance techniques more effectively visually and aurally.

3. The importance of practical training

As observed in the research, in the course of practical training, students have the opportunity not only to strengthen theoretical knowledge, but also to develop performance skills directly through performance practice. The individual approach of coaches is an important factor in this process.

4. A combination of national and modern approaches

Combining national and modern approaches in the educational process of traditional singing creates great opportunities for the development of students' creative potential. The results of teaching students national music methods combined with modern performance techniques have been effective.

5. Individual development of students

Based on the results of the research, it was emphasized that an individual approach, taking into account their abilities and needs, is necessary for the development of students' performance skills. This helps to organize the execution process more effectively.

In general, traditional singing lessons are not only an important part of the educational process in improving students' performance skills, but also serve as an educational platform that enriches their musical outlook. In order to improve this process, it was determined that it is necessary to ensure the harmony of national musical heritage and modern pedagogical technologies.

**Conclusion:**

The results of the research show that traditional singing lessons play an important role in the development of students' musical performance skills. Through these classes, students will have the opportunity to master the national musical heritage and improve their creative and performance skills. This study led to the following conclusions:

Traditional singing lessons create a foundation for students to master the theoretical and practical aspects of performance. This process increases their interest in music and stimulates their creative pursuits. Combining modern pedagogical technologies with traditional approaches ensures high efficiency in improving students' performance skills. The

use of multimedia tools and interactive methods expands innovative opportunities in music education.

Practical training plays a key role in the development of students' performance skills. The individual approach of the coaches and the teaching of national musical styles in these classes help to significantly improve the performance skills of the students. Development of special methodical recommendations by pedagogues and ensuring the harmony of national and modern approaches are of great importance in the development of students' executive abilities.

Thus, the development of performance skills in traditional singing lessons not only improves students' performance skills, but also forms their ability to understand and appreciate national musical culture. Improving the effectiveness of music education can be achieved by improving this process.

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## DEVELOPMENT OF A METHODOLOGY FOR PREDICTING THE PROPERTIES OF MULTICOMPONENT HIGH-QUALITY CONCRETE TAKING INTO ACCOUNT THE SURFACE PROPERTIES OF MINERAL FILLERS AND STRUCTURAL SIMULATION MODELING

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**Abstract:** The results of theoretical and experimental research on the development of a scientifically based methodology for prescribing plasticizing chemical additives and mineral fillers in the selection of compositions of complex modified concrete (CMC) at the stage of their design are presented. A classification of plasticizing additives is proposed according to the degree of reduction in the surface tension of water upon their introduction and the activity of mineral additives according to the indicator of reduced hydration activity, which makes it possible to obtain highly economical BMPs with the required properties.

**Key words:** Concrete, classification of additives, modification, plasticizer, mineral filler, surface tension, adsorption centers, hydration activity

It is established that for the production of hollow floor slabs by the method of continuous formless molding, it is necessary to use concrete mixtures with a stiffness of about 90 c, which guarantees that the product retains its shape immediately after the vibration effect on the concrete mixture is completed. Therefore, the spatial framework should be formed according to the principle of selecting a rational grain composition of components.

When selecting the composition of concrete, the issues of ensuring the minimum consumption of cement from the conditions of reducing the energy intensity and cost of the mixture, ensuring workability and reducing defects associated with the collapse of the massif, as well as with the quality of the front surface were taken into account [1]. Effective production of products using this technology largely depends on the full involvement of local raw materials. When selecting concrete compositions, we used the accumulated experience of optimization from the conditions of minimal voidness with the replacement of part of the traditional raw **materials with soils of different nature and density.**

Purposeful optimization of the grain composition of concrete mixes was carried out at the expense of fillers.

Analysis of the research results of the authors [1-3-3] showed that mineral fillers with adsorption centers of intensities lying in the pKa region from -4 to 7 and more than 13 contribute to the catalytic activation of cement hydration. Active centers of mineral fillers in the areas of pKa from 7 to 13 contribute to accelerating the adsorption of water molecules from cement dough, thereby distracting from deeper participation in chemical interactions with the binder and thereby reducing the rate of hydration processes in the cement binder.

Taking into account the above, we have proposed a new criterion - "indicator of reduced hydration activity", which, in our opinion, allows us to more accurately assess the contribution of the surface activity of mineral fillers to the course of interactions and transformations, occurring in a hydrated medium.

**Table 1**
**Content of surface adsorption centers of mineral fillers**

№ n /	a Name of mineral filler	Number of centers, $10^3 \text{ mg-eq/m}^2$				Total number of centers
		-4...0	0...7	7...12,8	>12,8	
		$P_{ol}$	$P_{kb}$	$P_{ob}$	$P_{kl}$	
1.	Sand Quartz Sand	8.04	9.11	8.75	1.88	27.78
2.	Sand dune	4.12	7.08	9.95	1.07	22.22
3.	Clay	13.22	16.47	10.08	2.87	42.64
4.	Basalt	23.41	22.15	11.16	1.96	58.68
5.	Zeolite containing rock	102.08	24.88	12.62	2.14	141.72

The proposed indicator is indicated by the symbol  $-P_{pga}$  and is determined by the formula:

$$P_{pga} = P_{kv} + P_{kl} + 0.33P_{ol} - 0.1P_{ob}, \text{ where (1)}$$

$P_{kv}$ ,  $P_{kl}$ ,  $P_{ol}$ ,  $P_{ob}$  –the number of adsorption centers in the regions  $0 < pK_a < 7$ ;  $pK_a > 13.0$ ;  $-4 < pK_a < 0$ ;  $7 < pK_a < 13.0$  in  $10^{-3} \text{ mg-eq/g. co}$ , respectively.

This criterion, which characterizes the acid-base properties of the surface of mineral fillers, allows us to scientifically classify mineral fillers according to the degree of their impact on cement systems. In general, the following classification of mineral fillers is proposed according to the  $P_{pga}$  criterion—an indicator of the reduced hydration activity (Table 2).

**Table 2**
**Classification of mineral fillers according to the indicator of reduced hydration activity**

№ n /	a Type of mineral filler	$P_{pga}$ .	
		Values of the $P_{pga}$ criterion.	Potential efficiency in cement systems, cement savings in %
1.	Weakly	active from $0 <$ to $<10$	To 10%
2.	Moderately	active from $10 <$ to $<25$	10-20%
3.	Highly	active $25 <$ to $<50$	20-30%
4.	Super	Active Over Up to $>50$	Up to 50%

For mineral fillers accepted for the study, the calculation of this criterion, i.e., the indicator of reduced hydration activity, is presented in (Table 3).

Comparative analysis of mineral fillers according to the  $P_{pga}$  criterion allows predicting their effectiveness in cement systems and characterizing them by their degree of activity, such as: barkhany sand-weakly active; quartz sand, clay, SEP-moderately active; basalt, OMP, fly ash from the Angren thermal power plant-highly active and zeolite-containing rock-super active.

Table 3

**Criterion  $P_{pga}$  in mineral fillers**

№ n/	a Mineral filler name	Converted data		Criterion $P_{pga}$ .	Ey, MPa
		$0.33P_{ob}$	$0.1 P_{ol}$		
1.	Sand Quartz Sand	2.65	0.87	12.77	200
2.	Dune sand	1.36	0.99	8.52	180
3.	Voronezh	4,36	1,01	22,39	120
4.	Basalt	7,72	1,12	30.71	290
5.	Zeolite containing rock	33.68	1.26	59.44	300

The **developed Patent No . IAP 07520** allows determining the composition of filled cement systems with local mineral fillers, which makes it possible to design concretes with the necessary physical and mechanical properties for the technology of non - formwork molding using structural simulation modeling.

**Конструктивные слои из смесей щебеночно-гравийно-песчаных, соответствующих  
ГОСТ 25607-94 и ГОСТ 3344-83**

Материал слоя	Нормативные значения модуля упругости, E, МПа
Щебеночно-гравийные смеси (С) для покрытий: - непрерывная гранулометрия (ГОСТ 25607) при максимальном размере зерен: $C_1$ - 40 мм	300/280
$C_2$ - 20 мм	290/265
Смеси для оснований - непрерывная гранулометрия: $C_3$ - 80 мм	280/240
$C_4$ - 80 мм	275/230
$C_5$ - 40 мм	260/220
$C_6$ - 20 мм	240/200
$C_7$ - 20 мм	260/180
Шлаковая щебеночно-песчаная смесь из неактивных и слабоактивных шлаков (ГОСТ 3344)	
$C_1$ - 70 мм	275
$C_2$ - 70 мм	260
$C_4$ - 40 мм	250
$C_6$ - 20 мм	210

**Geometric and physical parameters of the modeling object**

Concrete macrostructure the structure of concrete that is visible to the eye or at low magnification. In the macrostructure of concrete, structural elements are distinguished: coarse aggregate, sand, cement stone, air pores. Sometimes the macrostructure of concrete is conventionally assumed to consist of two components: a coarse aggregate and a cement-sand mortar.

Matrix - a component of a two-component concrete system that represents the mortar part (in Figure2, the main field of the "plate" is represented by light dots).

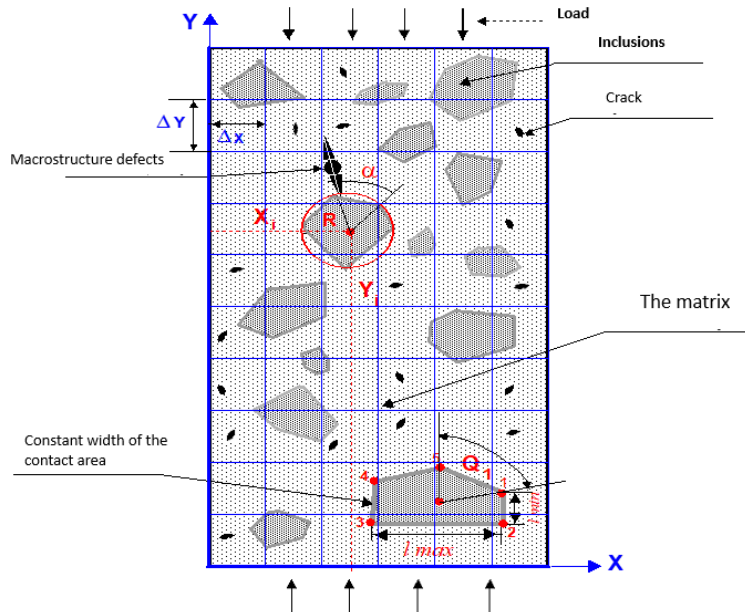


Figure 2. The simulated object and its components

**Physical parameters of the matrix:** - elastic modulus  $E_m$ , Poisson's ratio  $\mu_m$ , critical coefficients of stress intensity at normal rupture  $K_{Ic}^I$  and plane shear  $K_{IIc}^I$  } } fixed values.

**Initial defects in the macrostructure of concrete and its components (SSS)** pores with collinear cracks (Fig.2).

Geometric parameters of the SSS: -  $r_{ij}$  – pore radius with coordinates  $X_i, Y_j$  – const,  $l_{oij}$  – initial crack length =  $0.184r$ ,  $\alpha_{ij}$  – crack orientation relative to the load vector, random-a value obeying the law of arbitrary distribution in the range from 0 to  $2\pi$ ,  $X_i, Y_j$  VAT coordinates, independent random variables distributed according to a uniform law over the area of the plate (simulated sample);  $N$  is the number of initial defects in the sample field ( $N_{min} = 30$ ).

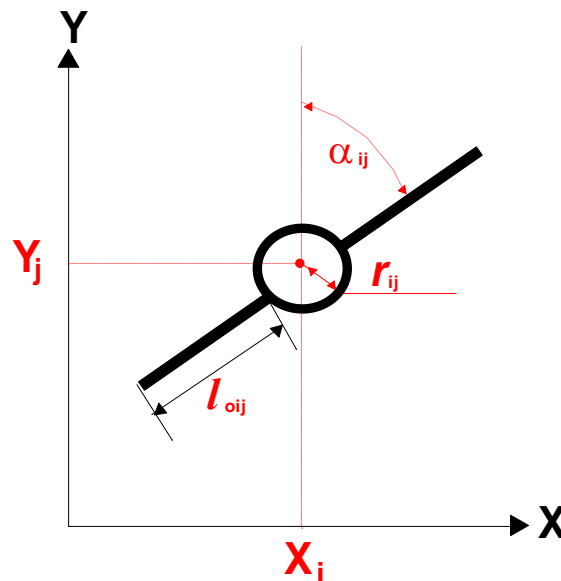


Figure 3. Geometric parameters of VAT.

**Inclusions of coarse aggregate grains.** They are modeled by convex polyhedra (Fig. 4). Geometric parameters:

-  $R_{ij}$  is the radius of the circle described around the polygon – const;  $n_{ij}$  is the number of vertices of the polygon ( $n \leq 6$ ) –  $\Theta_k^m$  – orientation of the  $k$ -th vertex of the polygon of the  $m$ -th inclusion relative to the load vector – a random variable distributed according to a uniform law in the interval from 0 to  $2\pi$ ;  $X_i^M, Y_j^M$  – coordinates of the center of the circumscribed circle  $M$ -th inclusion  $\varphi$  – concentration of inclusions:

$$\varphi = \frac{\sum_{m=1}^M S_m^B}{S_{об}}, \quad (2)$$

where  $S_m^B$  – is the area of the  $m$ -th inclusion,  $S_{об}$  is the area of the sample.

— $K_\Phi$ —shape coefficient:

$$K_\Phi = \frac{L'_{\max}}{L'_{\min}}, \quad (3)$$

where  $L_{\max} = L'_{\max} = L_{\max} \cos \xi_1$ ,  $L'_{\min} = L_{\min} \times \cos \xi_2$ ;  $L_{\max}$ ,  $L_{\min}$  are the maximum and minimum sides of the inclusion polygon, respectively (Fig.).

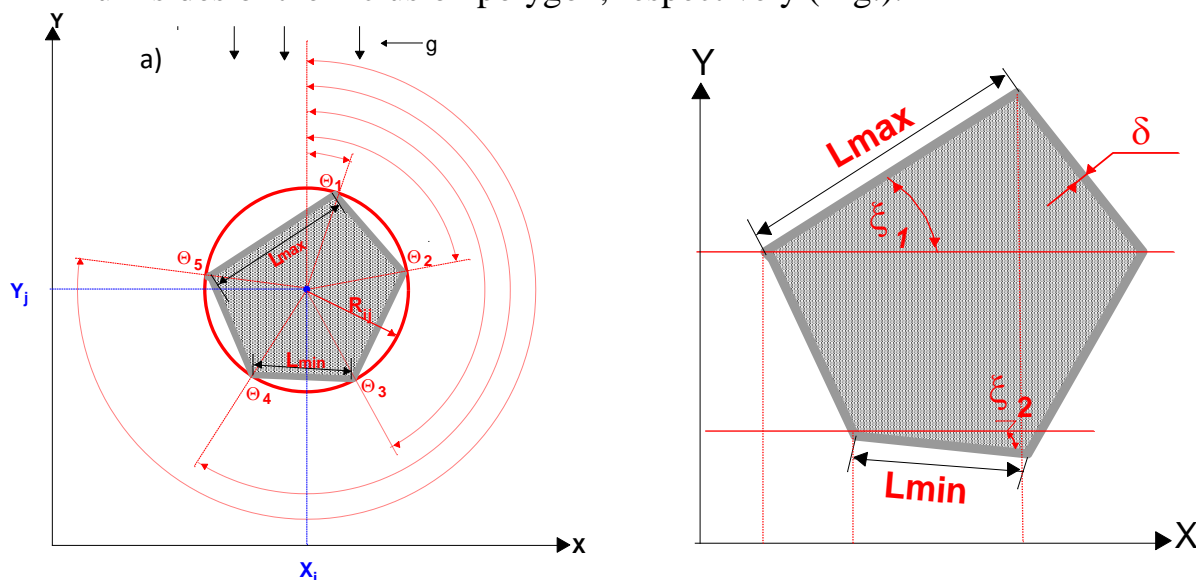


Fig. 4. Geometric parameters of switching on.

Physical activation parameters:

$E_b$  – elastic modulus – const;  $\mu_b$  – Poisson's ratio – const;  $K_{Ic}^B$  – stress intensity coefficient at normal rupture;  $K_{IIc}^B$  – stress intensity coefficient at plane shear – const.

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**"GREEN" ENERGY IS THE FUTURE OF THE COUNTRY****Kayim Beshimovich Khozhiev**

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**Annotation:** this article focuses on the research on the elimination of energy problems and work on the basis of public-private partnership in co-operation with foreign investors, work to improve energy efficiency.

**Keywords:** efficiency, green economy, solar home, energy, renewable energy sources.

**Introduction**

Today, humanity faces new threats. The world's population has been steadily increasing for many years, while natural resources are rapidly diminishing. This, in turn, leads to the search for alternative energy sources around the world. This is why it is trying to encourage a shift towards green energy (renewable energy) around the world. There are two important reasons for this. Firstly, while the world is running out of energy generating resources, and secondly, due to the emission of harmful exhaust gases into the atmosphere, there is a drastic pollution of the atmosphere and global climate problems.

They emphasise the need to introduce the principles of 'green development' into the global economy in order to address the existing problems and correct the situation in the world economy. In this regard, serious reforms are also being carried out in our country under the leadership of the Head of State.

It is known that in 2019 Uzbekistan adopted a strategy to transition to a 'green economy'. The main goal of this is a sharp reduction in carbon dioxide consumption in our country in the next ten years, the introduction of environmentally friendly and energy-efficient technologies in all sectors of the economy, and the widespread use of renewable energy sources[1].

**Analysis of literature on the topic**

Leading specialists, scientists of the industry conduct large-scale research work to study and eliminate fuel and energy problems in countries with climate change, damaging the environment, lack of fossil fuel and energy resources. Including World scientists J.Duffy and W.A.Beckman, B.Anderson, J.Twidell and A.Ware, R.V.Gorodov, N.V.Kharchenko and V.Ya.Ushakov[5,6,7,12,13,14]. The main directions of development of renewable energy use, methods of conversion of solar, wind, geothermal, tidal energy, electric and thermal energy taking into account the latest achievements of technology and techniques, heating of houses with the help of solar energy and hot water supply are considered in these articles. Special attention is paid to the dynamics of energy consumption and modernisation of energy facilities, the development of renewable energy sources and environmental ecology, including views on the green development programme. Among the leading scientists of our country in this field G.Y.Umarov, R.A.Zakhidov, R.R.Avezov, K.Shodimetov, G.K.Zainuddinova, G.N.Uzakov, S. Kaxxorov [8,9,10,11] and others, written practical manuals, describe in detail home heating

devices with the use of alternative energy sources, guidelines for meeting the demand for electricity, guidelines for the use of renewable energy sources in our country and the prospects for increasing its share in the total energy production, as well as recommendations for increasing the share of renewable energy in the total energy production, as well as recommendations for improving the energy efficiency of the country.

### **Research methodology**

The article widely used methods of induction and deduction in analysing the views, opinions and judgments of scientists on research work on solving the problems of the energy sector of our country, the problems of energy resources in the world at present. On the basis of analysing the growth of demand for alternative energy sources and implementation of 'green economy' with the use of renewable energy sources in Uzbekistan, proposals and recommendations have been developed.

### **Analiz and results**

According to studies, Uzbekistan annually loses at least 4.5% of its GDP due to the use of hydrocarbon energy - oil, gas and coal. In particular, 66% of main and distribution networks, 74% of substations and more than 50% of transformer stations are obsolete due to their operation for more than 30 years [4]. Significant funds are allocated for their restoration or modernisation. For this reason, the transition to 'green energy', which is economical and environmentally efficient, has proven to be a thousand times more effective. A vivid example of this is the fact that the whole world is moving along this path in the current energy shortage.

Uzbekistan is the first Central Asian country to consistently join this movement, and the green economy transition strategy adopted five years ago is a sign that our country is moving towards green progress. On 27 December 2023, our President participated in a ceremony dedicated to the launch of major joint projects in the field of green energy and expressed important thoughts on the strategic programme for the development of green energy in our country, which was aimed at 2030 [1,3].

Our president raised the question of where to start reforming the energy sector, we started first of all with consultations with leading specialists. We started first with consultations with leading experts from the World Bank, the Asian Development Bank and the Asian Infrastructure Investment Bank, and the European Bank for Reconstruction and Development. A solid legislative framework based on market principles was established in the energy sector by amending a number of legislative acts and adopting new decisions. Administrative-command mechanisms in place, abandoning monopoly and moving towards a modern managed, open and transparent system. The fact that favourable opportunities have been created for the private sector and foreign companies to enter our country.

Why do we pay so much attention to the promotion and development of green energy? First of all, we have set ourselves the goal of doubling the volume of industrial production by 2030 and raising such spheres as metallurgy, petrochemicals and machine building to a new level. We plan to implement

To achieve such lofty goals, we need guaranteed and stable energy resources like air. According to estimates, in the next six years, the demand for electricity in our country is expected to increase from the current 83 billion kilowatt hours to 120 billion kilowatt hours. more than 500 large industrial and infrastructure projects with a total value of \$150 billion [2,3].

We will cover this need first and foremost with renewable energy.

Secondly, tireless research to mitigate the negative effects of climate change, which has become a global problem. We are actively promoting important proposals and initiatives at international summits. Within the framework of the UN Climate Change Conference in Dubai, it was agreed that the countries of the world will triple the number of the 'green' generation. Uzbekistan fully supports this initiative and the need to consistently continue its active investment policy to bring the capacity of green energy sources to 27 gigawatts by 2030.

Thirdly, the fact that there is an incredibly huge potential for green energy in our country. It is imperative that we make the most of this wonderful opportunity provided by the creator himself and channel it for the benefit of our people. In order to incentivise the industry and further its development, the Solar Home Scheme has been set up to provide soft loans and subsidies for the installation of solar panels, guaranteed purchase of the electricity generated. Although in 2023, solar panels have been installed in our country in 50 thousand flats and entrepreneurs. Considering that there are more than 7 million housing units in our country, we can separately say that this is a favourable environment for investors and the creation of a large market.

Fourthly, green energy certification is being widely implemented, with a special focus on green energy products worldwide. Uzbekistan is taking the first steps to bring green energy to Asian and European markets in the future through a clear plan and careful efforts.

For the first time, 2 solar plants in Karmana and Nurabad districts of Navoi region were launched with 100% foreign direct investment and are now contributing to the overall energy grid by generating green energy[15,16].

In addition, six large solar and wind power plants with a total capacity of two thousand four hundred megawatts have been connected to the grid. In particular, the Masdar company from the United Arab Emirates will launch the first phase of 3 solar power plants in Jizzak, Samarkand and Surkhandarya oblasts, as well as a modern wind farm with a capacity of 100 megawatts, which is under construction in Tomdinsky district of Navoi oblast [15,16]

The first generation of 400 megawatt solar plants in Bukhara and Kashkadarya regions will start with Gezhouba. The most remarkable thing is that all these projects are implemented on the basis of public-private partnership, at the expense of direct foreign investments.

It can be said that these projects, with a total cost of \$2 billion, generate 6 billion kilowatt hours of electricity annually, saving two billion cubic metres of natural gas. This is evidenced by the fact that 2 million flats now have uninterrupted and guaranteed electricity supply. In the industry and service sector, an added value of 4 billion dollars will be created. Currently, it can be noted that our country is working intensively on projects for the construction of 22 solar and wind power plants with a capacity of 9 gigawatts, with a special focus on further improving the infrastructure to provide new generating capacity [2,4].

The country's population and incomes are growing. Under these conditions, the demand for energy resources will also increase. An important component of the 'green economy' is the creation and utilisation of renewable energy sources. Uzbekistan's potential in this area is quite high. According to the calculations of international financial institutions, the annual stock of alternative energy (especially solar energy) in the country is equal to 270 million tonnes of fuel equivalent. This is three times more than our real need. In addition, the implementation of green energy projects will make it possible to increase the share of

renewable energy sources in Uzbekistan by more than 3 times over the next decade. This means that it has unprecedented benefits for our economy[4].

At the same time, when we achieve further strengthening of overseas partners to establish close co-operation relations with domestic enterprises in the production of components and spare parts in the field of 'green energy', we will accomplish the tasks set before us.

### Conclusions and suggestions

Instead of a conclusion, we can say that the country's rapid transition to 'green energy' is primarily important for ensuring the ecological balance in the region, rational use of natural resources and meeting the energy needs of the population.

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## SYMBOLISM IN MODERN SCULPTURE

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**Annotation:** This article explores contemporary scholarship on symbolism in modern sculpture, highlighting how artists utilize symbolic materials, abstract forms, and cultural motifs to address identity, existentialism, and social themes, how Symbolist traditions inspire modern themes

**Key words:** modern sculpture, symbolism, cultural identity, existentialism, abstract forms, symbolist influence, mythological reinterpretation, contemporary art

### Introduction:

Symbolism in modern sculpture has evolved to engage with themes of identity, existentialism, socio-political critique, and abstraction, often foregoing traditional figurative representation in favor of more suggestive, open-ended interpretations. Unlike classical sculpture, which generally sought to reproduce the human form or significant historical events in a recognizable manner, modern sculpture explores more abstract ideas through forms that are fragmented, geometrically simplified, or entirely abstract. The symbolism within modern sculpture thus operates on several levels, from the materials used to the spatial interaction with the viewer, allowing for a deeply nuanced engagement that challenges the viewer to uncover meaning beyond mere appearance. This departure from the classical and representational roots of sculpture allows modern artists to approach their subjects from a conceptual perspective, where ideas and emotions become paramount, often resulting in works that are as much about process and perception as they are about the physical object itself.

### Literature analysis and methodology:

The materials used in modern sculpture also carry profound symbolic significance, becoming integral to the conceptual message of the piece. For example, the choice of metals, stone, wood, or even found objects reflects a broader statement about industrialization, nature, permanence, or disposability. Artists like Louise Nevelson, who is renowned for her use of reclaimed wood, transformed discarded materials into intricate monochromatic structures, often painted black or white. In doing so, Nevelson imbued her work with themes of rebirth, resilience, and transformation, as the act of reusing and reconfiguring these materials symbolized a reimagining of society's unwanted remnants into something meaningful and valuable. The material choice is not merely aesthetic but is inherently tied to the sculpture's message, as it speaks to cultural, social, or environmental contexts.

### Results:

Fragmented or distorted human forms are another potent symbol in modern sculpture, often representing themes of alienation, existential despair, or identity crises. Alberto Giacometti's elongated and almost skeletal figures, for example, capture the fragility and isolation of the human condition, symbolizing the existentialist belief in the individual's

solitary nature amidst an indifferent universe. His sculptures are not about physical resemblance but rather about embodying psychological states; they stand as haunting symbols of humanity's struggles with isolation, fear, and mortality. These figures, so thin and fragile in appearance, confront viewers with the vulnerability of the human form, forcing a contemplation of the emotional and psychological dimensions of existence. By distorting the body, Giacometti, along with other sculptors who engage in similar approaches, creates figures that symbolize the inner turmoil and alienation felt by individuals in the modern world, thus capturing the dissonance between one's inner and outer realities.

**Discussion:**

Modern sculpture's emphasis on spatial symbolism and viewer interaction is also noteworthy, as it transforms the viewing experience into a dynamic process of interpretation. Works by Richard Serra, for instance, employ large, imposing steel walls that create confined pathways and enclosures, compelling viewers to navigate around and within the work itself. As viewers are forced to confront their own scale in relation to these towering walls, they are also compelled to reflect on their psychological and emotional responses to the space, thereby becoming active participants in the symbolic narrative of the piece. Through such spatial manipulation, sculptors like Serra create immersive symbolic spaces that reflect the tensions between personal autonomy and societal structures, echoing the broader existential concerns of modern art. This interactive engagement with space is a defining characteristic of modern sculpture's symbolic vocabulary, as it prioritizes the relationship between the viewer and the artwork over traditional notions of passive observation.

**Conclusion:**

In conclusion, symbolism in modern sculpture operates on a sophisticated and multi-layered level, inviting viewers to engage in an interpretative process that transcends literal representation. Through abstract forms, symbolic use of materials, distorted human figures, spatial interaction, and minimalism, modern sculptors create works that resonate with universal themes and contemporary issues alike. This symbolic approach not only broadens the interpretative possibilities of sculpture but also challenges viewers to find meaning in ambiguity and abstraction, underscoring modern sculpture's role as a medium for both personal reflection and cultural critique. In its varied approaches to symbolism, modern sculpture has redefined the boundaries of the art form, transforming it into a powerful vehicle for expressing the complexities and contradictions of the modern human experience.

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## HEALTH-IMPROVING PHYSICAL EDUCATION IN ELDERLY PEOPLE WHO PRACTICE AMATEUR SPORTS IN THE NORMALIZATION OF PHYSICAL LOADS

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**Annotation:** In this article, several parameters of the individual's heart rate indicator are studied in detail in determining the norm of physical load for practicing health-improving physical education in people over 30 years of age.

**Keywords:** individual, parameter, frequency, endurance, flexibility, hypokinesia, hypodynamics, enzyme, hormone, biosynthesis.

### INTRODUCTION

Knowing the legal periods that occur in the individual development of a person is one of the main factors when setting a physical load norm for practicing health-improving physical education in people over 30 years of age. The hierarchy of adulthood and old age is continuous without interruption, and the changes in it continue in the form of balkim, undulating forms, in one rhythm and without leaving at the same time. The second period of maturation was relatively accepted as 35-55 years of age in females and 37-60 years in males; while the aging period is 55-75 years in females and 63-77 years in males. There are various scales that look for the aging and aging of the human body there are a number of theories that explain them in detail. In the opinion of scientists studying most of these sochains, aging at the cellular and molecular levels goes slower than aging of one whole organism. One of his theories explaining aging is the widely known Emirati theory.

During the second period of its life, the cells, tissues and systems of the organism are absorbed, and the control processes are decayed. The subtlety of this theory is that a person does not take into account the fact that the organism has the ability to self-regenerate during life activities without being sucked away. The energy reserve of a human organism is genetically determined, which is spent throughout its life. The supposedly combustible will melt as astalik as a candle holder. The sluggish the activity of movement according to the above theory, the energy consumption will also be correspondingly low, the aging of the organism will be slow and the duration of its life will be longer.

### LITERATURE ANALYSIS

The theory of self-poisoning explaining aging was put forward by I.I.Mechnikov. According to him, factors that affect the continuity of the life of the body - unfavorable external environment (cold, hot, dust, strong pressure,) conditions, smoking bad habits, drinking a sports drink, giokhvandlik yana Mechnikov believes that microbes in the large intestine are the effects of poisons that are formed as a result of life activity. As a result of their action, poisoning and premature aging of the body occurs.

To prevent this, the scientist recommended increasing fruits and vegetables by reducing proteins in the diet, as well as cleaning the body (one in 1 year). Thus, a number of theories aimed at preventing aging show the authors' opinions in this area.

Social, economic, medical and external environmental factors affect the rate of aging and determine the life expectancy of people. The average life expectancy of people is not the same in different countries. In better living conditions countries, the average life expectancy will be longer than in others.

### RESEARCH METHODOLOGY

The result of research in subsequent years suggests that as one grows older, it becomes more difficult for the body to adapt to the effects of external environmental factors, resulting in the occurrence of various diseases in older people, leading to the development of a chronic stress condition in the body.

Scientists suggest that changes in the body during aging are almost identical to changes in stress time. It follows from this that the theory of aging elevation was created by scientists. According to this theory, aging is associated with the activity of the hypothalamic section of the brain, as its activity increases with age, rather than decrease. This leads to the rise of the homeostatic braking step, disruption of metabolism and the development of chronic stress. Based on this theory, it is proposed to apply practical measures (active rest, optimal physical load, biologically active substances,) aimed at improving the chances of adaptation of old people to munit. Thus, in theories explaining aging, this process is followed by the personal opinions of the authors and links these changes to certain levels of the organism. In fact, however, it is considered a complex biological process, has a polymorphic nature, and it is not possible to explain it for one reason or another very difficult case in short.

Prevention of premature aging, among the factors that slow down aging, the most convenient and harmless is the practice of physical exercise. At this point, the French writer A. In myussé's novel, he described that "exercise replaces many drugs, but not a single drug can replace exercise". Changes and emotional reactions that occur in the body's functions under the influence of exercise have a positive effect on organisms of maturity and old age. These effects only have a positive effect when the character, size, rhythm, intensity of physical exercise is consistent with the satisfaction and personal characteristics of the practitioner. For example, running exercises for someone, rock climbing exercises for whom, dancing exercises for whom, and has a positive effect.

### ANALYSIS AND RESULTS

In the study of the aging process, the physical qualities of the body can be assessed according to their changes. The change in physical qualities makes the individual dependent on himself, and in adulthood and old age, along with physically impaired people, it is possible to meet people with high functionality, for example, in some people muscle strength begins to decrease after 20-25 years, and in others this quality decreases only after 40-45 years. From physical qualities, quickness, flexibility and agility quickly deteriorate compared to strength and endurance. The main factor that keeps track of the deterioration of physical qualities is regular exercise. The sentence "regular" is based on the principles of this science of physical education.

All indicators of the quality of speed within the chemical qualities deteriorate with age, for example, the speed of movement drops the most between the ages of 50-60, and slightly stabilizes between the ages of 60-70, and in older adults after this, the speed of movement slows down significantly.

From this we know that in the age range of 60 - 70 years, a basic level of life activity occurs, bringing a reduced state of movement to the surface. In people who perform regular



physical loads, the decrease in all indicators of agility occurs at a slower pace. For example, a decrease in agility in 50 - 60 - year - olds compared to the 18-20-year-old rate is 20-40%, while in unvaccinated individuals it is 25-60%.

The maximum value of the strength of different muscle groups is 18-20 years old, and at this level in most halls it stands at 40-45 years old, and when it reaches 60, it decreases by about 25 percent. The greatest decrease in strength in people who do not exercise is between the ages of 40 and 50, while those who do regular exercise are between the ages of 50 and 60. The superiority of satisfied people over unverified people is evident in 50 - 60 years of age and older. For example, hand dynamometry of people engaged in sports or physical education is 40 - 45 kg/m at the age of 75, which corresponds to the average of people aged 40 who are not fit.

In physical qualities, the quality of endurance is maintained longer than in other physical qualities. In most of the studies carried out, endurance attenuation begins at the age of 55, when performing work of medium strength, a high level of aerobic capacity (oxygen conditions) endurance indicator is maintained at the age of 70-75 years. This information is characterized by the fact that people of this age participate in various long-distance runs, swimming, tourist walks. Endurance decreases after 40-45 years of age when performing exercises in anaerobic (oxygen - free conditions). The development of endurance will primarily depend on the circulation, breathing, and full-value functioning of the organs of the blood system. Regular running and swimming exercises significantly delay the decrease in the quality of endurance, rock lifting, work with dumbbells, work with expanders have little effect on the quality of endurance.

Flexibility motion is characterized by the ability of the hardware joints to bend at maximum amplitude. The decrease in the quality of flexibility begins at the age of 15 - 20 years, if not engaged in special chincing exercises. This in turn disrupts the performance of complex movements of various shapes and their coordination (coordination of the body's behavior). In older people, the elasticity indicators of the spine will be significantly reduced. Practicing temper training ensures that the quality of the flexibility is maintained for a long time.

The favorable period for the development of agility quality is the period from 7 to 14 years. The progress of the quality of agility will depend on the fact that the paws especially expand the lower surface of the heel. The earlier these indicators develop, the faster the agility Ham appears. The quality of agility also begins to fade from the age of 18-20, practicing special exercises slows down the weakening of agility and ensures that it is high for many years.

### DISCUSSION OF RESEARCH RESULTS

Physical education is considered the means that ensure the good maintenance of the functional state of the body of elderly people. Functional state of the organism refers to the qualities that ensure any physical work and sports activity. The main functional states associated with movement activity can be indicated by fatigue, chronic fatigue, extreme fatigue, mental emotional tension, monotony, hypoknesia and hypodynamia. All functional states are divided into Type 3: normal (fatigue), borderline (chronic fatigue), and pathological (extreme fatigue). It is known that elderly people get tired quickly and quickly switch to a state of extreme fatigue. Older people will be obsessed with mental emotional experiences, their lives will be monotonous (growing or decreasing) or almost the same. There are many

cases of hypodynamia, hypoknesia. Under the influence of these factors, the functions of the organs and systems of the body decrease, and energy consumption decreases. Such physiological shifts cause the body to reduce oxygen consumption and the coefficient of its absorption, slow down breathing in tissues, General gas and energy metabolism. The result is a significant decrease in a person's ability to work physically. Regular exercise activities prevent the above disadvantages. From a physiological point of view, the change in the functional state and the decrease in working capacity in older people will depend on many factors, first of all, they slow down the rate of blood flow, the capacity of moving blood decreases, the combination of blood with oxygen decreases, the state of hypoxia in organs and tissues develops. A small supply of glycogen in the muscles and liver leads to a decrease in blood glucose levels, a decrease in oxidative processes and energy metabolism. It is observed that the recovery reactions are slowed down and the body develops changes in blood vessels and tissues related to aging. As a result, a decrease in the indicators and mediated indicators of Labor aptitude indicates an increase in the physiological value of the work performed.

Modern science has advanced to the point that methods for assessing the state of a person's health, physical fitness and durability of flour have begun to be developed. There are health tests adopted in the medical and biological program of UNESCO, which take into account the age, weight, smoking of a person, alcohol consumption, resistance to static loads, the number of heartbeats in a calm state and after dynamic loads, and its recovery. Each indicator is given a certain score, which is added, and the result is calculated and given appropriate recommendations for nutritional properties, activity of movement and special physical conditioning.

All scientists of the world who carry out work aimed at actively living long and preventing aging list physical conditioning in the first place. For example American physiologist A. Within a number of factors studied by Tanni, optimal physical loads are outweighed by other factors. From a physiological-pedagogical point of view, the volume of the physical load at the smallest capacity used to achieve the best result is the optimal load.

The most convenient and reliable information for many when assessing the Optimal health-improving load can be obtained by determining the number of heartbeats (beats/minutes). To determine this, the elbow artery is found near the wrist to the wrists and the vascular oscillation (pulse) is counted for 10 C, increasing the number obtained by six and determining the number of heartbeats per minute. When summarizing the data of most specialists, the average frequency of heartbeats was determined, corresponding to the fact that people of different ages are engaged in health-improving physical education. For example, for 20 - year-old people, the number of heartbeats per minute should not exceed 140, for 30 - young people - 130, at 40 - 125, at 50-120, at 60 and older-100-110. For those who are physically fit, these indicators may be slightly higher.

Health is assessed by determining the role and importance of physical education and sports in preventing premature aging and prolonging active long life, by identifying a number of physiological changes that occur in people who perform regular physical loads. In these people, the combination of blood, tissues and organs with oxygen improves, the development of regional hypoxia is obtained, the metabolic rate rises, and the elimination of unnecessary products of metabolism from the body accelerates. In such people, a high level of biosynthesis of proteins, enzymes and hormones is maintained, which in turn significantly slows down the processes of aging the body. Engaging in adequate physical loads can reduce cholesterol and

lipoproteins levels to prevent ischemic heart disease, atherosclerosis, and obesity. Increased muscle activity ("muscle pump" or "peripheral heart") improves the functioning of the cardiovascular system. Ultimately, the body's resistance to the influence of unfavorable factors of the external environment increases, the chances of developing a number of diseases decrease, mental and physical labor aptitude remain intact.

### CONCLUSIONS AND SUGGESTIONS

Thus, it has been recognized by most researchers that exercise is the most convenient means of maintaining health, preventing premature aging, and among the factors that ensure active longevity. When dealing with physical loadings, they can be assessed by measuring the number of heartbeats per minute for their effect on the body. The volume of the physical load should give the body an invigorating effect, without ask it can cause disease if there are many, and not fruit if there are few. To avoid such situations, everyone should choose a suitable physical load on themselves. When choosing a suitable physical load, the heart rate indicator is used. To determine this, the age of the practitioner (in years) is subtracted from the maximum number of heart beats (220). The number that comes out (180) is the maximum heart rate for the same person. For example:  $220 - 40 = 180$  at the beginning of physical activity, a load of 65% of the maximum indicator is used.  $180 \times 65\% = 117$ . So, a 40 - year-old person should be hit at a limit of 115-120 when the frequency of heartbeats is affected by physical loads.

As a result of the adaptation of the body to the effects of physical loads, the number of heartbeats to the effects of initial loading begins to decrease. This weakens the healing effect. For this reason, the physical load increases, gradually increasing the number of heart attacks to 85%.

Dynamic exercise for older people in the selection of physical exercises: walking, running, swimming, cycling, etc. k. - recommended to use. The frequency of engagement can be taken 3-5 times a week, depending on the physical fitness. However, people in old age should not at all cause the body to strain.

In large healthy people, general recommendations on the size of the tensile loads for endurance and muscle strength body composition and the development and maintenance of cardiorespiratory function were created by scientists.

1. Frequency of training exercises-3-5 days a week;
  2. Intensity of work power from the maximum level of 65-85 %;
  3. Duration of training when performing non-stop aerobic work, the intensity of work is 20-60 minutes;
  4. The type of exercises are physical exercises in which many muscle groups participate, such as walking, jogging, cycling, swimming dancing and x.z;
  5. Anaerobic (oxygen-free conditions) resistance exercises of moderate intensity to maintain capacity.
- 8-10 exercises of large muscle groups at least 2 days a week.

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## THE IMPORTANCE OF ARTIFICIAL INTELLIGENCE IN THE TOPICS OF "ELECTRIC CHARGE AND ELECTRIC FIELD" IN PHYSICS TEXTBOOKS

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**Abstract:** Currently, the demand for electricity is very high, and we use it extensively in our daily lives. Every device we use cannot function without an electric source. Therefore, it is essential to understand this field well. If we understand this area well, we will know how to obtain and utilize electric current, which is one of the global issues today. Through this article, we will answer the question of how the concepts of "electric charge and electric field" are taught in our textbooks, specifically in the 7<sup>th</sup> and 8<sup>th</sup> grade textbooks, and how students are grasping these concepts. We will analyze what achievements we can reach when explaining these topics through artificial intelligence. If we achieve our goal, students will gain new knowledge, skills, and competencies in this field. This will also enhance the teacher's proficiency during the teaching process. We hope this will improve the quality of our education, even if just a little.

**Keywords:** Theoretical knowledge, Logical questions and problems, Artificial Intelligence, Physics textbooks.

**Introduction.** The role of artificial intelligence in modern education is increasing. In the field of physics, particularly in studying fundamental concepts like electric charge and electric field, artificial intelligence technologies can be effective tools. In this chapter, we will review the nature of electric charge, its influence on the electric field, and how artificial intelligence can be utilized in studying these processes [2,3].

Unlike other textbooks, with the help of artificial intelligence, we can analyze the relationships between charges and fields interactively and present them in new ways that engage students. This chapter aims to combine theoretical foundations with practical examples to help develop a deeper understanding of electric charge and field.

Today, artificial intelligence (AI technologies) occupies a significant place in the field of education. With AI, the educational process can be made more efficient and interactive, as well as develop teaching methods tailored to the individual needs of students. In this regard, it is crucial to examine the significance of artificial intelligence in the topic of "Electric Charge and Electric Field." This, in turn, helps enhance the quality of education, learn new knowledge, and promote scientific research [4].

Thus, studying the importance of artificial intelligence in the topic of "Electric Charge and Electric Field" significantly contributes to improving the quality of education and advancing scientific research. This topic integrates modern technologies and pedagogical approaches, which elevates the teaching and learning processes to a new level.

**Materials and Methods.** We will begin our work by finding textbooks that cover the topic of "Electric Charge and Electric Field." These topics are present in the 7th grade physics textbook published in 2022 and the 8th grade physics books published in 2019. So, these



topics are included in the 7th and 8th grade textbooks and are currently being learned by the future generation [5,6].

In the 7th grade book, there is a comprehensive chapter titled "Electric," which includes the following topics:

"Charging of Bodies,"

"Electric Charge,"

"Electroscope and Electrometer,"

"Conductors and Dielectrics,"

"Interaction of Charged Bodies,"

"Distribution of Electric Charges in Conductors,"

"Electric Phenomena in Nature."

In the textbook, the topic "Charging of Bodies" provides students with the following theoretical knowledge:

When bodies are rubbed together, one becomes positively charged and the other negatively charged.

Any charged body has an electric field in the surrounding space.

Bodies with the same charge repel each other, while bodies with opposite charges attract each other.

The electric field exists independently of us.

In the topic "Electric Charge," it states:

There are two types of charges in nature: positive and negative.

The elementary charge is the smallest unit of charge that a charged body can have, equivalent to  $1.6 \times 10^{-19}$  C.

The charge gained (or lost) by a body during the charging process is an integral multiple of the elementary charge.

The charge of an electron is  $e = -1.6 \times 10^{-19}$  C, and the charge of a proton is  $e = +1.6 \times 10^{-19}$  C.

Masses of protons, neutrons, and electrons are:  $m_p \approx m_n = 1.67 \times 10^{-27}$  kg and  $m_e = 9.11 \times 10^{-31}$  kg.

In the topic "Electroscope and Electrometer":

The electroscope determines the electric charge of bodies.

The electrometer indicates the level of electric charge of a body.

The electrostatic machine is a device that generates charges.

In the topic "Conductivity and Dielectrics," it is stated that bodies are divided into conductors and dielectrics based on their ability to conduct electric current.

The topic "Interaction of Charged Bodies" explains the subject through several experiments [7].

In the topic "Distribution of Electric Charges in Conductors," the following knowledge is provided through Faraday's laws:

The charge on the surface of a spherical conductor is distributed evenly.

In differently shaped conductors, charge is distributed unevenly along their surfaces.

The topic "Electric Phenomena in Nature" covers:

Lightning, thunder, and static electricity as electric phenomena in nature.

Thunder occurs due to the heating of air along the path of lightning.

Lightning rods are used to protect from lightning.



The theoretical knowledge is consolidated at the end of the topic.

Now, let's analyze this textbook using artificial intelligence. We will ask AI the question: "How can we present the electric section of the 7th grade physics textbook meaningfully and understandably to students?" The AI responded as follows:

Today, the role of artificial intelligence (AI) technologies in the educational process is increasing. Especially in physics classes, particularly in teaching the "Electric" section, AI's capabilities are very important. In this presentation, we will discuss how to effectively explain the electric section in 7th grade physics classes.

#### Interactive Simulations

First, we will consider interactive simulations. Simulations created with the help of AI allow students to visually see the interactions between charges and electric fields. Students can place charges themselves and observe their effects, testing theoretical concepts in practice [8,9].

Materials. Second, we highlight the importance of engaging video materials. Through automatically generated teaching videos using AI, complex concepts can be presented in a simplified manner. These materials capture students' attention and make the topic more interesting.

Individual Learning Plans. Additionally, creating individual learning plans is crucial. Artificial intelligence can analyze students' abilities and difficulties to develop tailored learning plans for each student. This helps students better understand the concepts.

Question-Answer Platforms. Question-answer platforms are also an effective tool. Students can ask questions on online platforms powered by AI and receive quick responses. This creates a convenient opportunity for self-assessment and reinforcement of knowledge.

Virtual Experiments. Through virtual experiments created with AI, students can practically learn about the properties of electric charges and fields. Such experiments help apply theoretical knowledge in practice and increase students' interest.

Group Discussions. Lastly, we include group discussions. With the help of AI, students can conduct group discussions, explore each other's opinions, and exchange knowledge. This process encourages collaborative learning.

**Results.** Artificial intelligence is an effective tool for teaching the "Electric" section in 7th grade physics classes. Through interactive simulations, video materials, individual learning plans, question-answer platforms, virtual experiments, and group discussions, students can enhance theoretical knowledge in practice and improve understanding. These opportunities provided by artificial intelligence are significant in enhancing the quality of education.

Now, let's analyze the 8th grade physics textbook. This textbook also includes similar topics and provides the same theoretical knowledge. However, the 7th grade book contains fewer logical problems, while the 8th grade book covers them in more depth. Specifically, the following problems are presented:

**Series and Parallel Resistance Connection:** Three resistors of  $1\ \Omega$ ,  $2\ \Omega$ , and  $3\ \Omega$  are connected in series, with a current of  $1\ \text{A}$  flowing through them. What is the voltage across each resistor, and what is the total voltage?

**Coulomb's Force:** Two spheres, one with a charge of  $-2\ \text{nC}$  and the other with a charge of  $3\ \text{nC}$ , are  $10\ \text{cm}$  apart. What force do they exert on each other?

**Field Strength:** When a point charge of 0.2 nC is placed in an electric field, it experiences a force of 5 mN. What is the strength of the electric field?

**Work Done in Electric Field:** A voltmeter connected in parallel to a lamp shows 1.5 V. How much work is done when 10 C of charge passes through the lamp?

**Resistance in Electric Circuits:** If the resistance of a resistor connected in an electric circuit is 100  $\Omega$  and the voltage across the resistor is 10 V, what current flows through it?

**Find the total resistance and voltage. Capacitance of a Capacitor:** A flat capacitor with a surface area of 25 cm<sup>2</sup> is separated by a 5 mm thick dielectric. What is the capacitance of the capacitor?

**Magnetism:** A conductor 20 cm long is placed perpendicular to a magnetic field with an induction of 0.5 T. What is the force acting on the conductor if the current flowing through it is 0.03 N?

**Electric Motors:** What force acts on a proton moving at a speed of 20,000 km/s in a magnetic field with an induction of 0.6 T perpendicular to the field lines?  
These problems help consolidate the knowledge gained.

Now, we will ask artificial intelligence again: "What logical problems could help in mastering these topics?"

**Connection Between Charge and Field:** If there is a charge of +5  $\mu\text{C}$  at a point, what would the electric field be at that point? If the electric field is 2000 N/C, what force acts on the charge?

**Counter Charge:** If there is a charge of -3  $\mu\text{C}$  at a point where the electric field is 1000 N/C, what is the effect of that charge? Calculate the force acting on this charge.

**Force Between Charges:** Calculate the force between two charges (+2  $\mu\text{C}$  and -2  $\mu\text{C}$ ) that are 10 cm apart. (Use Coulomb's Law.)

**Effect of the Field:** If one charge is +1  $\mu\text{C}$  and the other is +3  $\mu\text{C}$ , what force does the second charge exert on the first if they are 15 cm apart?  
(Continued similar problems...)

**Conclusion.** To organize the lesson process in accordance with modern requirements, we must apply the latest techniques and technologies, among which artificial intelligence plays a significant role. Nowadays, everyone has access to information regarding AI. In the age of technology, utilizing it in the lesson process creates great opportunities. Organizing lessons in this way helps students retain the topic and acquired knowledge better, while also enhancing the teacher's pedagogical skills[1-9].

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## SOME CONSIDERATIONS ON THE FORMATION OF SPEECH CULTURE IN LANGUAGE EDUCATION

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**Abstract:** The integration of subjects and fields in language education develops the ability to use the language in practice. In order to strengthen the practical aspect of grammar knowledge, texts on various topics are referred to. In this, the process of connection between language science and various disciplines and fields occurs. The article contains some recommendations for primary class pupils (college and lyceum) and independent learners of foreign languages.

**Key words:** language education, integration, interdisciplinary integration, interdisciplinary communication, speech culture, foreign language, comparative linguistics. Integration in education is the process of establishing connections between the components of the content within a certain educational system in order to form a holistic view of the world aimed at the development of the student's personality and self-development. Integratsiya (lat. integratio - restore, start again, complete) 1. The concept that expresses the state of dependence of some names, elements, and their integration. 2. It is a process of interrelation of sciences, which is important to every learner who is learning a foreign language in the process of language learning. Abu Nasr Farabi (great uzbek scholar) states that "Words are of four types: the first are words that do not need to be known and said; the second is words that are necessary to know and say, and the third is words that do not need to be known, but can be said; the fourth is the words that can be known, but do not need to be said... I have explained these four words. The best of these are the words that need to be known and spoken." Learning a language requires meaningful expressions to express one's thoughts. Language needs thoughts as well as thoughts.

Today, our education system cannot be imagined without the process of integration. Integration means "whole", so it is the integration of different parts and elements of the process of thinking growth into a single whole. This shows interdisciplinarity in education, teaching subjects in close connection with each other. Integration of subjects in modern education is one of the ways of developing the creative potential of pedagogical staff to actively search for new pedagogical solutions, to have an effective and reasonable impact on students. Interdisciplinary integration in education also ensures that students acquire a set of universal values while studying other disciplines and fields in an interconnected and related manner.

Pupils will thoroughly and deeply understand the essence of educational materials, the laws of nature and society's development on a scientific basis. All topics taught in learning English (and other foreign languages) are based on the study of language phenomena in connection with various disciplines and fields. That is, texts on different topics are recommended. In the process of language learning, since the information (in the texts) related



to science or fields unrelated to language science consists of a set of knowledge, the concepts necessary in social life, the process of inter-science or field integration occurs. Knowing is done through thought and language. The materialization of thinking is carried out through speech. It is necessary to be able to choose the appropriate language units (lexical, grammatical means) for the speech situation. A complex requirement for language education is students' speech culture development. Speech culture includes both everyday (free) communication and how to speak in different situations. Each lesson should be aimed at developing speech culture. For this, in the lesson processes (before starting), wise words, proverbs, poems (can be a stanza, even a verse) or sentences from works of art, short fragments, instead of humor (Because the incident taken under laughter- at the heart of events is a lesson.) use serves to strengthen the student's knowledge of language science, to receive education along with education, and, most importantly, to develop his thinking. Good mastery of grammatical knowledge and language norms allows for accurate, clear and fluent expression of thought, and this leads to the improvement of speech culture and methodology will be the basis.

Education, spirituality, literacy of each person is measured by his words and speech. A person's inner world, humaneness, honesty, and culture in general are revealed through speech. Although oral and written communication are related to each other, they also have their own characteristics. Spoken speech is pronounced and heard. In this, a person uses tone, pauses and various non-verbal means to express his thoughts. The ability to use these tools correctly should be formed in students. Literacy is required in written speech. When a person expresses his thoughts in writing, he receives information from others through the organs of vision and hearing and expresses his attitude. The advantage of written speech is that when describing the expressed event, concept, etc. in words, if a word, phrase or adverb is used incorrectly, they can be replaced with another suitable option. possible But there is no such opportunity in oral speech, so the thought to be expressed should be thought through in every way and then expressed. In T learning stages, topics progress from simple to complex. For example, in English language classes, students should know the language features and styles of literary texts, thus, one of the types of work performed in the development of their speech culture is to identify and interpret a language phenomenon or style from it, and to be able to distinguish speech styles from each other. For this, the teacher is required to impart theoretical knowledge and create sufficient skills and competencies in students to be able to apply them in practice. At first, the teacher gives general information about speech styles and writes down the necessary resources for the students. After the statement of the new topic, the teacher directly connects the topic with other subjects. For this, the teacher distributes handouts with different types of texts to the students. With this, the teacher makes the lesson interesting and at the same time allows the student to be active. For example, we can use the following materials:

**Passage 1:** A so-called 'smile of respect' is seen as insincere and often regarded with suspicion in Russia. A famous Russian proverb even states that 'laughing without reason is a sign of idiocy'. Yet in countries like the United States, Australia and Britain, smiling is often interpreted as a sign of openness, friendship and respect.

**Passage 2:** An American or British person might be looking their client in the eye to show that they are paying full attention to what is being said, but if that client is from Japan or Korea, they might find the direct eye contact awkward or even disrespectful. In parts of South America and Africa, prolonged eye contact could also be seen as challenging authority. In the Middle East, eye contact across genders is considered inappropriate, although eye contact within a gender could signify honesty and truthfulness.

Therefore, in language lessons, grammatical rules are studied in connection with the development of speech. The beginning of learning about syntax serves as a basis for the development of speaking skills. Phrase and sentence tone, pronunciation of the sentence with a complete tone, logical (logical) stress, tone of speech of the secondary clauses together with the main clauses, intonation, pause should be followed:

"There once was a poor shepherd boy who used to watch his flocks in the fields next to a dark forest near the foot of a mountain. One hot afternoon, he thought up a good plan to get some company for himself and also have a little fun. Raising his fist in the air, he ran down to the village shouting "Wolf, Wolf." As soon as they heard him, the villagers all rushed from their homes, full of concern for his safety, and two of his cousins even stayed with him for a short while"

As English serves the purpose of international communication, most of the foreign language learners try to learn it. In this process, they have to acquire all the four basic skills of the language listening, speaking, reading and writing.

English is the language widely used in the field of scientific research, education, business, the internet, travel and tourism, media and newspapers, software, medicine, engineering, information and technology, entertainment, banking and so on.

In conclusion, if the phonetic method is taught to the student or students in the language learning classes, the word stress, syntagm stress, and pause in oral speech or texts should be correctly placed. winter sleep increases cognitive efficiency. The use of video, audio texts, information from social networks and other texts recommended in the lesson effectively affects the development of speech culture skills along with language learning. Based on the content of the texts, integration of disciplines, interdisciplinary use of the studied language materials in practice forms skills and competencies.

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## PRINCIPLES OF PROFESSIONAL COMPETENCE DEVELOPMENT IN TALENTED STUDENTS THROUGH EDUCATIONAL PLATFORMS

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**Abstract:** This scientific article describes the methodology of developing the professional competence of talented students with the help of educational platforms. The need to use innovative technologies in education, the effectiveness of directing students to professional activities through modern platforms is scientifically based. The research examines the types of platforms, their functionality, their impact on the educational process, and their role in improving students' professional skills. At the same time, ways of personalizing the educational process for gifted students, creating an interactive environment, and integrating knowledge with practice were analyzed. In conclusion, innovative methodical approaches to the development of students' professional competence through educational platforms were proposed.

**Key words:** Educational platforms, professional competence, gifted students, innovative technologies, interactive education, personalized education, methodical approach.

### Introduction.

Today, globalization and the rapid development of digital technologies require the introduction of new approaches in the field of education. In particular, directing talented students to professional activities and increasing their level of competence is one of the priorities of modern education. In this process, the effectiveness of using innovative educational platforms and digital resources is increasing. Educational platforms provide a wide range of opportunities for creating an interactive environment, personalizing educational materials and developing practical knowledge in the modern educational process.

The relevance of this research is that the development of professional competence of talented students through the use of educational platforms is not limited to providing only theoretical knowledge, but it allows to form and strengthen their practical skills. Also, this process increases students' motivation for professional activity, encourages them to think independently and use innovative approaches.

The article analyzes the theoretical basis, practical application and results of the methodology of professional development of talented students through educational platforms. At the same time, opinions about the existing problems and effective ways to eliminate them were put forward.

### Methodology:

In this study, the following methodological approaches were developed to develop the professional competence of talented students through educational platforms:

#### 1. Individualization of the educational process

Taking into account the level of knowledge and interests of students, individually form educational materials and provide them with customized tasks through the platform. This approach helps students' self-development and increases motivation.

## 2. Creating an interactive educational environment

Ensuring active participation of students through tests, virtual laboratories, video lessons and discussions on educational platforms. The use of interactive materials helps to strengthen students' practical skills.

## 3. Numerical methods of assessing skills

Regularly analyze students' knowledge level and monitor their progress using automated assessment systems through the platform. This method allows to determine the development of students and, if necessary, to reorganize the educational process.

## 4. Integration of practice and theory

Application of tasks based on professional situations in educational platforms. For example, real-life problem solving, project-based learning, and the use of simulation methods play an important role in preparing students for their careers.

## 5. Formation of teamwork skills

Developing communication, joint problem solving and teamwork skills in students by organizing group projects and tasks on platforms.

## 6. Expanding the capabilities of platforms

Use of modern educational platforms, such as Moodle, Coursera, Google Classroom and other interactive programs. Through them, students can independently expand and deepen their knowledge.

This methodology is aimed at the comprehensive development of students' activities and helps them acquire the knowledge and skills necessary for success in professional activities. Also, these approaches increase students' interest in studying and ensure their activity in the learning process.

### **Literature review:**

In this study, foreign and local sources were deeply studied to determine the scientific and theoretical basis for the development of professional competence of talented students through educational platforms. In the course of the research, literature on the following topics was analyzed:

### 1. Educational platforms and their advantages.

Research on the functionality and usability of modern educational platforms has been covered by many scholars, including Anderson (2008) and Siemens (2014). They justified the advantages of creating an interactive environment, personalizing knowledge and using a global educational network in online education. Foreign sources have widely analyzed the importance of educational platforms in increasing student motivation and professional training.

### 2. Concept of professional competence.

The studies of Boyatzis (2008) and Spencer & Spencer (1993) on issues of professional competence development are important. They evaluated professional knowledge and skills as the main factor for personal and professional success. The works of local scientists, including T. Q. Kadirov and M. U. Kasimov, pay special attention to the formation of professional competence in the educational system of Uzbekistan.

### 3. Innovative educational technologies.

Studies on the use of innovative educational technologies and their effectiveness (Clark & Mayer, 2016; Hattie, 2012) were studied. These resources provide a theoretical basis for the



role of digital technologies in education, especially the optimization of the learning process through educational platforms.

#### 4. Methods of working with gifted students.

Methodical approaches to teaching gifted students have been widely studied by Gardner (1983) and Sternberg (2005). Their research emphasizes the importance of an individual approach to the development of students' intellectual potential. The methods of organizing personalized educational programs for gifted students in foreign and local sources are deeply analyzed.

#### 5. Local educational experience.

The literature on the development of digital educational platforms in the educational system of Uzbekistan was analyzed, including the decisions and normative documents of the President of the Republic of Uzbekistan, as well as the works of scientists such as A. B. Joraev and S. Kh. Nasrullayev. These resources provide detailed information on the importance of introducing innovations in education and the social and economic benefits of this process.

From the analysis of the literature, it became clear that research on the development of professional competence of talented students through educational platforms remains relevant at the foreign and domestic levels. However, it is necessary to study this subject more deeply and develop innovative approaches in the conditions of the educational system of Uzbekistan.

### Discussion:

The results of the research on the methodology of developing the professional competence of talented students through educational platforms show that the use of digital educational technologies is becoming an integral part of the modern education system. The information and observations obtained during the research were discussed in the following aspects:

#### 1. The influence of educational platforms.

Interactive learning platforms such as Moodle, Google Classroom, and Coursera play an important role in increasing student engagement in the learning process. Through these platforms, students are provided with tasks aimed at developing not only theoretical knowledge, but also the skills to solve real professional problems. This greatly contributes to the formation of professional competence of students.

#### 2. Individualization and personalized education.

Educational platforms allow for individualization of knowledge according to the abilities and needs of students. The results of the research showed that the personalized educational approach increases students' motivation for self-development and serves to effectively acquire knowledge.

#### 3. Formation of practical skills.

By introducing tasks based on real situations on the platforms, students' practical skills will increase significantly. Methods such as simulations, project work, and analysis of problem situations allow students to connect theoretical knowledge with practical activities.

#### 4. Difficulties and problems.

Technical and organizational problems are observed in the introduction of educational platforms. In particular, the lack of sufficient digital literacy for students and teachers, limited Internet resources, as well as the inflexibility of some platforms can hinder the educational process. To solve these problems, it is necessary to develop special programs for increasing digital literacy.

#### 5. Effectiveness of innovative approaches.

Teamwork-oriented assignments on educational platforms, such as group projects and collaborative discussions, help students develop their communication skills. This method not only increases the individual professional knowledge of students, but also forms the ability to succeed in team work.

During the discussion, it was determined that the development of professional competence through educational platforms is effective not only for students, but also for teachers, who will have the opportunity to organize lessons in high-quality and modern ways. Therefore, the introduction of these approaches to the educational system on a large scale is an urgent issue.

#### Summary:

This research is aimed at determining the methodological basis of developing the professional competence of talented students through educational platforms, and the obtained results are summarized as follows:

1. Educational platforms are highly effective in personalizing student knowledge, creating an interactive environment, and building practical skills. They serve as an important tool in increasing the activity and interest of students in the modern educational process.

2. It has been confirmed that the introduction of an individual approach, interactive educational materials, and practical tasks in the development of professional competence through platforms will give effective results. This approach helps students adapt to professional activities faster and develop independent thinking skills.

3. Through the use of innovative approaches, for example, teamwork, project-based learning and the integration of theoretical knowledge with practice, students acquire not only professional skills, but also social skills.

4. In order to overcome the technical and organizational problems encountered in the use of educational platforms, it is necessary to develop the digital infrastructure, improve the qualifications of teachers and prepare students for digital literacy.

5. The research shows that the development of a special program and methodical recommendations for the development of professional competence with the help of educational platforms will serve as a basis for introducing important innovations in this field in the future.

Thus, the use of educational platforms is one of the important means of improving the modern educational process and creates great opportunities for the professional development of talented students. Widespread implementation and continuous development of these approaches should be considered as one of the priorities of modern education.

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## ABOUT THE STORY OF CHULPAN “DOKHTUR MUHAMMADIYOR”

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**Abstract:** this article talks about the textual study of the story “Dokhtur Muhammadiyor”, the first story of Chulpan, the strong representative of jadid literature.

**Key words:** jadid, prose, textual study, scientific-critical text, story, abstracts, copy of text, graphic formation.

A strong representative of Jadid literature is “Dokhtur Muhammadiyor”, the first story of Chulpan, published in 1914 in the Sadoi Turkestan newspaper 24-, 30-, 34-, 45-, 46-, 47- published in issues. The story is announced with the signature “Abdulhamid Sulaymaniy”[1.5]. The story was also adapted from Abdurahman Saadi's textbook “Uzbek bourgeois literature” in 1934 during his Chulpan life. So, during the life of adib, two copies of this story were published. In addition the story was included in Volume II of the Chulpan Works Volume III, published in 1994, as well as Volume II of Volume IV, published in 2016. So, there are 4 copies of this story, which we can conditionally divide into the following groups:

1. The first source as the main base copy is a copy printed in the Sadoi Turkestan newspaper in 1914.
2. As a base copy, we define a copy that takes its place from Abdurahman Saadi's textbook “Uzbek bourgeois literature”.
3. As an auxiliary copy, we get current editions, which were published in volumes published in 1994 and in 2016.

We preferred to name these copies with their years of publication in the coming places. We mainly focus on the graphic formulation of this story, taking into account the size of our work.

When we cross-compare the existing copies of this story, we can take as an initial difference in its graphic formation the genre record, which is considered the element of the frame. Because the copies of the story, published in 1914 and 2016, give the compound “imaginary story” as a genre cream, while the copies of 1934 and 1994 have omitted the element of this frame. It seems to us that in this place it is desirable that the genre note is given.

In all but the 1934 published copy of the story of “Dokhtur Muhammadiyor”, the word “faxshxona” is in the style of “faxshxona”, only in the 1934 copy “...the room” is given in the form of a, i.e. the word “faxsh” is dropped and replaced by two dots on its side [2.106]. Another early version, “... some were interested in the beauty of Muhammadiyor with a unique monthly asking for mirza and mahramlikg’a”, omitted the word “mahramlikg’a” from the 1934 edition. It seems to us that these differences in copies are due to the fact that they are given to schoolchildren as a textbook: in this place, the young character of students seems to be taken into account.

It should also be noted that in the copies of the copy and the current edition published at the time of the Steppe life of 1914, the allocation to abstracts is almost identical, but in the copy of the textbook "Uzbek bourgeois literature", published during the Steppe life of 1934, there are many discrepancies with other copies. In addition to the 1914 Chulpan copy published during his lifetime and the large-large sentences and even whole-entire abstracts present in the copies of the current edition were completely omitted in his 1934 copy. It should also be mentioned that many variations are also observed when dividing existing texts into paragraphs. We will try to identify these differences with consistency.

In order for us to compare the copies of this story with each other and understand that they are correctly assigned to abstracts, it is advisable to first briefly dwell on the issue of correctly assigning texts in Uzbek to abstracts. In this regard, the following points are found in the books of linguistics:

"The division of the text into abstracts is done on the basis of a clear logical requirement, each of which helps to express a common (internal) single goal-the subject in its entirety. This is how the internal logical integrity of the stressed style is expressed in written speech by the way of leaving a little open space from the beginning of the line"[4.53].

There is also such information about abzas: "The division of text into paragraphs is a stylistic method that is carefully thought out and consciously applied by the author, without being accidental. New abzas means to switch to a new thought"[4.53].

Linguist M.Khakimov touched upon an important feature of abzas, arguing that it prevents thoughts from becoming entangled[5.25].

In the 1934 copy, the first 3 sentences are separated into a separate paragraph, but not all other copies observe this. We are here too A.Sa ' we think it's right to divide Dee into abzas. The reason is, although a later opinion statement mentions one of the heroes of the story – Haji Ahmad, i.e. tema (the greek thema – what is the basis) is Haji Ahmad, while rema (rheme – information, commentary) is changing the part that comes after the theme and expresses the content of the new message that the speaker wants to tell[5.25]. Because from the 4th sentence, the history of when and in what condition the hero of the work received the annotator "haji" is told.

In a 1934 copy, 4 sentences starting with sentence 9 are separated into a separate paragraph, but not all other copies have this. Now in this place A.Saadi's we can't agree with Dee's decision. Because even from the content of Proposition 8, the goal of Haji Ahmad teaching his son Muhammadiyar was being realized. From the 9th sentence to the 20th sentence of the story, the dream of teaching his son in a teacher who had been studying at the High School of Ufa Madrasai and the efforts of an ardent father who had done it for his realization were embodied. In addition, the 1934 copy has another new paragraph allocation, starting with sentence 13 of the story. It will not be difficult for us to notice that the topic of thoughts in sentences has never changed if we pay close attention to the content of previous sentences. So, it is understood that the authors of the copy and copies of the current edition, published at the time of the Steppe life of 1914, did the right thing in this place without allocating it to abzas.

Proposition 18-19 of the story was made into a separate abzas in a 1934 copy, while in current copies a new abzas began starting with proposition 18, but this abzas continued continuously until proposition 26. These sentences came as part of abzas 1 in a copy published at the time of the steppe life of 1914. In our opinion, sentences 18-19 are the last



sentences of paragraph 2. Because in sentences 15-16-17, Haji Ahmad is given the say'-effort he made to give his only son to a teacher who graduated from Madrasai Aliyah, while in sentence 18-19, this idea is encouraged by the teacher, that is, this topic is logically continued.

By comparing the text of the story with copies in this way, we can determine its differences, but this does not correspond to the size of our article. Therefore, we can draw conclusions that are inherent in the grinding.

As a result of our comparative study of the text of this story with all its copies, we came to the conclusion that, first of all, in what form the author of the story divided the work into parts, abstracts, in subsequent publications, the form should be left in exactly the same way, since in graphic formation it can undermine a certain creative purpose of the Punctuation marks in base source texts and reprints should be approached creatively in the case of differences in hand-to-hand, arising from the current basic punctuation rules. Textual errors associated with textual discrepancies in the tabdil of words and vocabulary should be completely eliminated. It is darcor not to overlook the many linguistic and spelling changes that have taken place in the creation of the scientific-critical text of the works of Jadid creators. There are a number of problems listed above when republishing the works of the creators of the years of repression, but the commitment to this painstaking work is an unquenchable duty of every intellectual.

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# THE IMPORTANCE OF ROLE-PLAYING GAMES IN THE DEVELOPMENT OF EMOTIONAL INTELLIGENCE IN PRIMARY SCHOOL CHILDREN

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**Abstract:** This article is devoted to the analysis of the peculiarities of the role of the game in the development of emotional intelligence of junior schoolchildren. It is revealed that the introduction of the game into the learning process will contribute not only to the increase of students' interest, but also to the increase of their emotionality, as well as the ability to control emotions. The game acts as the main, most frequently realised type of activity of a child, including junior school age, and, in view of this, effective application of the game within the framework of development of emotional intelligence of junior schoolchildren requires careful research and correct selection of methodological tools in order to control the degree of development of emotional intelligence. The development of emotional intelligence, in its turn, will be a guarantee of optimal development of personality as a whole.

**Key words:** game, intelligence learning, emotions, emotional intelligence

The development of the emotional intelligence of a primary school child is an important aspect of the formation and development of personality, since it is emotions that largely determine the child's ability to identify himself with society and to understand his own role within it. Play allows the child to fully realise the importance of harmonious coexistence of people within social groups and society as a whole.

Emotional intelligence is an individual's ability to recognise their own emotions and emotions of others, to understand and relate their own intentions and motivation of others, as well as the ability to manage emotions within the framework of current life activity and solving specific tasks [5].

The works of such foreign authors as D. Meyer, P. Salovey, D. Caruso, D. Goleman, R. Bar-On are devoted to the study of the peculiarities of the formation of emotional intelligence. Speaking about the degree of scientific development of the topic, it should be noted that the development of the emotional sphere of the child, including emotional intelligence, was the subject of close attention in the domestic concepts of developmental education, in particular, in the works of V. V. Davydov, L.V. Zankov, B.D. Elkonin.

The role that a child lives within the framework of play can influence his/her choice of certain hobbies, which, in turn, can influence the choice of future profession.

A child of primary school age, who has just left kindergarten or home environment, is in a kind of borderline state. On the one hand, he/she is still attached to these social environments, but on the other hand, he/she is moving to a new level of social self-determination. In such conditions, the introduction of games into the educational process allows to smooth the painfulness of this transition. In view of this, games are widely used at

the early stage of school education in order to increase the effectiveness of the processes of child's personality development [4]. The game used at the considered stage of school education allows not only to increase the child's interest in learning, but also to develop new characteristics of his/her emotional state [1].

Winning and losing at play is a very important part of a child's life. Play is the prism through which the child perceives the surrounding reality, the bridge between childhood and adulthood. The results achieved in the process of play are the underlying cause of a child's emotional state, his good or bad mood. Defeat in the game can cause discouragement, depression, lack of desire to achieve any goals that used to occupy the child, frustration. Victory, as a rule, inspires the child, increases his self-esteem and self-confidence, contributes to the achievement of new victories in the future. Consequently, the results achieved by a child in games used as part of the learning process will also contribute either to the child's enthusiasm or disappointment in himself/herself and rejection of further improvement in learning.

It seems possible to state that a child's emotional range is enriched as a result of his/her participation in various games. If in early childhood a child's emotions are still rather primitive and unambiguous, as he grows up he experiences more vivid and mixed emotions, which is largely due to game processes. For example, for example, team games develop in the child the habit of rejoicing or worrying not only for himself personally, but also for his team; winning the game, accompanied by the loss of friends, generates a dual sense of joy and pride for themselves with simultaneous pity for the losers. Thus, the child learns to understand the nature of his emotions, to draw cause-and-effect links between the accomplished event and his own mood, and later to influence it, that is, to be able not to give in to the rush of emotions, to control his state, which is especially important in adult life. For example, the worst result in the class on the results of solving a puzzle can provoke a child to tears, but the realisation that the others will laugh at him in this case, most likely, will stop such a violent manifestation of emotions.

Thus, the various emotions experienced by the child in connection with his or her participation in play contribute to the fact that the emotional range becomes vivid and extensive, and the emotional state becomes recognisable.

The child understands what causes certain emotions, learns to eliminate, to the best of his or her ability, the causes of bad moods, as well as to enjoy pleasant moments.

The use of play in primary school contributes to the fact that the child gradually leaves the kindergarten regime and enters a more formalised regime through the rather comfortable conditions of play. In other words, there is not an abrupt jump, but a comfortable transition, allowing a less painful experience of the new and therefore stressful stage of the beginning of the school years.

The period of learning in primary school is also important because within its framework the individual style of pupils' activity is developed, and the use of games is also important here. The level of intellectual development and the emotional factor act as essential internal conditions that ensure the regulation of activity. There is a connection between the peculiarities of students' practical thinking and different aspects of their activity results, as well as the speed of mastering labour actions and progress in theoretical disciplines.

In the process of acquiring new knowledge, new links are formed between different levels of individuality - personality, psychodynamic and neurodynamic properties. At earlier

stages of mastering an activity, personality features are more directly related to its psychodynamic and neurodynamic properties. In parallel with the way it develops, the importance of personality traits increases.

The primary role of personality traits in relation to the manifestations of temperament and nervous system functions is through self-evaluations, intellectual qualities, components of experience, and the manifestation of emotions. Personality properties, which express the attitude to activity and intellectual capabilities of the subject, are the main factors that provide regulation of activity[5].

Games are quite actively used in the educational process of primary school; moreover, we are talking not only about the game in the classical meaning of the word, but also about the game form of class organisation, about the use of logical and similar games as tasks. Many researchers put forward the thesis that the most effective for the development of both emotional intelligence and personality in general are logical games and puzzles, because they allow not only to engage the child's abilities to productive thinking, but also to develop new emotions associated with finding the right answer [2].

Logic games, puzzles, rebuses, labyrinths and other similar tasks are aimed at developing new skills that are necessary both in learning activities and in future life.

Solving tasks of game character within the framework of the lesson develops in pupils a competitive spirit, promotes the emergence of their need to achieve victory, to beat their classmates, to become the best, which is also important for the further formation of personality. Emotions experienced by a child at the moment of achieving any success play an extremely important role, as they set him/her up for new achievements[6].

Thus, the role of play in the development of the emotional component of a child's life activity and his emotional intelligence is as follows [3]:

- the possibility of identifying oneself with other members of society, realising oneself as a part of society;
- the possibility of trying on a social role;
- the possibility of accepting social rules, developing the ability to obey them and realising the necessity of such obedience;
- Formation of a line of behaviour in accordance with the accepted rules of life in society;
- formation of new skills and abilities and related formation of pride in oneself, emergence of new, previously unexperienced emotions.

It should be noted that one of the characteristics of the younger school age is the change in the structure of the child's emotional processes. Thus, if in early childhood the manifestation of emotions is extremely bright and is accompanied by vegetative and motor reactions (screaming, squealing, fighting, falling on the floor), then at the beginning of the school period these reactions are blunted, and in general, despite individual manifestations of emotions and preservation of some capriciousness, the child's behaviour becomes more restrained [5]. The manifestation of a child's emotions, for the most part, becomes tied to specific situations experienced by him/her.

The child's emotionality at the beginning of the school period is not characterised by increased affectivity and unregulated outbursts of conflicts; behaviour becomes more even. This is largely due to the fact that school, unlike kindergarten, is perceived by most children as a serious stage of life, in connection with which, responsibility for their behaviour increases, and, under the influence of school education, the desire to be a worthy member of society is

formed. Thus, the emotions experienced by a junior schoolboy, in many respects, act as the starting point of the process of personality formation; in view of this, the formation of emotional intelligence in the period under consideration acts as one of the most important parts of the child development process.

Thus, it seems possible to draw a conclusion about the key role of play not only in the development of emotional intelligence of a junior schoolchild, but also in the formation and harmonious development of his personality. The special role of the game in the life activity of a junior schoolchild is conditioned by the fact that it is in the process of the game that the child's primary adaptation to society is realised, the child identifies himself with other members of society and realises himself as a part of it. In many respects it allows to use games productively within the framework of development of emotional intelligence and emotional component of personality.

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## PSYCHOLOGICAL PECULIARITIES OF EMOTIONAL INTELLIGENCE DEVELOPMENT IN JUNIOR SCHOOLCHILDREN

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**Abstract:** in this article the authors describe in detail emotional intelligence and its mechanisms of development in primary school children. The characteristic of emotional intelligence as an important factor of psychological and emotional ability of a person is given.

**Key words:** emotion, emotional intelligence, preschooler, school, ability.

Nowadays, the problem of connection between feelings and reason, emotional and rational, their interaction and mutual influence is of great interest. Scientists have determined that about 80% of success in social and personal spheres of life determines the level of development of emotional intelligence, and only 20% - IQ - intelligence quotient, which determines the level of mental abilities of a person [4]. Emotional intelligence reflects the inner world of a person, determines his/her behaviour and interaction with other people. People with a high level of development of emotional intelligence have a pronounced ability to understand their own emotions and emotions of other people, to manage the emotional sphere, which provides higher adaptability and efficiency in communication.

In spite of this, most of the educational process is aimed at the cognitive development of the student, while the emotional life of the child and the ability to build relationships with other people are out of the scope of the organised pedagogical process.

Emotional intelligence is the ability to understand and manage one's own and others' emotions. There are two components in the structure of emotional intelligence: intrapersonal (the ability to understand and manage one's own emotions); interpersonal (the ability to understand and manage other people's emotions) [3].

The ability to understand emotions means that a person:

- can recognise an emotion, i.e. identify the fact that he/she or another person is experiencing an emotion;
- can identify an emotion, i.e. identify what emotion he/she or another person is experiencing and find a verbal expression for it;
- understands the causes of the emotion and the consequences that will result. The ability to manage emotions means that a person:
  - can control the intensity of emotion, primarily by muting excessively strong emotions;
  - can control the external expression of emotions;
  - can, if necessary, arbitrarily cause this or that emotion [3].

The development of emotional intelligence is of particular importance and relevance in the younger school age, because it is during this period that children are actively developing

emotionally, improving their self-awareness, the ability to reflect and the ability to take the position of a partner, to take into account their needs and feelings. The importance of emotions in the younger school age is very great, both in mental activity and in the formation of the child's personality. They enrich the psyche, brightness and variety of feelings, make him more interesting for others and for himself. The variety of one's own experiences helps to understand more deeply and subtly what is going on.

During a child's primary school education, the child's organism develops intensively. When a primary school child enters school, his or her lifestyle changes, new goals appear, and all this leads to significant changes in the child's emotional life. In contrast to the preschool age, junior schoolchildren have new experiences, new tasks and goals arise, a new emotional attitude to aspects of reality and phenomena occurring around him. At first it is difficult for a junior schoolboy to participate in learning activities at lessons, it is difficult for him to communicate with the teacher and the team in the learning process, as it requires great restraint in feelings. Gradually, younger pupils learn to control their behaviour, behave with more restraint in the process of fulfilling everyday school duties, requirements imposed on children by the teacher and later by the team.

The general orientation of emotions of junior schoolchildren is connected with the growth of awareness, restraint, stability of feelings and actions. The process and result of learning activities, the need for evaluation and good attitude of others is significant for junior schoolchildren, so most of the emotional reactions are directed to them, rather than to the game and communication with peers as it was observed in preschool age.

At school age there are situations that cause high situational anxiety in children, assessment situations such as answering at the blackboard, solving tests, passing exams. 85% of children in primary school experience a high level of anxiety in relation to knowledge testing, this is due to the fear of punishment and fear of upsetting parents. The second cause of anxiety is 'difficulties in learning'. Many schoolchildren experience anxiety during learning, both children with low grades and those who study well and even excellently, who are responsible for their studies and school discipline.

Inadequacy of a junior schoolboy to the level of requirements imposed by himself and parents in learning activities can lead to affects in behaviour, and in case of lack of attention from the teacher, can be consolidated as negative character traits. Such behaviour is characterised by an increase in general emotional excitability, symptoms and syndromes of fears, manifestation of aggression or negativism [5]. As a rule, children work very hard to achieve the highest mark, it is dangerous to breakdowns especially in case of sharp complication of activity. Such pupils have pronounced vegetative reactions, neurosis-like and psychosomatic disorders.

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Despite the fact that a junior schoolchild is emotionally responsive and reacts strongly to events, he/she starts to restrain his/her undesirable emotional reactions by willpower, tries to overcome strong excitement, for example, to hold back tears, to overcome his/her desires, obeying the teacher's demands. This leads to the fact that a junior schoolchild may not understand the emotion he/she is experiencing or portray an emotion he/she does not experience, i.e. there is a separation of expression from the experienced emotion both in one direction and another [2].

Younger pupils are easily 'infected' by the emotional feelings of others. Teachers are well aware of such facts, when laughter of some pupils causes laughter of other pupils in the class, although the latter may not know the reason for the laughter. Girls start crying when looking at a crying friend, not because they consider her unjustly offended, but because they see her tears. In addition, younger schoolchildren are very impressionable. Events seen in the theatre, cinema, experienced in the family, having a negative connotation lead to fear, fright. These events can be fixed in the child's memory for a long time and disturb him, thus distracting him from the learning process.

Schoolchildren of younger grades, as shown by T.B. Piskareva, more easily understand emotions arising in familiar life situations, but find it difficult to put their emotional experiences into words. They are better at distinguishing positive emotions than negative ones. It is difficult for them to distinguish between fear and surprise. Unlike preschoolers, who prefer to perceive only cheerful and joyful pictures, junior schoolchildren have the ability to empathise when perceiving harsh scenes and dramatic conflicts [1].

Thus, for successful adaptation in society a person must have a developed emotional intelligence, which is the readiness of a person to orientate on another person and take into account his emotional state in his activities. The following features of development of emotional intelligence in younger schoolchildren can be distinguished: easy responsiveness to events; directness and frankness of expressing their feelings; great emotional instability; weak awareness of their own and other people's emotions and feelings. These features should be taken into account in the educational process.

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## LEVERAGING AI WITH FLUTTER: BUILDING SMART APPLICATIONS

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**Abstract:** This article explores the integration of artificial intelligence (AI) in Flutter application development, highlighting its transformative impact on modern app creation. It delves into key use cases such as image recognition, voice recognition, natural language processing (NLP), predictive analytics, and recommendation systems, demonstrating how AI-powered features enhance functionality and user engagement.

**Key words:** Flutter, artificial intelligence, machine learning, Watson UI customization, cross-platform development, performance optimization, responsive design, animation, mobile SDK, neural networks, app development.

Flutter, Google's open-source UI toolkit, has gained immense popularity for building cross-platform applications with a single codebase. Combining its capabilities with artificial intelligence (AI) opens up a realm of possibilities for creating smarter, more intuitive, and feature-rich applications. In this article, we'll explore how to integrate AI into Flutter projects and discuss use cases that can transform your applications.

### Why Combine AI with Flutter?

AI empowers applications to analyze data, predict outcomes, and automate tasks, providing users with an enhanced experience. Flutter, known for its flexibility and performance, acts as an excellent framework to seamlessly integrate AI-driven features into your app. Key benefits include:

- **Cross-platform support:** Build AI-powered apps for Android, iOS, web, and desktop with a single codebase.
- **Enhanced user experience:** Use AI to offer features like voice assistants, image recognition, and predictive analytics.
- **Faster development cycle:** Leverage Flutter's rapid development tools to prototype AI-powered features quickly.

AI has a wide range of applications that can be effectively implemented in Flutter applications, enabling developers to create intelligent and engaging user experiences. Some of the most popular use cases for integrating AI in Flutter include:

Image recognition is one of the most common AI applications and can be achieved using tools like TensorFlow Lite or Firebase ML. These models enable functionalities such as scanning and identifying objects in photos, detecting facial features for authentication or enhancement purposes, and dynamically cropping images. The latter is particularly useful in applications like photo editors or comic cropping tools, where precision is crucial.

Voice recognition is a powerful feature that allows applications to interact with users through spoken commands. AI-powered voice recognition can be used in hands-free music players, where users can control playback with simple commands. It is also valuable in language learning apps that provide pronunciation feedback, helping users improve their speaking skills.



Additionally, voice recognition enhances accessibility by enabling visually impaired users to interact with applications through spoken instructions.

AI-powered Natural Language Processing (NLP) enables Flutter applications to handle text and language intelligently. Chatbots, for example, provide in-app customer support by understanding and responding to user queries. NLP can also be used for language translation, making applications more accessible to global audiences, or for summarizing and analyzing large volumes of text data, which is particularly useful in productivity and research tools.

Predictive analytics leverages AI to analyze historical data and make informed predictions about future events. In e-commerce applications, this could mean predicting user preferences based on past behavior to recommend products. In healthcare, predictive analytics can identify potential health risks by analyzing patient data. Similarly, financial applications can use it to detect trends and forecast market movements, providing valuable insights to users.

Recommendation systems personalize the user experience by tailoring suggestions to individual preferences. Applications can recommend videos, songs, or products based on a user's previous interactions, creating a more engaging experience. News apps can curate personalized feeds by analyzing user interests, ensuring that content is relevant and appealing to the audience.

By integrating these AI capabilities, Flutter applications can provide innovative features that not only improve functionality but also enhance user engagement and satisfaction.

In addition to TensorFlow Lite, Flutter supports several other AI libraries that can be seamlessly integrated into applications, enabling developers to build intelligent and feature-rich solutions.

ML Kit, developed by Google, is a mobile software development kit (SDK) that simplifies the integration of machine learning into applications. Designed to cater to developers of all skill levels, ML Kit allows you to add powerful AI capabilities such as image labeling, face detection, and text recognition with minimal coding effort. Whether you are new to machine learning or have extensive experience, ML Kit provides a robust yet user-friendly environment to enhance your applications.

Teachable Machine is a web-based platform that democratizes the process of creating machine learning models. With this tool, you can train models using images, audio, or poses, making it accessible even to those without a technical background in AI. Once trained, these models can be exported and seamlessly integrated into Flutter applications using the `teachablemachine\_flutter` package. This combination enables developers to incorporate custom AI features without needing extensive expertise in data science or machine learning frameworks.

IBM Watson offers a comprehensive suite of AI-powered services that can be integrated into Flutter applications. Using the `flutter\_ibm\_watson` package, developers can access tools for language translation, text-to-speech conversion, visual recognition, and more. These services provide advanced AI capabilities, allowing applications to perform tasks such as understanding and generating natural language, analyzing images, and converting text into human-like speech. IBM Watson's offerings empower developers to create highly intelligent and interactive applications with ease.

By leveraging these AI libraries, Flutter developers can extend their applications' capabilities, enabling them to perform complex machine learning tasks and deliver innovative user experiences. Performance Benefits of Using Flutter for AI-Integrated Apps

Flutter offers several performance advantages that make it ideal for building AI-powered applications:

Flutter offers numerous benefits for creating AI-powered applications, particularly when it comes to performance and user interface customization.

One of the key advantages of Flutter is its high-speed rendering capability, made possible by the Skia graphics engine. This engine allows Flutter to render directly onto the screen, bypassing traditional platform-specific widgets. As a result, applications built with Flutter can achieve smooth performance at 60 frames per second or more, which is critical for real-time AI features like object recognition or interactive data visualizations.

In addition to rendering speed, Flutter benefits from Dart's Ahead-of-Time (AOT) compilation, which converts code into native machine instructions. This eliminates the overhead associated with interpretation, ensuring that AI functionalities such as real-time image processing or predictive analytics execute with minimal latency. Moreover, unlike some other frameworks, Flutter avoids using a JavaScript bridge to communicate with device hardware, further reducing the delay in processing AI tasks like voice recognition or augmented reality interactions.

Flutter also excels in efficient resource management, ensuring that memory and processing power are used judiciously. This is particularly important for AI models running on-device, such as those powered by TensorFlow Lite or ML Kit, which need to operate smoothly even on devices with limited hardware capabilities. GPU acceleration further enhances performance, allowing the framework to handle graphics-intensive AI tasks, such as rendering 3D objects or processing high-resolution images.

In terms of UI customization, Flutter provides unmatched flexibility. Its widget-based architecture allows developers to have complete control over the appearance and behavior of each UI element. This makes it easy to design interfaces tailored to the unique requirements of AI-driven features, such as real-time data visualization dashboards, dynamic charts, or interactive widgets that respond to AI predictions. Additionally, Flutter's adaptive design capabilities ensure that these features work seamlessly across different platforms, offering a consistent user experience whether on mobile, desktop, or web.

Animations and transitions are another area where Flutter shines. The framework comes with powerful animation tools that can be used to create visually appealing effects, such as animating changes in a heatmap as AI detects objects in real time or smoothly updating a chart when new data is processed. The dynamic nature of Flutter's UI system also allows developers to build interfaces that adapt in real time to AI outputs. For example, if an AI model identifies objects in an image, Flutter can immediately update the UI to tag and highlight those objects.

Furthermore, Flutter supports extensive theming and styling options, enabling developers to design visually cohesive applications that integrate AI features in a natural and user-friendly manner. For instance, the UI can use color changes, icons, or subtle animations to represent different AI states, such as ongoing model training or prediction completion.

Integration with third-party libraries, such as those for advanced graphing or animations, further expands the customization possibilities.

Overall, Flutter's combination of high performance and UI flexibility makes it an ideal framework for developing applications that leverage the power of artificial intelligence. It ensures smooth execution of computationally intensive tasks while enabling developers to craft engaging, responsive, and highly interactive user experiences.

Flutter stands out as a powerful tool for creating visually stunning user interfaces, offering advantages far beyond what is possible with Python's Tkinter. Its advanced UI capabilities, flexibility, and rich ecosystem make it a preferred choice for developers aiming to build modern, engaging applications.

One of Flutter's defining features is its comprehensive collection of pre-designed widgets, which include both Material Design and Cupertino components. Material Design widgets bring a sleek, contemporary aesthetic to applications, adhering to Google's design principles, while Cupertino widgets emulate iOS-style UIs with precision. This versatility allows developers to craft interfaces that feel native to their respective platforms. In contrast, Tkinter provides a basic set of widgets that are functional but lack the visual sophistication necessary for modern applications. Tkinter's UIs tend to look dated, even with significant customization effort.

Customization is another area where Flutter excels. In Flutter, every element of the interface is a widget, and each widget can be tailored to match any design specification. Developers can easily adjust properties such as colors, shapes, shadows, and gradients or create entirely new components that align with their vision. For example, a button in Flutter can have a gradient background, rounded edges, and an animated ripple effect on click—all achieved with minimal code. Tkinter, on the other hand, offers limited customization options. While basic changes like adjusting fonts and colors are straightforward, achieving complex designs or creating custom components often requires extensive workarounds or reliance on external libraries.

Animations play a crucial role in enhancing user experiences, and Flutter's robust animation framework makes it easy to implement both simple and complex animations. Whether it's animating a button press, creating page transitions, or implementing interactive visualizations, Flutter enables smooth and visually appealing effects with minimal effort. Tkinter's animation capabilities are rudimentary by comparison. Creating even basic animations typically involves manually updating widget states using timers, a process that can be cumbersome and lacks the fluidity achievable in Flutter.

Another key strength of Flutter is its ability to create responsive and adaptive layouts. Modern applications are expected to function seamlessly across a variety of devices, from smartphones to tablets to desktop computers. Flutter provides tools like the `'MediaQuery'` widget and flexible layout widgets such as `'Row'`, `'Column'`, and `'Flex'` to ensure that UIs adjust dynamically to different screen sizes and orientations. Tkinter, being primarily designed for desktop applications, does not natively support responsive design. While it is possible to create adaptive layouts in Tkinter, the process is more manual and less intuitive than in Flutter.

Moreover, Flutter's pixel-perfect rendering is powered by the Skia graphics engine, which ensures that the UI looks consistent and high-quality on all platforms. This approach eliminates issues like platform-specific inconsistencies, which can arise when using Tkinter's native

rendering. As a result, Flutter applications not only perform well but also maintain a polished, professional appearance across devices.

In summary, while Tkinter is a capable tool for building simple, functional desktop applications, it falls short when it comes to creating beautiful, modern interfaces. Flutter's rich widget library, advanced customization options, built-in animation capabilities, and support for responsive design make it the superior choice for developers looking to deliver visually appealing and highly interactive applications.

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## THE MAIN DIRECTIONS OF DEVELOPMENT OF PROFESSIONAL AND METHODOLOGICAL COMPETENCE OF THE FUTURE ELEMENTARY SCHOOL TEACHER.

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**Abstract:** In this article, the main areas of development of the professional-methodical competence of the future elementary school teacher are researched from a scientific and theoretical point of view.

**Key words:** integration, trajectory, complex, teaching method, logical method, situation-illustration, cognitive activity.

By improving the methodical training of the future primary school teacher, the main areas of development of his competence elements are as follows:

1) specially selected methodological task systems (V.G. Gilev [32], N.G. Kilina [102], V.I. Mishin [167], G.I. Sarantsev [210, 211] and others);

2) development of special methodological skills of teaching to work with mathematical tasks (O.I. Chikunova [255] and others); organization of extracurricular activities in mathematics (E.V. Vostokova [27], S.V. Demisenova [60] and others); Designing the learning process of the elementary mathematics course theory course (N.V. Sidorova [215], I.S. Zayats [86] and others); designing a task system (O.N. Orlyanskaya [182] and others); creation of specialized elective/facultative courses (V.A. Dalinger [57] and others); pedagogical research transfer skills (IV. Vladikina [26], G.A. Fedorova [240] and others);

3) integration of methodological cycle courses - "elementary mathematics" and "methodology of teaching mathematics" (O.B.Episheva [68], A.J. Jafyarov [82], V.F. Lyubicheva [129], Z.I. Yansufina [267] and others); "mathematics teaching methodology", "psychology" and "pedagogy" (N.L. Stefanova [225] and others); "mathematics teaching methodology" and "history of the development of mathematics" (T.S. Polyakova [196] and others); 4) Integration of traditional and innovative approaches in primary education - activity-based, integrative, differentiated and technological (S.V. Demisenova [60], L.P. Shebanova [258], Z.I. Yansufina [267] et al.); activity-based and technological (O.B.Episheva [68], G.V.Khoreva [246] and others); classification of school and HEI education based on levels and specialization (I.V. Drobisheva [62], O.B.Episheva [77, 79], E.I.Lyashchenko [131], R.A.Uteeva [239] et al. ); [267] et al.); activity-based and technological (O.B.Episheva [68], G.V.Khoreva [246] and others); classification of school and HEI education based on levels and specialization (I.V. Drobisheva [62], O.B.Episheva [77, 79], E.I.Lyashchenko [131], R.A.Uteeva [239] et al. ); 5) improvement of pedagogical practice (V.A. Dalinger [50], L.V. Sabanova [204], T.G. Cheshuina [254], R.R. Shakhmarova [257] and others);

6) development of creative methodical activity experience (A.P. Zenkovich [90], G.D. Glazer [33], E.I. Malakhova [135] and others);

7) improving the use of pedagogical technologies in teaching mathematics. humanization of mathematical education (T.A. Ivanova [92], Z.M. Kondrashova [109] and others); activity-



based approach (V.A. Dalinger [51, 52], O.B. Episheva [77] and others); developmental education (V.A. Dalinger [53] and others).

8) designing the professional development trajectory of the future primary school teacher (V.M. Monakhov [171] et al.); 9) development of professional competence of primary school teacher: professional and pedagogical (V.A. Dalinger [56], V.A. Demin [59] and others); technological (O.B. Episheva [71] and others); methodical (N.V. Grizlova I.A. Novik [176], T.B. Rudenko [202] and others); informative/information (V.A. Adolf [4], M.P. Lapchik [121], L.B. Senkevich [213] and others); socio-cultural (S.V. Pakhotina [185] and others); analytical/analytical (I.A. Abramova [3] and others) [144].

As noted by scientist V.A. Slastyo: [219, p. 104], the teaching method performs important functions; with its help, the following is carried out: a) delivery of the content of the studied topics to students, b) management of cognitive activities of students, c) intellectual development of students, g) formation of necessary personal qualities. The concept of "teaching method" has been given various definitions in pedagogical and methodological studies: - these are: the system of pedagogical rules and regulatory principles of teacher and student activity (M.I. Makhmutov [159]); an organized complex set of didactic methods and tools that implement the goals of teaching, upbringing and development (V.A. Oganessian [161]); method of interactive activity of teachers and students (Y.K. Babansky [28]; R.S. Cherkasov, A.A. Stolyar [162] et al.; O.M. Zheleznyakova [175]; V.A. Sitarov [217]).

In the opinion of scientist N.G. Khodireva [245, 11 p.], according to the activity-based concept of designing the educational process in higher education institutions, teaching methods are the methods of teacher activity that organize the student's educational/learning/learning activities, lead to the acquisition of knowledge, skills and personal development understood.

Analysis of these and other studies: a) if the teacher's leading role is assumed in the structure of the teaching/learning process, then the teaching method is defined as a method of organizing students' learning activities and managing these activities; b) if the direction of learning is assumed, then the teaching method is defined as a method that helps students move from ignorance to knowledge under the guidance of the teacher; c) logical-content teaching method is defined as a logical method that helps students to consciously master knowledge, skills and abilities.

Most traditional teaching methods [28, 34, 70, 126, 159, 181, 219, et al.] put the teacher, not the learners, at the center of learning/teaching. For example, the classification of scientists such as E. V. Perovsky, E. Ya. Golanta [34] according to the source of information transmission (verbal/verbal, visual and practical methods) is based on the types of teacher's activities and does not reveal the activities of students and the mental processes associated with them. M.N. Skatkin, I.Ya. Lerner's [126] classification by the type of cognitive activity (explanatory-illustrative/demonstrative, reproductive, problem statement/presentation, heuristic and research methods), although it implies a transition to methods that involve the gradual (gradual) development of low-level independence of students, it does not reveal the methods of mastering the knowledge and skills of students.

Among the traditional teaching methods used in higher education, many researchers (E.P. Belozertsev [186], M.Ya. Vilensky [24], V.A. Slastyonin [219], etc.) distinguish the following: lecture (problematic, binary, visual, lecture-consultation, lecture-press conference, lecture-conversation, lecture-discussion, etc.) seminar (abstracts, reports, messages, "round

discussion"/round table), practical and laboratory training, game teaching methods (business game, analysis of educational and professional situations, "brainstorming"/brainstorming, etc.) and independent work of students (advice/consultation, etc.). The traditional theoretical orientation of education prevails in HEIs. The approach, which is the basis of the competence-building approach, and focuses on the development of students' cognitive activity by selecting the teaching methods from the subject's point of view, is insufficiently used in HEIs, which reduces the level of methodological training of students.

In the 60s and 70s of the 20th century, the issue of the need to further develop students' existing knowledge in improving traditional teaching methods began to be studied. Heuristic and problem-based methods based on didactic (business) games, further improvement of technical educational tools to enrich students' knowledge and organize their independent education.

So, the main difference between traditional and active learning methods is the strengthening of activity-oriented learning process. In our opinion, the most complete classification of active teaching methods is based on the researches of scientist E.P. Belozertsev as follows [186, pp. 276-277]:

- 1) non-imitation methods; various lectures, "round discussion", colloquium, programmed education, seminar, mobile training with thematic discussion, work with small groups and Olympiad;
- 2) imitative: a) non-game methods (situational solutions, completion of individual tasks, discussion of developed options, holding a seminar, individual trainer, teacher's summary of training, i.e. completion of the lesson and evaluation of students  
b) game methods (multiple choice of the optimal solution, brainstorming, business games, role-playing games, game design of individual technological process).

There are also classifications of active learning methods focused in a narrow sense (areas). For example, O. M. Zheleznyakova [175] considered the most productive methods of problematic, dialogic and personalized statement, heuristic dialogue, research method, analysis of production situations, direct and reverse question-and-answer, aimed at forming the qualities of an expert personality. shows. In our opinion, the method of analyzing production situations implies the use of all other methods listed above, because brainstorming is important in situation research.

Since one of the components in the structure of the concept of "professional-methodical competence" of a future primary school teacher is personal qualities of professional importance (chapter 1, clause 1.1, p. 23-25), we analyze the concept of "educational-methodical situation".

"Situation" from a psychological point of view is a system of external conditions that motivate and mediate the activity of the subject [217]. From the point of view of professional activity, "situation" is a set of facts, events and problems related to the description of a certain period or event in the activity that requires appropriate actions [217].

Some researchers (V.A. Slastyonin [217], D.V. Chernilevsky, O.K. Filatov [252], etc.) use active teaching methods as close as possible to the real professional and pedagogical situations in which the future teacher may find himself. is called the method of creating pedagogical situations. For example, V.A. Slastyonin [219, 189 p.] and V.A. Sitarov [217, 235 p.] define several groups of methods of creating problem learning situations as a special class of pedagogical situations that implement the following types of student initiative:

1) methods that motivate students' cognitive activity, for example, the method of unexpected solutions - it is appropriate to use it when the teacher offers a new, previously unused solution to a certain problem that contradicts the existing experience of students, that is, when giving students tasks with an unknown end. This forces students to ask questions that focus on obtaining additional information;

2) methods encouraging independent demonstration of initiative: training in methods of independent creative composition of tasks, searching for analogues similar to events in everyday life;

3) methods using the initiatives put forward during the activity; method of deliberate, deliberate errors: in this, students will have to find and correct the error made by the teacher during the activity.

In the method of joint search for solutions, the teacher deliberately chooses the wrong way to achieve the goal, and the students are required to identify it, offer alternative methods and ways of solving the task. "Labyrinth" method: students are offered 5-6 ready-made solutions on the topic and they have to find the optimal solution. Method of solving practical problems: in this the teacher creates a situation of social importance and students have to prepare themselves for the upcoming activity;

3) Methods of organizing initiative in collective and cooperative activities: the teacher creates situations that ensure competition in the game, study, work and other types of student activities, as well as their initiative in educational and extracurricular activities.

Scientists such as D.V. Chernilevsky and O.K. Filatov [252] distinguish four types of situations according to their educational, educational function:

1) situation-problem (students find the cause of the described situation, pose a problem and solve it);

2) evaluation-situation (students evaluate the decisions made);

3) situation-illustration (students get examples of the main topics of the course based on the issues and problems that need to be solved);

4) case-exercise (students practice verbally solving problems and examples using the analogy/analogy method).

So, all these studies serve as a certain theoretical basis for the development of a holistic concept for the development of professional-methodical competence of the future primary school teacher in the practice of teaching at the pedagogic higher education institution. However, for this, it is necessary to determine the methods and means of its development.

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## DEVELOPMENT OF THE LEGAL BASIS OF THE ACTIVITY OF CRIME PREVENTION SERVICES OF THE INTERNAL AFFAIRS BODIES (1999-2016)

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**Abstract:** The article discusses the development of the legal basis of crime prevention services of internal affairs bodies of the Republic of Uzbekistan, offers and recommendations for more effective organization of this activity.

**Key words:** Internal affairs bodies, crime prevention services, crime prevention activities, legal basis.

In our country, a unique legal system has been established to protect human rights, freedoms, and legitimate interests, as well as the property of individuals and legal entities from various offenses. This system aims to maintain public order, ensure public safety, uphold the rule of law, safeguard the security of individuals, society, and the state, and implement crime prevention measures. Within this system, the crime prevention services of internal affairs bodies play a crucial role.

It can be said that just as each participant in administrative and legal relations in society's social life has its own legal status, the crime prevention services of internal affairs bodies also have their distinct legal status.

In some sources, the concept of "legal status" is defined as the state of a subject determined by legal norms, a set of his rights and obligations.[1]

M.Z. Ziyodullaev notes that when discussing the legal status of a legal entity, along with its rights and obligations, it is possible to include its main functions.[2]

In our view, the "rights and obligations of the subject" within the concept of "legal status" mentioned above also encompass "the functions of the subject." In other words, the rights and obligations assigned to the subject by normative legal acts inherently include its tasks and functions.

Regarding the development of the legal status of crime prevention services within internal affairs bodies, which began in 2017 and is currently being consistently and comprehensively implemented as part of the New Uzbekistan reforms, it is no exaggeration to say that over the years, the normative legal acts defining the legal status of this service, an integral part of the state body, have been uniquely improved in accordance with the development of our society's social life.

In particular, looking back at history, extensive work has been carried out to improve not only the crime prevention services of internal affairs bodies but also the entire system of internal affairs. This work continues consistently to ensure peace and tranquility, public order, and public safety more effectively in our country.

Specifically, the resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On the Concept of Maintaining Public Order and Ensuring Security in the City of Tashkent" dated April 12, 1999, can be considered the beginning of reforms in this area during the period we are discussing. The significance of these reforms lies in their comprehensive nature, covering



the entire internal affairs system and focusing on all important areas of activity. In particular, this decree reorganized the structure of the Main Department of Internal Affairs of Tashkent city, established the activities of the Patrol and Post Service and the Traffic Police on an entirely new basis, and instituted the Preventive Inspectors system based on the former police precinct inspectors.[4]

Also, based on this decision, support points were established in all 444 makhallas of the city of Tashkent, and about 1200 prevention inspectors were established in them. The results of these reforms made it possible to radically revise and strengthen work to prevent offenses, identify and eliminate the causes of crimes and the conditions that contributed to them, and ensure a significant improvement in the criminal situation in our country.

The Decree of the President of the Republic of Uzbekistan No. UP-2822 of March 27, 2001, "On Measures to Improve the Activities of Internal Affairs Bodies of the Republic of Uzbekistan" also has special significance in improving the legal status of crime prevention services of internal affairs bodies. This Decree defines the organizational structure and main tasks of the Ministry of Internal Affairs of the Republic of Uzbekistan. The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated June 6, 2001, "On Measures to Strengthen the Role of the Preventive Service in Combating Crime," adopted to ensure the implementation of this Decree, also played an important role in strengthening the legal status of the Ministry of Internal Affairs' crime prevention services. In particular, based on the aforementioned normative legal acts, support points have been established in all makhallas of the country, which are considered the lowest level of crime prevention services, the activities of prevention inspectors have been established in them, and the cooperation of the crime prevention services of the internal affairs bodies with citizens' self-government bodies and the general public, in other words, with civil society institutions, in the prevention of offenses has been further strengthened.

Furthermore, the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 162 "On Measures to Improve the Infrastructure of Military Support Points" of May 16, 2002, and the Decree of the President of the Republic of Uzbekistan No. UP-3264 "On Measures to Further Improve the Activities of Internal Affairs Bodies of the Republic of Uzbekistan" of July 19, 2004, and the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 442/69 "On Measures to Improve the Training of The reason is that these normative legal acts effectively influenced the formation of a completely new system of crime prevention services of internal affairs bodies, the further strengthening of their activities and further strengthening of their legal foundations and legal status, the improvement of their material and technical base and the training, retraining and advanced training of qualified personnel directly for this service in educational institutions of internal affairs bodies, the establishment of newly created structural structures in the system of crime prevention services of internal affairs bodies, that is, the activities of the base points of the internal affairs bodies and

The adoption of the Law of the Republic of Uzbekistan "On the Prevention of Offenses" on May 14, 2014, also serves to increase the effectiveness of work in this area and raise it to a qualitatively new level.

In particular, this law provides appropriate definitions of such basic concepts as offenses, victims of offenses, persons prone to committing offenses, antisocial behavior, social rehabilitation and social adaptation, as well as crime prevention, defines the main tasks of

crime prevention and the main principles of crime prevention and identifies general, special, individual and victimological crime prevention as types of crime prevention. These main tasks, principles, and types of crime prevention serve as a program for the effective implementation of the activities of the crime prevention services of internal affairs bodies.

At the same time, this law separately defines the bodies and institutions that carry out and participate in the prevention of offenses, their powers, and in the system of bodies and institutions that directly carry out the prevention of offenses, internal affairs bodies are also noted, and in the field of prevention of offenses, internal affairs bodies:

- participate in the development and implementation of state programs for the prevention of offenses;
- develop, approve and implement programs for the prevention of offenses;
- studies the criminogenic situation in the country, individual regions, districts and cities, analyzes the effectiveness of using existing forces and means to prevent and eliminate offenses;
- carry out the prevention of offenses, including identifying and eliminating the causes of the commission of offenses and the conditions that make them possible;
- keeps records of violations, persons who committed them and victims of violations, conducts an analysis of these data;
- Carries out preventive registration of persons provided for in Article 35 of the Law;
- identifies individuals associated with banned organizations and religious extremist groups, and takes measures against them;
- ensures control over compliance with the passport-visa regime, the rules and procedure for the storage of civilian and service weapons and ammunition for them by citizens and legal entities;
- participate in the disclosure of crimes and the search for missing persons and persons who avoid appearing before the investigation, court;
- takes measures for social rehabilitation and social adaptation;
- interacts with other bodies and institutions that directly carry out and participate in the prevention of offenses.

It was established that internal affairs bodies may exercise other powers in accordance with the legislation.

The adoption of the Law of the Republic of Uzbekistan "On Internal Affairs Bodies" on September 16, 2016, played a significant role in understanding the legal foundations of the activities of crime prevention services of internal affairs bodies, their structural organization and current state, as well as defining their goals and objectives. Specifically, Article 2 of the law stipulates that the main tasks of internal affairs bodies are to protect the rights, freedoms and legitimate interests of citizens, property of individuals and legal entities, and the constitutional order; to ensure the rule of law and the security of individuals, society and the state; as well as to prevent offenses. Article 4 identifies crime prevention as one of the main directions of internal affairs bodies' activities, including identifying and eliminating the causes and conditions that enable offenses, and identifying persons prone to committing offenses.

Furthermore, Article 15 of the law specifically notes that the base stations of internal affairs bodies, which are one of the main structural units of crime prevention services, are the primary local units of district and city internal affairs departments. These base stations are organized to ensure cooperation between internal affairs bodies and the public, and directly

maintain public order in villages, auls and mahallas, ensure citizens' safety, prevent crime, and combat criminal activity.

Additionally, it was determined that the base stations of internal affairs bodies should carry out activities with a staff comprising senior crime prevention inspectors, inspectors, and their assistants for maintaining public order. Crime prevention inspectors are to be appointed by the decision of the district (city) Council of People's Deputies and are required to submit reports to citizens' self-government bodies in the prescribed manner. It was also established that other units of internal affairs bodies may be involved in organizing the work of these base stations.

It should be noted that today, the crime prevention services of internal affairs bodies are effectively working to maintain public order and ensure public safety in residential areas, organize crime prevention, raise the legal awareness and culture of the population, and create a lifestyle that fully corresponds to the way of life, spirituality, values, and mentality of our people. However, as society continually develops, offenses also evolve, becoming more complex and sophisticated. Therefore, the effective implementation of crime prevention and the fight against crime remains one of the pressing tasks of our time.

In conclusion, it can be said that raising the effectiveness and efficiency of crime prevention services of internal affairs bodies to a new level is a requirement of today. Based on this requirement, it is advisable for law enforcement agencies to carry out crime prevention services to maintain public order and ensure public safety, implement crime prevention, and eliminate the causes and conditions that contribute to the commission of offenses. This should be done based on laws and regulatory legal acts, effectively using various forms and methods of activity, as well as official powers.

At the same time, in the 21st century, with the rapid development of modern information and communication technologies and the widespread prevalence of modern threats in global social life, the types of offenses are increasingly developing, becoming more complex and sophisticated as our society evolves. Correspondingly, it is axiomatic that the legal foundations of the activities of crime prevention services of internal affairs bodies, in other words, the laws and regulations governing their activities, should be improved in a unique way, keeping pace with the times. After all, the continuous implementation of measures aimed at preventing offenses, combating crime, protecting the rights, freedoms and legitimate interests of individuals, maintaining public order and ensuring public safety, identifying and eliminating the causes of offenses and the conditions that allow them to be committed is one of the main directions for the future of our country.

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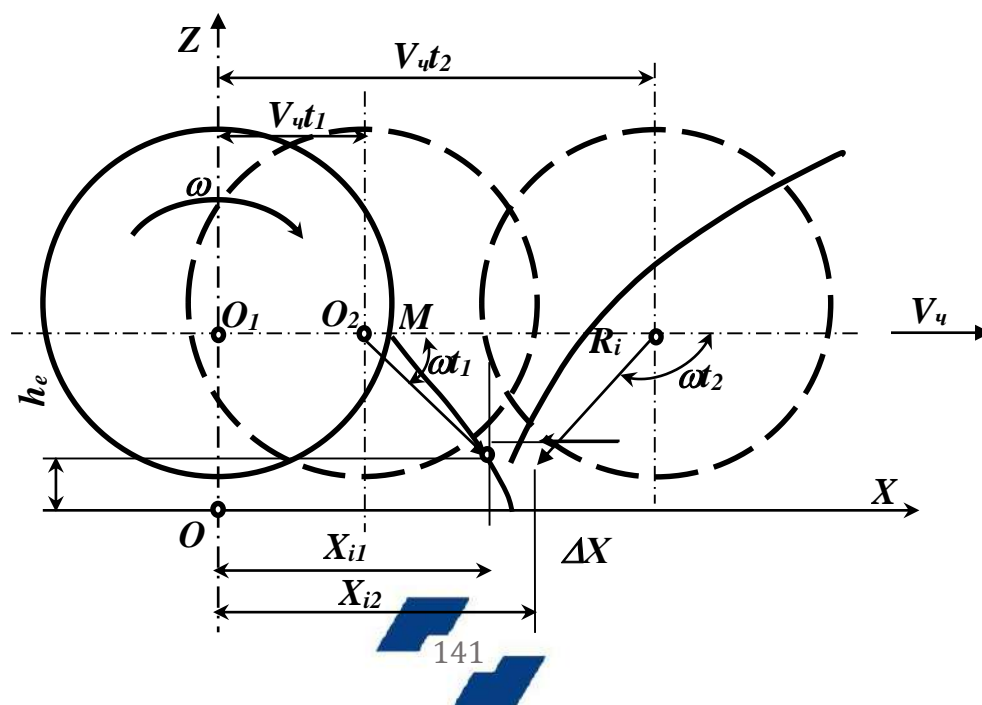
**Egamov Nodirbek Murodillo yevich**

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The size of the zone of softening of friction by one protog of the roller  $\Delta X$  (Fig. 1) using the following expression [5; p. 60].

$$\Delta X = R_i \left\{ \frac{1}{1-K_c} \left[ \pi - 2 \arcsin \left( 1 - \frac{h}{R_i} \right) \right] - \right. \\ \left. - 2 \cos \arcsin \left( 1 - \frac{h}{R_i} \right) \right\} + b_p, \quad (1)$$

in this  $K_c$  - go ahead slip coefficient;  $b_p$  - the width of the roller bar, m.





### 1 . The scheme for determining the softening zone of the coil by one protog of the roller

$R_i = 0.125 - 0.165$  m,  $K_c = 0.2$ ,  $h = 0.05$  and  $b_p = 0.014$  m, calculations made according to the expression (1) show that the size of the zone of softening of the coil by one protog of the roller is 10 – 11 cm was determined to be

#### The number of rods to be installed on the reel

We determine the number of rods to be installed on the reel according to the following condition

$$n \geq \frac{2\pi R_i (1 + K_c)}{\Delta X} \cdot (2)$$

When this condition is fulfilled, the complete smoothing of the coil is ensured by the roller in the direction of movement.

Taking into account the expression (1.1), the expression (1.2) has the following form:

$$n \geq \frac{2\pi R_i (1 + K_c)}{R_i \left\{ \frac{1}{1 - K_c} \left[ \pi - 2 \arcsin \left( 1 - \frac{h}{R_i} \right) \right] - \left[ -2 \cos \arcsin \left( 1 - \frac{h}{R_i} \right) \right] \right\} + b_p} \cdot (3)$$

By substituting the values of  $R_i = 0.125 - 0.165$  m,  $K_c = 0.2$ ,  $h = 0.05$  va  $b_p = 0.014$  m into this expression, we determine that the number of rods mounted on the reel should be 10 - 12.

#### The coverage width of the reel

We determine the coverage width of the coil according to the following expression:

$$B = M - 2\Delta, (4)$$

where  $M$  is the width of seeded rows (between cotton rows), m;

$\Delta$ – the width of the roller protection zone, m.

$M = 60$  cm,  $\Delta = 5$  cm [11; pp. 64-65, 13; p. 146] values, we determine that according to expression (4) the coverage width of the coil should be 50 cm.

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## CAUSES OF THE HIDDEN ECONOMY AND ITS BROAD IMPLICATIONS FOR MACROECONOMIC STABILITY

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**Abstract:** The field of macroeconomics is built on the foundation of understanding the complex web of economic activity within a nation. However, lurking beneath the surface is a mysterious area known as the "hidden economy" – a dynamic and challenging space that challenges traditional economic analysis. This article explores the concept of the shadow economy, exploring its characteristics, causes, and far-reaching implications for macroeconomic stability.

**Key words:** Features of the hidden economy, causes of the hidden economy, causes of the hidden economy, implications for the macro economy, addressing the hidden economy.

The hidden economy is initially viewed as a subsidiary sector in terms of its contribution to the general economy. However, it came into focus with the publication of Peter Guttman. Estimates of the size of the shadow economy for the US economy (ie \$200 billion in 1976) in the context of achieving the goal of inclusive growth and development. The informal economy is known by different names in different regions of the world. For example, the Swedes and Russians call it "Hidden economy", the British call it "Fiddle", the Japanese recognize it. As "hidden income", the French consider it "Travail au noir", and the Italians consider it "Lavoro". It is analyzed as "hidden economy" or "informal economy".

The secret economy is the concealment of economic activity from society and others in the absence of state control and reporting, at the same time, the economy is an unobservable and informal type of activity. possible society.

The hidden economy is a part of the economy of a country that has not been studied or observed on order, and often the development of the economy is negatively affected.

The activity of the hidden economy leads to various consequences, among which there are positive and negative aspects.

Positive effects include:

1. Creation of new jobs in the underground market, i.e. population growth and employment;
2. The national market includes, for example, goods that are prohibited or restricted due to sanctions. Thus, consumer demand improves due to the hidden economy.

However, the negative consequences for both the individual and the state are much greater than the positive, they are: (uneven redistribution of income in favor of a small privileged group of the population, thus creating an antisocial environment that leads to a decrease in social welfare; an increase in the budget deficit; among them, the wrong population the formation of a sense of well-being; the deterioration of the criminal situation in the country; the destruction of the centralized system; the decline of moral values) and others.

The measures taken to reduce the share of the underground economy in the Republic of Uzbekistan consist of the following sections:

1. Experiences of foreign countries were studied. As a result of the study, the negative impact of this economy on these countries was determined. Methods The methods of assessing the hidden economy, which are widely used in foreign countries, are studied and divided into two categories: direct and indirect. Direct methods are based on direct observations and tax audits, while indirect methods are based on transaction, currency-based demand method, energy consumption method, difference between costs and earnings statistics, the difference between the official and actual labor force, and the MIMIC model.

2. Implemented measures. Projects such as the strategy for reducing the share of the hidden economy in 2021-2025 and the methodology for assessing the share of the large economy "hidden economy" (based on the MIMIC model) are being developed in cooperation with World Bank experts.

3. Measures planned to be implemented by the Ministry of Economy

Development. A system of non-cash account books planned to be developed together with ministries and agencies, simplifying the taxation system and ensuring the equality of the tax burden, improving and liberalizing the competitive environment, ensuring market and budget transparency, and increasing citizens' awareness.

In general, extensive work is being done in our country to prevent the negative consequences of the underground economy. I think the actions are wise and will have a positive impact in the near future.

Several factors contribute to the existence and growth of the underground economy:

**Tax evasion** : individuals and businesses may engage in the shadow economy to avoid taxes. By conducting off-the-record transactions, they can avoid paying income, sales and other taxes and thus increase their disposable income.

**Regulatory avoidance** : the shadow economy often thrives in an environment with strict regulations, bureaucratic hurdles, or complex licensing procedures. Informal enterprises can operate to overcome these barriers.

**Informal labor market** : Unreported work, in which workers are paid in cash without formal contracts and benefits, is an important component of the underground economy . This includes jobs in industries such as domestic work, construction and small-scale manufacturing.

**Lack of access to formal markets** : in some cases, individuals and businesses may be excluded from formal markets for various reasons, such as lack of credit history or legal documents. As a result, they turn to informal channels for economic activity.

**Cultural and social factors** : Cultural attitudes and social norms can also play a role in the prevalence of the shadow economy. In some societies, informal transactions are deeply embedded, and participants may see them as a way to cope with economic problems.

Characteristics of the hidden economy:

**Informal transactions** : At the heart of the shadow economy are transactions that occur outside the purview of regulatory authorities. These exchanges often involve cash transactions and leave no paper trail for tax authorities.

**Unreported work** : A significant part of the underground economy consists of undeclared work, where workers work without formal contracts or legal recognition.

Industries such as home work, small manufacturing and construction often contribute to this phenomenon.

**Avoidance of regulation** : strict regulations and bureaucratic barriers often lead economic markets to the shadow economy, seeking to bypass the complexities of formal markets and regulatory requirements.

Implications for Macroeconomics:

**Loss of revenue** : The shadow economy poses a major challenge to governments by depriving them of potential tax revenue. This loss could hamper public finances and limit the government's ability to fund critical services and infrastructure.

**Distorted economic data** : The spread of the underground economy distorts official economic statistics, leading to inaccurate estimates of a country's economic health, employment levels, and overall productivity.

**Lack of social protection** : informal workers often lack access to social security benefits and other protections, contributing to increased income inequality and reduced social cohesion.

**Violated rule of law** : The shadow economy can erode the foundations of the rule of law, create an environment of inconsistency and lead to increased corruption.

Understanding and addressing the shadow economy is critical to maintaining the integrity of macroeconomic analyzes and ensuring sustainable economic development. As nations strive for transparency, equity, and stability, unlocking the secrets of the shadow economy is an important step toward achieving these fundamental goals.

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## SOME THOUGHTS ON VICTIMOLOGICAL PREVENTION OF FRAUD BY THE PREVENTION INSPECTOR

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**Abstract:** The article outlines the fundamentals and concepts of organizing victimological prevention of fraud by the inspector. Additionally, the author clarifies the concept of fraud victimization, the classification of specific objects of victimological crime prevention in implementing early victimological crime prevention measures, as well as their distinguishing features.

**Keywords:** victim, fraud, victimization, offense, prevention, victimological prevention.

Today, the increase in crimes of fraud, deception, and abuse of trust, as well as combating these types of crimes and offenses, is one of the main tasks of internal affairs bodies. Therefore, before analyzing the concepts related to this topic, we first need to understand what fraud is, or how to define this concept. Thus, fraud is categorized as a crime in the economic sphere, and Article 168 of the Criminal Code provides a definition for this crime.

According to it, fraud is the acquisition of someone else's property or the right to someone else's property through deception, trickery, or abuse of trust. Thus, any sane person who has reached the age of 16 who acquires another person's property or right to property for free using the two aforementioned methods may be prosecuted by law enforcement agencies as a person who has committed fraud. In this case, the amount of damage that serves as the basis for initiating a criminal case must exceed a small amount, which is 30 times the minimum monthly wage.

Today, this amount is 5,167,200 soums. If an individual has been victimized by a fraudster, according to criminal legislation, the amount of misappropriated property is not significant for initiating a criminal case. From a criminal law perspective, the legal assessment of this crime is primarily a matter of public concern. People are easily falling for the words of swindlers and being deceived. Therefore, let's present some thoughts on the causes of this type of crime, as well as who the main victims of this crime are and how to prevent them.

To enhance the effectiveness of internal affairs bodies directly implementing and participating in victimological crime prevention measures, it is necessary that their activities be directed towards specific targets. When studying the activities of the prevention inspector in organizing victimological prevention of fraud, it is important, first and foremost, to approach the concept of the victim from a victimological perspective as an object of victimological crime prevention. Therefore, a victim can be recognized not only as a person officially identified as a victim of a crime or an administrative offense but also as a person who has not yet become a victim but is at real risk due to antisocial behavior or illegal acts, regardless of whether an official of the competent authority formally recognizes them as a victim. As mentioned above, while the concept of victim in the direct implementation of

victimological prevention measures is interpreted relatively broadly in theory, the scope of the concepts of victim and victim of offense (criminal and administrative) used in the field of law and practice is limited, and they are interrelated. According to the Criminal Procedure Code of the Republic of Uzbekistan, a person is recognized as a victim if there is evidence to believe that a crime or a socially dangerous act committed by an insane person caused moral, physical, or property damage to that person. The investigator, prosecutor issues a decision, and the court renders a ruling on the recognition of the victim" (Article 54 of the Criminal Procedure Code). When developing this definition, the legislator did not take into account the requirements of Part 2 of Article 14 of the Criminal Code, nor did it consider the latency of crimes and their victims when examining them from a victimological perspective.

In our view, there is a need to further improve the definition of the concept of victim of an offense provided for in Article 3 of the Law of the Republic of Uzbekistan "On the Prevention of Offenses." Because this concept refers to a person who has suffered from an offense as a result of physical, moral or property damage, and somewhat limits the circle of victims. It is also possible to find that the objects of victimological crime prevention are interpreted differently in the eyes of different lawyers.

For example, E.Yu. Moshitskaya's research presents potential and victimized victims as objects of victimological prevention.[1] The study also emphasizes that the circle of individuals carrying out preventive measures depends on the types of prevention. For example, victimological prevention is implemented in relation to individuals with a high risk of becoming victims of trafficking.[2] In this case, the researcher took an individual approach to expressing his opinion. However, a group of researchers acknowledged that the object of victimological prevention is not limited to victims, but includes individuals with a high risk of becoming victims of human trafficking, as well as the factors and causes that cause victims of human trafficking. After all, the less people in society are prone to be victims of offenses, as well as the lower their level of victimization, the more effective it can be in combating crime.[4] It is also emphasized that not all of those listed in legal literature as objects of victimological crime prevention by internal affairs bodies can be accepted as objects of this activity. Because the study of the concept of victimization, the types, methods, forms, measures, directions, and legal foundations of victimological prevention is an object of science and research, not of this activity.

Victimological crime prevention measures used by internal affairs bodies are aimed, firstly, at factors that shape a propensity to be victimized by offenses and require victimhood, secondly, at those with a high probability of being victimized by offenses, and thirdly, at victims of offenses.

Therefore, the activity of organizing victimological prevention of fraud by a prevention inspector can be understood as social relations that shape a predisposition (high probability) to be victimized by offenses within the framework of crime prevention measures, factors requiring victimization, and ensuring the presence of victims in society.

The following can be cited as the main reasons for the emergence of this type of fraudulent crimes; the lack of awareness of the essence of the crime, the interest of young people and minors in various games (online gambling, various types of paid games) and their insufficient control by family members, the credibility of victims. Based on the above analysis and the results of the conducted research, the classification of objects of victimological crime

prevention activities of internal affairs bodies made it possible to conditionally divide them into three groups.

The first group includes factors that shape victimization (features that determine the likelihood of being victimized by offenses) in the population, its individual groups, and specific individuals.

The second group includes categories of the population, groups, and individuals with a high probability of becoming victims of a crime and who in certain situations may become victims. (for example, depending on their physical and physiological condition: children, elderly people, women, people with disabilities, people with physical and (or) mental disabilities, etc.).

The third group includes victims of a crime. victims of a crime (persons whose primary victim suffered physical, material, and moral harm as a result of the commission of a crime, as well as a person whose secondary victim suffered moral harm as a result of the commission of a crime against a close relative, legal representation, or patronage.

In cooperation with the bodies carrying out the prevention of crimes and offenses and the relevant departments involved in it, it is necessary to implement measures aimed at providing legal, social, psychological, medical, pedagogical and other types of assistance, as well as instilling in them accepted norms and rules of conduct in society.

In conclusion, it is advisable for the above-mentioned prevention inspector to implement victimological prevention measures for fraud in conjunction with general, special, and individual prevention measures

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## CONSTITUTIONAL GUARANTEES OF CITIZENS' RIGHT TO APPEAL IN THE REPUBLIC OF UZBEKISTAN

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**Abstract:** The article highlights that the new principle of ensuring state bodies' work with appeals from individuals and legal entities, as well as safeguarding their legitimate interests in human rights and freedoms, is an important guarantee for filling gaps in legislation in this regard.

**Keywords:** Human, appeal, right, law, state, citizen, problem.

"All human beings are born free and equal in dignity and rights." [1] The first article of the Universal Declaration of Human Rights begins with these words. This international document guarantees the most important rights of every person, such as personal inviolability, freedom of speech, right to appeal, property ownership, freedom of belief and expression, citizenship, participation in public administration, right to vote and be elected, right to marry, work and rest, education, access to medical and social services, and enjoyment of cultural and artistic works. As President Sh.M. Mirziyoyev emphasized, "Our priority task is to comprehensively promote the realization of human potential and protect fundamental rights and legitimate interests. This is a key condition for ensuring peace, stability, and a prosperous life in society." [2] This is a key condition for ensuring peace and stability, a prosperous life in society." [2]

Among these rights, the individual's right to appeal is of particular importance, which is reflected in Article 40 of our Constitution as follows: "Everyone has the right, individually or collectively, to submit applications, proposals, and complaints directly to state bodies and organizations, citizens' self-government bodies, officials, or people's representatives."

The Development Strategy of New Uzbekistan for 2022-2026, approved by the Decree of the President of the Republic of Uzbekistan dated January 28, 2022, No. UP-60, outlines some issues related to appeals, including: Including:

- Establishing the practice of issuing and exchanging time-sensitive documents confirming specific facts to citizens and offering composite state services without waiting for their application.
- Establishing digital control over the timing and quality of consideration of appeals received by state bodies by creating a centralized system for collecting them, ensuring prompt and high-quality consideration of appeals on issues that directly affect the daily lives of the population.
- Developing modern forms of public control and introducing the practice of monitoring the quality of implementation of regional, sectoral, and state programs based on collective appeals.
- Ensuring the implementation of the "Code of Professional Culture" for employees of internal affairs bodies. Staffing internal affairs bodies with morally upright, loyal, people-



oriented, and responsible employees, and introducing a system for evaluating their activities based on the effectiveness of solving public problems and handling citizens' appeals, as well as public opinion.

- Organizing the activities of the "Mehnat-M" center in Tashkent city as an experiment to study and assist in resolving labor-related appeals and disputes.[3]

Along with the step-by-step development in our country, the "Uzbekistan-2030" strategy aims to introduce the "Service State" system for the population by expanding the scope of digitalization of public services, eliminating bureaucratic procedures in relations between citizens and the state, abolishing excessive formal procedures such as filing applications and filling out various forms for citizens to use public services, creating a system where government agencies obtain necessary documents from an electronic database, increasing the efficiency of identifying and resolving public issues through expanded dialogue with the people, canceling the practice of registering appeals in paper form in state bodies and organizations, creating opportunities to appeal electronically, including through relevant mobile applications, to all state bodies and organizations and their territorial divisions, ensuring that at least 80 percent of appeals are satisfied at the local level, reducing the share of repeated appeals by at least 2 times, establishing effective judicial control over the activities of state bodies and officials and further developing the administrative justice system, fully eliminating factors hindering direct appeal to administrative courts, increasing the effectiveness of pre-trial dispute resolution by 50 percent, reducing the number of cases coming to courts on disputes that can be resolved pre-trial by 50 percent, with the goal of creating conveniences and facilities for the population.

At the same time, in order to directly solve the problems of the population and create the necessary resources and opportunities for the development of the region, the activities of assistants to the district (city) khokims on entrepreneurship development, ensuring employment and reducing poverty, as well as youth leaders, introduced as a new institution in mahallas, have been effectively established.

A procedure has been introduced for managers at all levels to visit mahallas, study problems in their respective fields, and find solutions to them, with the state of affairs in mahallas serving as the main criterion for evaluating the activities of ministries, departments, and khokimiyats.

A system has been created for citizens to contact all government agencies and communicate with their leaders from within the mahalla, and the reputation of mahallas has been enhanced by providing state and social services directly in the mahalla, including establishing effective connections with the People's Reception Offices of the President of the Republic of Uzbekistan.

It should be noted that practices have been established for organizing direct dialogue with the population, ensuring the functioning of an effective system for handling appeals aimed at fully protecting their rights, freedoms, and legitimate interests, creating conditions for the unconditional realization of the constitutional right to appeal, organizing complete, impartial, and timely consideration of incoming appeals, implementing systematic monitoring and control over the consideration of appeals received and forwarded to relevant state bodies and organizations, conducting receptions of individuals and representatives of legal entities (including through videoconferencing), registering, summarizing, and systematizing incoming appeals.





In our country, citizens' appeals are regulated by the Law "On Appeals of Individuals and Legal Entities," and the provisions outlined in this law, which regulate the interaction between the population and state bodies, apply equally to all state bodies, organizations with state participation, and citizens' self-government bodies.

According to Article 3 of this law, a repeated appeal is defined as an appeal received from the same applicant, expressing either a complaint against the organization's decision on their previous appeal or dissatisfaction with the fact that the appeal was not considered within the time limits established by law. It is important to distinguish this from a duplicate appeal, as a duplicate is simply a copy of the same physical or legal entity's original appeal. In other words, a duplicate occurs when the author of the appeal resubmits a copy of the same appeal without having received a response from the relevant organization or knowing its decision.

Furthermore, Article 4 of the law establishes the following main principles: legality in the consideration of appeals; timely and comprehensive review of appeals; uniformity of requirements for appeals; respect for the rights, freedoms, and legitimate interests of individuals and legal entities; prevention of bureaucracy and red tape in the consideration of appeals; and transparency in the activities of state bodies, organizations, and their officials when considering appeals.[6]

Based on the results of an in-depth scientific and practical study of the causes of increasing recurrent appeals and the conditions that contribute to them, it is recommended to implement the following measures in accordance with advanced foreign practices to address the aforementioned factors: attracting psychologists to work with the main sources of appeals; establishing the work of managers who directly deal with applicants; improving the qualifications of those responsible for handling appeals and strengthening methodological support for them; creating opportunities for interested parties to regularly monitor the status of their appeals at each stage and evaluate the results; effectively utilizing information technologies; developing platforms that allow each individual to access necessary, high-quality, and reliable information; and implementing formal and informal mediation models to prevent the influx of appeals.

To address problems arising in practice when considering appeals received by internal affairs bodies, it is necessary to improve the organizational and legal aspects of handling appeals in these bodies. This includes enhancing efficiency, openness, transparency, effectiveness, and provision of necessary information and resources. Additionally, it is crucial to develop priority directions for the legal protection of whistleblowers from potential consequences such as persecution, job loss, discreditation, and other forms of material and moral damage. In this regard, it is essential to continuously improve the relevant regulatory legal documents.

Including:

- setting deadlines for consideration of appeals separately in legislative acts on specific areas and issues;
- Reflection of Article 242 of the Law of the Republic of Uzbekistan "On Appeals of Individuals and Legal Entities" entitled "Features of Consideration of Appeals of Convicts";
- It is proposed to replace the words "by drawing up an act" in the fourth part of Article 21 of this law with the words "by drawing up an act in cases where it is impossible to correct or eliminate these shortcomings."

The practical implementation of these proposals will contribute to the implementation of new legal mechanisms for working with appeals, simplifying the appeal process, and further improving the consideration and resolution of appeals.

As a general conclusion, the effectiveness of the current system for working with the problems of the population can be implemented through advanced foreign experience, as well as in the development of a draft of organizational, legal and financial measures aimed at finding solutions to the tasks to be solved, working with appeals, ways to manage and resolve disputes, the laws of appealers' satisfaction with the results of consideration of their appeals, protection of the right to information, automatic classification based on the analysis of the text of appeals, as well as legal mechanisms for the protection of persons

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## ORGANIZATIONAL AND LEGAL FOUNDATIONS OF SPECIAL PREVENTION MEASURES AMONG PREVIOUSLY CONVICTED PERSONS

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**Abstract.** This article highlights the organizational and legal foundations for implementing special prevention measures among previously convicted persons by prevention inspectors. Additionally, proposals and recommendations have been developed regarding the theoretical and practical aspects of special preventive measures implemented among previously convicted persons, as well as solutions to problems arising in the mechanism of law enforcement.

**Keywords:** crime prevention, prevention inspector, previously convicted persons, special prevention, measures, legal framework.

The effective organization of preventive work among previously convicted persons by prevention inspectors and ensuring meaningful leisure activities for minors and young people, as well as raising the legal awareness and culture of previously convicted persons, serve to prevent the influence of various negative trends and the commission of crimes in mahallas. As a result of this work, over the past five years, nearly twenty percent of neighborhoods in our country have not experienced any crime. Furthermore, as a result of collaborative efforts, the proportion of extremely serious and serious crimes within the structure of all crimes is decreasing.

Naturally, the prevention inspector working in our republic also plays a significant role in achieving such results. Today, the emerging risks and threats, primarily international terrorism, religious extremism, illegal migration, human trafficking, and the increasing spread of ideas alien to our people among youth, are setting new tasks for internal affairs bodies to prevent and eliminate them in a timely manner. This requires the effective organization and improvement of activities of our country's internal affairs bodies, particularly their prevention inspectors and previously convicted persons. Moreover, the lack of targeted and comprehensive approach to crime prevention measures and combating crime, as well as the absence of systematic development of effective measures to identify and eliminate the causes and conditions contributing to offenses, indicate the existence of several problems and shortcomings in organizing and managing crime prevention activities between internal affairs prevention inspectors and previously convicted individuals.

The Decree of the President of the Republic of Uzbekistan No. UP-5005 of April 10, 2017, "On Measures to Fundamentally Enhance the Effectiveness of the Activities of Internal Affairs Bodies, Strengthen Their Responsibility for Ensuring Public Order, Reliable Protection of the Rights, Freedoms, and Legitimate Interests of Citizens"[1] acknowledges that work on offense prevention primarily consists of combating the consequences of committed unlawful acts. It recognizes the insufficient organization of systemic and effective measures for early prevention of offenses, in-depth analysis, identification, and elimination of their causes and

conditions. The decree also outlines tasks that need to be implemented to address these shortcomings.

Therefore, crime prevention is carried out not through criminal law punishments, but through the early prevention of crime, the identification of causes and conditions for its commission, and the application of mitigation measures, which require knowledge and analysis of events, phenomena, and processes in all spheres of public life that contribute to crime prevention.

Today, reforms in the field of crime prevention are being intensively continued, the legal framework for the development of the sphere has been improved, measures have been taken to improve the material and technical base, especially to provide it with new innovative information technologies, and work has been carried out in this direction.

One of the important tasks is to improve the activities of the prevention inspector in the organization and implementation of crime prevention among previously convicted persons, to attract new forces and means in this process.

Systematic work is also being carried out to provide preventive activities with qualified specialists and improve the quality of work in this area. As a result, the implementation of the prevention of offenses among previously convicted persons by the prevention inspector has become a guarantee, first of all, of maintaining peace and tranquility, law and order and public safety in mahallas, villages, towns and auls. At the support point of the internal affairs bodies, employees of the relevant branch services of the internal affairs bodies serve in close cooperation with each other, citizens' self-government bodies and other public structures, as well as other bodies of state power.

The Decree of the President of the Republic of Uzbekistan No. 5005 "On Measures to Fundamentally Enhance the Effectiveness of the Activities of Internal Affairs Bodies, Strengthen Their Responsibility for Ensuring Public Order, Reliable Protection of the Rights, Freedoms, and Legitimate Interests of Citizens" (April 10, 2017) [2] addresses serious shortcomings and problems in the activities of internal affairs bodies, including crime prevention, particularly in managing the activities of internal affairs support points and prevention inspectors. The decree emphasizes that current risks and threats, primarily international terrorism, religious extremism, illegal migration, human trafficking, and the increasing spread of ideas alien to our people among the youth, have posed new tasks for internal affairs bodies to prevent and eliminate these issues in a timely manner. Consequently, several tasks were set for them, including the timely elimination of causes and conditions leading to offenses, increasing the legal culture of all segments of the population, instilling respect for the law and intolerance to any manifestation of law-breaking, and ensuring early prevention of offenses as the most important task.

Therefore, the Decree of the President of the Republic of Uzbekistan No. UP-4947 "On the Strategy of Actions for the Further Development of the Republic of Uzbekistan" (February 7, 2017) [3] stipulates special attention to be paid to the system of crime prevention and the fundamental improvement of the activities of internal affairs bodies in combating crime and maintaining public order.

In addition, during the ongoing reform process, methods of implementing the tasks assigned to internal affairs bodies regarding the organization of crime prevention are studied and communicated. These tasks are clearly defined in the decrees and resolutions of the President of the Republic of Uzbekistan.

The resolution of the President of the Republic of Uzbekistan No. PQ-2896 dated April 18, 2017 "On measures to fundamentally improve the activities of crime prevention units of internal affairs bodies" defines the most important task of internal affairs bodies as qualitatively improving the activities of crime prevention services, establishing their specific areas of activity; improving cooperation with the public, early prevention of offenses, shaping citizens' legal awareness and culture, preventing offenses among minors and youth, protecting them from various negative influences; improving the activities of prevention inspectors, establishing systematic reporting to the public; developing and implementing effective criteria for evaluating the performance of prevention inspectors; widespread application of modern information and communication technologies in the field of crime prevention, improving the system of developing professional knowledge and skills of prevention inspectors.

The laws of the Republic of Uzbekistan "On State Youth Policy" (2016), "On Internal Affairs Bodies" (2016), "On Combating Corruption" (2017), "On Administrative Supervision of Certain Categories of Persons Released from Penitentiary Institutions" (2019), "On Protection of Women from Harassment and Violence" (2019), "On Prevention and Treatment of Narcological Diseases" (2020), decrees of the President of the Republic of Uzbekistan "On the Strategy for Further Development of the Republic of Uzbekistan" (2017), "On measures to fundamentally increase the effectiveness of internal affairs bodies, strengthen their responsibility in ensuring public order, reliable protection of citizens' rights, freedoms and legitimate interests" (2017), "On approval of the Public Security Concept of the Republic of Uzbekistan and measures for its implementation" (2021), resolutions "On measures to further improve the system of crime prevention and combating crime" (2017), "On measures to fundamentally improve the activities of crime prevention units of internal affairs bodies" (2017) and other legislative acts related to the field serve to increase the effectiveness of ensuring their implementation to a certain extent.

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## THE ROLE OF DIDACTIC GAMES IN THE FORMATION OF THE STUDENT'S PERSONALITY IN PRIMARY GRADE LESSONS

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**Annotation:** This article analyzes the pedagogical significance of using didactic games in primary school lessons and their role in shaping the personality of students. It is shown that didactic games serve not only to effectively organize the process of mastering knowledge, but also to develop students' creative thinking, form communicative skills, and increase their ability to adapt to society. The article also highlights the practical effectiveness of didactic games in the educational process based on experiments. This study will help teachers implement new approaches in working with primary school students.

**Keywords:** didactic games, primary education, student personality, creative thinking, educational effectiveness, communicative skills, pedagogical process.

### Introduction.

Primary education is a crucial stage in the formation of students' knowledge, skills, and personal qualities. During this period, students begin to broaden their worldview and understand social and moral values. Innovative methods and techniques used in the educational process, in particular, didactic games, play an important role in activating students' activities, increasing their interest in learning, and forming their personality.

Didactic games allow for a more meaningful and interesting organization of the educational process in accordance with the age characteristics of the child. Through such games, students not only acquire knowledge, but also develop their creative abilities, acquire social skills, and learn to be responsible. This article examines the importance of using didactic games in primary school lessons, their role in shaping the student's personality, and their pedagogical effectiveness.

The article analyzes the relevance of this issue and highlights the theoretical and practical aspects of using didactic games in the educational process. This approach serves as an effective method for primary school teachers to improve the quality of education.

### Didactic games in primary school lessons.

Didactic games are an integral part of the primary education process, they are important in increasing students' interest in the lesson, effectively mastering knowledge and ensuring personal development. The main feature of this method is that didactic games convey educational content in an interesting and interactive form, which attracts students to the active learning process.

The main types of didactic games.

Knowledge consolidation games: These games are aimed at consolidating the topics covered during the lesson. For example, question-and-answer games, vocabulary games or games based on solving mathematical problems help students better assimilate new knowledge.

Games that develop logical and creative thinking: These types of games serve to develop students' creativity. For example, "Who is the most resourceful?" or "Knowledge Competition" develop students' problem-solving skills and new ideas.

Active didactic games: Games associated with physical movement involve students not only in learning, but also in physical activity. For example, reading poetry with movement or connecting mathematical examples with answers.

Team games: These games help students develop their skills in working together and solving problems in a team. For example, completing logical tasks in a group or organizing role-playing games.

The role of didactic games in primary school lessons.

Increasing students' interest: Through didactic games, educational content is presented in an interesting way, which increases students' interest in learning.

Consolidation of knowledge: During the game, students have the opportunity to apply the topic in practice, which helps them effectively master this knowledge.

Personal development: Didactic games develop personal qualities such as responsibility, creativity, logical thinking, socialization, and teamwork.

Increasing activity: Students are more actively involved in the lesson through games, which increases the effectiveness of the lesson.

Enlivening the learning process: Didactic games help to avoid the monotony of the lesson and make the learning process more interesting.

The use of didactic games in primary school lessons not only enriches students with knowledge, but also develops their creative thinking and serves to form personal qualities. This approach is an important pedagogical tool for teachers in organizing the educational process effectively, interestingly and meaningfully. The correct selection and use of didactic games by teachers in lessons gives positive results in the development of students.

### **Methodology:**

In this study, the following methodological approaches were used to determine the role of didactic games in the formation of the student's personality in primary school lessons:

Analysis and generalization method: Pedagogical and psychological literature was studied in order to determine the theoretical foundations of didactic games. Through this method, the impact of didactic games on the educational process and their impact on the personal development of students was theoretically substantiated.

Experimental research: Experimental classes were selected to determine the effectiveness of using didactic games in the lesson process. During the experiment, various didactic games were organized with students, and changes in their interest in education, creative thinking, and personal qualities were observed.

Questionnaire and interview: In order to determine the attitude and opinions of teachers and students towards didactic games, special questionnaires and interview questions were developed. This method helped to analyze the acceptance of didactic games in practice.

Mathematical-statistical method: Statistical methods were used to analyze the results of the experiment and draw conclusions. Based on the data obtained, scientifically based conclusions were drawn about the impact of didactic games on the educational process.

Using these methodological approaches, a comprehensive analysis was conducted of the positive impact of didactic games on educational effectiveness and their importance in shaping the student's personality.

#### **Literature review:**

The issue of using didactic games in the process of primary education is one of the most widely studied topics in modern pedagogy and psychology. During the study, the scientific works of local and foreign scientists were analyzed, and the importance of didactic games in the formation of the student's personality was comprehensively considered.

Within the framework of Uzbek pedagogy, there are several important studies on the role of didactic games in the development of student activity. In particular, the works of A. Avloni, K. Yusupov[6] and M. Tokhtakhojaev[3] on the organization of education through play serve as a theoretical basis in this direction. These scientists noted that games are a means of not only acquiring knowledge in children, but also of forming social skills and moral values.

Foreign scientists, including J. Piaget[5] and L. S. Vygotsky[6], have widely highlighted the importance of didactic games in developmental education in their studies. According to J. Piaget[5], the game ensures the cognitive development of students, as it allows them to master new knowledge and skills through practice. L. S. Vygotsky[6] described didactic games as a key tool for expanding the child's "zone of proximal development". Modern research has shown that didactic games have a positive effect not only on the learning process of primary school students, but also on the formation of their personal qualities - responsibility, creativity, initiative and teamwork skills (G. Taylor[4], S. Johnson[2]).

The analysis shows that the pedagogical value of didactic games is manifested in their interesting and interactive nature. Through these games, students are aroused in interest in knowledge, and the knowledge and skills learned in them are consolidated. As a result of studying foreign and domestic literature, this article highlights the theoretical and practical aspects of using didactic games in the educational process and substantiates their pedagogical effectiveness.

#### **Discussion:**

The results of the study showed that the use of didactic games in primary school lessons not only increases the quality of education, but also has a positive effect on the personal development of students. The data identified during the experiments confirm the following pedagogical advantages of didactic games:

**Consolidation of knowledge:** Didactic games helped to make the content of the lesson interesting and easy. Games increased students' interest in the lesson and created the opportunity to consolidate knowledge.

**Development of creative and logical thinking:** During the game, students learned to use creative and logical approaches to solving various tasks. This helped develop their creative thinking.

**Socialization and communication skills:** Didactic games played in groups formed teamwork skills in students. This process developed a culture of clearly expressing their opinions and listening to others.

**Formation of personal qualities:** Through didactic games, students developed personal qualities such as responsibility, discipline, and initiative. During the game, students strengthened their skills in planning and managing their work to achieve goals.

Pedagogical effectiveness: Didactic games allowed teachers to organize lessons in an interesting and effective way. Teachers who participated in the experiments highly appreciated the effectiveness of the game method in actively involving students.

During the discussion, it was found that the use of didactic games, if carried out taking into account the individual characteristics of primary school students, significantly activates their participation in the educational process. However, it was also noted that excessive work with didactic games or their incorrect selection can lead to negative consequences. Therefore, teachers need to be careful when choosing didactic games and adapting them to the age characteristics of students.

The results reviewed in the article confirm the importance of didactic games in the educational process and indicate the need to develop specific recommendations for their use in primary school classes. This approach is important in improving the quality of education and ensuring the personal development of students.

### **Conclusion:**

This study was devoted to analyzing the importance of the use of didactic games in primary school classes in the educational and upbringing process. Based on the conducted theoretical and practical research, the following conclusions were drawn:

Educational effectiveness of didactic games: Didactic games allow you to organize lessons in an interesting and interactive way. This helps students to master and consolidate knowledge faster.

Role in personal development: During the games, students develop important personal qualities such as creativity, logical thinking, teamwork, responsibility and discipline.

Pedagogical effectiveness: For teachers, didactic games serve as an innovative way to conduct lessons actively, interestingly and effectively. This increases students' interest in the lesson and involves them in the active learning process.

Requirement of a creative approach: The successful use of didactic games requires teachers to have a creative approach and take into account the needs of students. It is also necessary to adapt the games to the classroom conditions and the age characteristics of students.

The results of the study show that didactic games are not only a means of acquiring knowledge in the process of primary education, but also an important pedagogical technology in the formation of the student's personality. The widespread application of this approach to the educational process will serve to improve the quality of primary education and the comprehensive development of the future generation. In the future, there is a need to deeply study the possibilities of using didactic games with students of different age groups and develop methodological recommendations. This will help to enrich the educational process with more effective and innovative approaches.

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## IMPROVEMENT OF COGNITIVE COMPETENCIES OF STUDENTS IN THE TEACHING OF DRAWING SCIENCE

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**Abstract:** In the following article the modern methods of perfection of the cognitive competencies of the students in teaching the lesson of drawing are analyzed based on the available data. The article provides information about the Department of drawing and drafting Sciences.

**Keywords:** drawing, painting software, project, design, positioning, updated cognitive, digital, autopsychological competencies

**INTRODUCTION.** Drawing is an important and mandatory subject in classes for future technical specialists in secondary and higher educational institutions. Currently, there are many different drawing programs, among which professional (paid) and simplified (free) programs can be distinguished. For you, we have prepared an overview of the most popular and multifunctional of them. Nowadays, it is possible not only to draw complex sketches with their tool, but also to print the finished drawing, view and correct it if necessary, and also create one's own projects. Some methods of applying innovative technologies in drawing projection are discussed

**METHODS.** Graphite (general application). Designed for creating two- and three-dimensional drawings, organizational charts and diagrams of various levels of complexity and detail. The program has several functions and tools to create drawings quickly and accurately. Space has a binding system, the ability to create custom libraries, flexible dimensions, and more. This program is suitable for technical university students, engineers and ordinary users. It allows you to create multi-page PDF documents and provides accurate import and export of images in popular CAD formats.

The principle of operation is to build a project drawn from 2D and 3D components. This allows us to create the simplest drawing and the most complex mechanism. It works with three formats: DXF, DVG and DXF [1].

Unlike the previous program, AutoCAD does not work with the Western European ESCD system, but only offers an international program. In addition, its disadvantages include the high price of the full-featured version.

The most important conceptual position of the innovative platform is the student as an active participant (subject) who activates the process of professional formation of a person who has the general and professional competencies included in the state education standard and additionally has updated cognitive, digital, autopsychological competencies uses All this is recorded in the innovative future adaptive model of the teacher developed in schools.

Cognitive competence refers to the skills of critical, systematic, strategic, creative thinking, as well as the skills of designing individual educational trajectories in terms of the concept of lifelong education. Information and communication (digital) competence includes:

skills for working with educational portals, online course platforms, project communication skills in online groups, skills for creating adaptive e-textbooks taking into account students' cognitive styles and thinking types, skills in programming educational games, as well as digital technologies for education. skills to use in self-development [2, 45].

Autopsychological (regulatory) competence includes the skills of managing physical and psychophysiological resources, emotional and motivational self-management, time and stress management skills in professional activities, as well as psycho-hygiene skills of information work. includes mastering ("digital sketching", "introduction of necessary information for the science of drawing").

Art (artistic) projects are essentially universal: they are high-tech classes on artistic subjects, educational activities among students, as well as a form of school career guidance among urban high school students. can be The main advantage of the art project is that students are its active partners. Every art project takes a long time to develop and implement among the audience. Below are the basic requirements for drawing.

1. Forming a creative group of students for drawing work, forming the theme, goals and tasks of an artistic project in drawing;
2. Work on an information project: collecting, classifying, analyzing, processing and summarizing information on the subject;
3. Identifying the main problems on the topic of the art project, developing problematic issues for discussion with the audience;
5. Creating an artistic project structure;
6. Select, process and mark the content of projects for drawing work;
8. Development of a detailed scenario of an artistic project;
9. Creating an electronic support system for an artistic project: selecting, processing and creating audio and video materials, creating presentations;
10. Creating costumes and props;
11. Distribute drawings in class and study them;
12. Selection and study of drawing compositions, miniatures, etc.;
13. Individual, differentiated, group and consolidated art project exercises;
14. Creating advertising for an artistic project (advertising posters, booklets, calendars);
15. Implementation of an art project among students.

Each of the listed stages of work helps to form and develop most of the students' skills, which make up cognitive, digital and autopsychological competencies - the main components of the adaptive model of the future innovative type of teacher.

The most important stage of working on a drawing project is the so-called "creating ideas", identifying the main problems on which its structure will be built, as well as developing problematic issues for discussion with the audience during the artistic project (the most difficult universal problem usually turns into a mini-discussion problem ).

This stage of drawing works develops critical thinking - the most important component of cognitive competence. Critical thinking is also formed at the initial stage of working on an artistic project, collecting, classifying, analyzing, processing and summarizing information on the subject.

Creative, systematic and strategic thinking of students is formed when working on drawing projects, which are important components of cognitive competence for them.

An artistic project is a special system of presenting new knowledge, creating a unique educational and educational environment with high information and emotional saturation, rich semantic potential and relative freedom of communication. Systematic and strategic thinking skills are developed primarily in the creation of the structure and scenario of an artistic project.

The most important component of cognitive competence is the formation of creative thinking. Artistic design opens wide opportunities to show creative abilities of every student.

When creating an art project, students can: adapt source texts for the intended audience, create a script for an art project.

Demonstrate the skills of painting, draw a certain miniature, describe it in words, perform this very miniature on computer technologists, create costumes and props, create ICT accompaniment, create advertising for an art project, organize an audience (games, develop and conduct quests), communicate with the audience, conduct dialogues (mini-conversations), form and argue their point of view, develop mini-debates and transfer etc.

One of the important conditions of the drawing lesson is that during the lesson, the most creative students can participate in the creation of sketches, sketches and templates for miniatures and still lifes in cooperation with the teacher.

Another component of cognitive competence is the ability to design individual learning trajectories. In art design, students are grouped into small groups of 7-10 people, each working on their own art project. In the course of work, each student can choose a business "according to his own desire", according to his capabilities and abilities, everyone will make a decent contribution to the common work.

Self-study in the process of working on projects for drawing classes in senior classes and mutual preparation, mutual assistance, mutual assistance in various tasks are of great importance. Most students master almost all the necessary activities in artistic design.

As a result, the students themselves evaluate the contribution of each member of the group to the collective work on the creation and implementation of the artistic project. Thus, artistic design allows the formation and implementation of individual learning trajectories of students, including the important stages of this process, such as interaction, mutual support and reflection.

This competence is formed while working on artistic drawings. This happens both at the initial stage of artistic design when creating an information project (collecting, classifying, analyzing, processing and summarizing information on the subject), and at the later stage - creating ICT support (system) for an artistic project. presentations and videos that are often filmed and edited by students are submitted using a bridge). The purpose of using ICT in the process of artistic design is to achieve a deeper understanding of the material through imaginative perception, to strengthen its emotional impact, to ensure "immersion in the drawing".

First of all, the lesson begins with the definition that the science of drawing technical drawings, as well as the correct organization of all areas of the drawing industry, is called drawing.

We use innovative technologies in drawing in the execution of educational drawings in geometry, projection drawing and construction drawing.

Before the drawing project among the audience, students create advertising posters, booklets, calendars in order to attract the audience and reward the most active listeners-

participants of the art project. Students' project communication skills are also developing in online communities, because the process of working on artistic projects requires constant communication not only in the classroom, but also between the members of the creative community and the teacher.

Creativity is one of the most "important" activities. The ability to regulate one's physical, psychophysiological, cognitive, emotional, voluntary resources (autopsychological competence) in the course of complex and long-term project activity is an important aspect of forming a future teacher of an innovative type. During the study of the basics of psychology, the information obtained about personality types and thinking styles, psychological defense mechanisms, and strategies for behaving in conflicts will give students a positive "self-image" in the process of preparing and conducting art projects." helps to save.

Team building and creative thinking development trainings are held to improve students' ability to manage their physical and psychophysiological resources. Emotional and motivational-voluntary self-management skills are formed through detailed planning of all stages of preparing conversations, role-playing, and drawing projects. In order to master the skills of managing time and artistic composition, a system of quick reports is used in specially created communities ("conversations") in social networks, the support of "flow activities" in the game makes sense (the logic of level achievements ).

Autopsychological (regulatory) competence includes the use of "digital drawing". This is not only a temporary rejection of the use of gadgets during classes and activities, but also the formation of the ability of students to find verified information on Internet sites that are checked for reliability and scientific information. In general, working on "future skills" included in the self-psychological competence of the future teacher activates the processes of self-awareness and self-development of the student.

Thus, artistic design in a general education school is an effective means of forming the personality of an innovative type of teacher. Auxiliary projection of graphic processes, design functions and motivational-value, practical-activity, reflexive-evaluation components in the sciences of drawing and drawing geometry by giving priority to the logic of optimal support of creative activity aimed at finding a creative solution to educational and cognitive tasks is determined;

The model of developing students' creative competence by teaching auxiliary projection methods is improved on the basis of the pedagogical design of the technological structure, which strictly defines methodological conditions such as taking into account individual characteristics to the maximum, ensuring the stability of the creative environment, accelerating dialogic joint activity;

Auxiliary projection of graphic processes, design functions and motivational-value, practical-activity, reflexive-evaluation components in the sciences of drawing and drawing geometry by giving priority to the logic of optimal support of creative activity aimed at finding a creative solution to educational and cognitive tasks is determined;

The model of developing students' creative competence by teaching auxiliary projection methods is improved on the basis of the pedagogical design of the technological structure, which strictly defines methodological conditions such as taking into account individual characteristics to the maximum, ensuring the stability of the creative environment, accelerating dialogic joint activity;



The methodology for the development of creative activity in the sciences of drawing and drawing geometry is improved by increasing the level of feedback with organizational and technical inclinations of heuristic methods aimed at finding the elements needed in the auxiliary projection (construction, projection, technical design,) relying on associative, intuitive and logical. is lost in the search [3, 234].

The pedagogical mechanism of developing the creative thinking of future teachers will be improved on the basis of expanding the positive dynamics of compositional-creative activity to systematically correct the state of reflexivity with the individual educational trajectory of the system of subject-subject relations aimed at revealing the personal potential of the student.

Discussion. Modern computer-aided design systems can solve the problem of developing spatial thinking at a qualitatively new level. Since architectural and construction drawings are studied by students of the faculty of art and graphics at the end of the course "fundamentals of drawing and drawing geometry", the logical continuation of this course, in our opinion, is the presentation of graphical information with a more visual appearance. is learning computer tools. dynamism, high speed of execution of various images, convenient and intuitive graphic interface.

A special influence on the formation of positive motivation is exerted by: the information saturation of the curriculum, its relationship with previously studied material, a clearly realized perspective of the educational work of future teachers, the use of the "success methodology", instilling in the student faith in their abilities and strength, the use of a rating system for assessing students' knowledge.

Modern software used in drawing classes.

The following programs are used for drawing lessons: Adobe Photoshop CC; MyPaint; DrawPlus; Clip Studio Paint; CorelDRAW; Affinity Designer; Autodesk Sketchbook; YouiDraw Drawing; MyBrushes Paint for Mac; Epic Pen; Flame Painter; ChemDoodle; Paintstorm Studio; MyPaint; Mischief; DrawPlus; Clip Studio Paint; Crete; MediBang Paint Pro; Procreate.

In addition to these broad-spectrum programs, there are also narrowly focused programs. For example, for drawing electric circuits: DSSim-PC, sPlan, Circuit program, for designing diagrams and microcircuits using a computer — ExpressPCB.

Summary. A positive motivational attitude to graphic activity can give a significant impetus to design in the field of visual arts education. At the same time, the motivation for effective use of innovative technologies in drawing is determined by the positive attitude of students to the entire educational process, stable internal motives, and the desire to find an original solution to a given graphic task.

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## THE CONCEPT OF SOCIAL MORALITY IN PEDAGOGICAL ACTIVITY IN THE REVIEW OF WORLD PSYCHOLOGISTS.

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### Abstract

In this article, the formation of the teacher's social intelligence allows students to correct defects in the psychological development of the emotional and volitional sphere, to activate cognitive activity, to form knowledge, skills and abilities, to identify their social roles with those around them, and to create a social image in the social environment and independent learning. theoretical information on the interaction correction is given.

**Key words:** preschool age, teacher, profession, intellect, social intellect.

Relevance of the topic. The fact that the requirements for the teacher's work are quite responsible depends in many cases on social intelligence. This level allows the teacher to realize himself as a carrier of socially important information, a subject implementing social units. The formation of the teacher's social intelligence allows students to correct defects in the psychological development of the emotional and volitional sphere, to activate cognitive activity, to form knowledge, skills and abilities, to identify their social roles with those around them, and to create a social image and independent interaction in the social environment. It helps to fix the glaze.

It can be seen from this that it is important to explain the importance of social intelligence in the professional activity of the teacher by referring to the psychological aspects listed above.

However, the main theoretical approaches to assessing the characteristics of social intelligence in psychology have not yet been sufficiently defined. In this regard, it is important to consider the work of Russian psychologists

We consider it appropriate to analyze the general state of existing psychological approaches to intelligence in order to shed light on the nature of social intelligence. The approaches available to date can be listed as intelligence approaches in the following order.

There are eight main approaches to the composition and formation of intelligence, which are cited in the following scientific sources:

1. Phenomenological approach to intelligence: intelligence is considered as the main form of the content of consciousness (V. Keller; K. Dunker; M. Wertheimer; Dj. Campion, etc.).
2. Genetic approach to intelligence: intelligence is considered as a result of difficult adaptation of human interaction with the external world to the requirements of the surrounding environment in natural conditions (U.R. Charlesworth; J. Piaget).
3. Socio-cultural approach to intelligence: intelligence is the result of human socialization, as well as the purposeful influence of culture (Dj. Brunner; L. Levi-Bruhl; A.R. Luria; L.S. Vygotsky, etc.).
4. Process-active approach to intelligence: intelligence as the basic form of human activity (S.L. Rubenstein; A.V. Brushlinsky; L.A. Wenger; K.A. Abulkhanskaya-Slavskaya, etc.).

5. Educational approach to intelligence: intelligence is considered as a product of goal-oriented education (A. Staats; K. Fisher; R. Feuerstein, etc.).

6. Informational approach to intelligence: intelligence as a set of elementary processes of information processing (G. Eysenck; E. Hunt; R. Sternberg, etc.).

7. Functional-level approach to intelligence: intelligence as a system of cognitive processes at different levels (B.G. Ananov; Ye.I. Stepanova; B.M. Velichkovskii and others)

8. The regulatory approach of intelligence: intelligence as a factor of self-regulation of mental activity (L.L. Thurstone and others)

Our goal is not to in-depth analysis of the aspects specific to the nature of general approaches to intelligence and the advanced scientific ideas about them, but to shed light on the general psychological nature of intelligence, reflecting the views that it cannot exist without social development and social conditions. indicates that it is possible. Maboda representatives of the phenomenological approach, Köller, M. Wertheimer, K. Dunker, in the analysis of the content of research, development of intellect; representative of the genetic approach U.R. The consequence of Charlesworth's views is the nature of J. Piaget's operational approach: it is the socio-cultural approach that comes closest to elucidating the nature of social intelligence, and the goal-oriented educational approach cannot avoid the influence of social factors. In turn, while studying the problem of social intelligence of a person, we cannot ignore the approaches specific to other aspects of intelligence.

Our analysis of the above scientific approaches and research leads us to interpret social intelligence as a manifestation of socially beneficial adaptation. For example, the following conclusion of V. Stern, which is typical of intelligence, is consistent with our opinion, i.e., intelligence is viewed as "the general ability to adapt to new life conditions" and "the act of adaptation - solving life issues with the help of the intellect, is carried out in accordance with the predominance of consciousness over unconsciousness in thinking. will be increased" we can quote.

Another aspect that we pay attention to in our study of scientific sources is clarifying the functions of social intelligence. This issue will clarify our choice of research methods in the following paragraphs and help in the psychological analysis of the empirical materials obtained from their implementation. Research was also conducted on the functions of social intelligence (N.A. Menchinskaya (1989), Albukhanova-Slavskaya (1991), N.I. Chuprikova (1995), V.D. Shadrikov (1997) and others (8; 60). we will be able to explain the functions of social intelligence on the basis of double conditioning.

According to the above-mentioned studies, as well as the theoretical analysis of psychological-pedagogical literature, the following functions are distinguished: knowledge-evaluation, communicative-valuable, reflexive-corrective. Now let's take a look at the summary of these functions. The cognitive-evaluation function is manifested in the process of socialization, in the determination of the content of interpersonal interaction, the real help of others, in the determination of individual opportunities for the achievement of activity results. Accordingly, social intelligence provides the necessary information processing to predict the results of activities. On the one hand, a person receives information about the nature of other people's activities, understands it and subjugates it in performing mental operations. On the other hand, it leads to the formation of conclusions about the importance of what is happening in the process of information processing.



N.A. According to Mechinskaya (1989), information can be positive and accepted, or, on the contrary, negative and rejected. In both cases, we have to show mental activity related to a certain pace of information processing. The obtained information ensures the manifestation of evaluation conclusions about the possibility of its use, the level of real achievement of results. This leads Islam to understand oneself and one's existence in the process of self-realization. In this process, a person manifests himself as a subject of learning activity. Intellectual capabilities and social conditions of mastering experience are acquired in accordance with the purpose. Thus, in order to manifest himself as a subject of the implementation of this function (from the aspect of knowledge), he forms evaluative judgments about what is happening in the process of selecting information suitable for the conditions, setting a goal (the aspect of evaluation). However, this function occurs during the implementation of the next function, and its cost of achievement may not allow to determine.

The next communicative-valuable function of social intelligence depends on the need to understand others and, in turn, to be understood by them. Self-awareness in constant communication with other people begins with the process of actively distinguishing and mastering the standards and standards of human interaction. N.I. According to Chuprikova (1995), communication is manifested in the ability to convey the content of expressing one's situation, attitude to the interlocutor and the listener, as a result, to show the purpose of the message. In addition, on the one hand, we look at communication as a way of establishing a connection between a person and the social environment, and on the other hand, as a process of searching for the meaning of the valuable environment of life. Appropriately, we divide the communicative-valuable function into two main manifestations.

Creating a plan of ideal content (the content of communication) is related to determining the social action situation of adaptation to the understanding of this person. A person does not react to nothing and does not perceive information, but puts forward issues related to social relations, perceives, understands the social-psychological and personal position of people and puts himself and him in his place. does it through imagination. Relying on the scientific observations recorded in psychological sources, social intelligence adapts a person to society, that is, to the environment in which he lives and is recognized as a representative of his social environment; we can say that it is a set of abilities that help to effectively implement interpersonal and professional relations. In turn, the term social intelligence refers to the ability to understand oneself, behavior, and other people in the process of interaction with other people, and to implement effective interaction and achieve a set goal. intends to develop the well. It is also necessary to remember that social intelligence plays an important role in the socialization of a person, education, and the implementation of intercultural communication.

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## ANALYSIS OF MATERIAL MIXING AND HEAT EXCHANGE PROCESSES IN THE PRODUCTION OF SODIUM PERCARBONATE

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### Abstract.

Dry dispersible substances are used as raw materials in almost all branches of production. Mainly in chemical, pharmaceutical, food, construction and other industries. Therefore, there is always a need for facilities that process this product. One of the most important of these devices is the mixer. First of all, it is an important task to create efficient and energy-efficient mixers suitable for the product type and production process. Mixers are based on the process of mixing, in which the products of different phases are mixed to obtain a homogeneous phase mass. Also, heat is released during the mixing process and cooling is required. In the mixing device we designed, we used a horizontal mixer to mix the dry dispersible substances and also installed a cooling shell in the mixing zone. Based on laboratory experience, we considered the process of wet mixing of dry substances. In the process of mixing, we used mixers with different shapes of the mixing part, and the dependence of the degree of mixing on the design of the mixers was studied.

### Introduction

Today, along with the increase in the production of chemical products, their use in various sectors of the national economy is also expanding. This, in turn, leads to the acceleration of the use of new technologies and the development of scientific and technical progress in all industries. The increase in the production of consumer goods requires the expansion of the base of industrial raw materials. In production, the main priority is the use of technologies with high productivity, efficient process, and low relative energy consumption. With the introduction of modern technologies in the industry, the demand for high-efficiency and energy-saving devices is increasing. This, in turn, requires the creation of improved technologies of high-efficiency and energy-efficient devices.

Production of bulk and powder products is widespread in modern industries. For example, the mixing process is widely used in chemical, pharmaceutical and food, construction and other industries. The mixing process is widely used to create a mixture of the same concentration as a result of mixing products of different phases and different concentrations. Also, during the mixing process, the process of mass and heat exchange is carried out, thereby obtaining products within the specified requirement. By applying the mixing process in production, finished or raw products are obtained. At the same time, the requirements for the homogeneity of mixtures and the performance of mixer equipment are constantly increasing. Despite many scientific studies and design-construction work, the solution of these problems still lags behind the requirements of modern technology. When mixing dissimilar components, the main barrier to obtaining a quality mixture is based on the melting of the components at different temperatures [1].

## Materials and methods

If we introduce the concept of degree of mixing in the process of mixing, it is the same distribution of two or more substances in the total volume of the total system. It is impossible to perfectly use the laws of the mixing process in all branches of production. Also, during the mixing process, it is possible to achieve a maximum mixing level in a short period of time. But it does not always satisfy the requirements of the technological regulation. Therefore, it is necessary to carry out scientific research on methods based on the elimination of all the negative factors affecting the mixing process and the maximization of the quality of the process [2]. The mixing process is carried out in the flow of components in different hydrodynamic structures. These flows are organized on the basis of different forms of the working body of the mixer. Basically, the process is carried out in mixers with different mixing parts. All mixers designed for high efficiency in production must be designed on the basis of accurate calculations. Determining the main optimal technological parameters of mixers is one of the main problems. Different processes and different raw materials are used in the industrial process. Depending on the type of raw materials, mixers of different structures are used. When mixing liquid products, vertical mixers are used to create suspensions and emulsions [3,4]. For dry dispersible fine dispersed substances, the horizontal type mixer in Fig. 1 is more convenient. Among this type of mixers there are simple blade, anchor and ribbon types. Some devices will have an additional structural modification.



**Figure 1. Horizontal paddle mixer**

Some products mixing process, and it is advisable to install cooling or heating shells on the equipment. It is possible by installing a shell on the horizontal and vertical mixers, which helps to efficiently carry out the process taking place in them. The problem of mixing different phase environments, especially in non-isothermal systems, to prevent temperature rise, is also waiting for its solution. It is an important task for industries that require increasing chemical reactions, mass and heat exchange coefficient [5,6]. Some of the processes and chemical reactions carried out in mixing plants are by cooling, thereby obtaining the desired product. In mixer devices, the mixing part serves for intensive mixing of the mixture of various structures. The choice of mixing methods and equipment is determined by the purpose of the mixing process and the type and condition of the materials to be mixed. Therefore, in any mixers created, the first thing is to speed up the processes carried out in it and ensure that the product mixed in it is of high quality. It also reduces energy and time spent on it. By reducing the cost and metal

consumption of the device, it is possible to increase the efficiency of the device and speed up the process [7,8].

### Results and Discussion

When mixing dry dispersible materials and obtaining a homogeneous mixture by wetting dry dispersible materials, it is desirable to use horizontal mixers mainly with blades. A bladed horizontal mixer design was created to prepare the mixture by mixing the dry dispersible compounds (Figure 2). The housing of the mixing device also has a cooling shell. Heat is released as a result of a chemical reaction when some dry dispersible substances are wetted and mixed to obtain a mixed product, and this heat needs to be cooled. If this heat is not removed, it will damage the quality of the product. A cooling shell is also placed in the mixing device developed for this reason. The structure of the mixing part and its speed are considered to be the most important factors in increasing the efficiency of mixing devices.

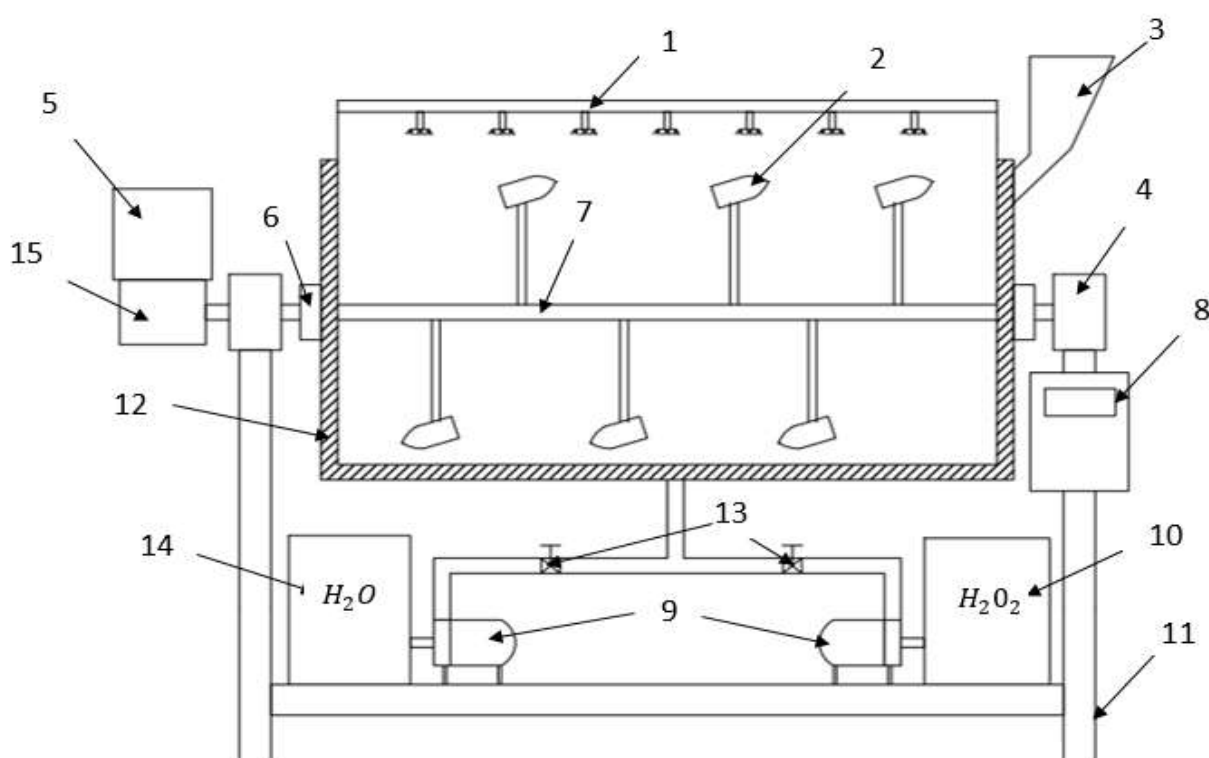


Figure 2. A mixer laboratory device

The bottom of the horizontal mixer is in the form of an arc, and the blades (2) are arranged in the form of a triangle on the horizontal rotating axis (7). From the top of the device, there is a spout (1) for spraying liquid and a slot (3) for loading the product. At the bottom of the device there is a slot for pouring the finished product. In the main body of the device, cold water enters the cooling shell (12) from one side and flows out from the other side. Electromotor driving the device (5), bevel gear (15), tightening ring (6), rotating bearing (4). Frequency control inverter (8), support legs (11). It consists of pumps (9), opening and closing valves (13), which drive liquids. In the device, an experiment was carried out to obtain a bleaching agent by reacting a dry product - sodium percarbonate as a liquid with a water tank (14) and a hydrogen peroxide tank (10). During the experiment, various data were obtained and the data were analyzed in a graphical form by calculating based on the calculation formulas. A variety of method and design changes have been made to the mixer

device to increase its efficiency. We conducted experiments on mixers with three different designs (Figure 3). Mixers consist of blades and ribbons arranged in three different ways on the axis of rotation. They are shown from above. The blades is placed in the form of a triangle on the axis of rotation (Figure 3-a), the blades are placed in the form of a plus on the axis of rotation (Figure 3-b), and the tapes are connected in the form of a spiral (Fig. 3-c). This is how the mixer was created in three different ways. It is designed for dry dispersion mixtures. The mixing part of the device is called "mixer".

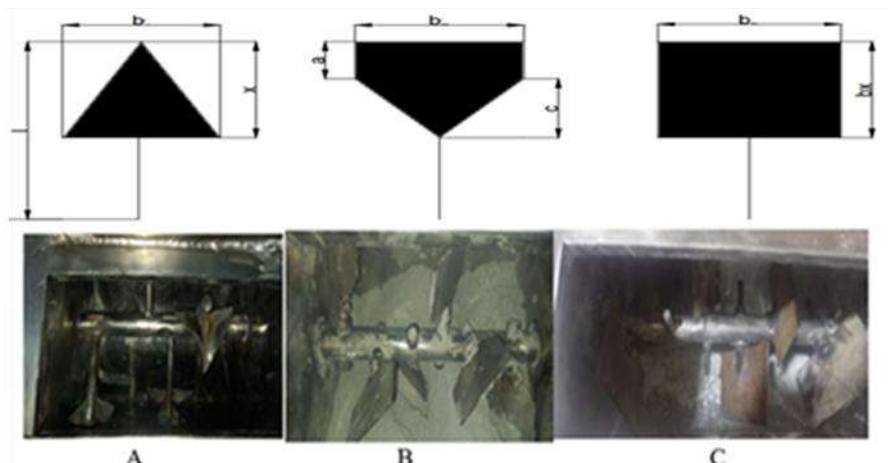


Figure 3. Mixers

The tasks performed b

- mixing of dispersible powdery products;
- preparing a uniform mixture by moistening dispersible powdery products with liquid;
- cooling the mixture during mixing;
- physical or chemical reactions can be carried out.

In the process of mixing, the mixing efficiency is determined by the degree of homogeneity. The degree of homogeneity is generally understood as the mutual distribution of two or more substances after perfect mixing of the whole system. Thus, the degree of homogeneity is a type of excitation efficiency, and the degree of homogeneity is used to evaluate the intensity of excitation. The higher the degree of mixing (I), the smaller the difference in the concentration of the mixed substance in different areas of the reactor volume.

The degree of mixing is determined by the following formula:

$$I = (x_1 + x_2 + x_3 + \dots + x_k)/k$$

here, k – number of samples,  $x_1, \dots, x_k$  – is the relative concentration of the substance in the samples determined by the following formulas.

$$x_i = \varepsilon_i / \varepsilon_0 \quad (\varepsilon_i < \varepsilon_0 \text{ when})$$

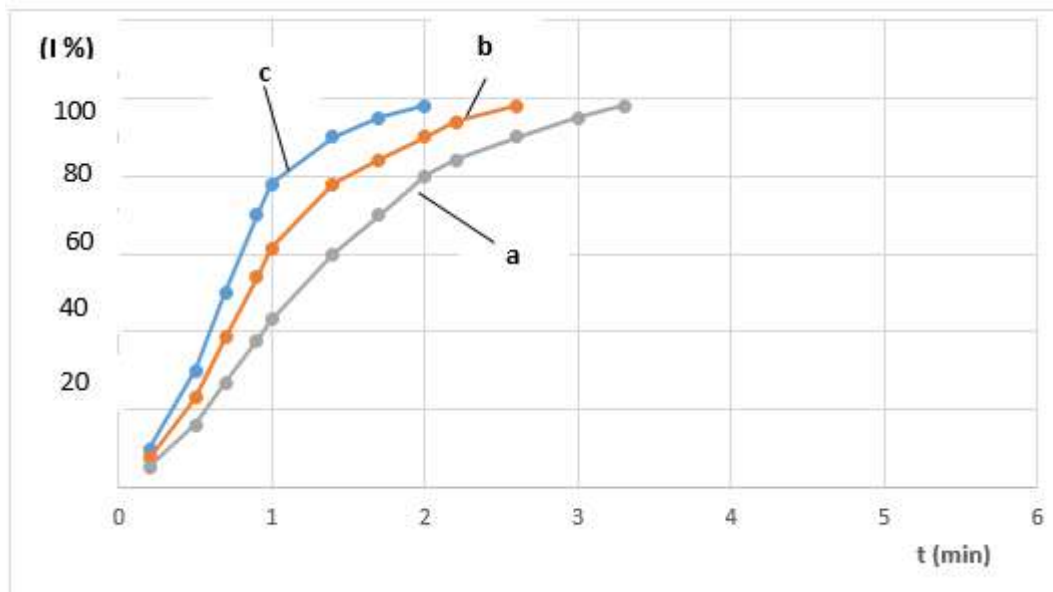
$$x_i = (1 - \varepsilon_i) / (1 - \varepsilon_0) \quad (\varepsilon_i > \varepsilon_0 \text{ when})$$

here,  $\varepsilon_i, \varepsilon_0$  – is the volume fraction of the  $i$ th component under analysis and in the sample and in the whole device [9,10].

Calculations were made to determine the degree of mixing of the mixing device using these formulas. When determining the degree of mixing, samples are taken from different points of the mixture and poured into the calculation formula. In the mixing device, the mixing frequency is controlled by 8 and the mixing is adjusted to the appropriate rotation frequency at different times of the process. During the experiment,



dry product is first poured into the device and mixing is started. The wetting liquid is sprinkled in and the mixing is continued, the specified amount of liquid is added and thoroughly mixed. The mixing process is carried out according to the three different constructions shown in Figure 3. The effectiveness of the mixture device is dependent on time on the basis of three different mixtures to determine the effectiveness of the mixture. Which structure is considered possible to have the same content in how long. The schedule of dependence on time on the basis of three different structures of the level of mixing levels is drawn. Different results are achieved on the basis of structures on the device of the product.



**Figure 4. The degree of mixing related to the mixer device**

The degree of mixing of the product in the device depends on the mixing design and time is shown in the graph. When mixing with the construction of the figure (c), the degree of mixing reaches 97-98% for 2 minutes. (b) reaches 97-98% in 2.6 minutes, respectively, when mixed with the construction shown. If mixed with the construction in (a) view, it reaches 97-98 % during 3.3. It can be seen that the efficiency of the mixing process varies depending on the mixer design.

During the mixing process, a certain amount of energy is consumed in obtaining the product. Of course, in order to achieve productivity, it is necessary to take into account the energy consumption. During the preparation of the mixture by moistening the dry dispersion product in the mixing device, the energy in the mixers is mainly used to overcome the frictional resistance during the rotation of the blades, as well as to continuously rotate the product.

The dry spreadable product is wet mixed and has a high viscosity in the form of a uniform mixture. Their physico-chemical state is described by Newton's equation.

$$\tau = \tau_0 + \mu \, dv/dy$$

here,  $\tau$  – is the force of friction between the layers of the mixture, N;  $\tau_0$  – the highest shear strength, characterizing structural bonds N;  $\mu$  – is the dynamic viscosity of the mixture, Pa·s;  $dv/dy$  – is the velocity gradient of the mixture layer, m/s [11].



Due to the complexity of the hydrodynamic behavior of the mixture in mixers and the variability of some of their properties, it is desirable to solve the equations of motion in the criterion form using the criteria of hydrodynamic similarity. When mixing, frontal pressure, friction and gravity forces prevail. Expressing them in the form of a criterion, that is, in relation to their inertia forces, the mixing process is characterized by power functions:

$$Eu = (Re)^x \cdot (Fr)^y$$

here,  $Eu$ -Euler's criterion is the ratio of frontal pressure forces to inertial forces;  $Re$  - Reynolds criterion is the ratio of internal friction forces to inertial forces;  $Fr$  -Froude's criterion is the ratio of gravity to inertial forces.

The power criterion (modified Euler's criterion) is equal to

$$Eu \approx \frac{\Delta P}{\rho} \cdot n^2 \cdot d \approx N/\rho \cdot n^3 \cdot d^5$$

Since the pressure drop  $\Delta P$  occurs in the flow is difficult to determine in practice, Euler's criterion is modified by introducing an easily measured mixing power  $N$  instead of  $\Delta P$ .

The modified case for mixers is as follows.

$$N/\rho \cdot n^3 \cdot d^5 \approx c \left( \frac{\rho \cdot n \cdot d^2}{\mu} \right)^x \cdot \left( \frac{n^2 \cdot d}{g} \right)^y$$

The amount of power required for the rotation of the blade is calculated from the following formula:

$$N = K_N \cdot \rho \cdot d^5 \cdot n^3$$

Angular velocity at the blade tip  $\omega = \pi d n$  (where  $n$  is the number of revolutions of the mixer in 1 s).

here,  $\rho$  – the density of the product being mixed,  $kg/m^3$   $g=9.81 m/s^2$  free fall acceleration [12].

Criterion equations for calculating the total power consumed by the mixer:

$$K_N = (Re, Fe, \Gamma_D, \Gamma_b, \Gamma_{H_0}, \dots)$$

here,  $\Gamma_D = D/d$ ;  $\Gamma_b = b/d$ ;  $\Gamma_{H_0} = H_0/d$  the ratio of the full geometric dimensions of the mixer;  $b$  - width of the sheet, m;  $D$ -mixer diameter, m;  $H_0$ -mixed product layer height, m [13].

When calculating the power consumed by the mixer, it was calculated based on the above formulas. All parameters are taken into account in the design of the device and the energy required during the wet mixing of the dry product until the product is mixed. It is possible to change the frequency of rotation of the blades of the mixing device, and the device consumes different power at different frequencies. The power required by the mixing device varies depending on the frequency of rotation. Therefore, the required power for different rotation frequency is calculated.

**Table 1 Dependence of mixer power on mixing frequency**

180 rpm	160 rpm	140 rpm	80 rpm
255 W	156 W	110 W	20 W

Some products generate heat during mixing and need to be cooled or kept at the same temperature without changing the temperature. If the heat is not removed, the mixing process will be adversely affected or the process will not take place. Therefore, as a result of installing a cooling shell on the mixer device, we have the possibility of cooling. Dry production of peroxide compounds requires a cooling shell in the mixing unit. During the mixing process, heat is released during the reaction, and it is necessary to maintain this process at 13-15 °C. Cooling is

done with water. How much cold water circulates in the shell in a certain time and what is the mode of movement. How much cooling is consumed during the mixing of the mixture. Calculation of the heat exchange surface, temperature difference, etc. is calculated using the following formulas:

$$Q = \alpha (t_w - t_i) dF d\tau \quad [J]$$

here,  $Q$  - amount of heat given,  $\alpha$  - coefficient of heat transfer,  $F$  - surface of heat exchange,  $t_w t_i$  - the temperature difference of the inner and outer shell of the device  $d\tau$  - duration of the process.

$$Q = G_c \cdot c_c (t_2 - t_1) \quad [J]$$

here,  $Q$  - is the amount of heat supplied,  $G_c$  - mass consumption,  $c_c$  - specific heat capacity of water,  $t_2, t_1$  - temperatures at the inlet and outlet of the shell [14,15].

When calculating the heat balance, it is possible to determine the consumption of the cooling product by finding the amount of heat consumed and pouring it into the Heat balance formula.

First, we determine the amount of heat consumed in the mixing process. we use the following formula for it.

$$Q = \alpha (t_w - t_i) dF d\tau \quad [J]$$

$\alpha = 600 \text{ W/m}^2\text{K}$  - heat transfer coefficient of water

$t_w = 13^\circ\text{C}, t_i = 10^\circ\text{C}$  mixture and cooling water temperatures,

$F = 0,35 \text{ m}^2$  the wall surface that separates the mixture and the cooling water,

$\tau = 1800 \text{ c,}$  time taken for the mixture to be ready in seconds,

$$Q = \alpha (t_w - t_i) dF d\tau = 600 \cdot (13 - 10) \cdot 0.35 \cdot 1800 = 1134000$$

The amount of heat consumed in the mixing process is  $Q = 1134000 \text{ J}$

We use the heat balance formula to determine the consumption of the cooling product.

$$Q = G_w c_w (t_2 - t_1)$$

$c_w = 4180 \frac{\text{J}}{\text{kg} \cdot \text{K}}$  - specific heat capacity of water,

$t_2 = 12^\circ\text{C}, t_1 = 10^\circ\text{C}$  - temperatures at the inlet and outlet of the shell,

$$G_w = \frac{Q}{c_w (t_2 - t_1)} = \frac{1134000}{4180 \cdot 2} = 136 \text{ kg}$$

$G_w = 136 \text{ kg}$  for 30 minutes and 272 kg for one hour.

In the process of mixing dry dispersible substances, the consumption of cooling water was determined through the heat balance, and the dependence of the temperature of the mixture on the consumption of cooling water was studied [16].

### Conclusions

As a result of the experiments, it was found that the product mixed in the created mixing device fully meets the requirements. It is also possible to cool the dry spreadable products during wet mixing. The degree of mixing depends on the design of the device, which is a consideration when choosing a mixer design. Accordingly, the power required by the mixer will also depend on the design of the device. Therefore, the selection of the device is based on the type of raw materials to be mixed and the state of the resulting product. When choosing a device, the type of metal, optimal and efficient, as well as the creation of a device that requires less energy is an important factor. In the production of dry dispersible substances or use as a raw material. The product produced on the basis of the application of mixing and heat exchange process is economically efficient. In production, import-substituting products are

produced. The product manufactured on the basis of the conducted experiments fully meets the requirements of GOST 32387-2013. It can be used as a bleaching agent for clothes, cleaning, oxidizing dyes and cleaning fabrics in the textile and chemical industries, as a disinfectant, and as a disinfectant

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## CREATION OF NORMATIVE AND LEGAL BASES OF HIGHER EDUCATION IN UZBEKISTAN

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**Abstract :** This in the article Uzbekistan in the Republic higher education system formation and in development regulatory and legal of the foundations importance analysis done Independence years acceptance done laws and normative documents , they education system modernization in doing place and higher education quality to increase directed reforms studied .

**Key words :** high education , regulatory and legal foundations , reforms , education quality , modernization .

Introduction . Uzbekistan to independence from achieving then education field of the state main priority from directions to one became In particular , high education system of the country socio-economic and scientific and technical development service doer personnel preparation goal did Our country higher education in the system done being increased reforms efficiency provide qualified education to managers directly depends in Uzbekistan next in years done being increased wide scope of reforms content , first First , our economy all networks fast pictures with consistent from development consists of This task successful done in increasing networks for deep knowledge and practical to skills have potential young personnel preparation separately place occupies This the target is a person capital upgrade Uzbekistan development the most important , integral part of the strategy from the parts is one It's on the way higher education system each bilaterally develop it qualified and practical to the experience have has been passionate specialists with to provide directed wide scope affairs done is increasing . Practice being increased systematic measures as a result higher education of institutions material and technical base , legal-normative , methodological supply step by step getting stronger is going

Main part. The last in years in Uzbekistan foreign of countries higher study with in cooperation their branches and joint education institutions organize being done attention deserves This activity more acceleration need This is the case local higher study of their countries they are with to competition and personnel in preparation quality level to increase take will come

Uzbekistan Republic of In Article 41 of the 1992 Constitution , " Each who knowledge get to the right has " note done In this country education system development constitutional basis created That's it with together , accepted in 1997 done " Education about". the law and Personnel preparation national program education a radical turn in the field made This program higher education modernization make , personnel preparation quality international to standards adaptation and modern education infrastructure to create mean caught President in 2017 Shaukat Mirziyoyev initiative with acceptance done Uzbekistan in 2017-2021 Republic development five priority direction according to Actions strategy within



education system , including higher education quality to increase separately attention was directed . This period the following main normative documents acceptance done :

High education system development according to President decisions : high study countries number reproduction , new direction and of faculties opening

International of universities to Uzbekistan attraction Education : Polytechnic of Turin University , Inha University , and others

Admission in 2018 done " Innovative development about". the law education system scientific research potential to increase directed was This is a document higher education institutions with science integration strengthened and international grants attraction to do opportunities expanded . Admission in 2020 done " Education quality control to do agency" . organize reach about decision of education quality indicators evaluation system current did This decision within education programs international to standards according to updated and higher study of their countries autonomy increased

That's it in a sense state education organizations development for how much conditions if it creates , non-state education organize organizations reach and activity conduct for from him less didn't happen organizational , legal conditions create , material help to show a must Therefore it is private education organizations wide privilege and preferences present reached , this field is being developed . New in Uzbekistan higher education system fundamentally reform is being done . Including private higher study countries opening , foreign universities branches the number increasing , distant university in the regions as well branches organize in progress , 41 state higher study to their countries academic and financial independence given Also to universities acceptance last six 5 times per year increased , students number to 1 million enough Coverage and from 9 percent to 38 percent increased An example for , in 2016 77 in Uzbekistan university has been if so , now their the number is 210 organize is doing The last one six in grants 2 times the number increased to 40 thousand enough From that , a master's degree for - 5 times increased . High education system international standards based on activity conduct - him administrative from management pulling educational and scientific research process organize in reaching academic to freedom have to be requirement is enough That's it relationship with new edited Our constitution Article 51 of the draft " High education organizations to the law according to academic freedom , self himself management , research transfer and teaching freedom to the right he said the rule is being determined .

Conclusion. Uzbekistan in the Republic higher education system development according to acceptance done regulatory and legal documents education quality to increase and competitive personnel to prepare directed . Reforms as a result higher education system international to standards adapted , this while Uzbekistan in the global arena competitiveness in increasing important importance occupation did Uzbekistan Republic President of October 8 , 2019 Decree with approved " Uzbekistan Republic higher education system until 2030 development concept". according to of our country higher education in the field reforms done increase , of people worldview change , mature and time on demand answer giving expert personnel preparation of life himself requirement is doing In this mature expert personnel training , education and education to give system reforms requirements with closely connected to be important importance occupation is enough Today in the day higher education in institutions study processes planning and organize in : Uzbekistan Republic of Constitution , " Education about". Law , Uzbekistan Republic President higher to education



about decrees and decisions , Ministers Court decisions as well High education science and innovation of the ministry commands such as normative documents in practice is being used . But that's it to the day until education and education processes organize doer subjects by this documents in practice their use theoretical and practical aspects almost not studied . These are the cases higher education in institutions applied higher of education regulatory and legal the basics each bilaterally theoretical and practical in terms of learning and analysis to reach from relevance proof gives

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## THE LINGUISTIC ASPECT OF LINGUISTIC GRADATION IN THE TRANSLATION OF WORKS TRANSLATED FROM ENGLISH TO UZBEKI

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**Key words** : national culture, translation science and practice, world progressive literature, political, ideological and aesthetic significance...

sisterly nations and world literature are being translated into Uzbek is a sign that the science and practice of translation is developing successfully in our country. It serves the convergence of our national culture with the best traditions of the cultures of world nations, the strengthening of friendship between peoples, and the enjoyment of Uzbek readers by examples of world progressive literature. In fact, most of the global events that are happening in the field of science, culture and technology are popularized directly due to translation. We think that the educational, political, ideological and aesthetic importance of artistic translation and the role of enlightenment will continue to grow more and more in the future.

Translation is of great importance in carrying out the sacred task of making our people enjoy the great achievements of world science, technology, culture and social thought development, and educating them in the spirit of friendship between peoples.

Along with modern socio-economic and societal changes, improvements in the process of the higher education system and learning foreign languages are being observed in our country. The currently observed expansions in the field of translation and the increased requirements for the translation process and its results have led to increased interest in the effective operation and implementation of various international relations [5.68]. In fact, from the point of view of today, every translator faces huge tasks, and we think that the translator should work tirelessly to increase the requirements for the translation process and its result, and to deliver world masterpieces to the next generation for our people.

In our opinion, the perfect mastery of a foreign language depends on the level of knowledge of foreign culture. It can be seen that the acquisition of a foreign culture can depend on the material provided, which, in turn, indicates a high level of interest in learning a foreign language. The translator's future professional work process relies on knowledge of a cultural nature. There is a misconception that knowledge of a foreign language will increase the future professional level of a translator. This is certainly not the case, because the work process of a translator is not only a superficial knowledge, but a process that requires improving the mother tongue. Therefore, a translator should constantly work on himself, master both himself and foreign literature, attend seminars on the basics of translation, learn modern computer technologies, get acquainted with technologies in translation studies, be aware of projects that help me remember language units, only with the educational process. but not limited to, attendance at additional courses is required[5.68].

In addition to being a bridge of international friendship, translation is also a broad road to culture and enlightenment. The wide spread of written translation opened a wide path

to the culture of other nations, and led to the development and prosperity of Uzbek literature, culture and art. Translation is a difficult but interesting art, how much fun it is to translate and read a work of art written in a foreign language. Therefore, it never loses its power, it lives as a product of creation, there is no force that hinders it, rejects it, forbids it. As long as humanity lives, the art of translation will continue to live as a special skill school [ 5.65] and we believe that it is the duty of every translator to translate and present to the public masterpieces that have their place in world literature.

found it permissible to consider the phenomenon of gradation from the perspective of linguo-cultural translation discourse from the copy of T. Dreiser's "Bakhtikaro Carrie" translated into Uzbek, which is considered one of the masterpieces of world literature .

*When Caroline Meeber boarded the afternoon train for Chicago, her total outfit consisted of a small trunk, a cheap imitation alligator-skin satchel, a small lunch in a paper box, and a yellow leather snap purse, containing her ticket, a scrap of paper with her sister's address in Van Buren Street, and four dollars in money. It was in August, 1889. She was eighteen years of age, bright, timid, and full of the illusions of ignorance and youth. Whatever touch of regret at parting characterised her thoughts, it was certainly not for advantages now being given up. A gush of tears at her mother's farewell kiss, a touch in her throat when the cars clacked by the flour mill where her father worked by the day, a pathetic sigh as the familiar green environs of the village passed in review, and the threads which bound her so lightly to girlhood and home were irretrievably broken*[3.25].

*This event happened in 1889. Carolina just turned eighteen. She was conscious, but [ 6.147] was a fourth girl, and she was spinning in the world of sweet dreams that do not let a person rest in the years of youth and indolence . he did not even imagine the positive aspects of the life he had just sat again [1.5]. It is known that the translator has translated the work creatively, because in this type of translation, the textual meanings and stylistic functions of the original linguistic means are recreated in harmony with the grammar rules of the common language. The national-historical, social and image-emotional characteristics of linguistic tools are interpreted in an authentic and appropriate way. The phonetic-orphoeptic and lexical-grammatical digressions used for specific methodological purposes in the pages of the work are restored using alternative linguistic tools in accordance with their tasks. All this makes it possible for the author's purpose to reach the reader [ 4.7]. Although the translator has given the original text above in a compound sentence, we can see that the translator has translated the text translation into simple sentences based on the meaning of the text translation. For example, When Caroline Meeber boarded the afternoon train for Chicago, her total outfit consisted of a small trunk, a cheap imitation alligator-skin satchel, a small lunch in a paper box, and a yellow leather snap purse, containing her ticket, a scrap of paper with her sister's address in Van Buren Street, and four dollars in money translated into text This event happened in 1889. Carolina just turned eighteen. She was conscious, but [ 4.77] she was the fourth girl, and she was spinning in the world of sweet dreams that do not leave a person alone in the years of youth and arrogance . in which he did not even imagine the positive aspects of the life he had just sat down again. in the original text She was eighteen years of age, bright, timid, and full of the illusions of ignorance and youth. Whatever touch of regret at parting characterized her thoughts, it was certainly not for advantages now being given up. as it appears in the text that he did not even imagine the positive aspects of the life he was sitting again , because the beating of a young girl's heart means that she will experience the difficulties of life that await her in*

the future we think. One of the linguistic and cultural aspects of mat is that in our national culture, when you send your children to study or work in a country, the child's *heart skips a beat, but it is characteristic of each nation to imagine the advantages of the life that he has just sat again*. we think it's from feelings.

We think that it is customary for young people who have gone far away to look at their previous partner, because during the period of transition of young people, the girl is attracted to the boy, and the boy is attracted to the girl. With this in mind, let's pay attention to the following text: Drouet arose, *kicked his legs to straighten his trousers, and seized his clean yellow grip* [ 3.47] .

Text translated into Uzbek: Drue also stood up. As usual, *he stretched his legs, straightened his pants, and picked up his clean yellow suitcase from the ground* [ 2.15]. The Uzbek translation of the text given in English seems to have been translated through the adaptation method, because this method uses simplification and adaptation. *kicked his legs to straighten his trousers, and seized his clean yellow grip* [2.41] We think that it is manifested in the sentence.

If we pay attention to the next text: *I suppose your people will be here to meet you?" he said. "Let me carry your grip* [ 2.54]." The translation of the text: "Should your relatives meet you soon ?" he asked the girl. We can see that the exact translation method was used in the quoted texts, because in this type of translation, literal accuracy was sought. The phenomenon of gradation in the texts. *I suppose your people will be here to meet you ?* is manifested in his sentences , and we consider it natural for a young man to use such sentences to a young girl from a linguistic and cultural point of view.

If we turn to the next text: Oh, no," he said. "I'd rather you wouldn't. *I'd rather you wouldn't be with me when I meet my sister* [ 2.44]." Text translation: "- Oh, no! No need!-Kerry hastily answered . - Thank you, there is no need! If it were up to me, you *would n't be standing next to me when I met my sister* [ 2.74]. Linguistics of quoted texts *I'd rather you wouldn't be with me when I meet my sister* It can be seen from the words that English people have feelings of *shame and anxiety* , just like Uzbek culture , and it means that there is a similarity between the cultures of the two peoples.

If we focus on the next text; All right," he said in all kindness. " *I'll be near, though, in case she isn't here, and take you out there safely.*" Uzbek translation: "Okay," Drewe answered without realizing it . - Anyway, *I'll be near you, and if your sister doesn't show up at the train station, I'll take her home* [2.55]. As it can be seen from the cited examples, the feelings of nobility and humanity show that there is a linguistic-cultural similarity in the culture of the English people as well as the Uzbek people. As for the gradation incident, *if your sister doesn't show up at the station on the mobo, I'll take her home* We think it is reflected in the sentence.

Let's turn to the next text : **You're so kind** , " said Carrie, feeling the goodness of such attention in her strange situation [ 3.15]. Uzbek translation: "You **are very kind** , " said Kerry, thanking him. He understood how valuable the favor of a companion was in such a situation, which he was unfamiliar with [ 3.158]. We can see that the Uzbek translation of the text is more attractive than the English version. As in every nation, it happened to man *compliments and respect* We think that units representing the speech act should be used not only in the Uzbek culture, but also in the culture of other nations. This also means that English and Uzbek languages are linguistically culturally similar. We can see that the phenomenon of gradation in the text is manifested in the sentence *You are very kind* .

If we analyze the next text: " *Remember, I'll be looking until you find your sister* [ 2.12]."

The Uzbek translation is given as follows: - *Don't forget that I will be your eyes and ears until you find your sister* ! [ 2.6]. *To be eyes and ears* [ 7.8]- *to be eyes and ears. To look, hear and watch; meaning to lie in wait* , we witness that such a combination was not used in the original English text, but until *look* since the meaning of the verb corresponds to the meaning of *look* , the translator *eye-ear* probably increased the attractiveness of the translation by using the combination, we think that the phenomenon of gradation is manifested in the two-component somatic phraseological unit. Linguistically, *remember, I'll be looking until you find your sister* ! [ 3.25] We can see that in the sentence *Don't forget that I will be your eyes and ears* until you find your sister , it is expressed through units that express the appeal.

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**TRANSLATION OF BYGONE DAYS BY MARK  
EDWARD REESE LINGUOCULTUROLOGICAL STUDY OF  
SUBORDINATORS OF THE CONCEPT OF BLOOD  
RELATIONSHIP**

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Translation is a bridge between language and culture. Translation is an important tool for communication between speakers of different languages. Because we can get information about the culture, history, literature and scientific research of other peoples through translation. Translation helps to develop understanding and respect between peoples. It promotes intercultural exchange and helps promote peace and harmony on a global scale.

It goes without saying that translation is a changing and constantly evolving field. Because, thanks to modern technologies and globalization, the field of translation is changing rapidly. The advent of machine translation and the globalization of translation services have brought the practice of translation to a new level.

It is no exaggeration to say that the field of translation constantly involves new languages and cultures and can be a tool for translators to constantly update their knowledge and skills.

When it comes to the theory of translation, it is impossible not to dwell on the theories of the Israeli linguist and logician Yaakov Bar-Hillel [1.6], because he is one of the scientists who made a great contribution to machine translation, and he tried to analyze the translation process mathematically. He did and proposed a unique approach to translation theory. According to the scientist, translation is impossible, because the structure and meaning of the language are interdependent and cannot be completely transferred to another language. American translator Eugene Nida is famous for his "dynamic equivalence" theory. In his opinion, he emphasizes that while preserving the meaning of the original text, the translation should also be understandable to the reader.

English translator Peter Newmark [5.6] distinguished "semantic" and "communicative" types of translation in his research. While semantic translation tries to be closer to the meaning of the original text, communicative translation focuses on the translation that is most understandable for the target language reader. The German folk writer, critic and translator Walter Benjamin [2.3] in his article "The Task of the Translator" describes the process of translation as creativity and emphasizes that translation is not "approaching" but "new creation" in relation to the original text. Russian linguist scientist and translator Roman Jakobson thinks about types of translation. According to him, "linguistic" translation is a translation based on grammatical and lexical structure, while "semantic" translation is a translation aimed at preserving the meaning of the text. Schleiermacher, a German folk theologian, linguist and philosopher, made a unique contribution to translation theory in the



19th century. He believes that the main task of the translator is to "approach" the original text and suggests choosing one of the types of translation "close to the source language" and "close to the target language".

Another Belgian literary critic, translation theory specialist André Lefevere [3.2] emphasizes that the translation process depends on the social and political context. According to him, translation is influenced by social and political forces, and the translators play their social role.

Many translators have contributed to world literature in Uzbek linguistics. As an example of these, we can cite the great representative of Uzbek literature and language, Hazrat Alisher Navoi, who translated works from many Turkic languages into Uzbek. As a clear example of this, we can cite the work of Hamsa. This work is considered a collection of five epics created by Navoi himself, but he used Nizami Ganjavi's "Khamsa" as a basis for translating "Khamsa" into Turkish. This can be said to be one of Navoi's most important contributions to Uzbek literature. A. Navoi translated many works, one of them is "Layli and Majnun", which Navoi translated from Persian to Uzbek. Navoi's translation has its place in Uzbek literature.

In addition, Navoi translated several books into Uzbek, for example: Miftah ul-Fuzala, the work was written in Arabic, and Navoi translated it into Uzbek. The work contains information about the art of poetry. Initially, the work Risolai Muqaddasi was written in Arabic, and later Navoi translated it into Uzbek. This work is devoted to a religious theme, and it reflects Navoi's religious views.

Another Uzbek representative is Zahiriddin Muhammad Babur. He also translated poems from Persian into Uzbek, he also wrote his work "Boburnoma" in Uzbek.

Mirtemir (Mirtemir Hamid Mirzo), a well-known representative of Uzbek literature and translation, translated many literary works from Russian, Ukrainian, Azerbaijani, Turkish and other languages into Uzbek. O'tkir Hashimov's contribution to the translation of works of art is also incomparable.

Osman Nasir, who translated many works from Russian, Turkish and other languages into Uzbek, was engaged in poetry and prose.

When the period of independence began, many translation scholars began to present their major works, among which Farhod Toychiyev's place is incomparable. He translated literary works from many foreign languages into Uzbek.

After the independence period, another well-known literary critic writer Tahir Malik translated the works of fiction from Russian into Uzbek, and he also wrote poetry.

Using the opinions of translation scholars as a source for a deeper understanding of the translation process and solving the problems that arise in it. Their opinions also serve as a guide to translators in their work, and the complexity of the translation process helps them understand the different aspects of translation.

Therefore, translation plays an important role in all areas of our life, not only in the fields of literature and art, but also in medicine, technology, law, business and many other fields. Through translation, we improve our knowledge, learn about new technologies, create opportunities to work with foreign partners to achieve success in business, and strengthen friendship between peoples.

In short, translation is a bridge between nations that helps create understanding and harmony between different cultures and languages. For this reason, we also take excerpts

from our national and cultural works, make a linguistic and cultural analysis of their alternatives translated into English, pay attention to the translations of the original text, and if necessary, we also provide translations of our alternatives.

The original text given in Uzbek: " *Thank you, uncle, for introducing me to the dear ones of the father,*" he said and bowed to Haji Akram and Mirzakarim. - *My father entrusted me with greeting close friends like you* [ 6.1]

Ingliz tiliga o'g'irilgan matn: "*Thank you for introducing me to my father's closest friend, taksir he said, showing his deference toward Mirza Karim and Akram Hajii.*"*My father also entrusted me with paying his compliments to his dearest friend*[4.5].

In the culture of the Uzbek people, the lexeme "uncle " expresses not only close kinship, but also respect and politeness. The lexeme " *blame* " was used in the English translation of the text . The correct lexeme " *taqsir* " is also used in Uzbek, but it does not fully reflect the meaning and level of respect of the word "uncle". The translator could also use a phrase such as " *respected uncle*" or " *honored uncle* " as a reference lexeme. The lexeme "Ota" is translated as "father", and this method has been successfully implemented directly into the type of translation.

the expression " *qarddon* or *close friends* " has a stronger meaning than the expression " *closest friend* " **given in English**. These lexemes express not only closeness, but also respect and attention. The words " *closest friend* " and " *dearest friend* " are used in the translation text . The lexeme given in the original text could be translated as " *cherished friend* " or " *dear and respected friend* ". translated.

In Uzbek culture, the lexeme "amonat" is very important, this word represents trust, responsibility and respect. Although the sentence " *entrusted me with* " was used in the translation, the cultural meaning of the word "amanat" was not fully reflected. In our opinion, the translation of the original text could have used phrases like " placed his trust in me" or "charged me with".

Regarding the shortcomings of the translation of the original text, it can be considered that the full meaning and tone of the lexemes "uncle" and "dear" used in the original text are not sufficiently reflected in English. We also believe that the cultural meaning of the word " *deposit* " is not fully reflected.

Based on the analysis, it can be said that it is important to take into account the specific features of the Uzbek language and culture in the translated text. It can be concluded that the translator should have understood the kinship relations in Uzbek culture and the way of expressing respect and politeness and translated these features into English.

The original text in Uzbek: "*I'm sorry, I don't remember,*" he said , " *Your uncle used to take you to the palace.*" Kutidar was about to say something, but Haji Akrom did not let him [ 6.2]

Text translated into English : " *I regret not being able to recall your visits,*" he said. *Kutidor wanted to brush away his embarrassment, but Akram Hajji cut him off* [ 4.5].

*regret* " mentioned in the original text is considered a lexeme reflecting embarrassment in the Uzbek language, and it should be said that in the culture of the Uzbek people, special attention is paid to the feeling of embarrassment, and the introductory word " *regret* " given in the original text expresses the feeling The expression "I don't remember" given in the text seems to be used simply in Uzbek language, but it is said in a respectful tone . Because respect and education are important in the culture of the Uzbek people.

In the sentence " *Your uncle used to take you to the palaces* " given in the original text, the plural form of the pronoun "sen", which is often found in the speech of the Uzbek people, means *you, to you*. It is a way of expressing respect for people in the culture of the Uzbek people.

In the original text, " *Kutidor Taghin wanted to say something, Akram Haji did not let him*" was the plural form of "edi", which is common in Uzbek language. You can hear sentences like *he wanted to say, he didn't allow*. In Uzbek culture like this, speaking softly and trying to be thoughtful reflects feelings.

"I regret not being able to recall your visits," he said. In this sentence, the phrase " *I regret* " is used, which corresponds to the lexeme " *taasufki* " given in the original text. This phrase is also used in English folk culture to mean regret.

As for the phrase "Kutidor wanted to brush away his embarrassment, but Akram Hajji cut him off", it is translated according to the phrase "Kutidor wanted to brush away his embarrassment, but Akram Hajji cut him off" in Uzbek.

If we think about the shortcomings of the translation of the text, **we can see that** in the English translation, the plural form of the personal pronoun " *you* " and the plural form of the auxiliary verb "you" in the original text are not correctly converted. In our opinion, in the language of English culture, the plural form of the personal pronoun "you" is often used in a simple relationship, it does not express the attitude of respect or appreciation, as in the Uzbek language. Also, the plural form of " *edi/was*" in English does not reflect the feelings of being soft-spoken and thoughtful, just like the plural in Uzbek.

If we analyze the following original text: The confession of the tyranny of a beg, *who was the blessing of his father, was really surprising. Azizbek is one of the most tyrannical and authoritarian begs of the Turkestan Khanate and his oppression of the people of Tashkent under his care is epic for Ferghana, but this question of Akram Haji is one of Azizbek's closest friends. it was to test the son of a man* [ 6.1] .

Ingliz tiliga o'girilgan matn: *All of Fergana knew of Azizbek's reputation as one of the most despotic and coldhearted leaders in all of Turkistan, a ruler who governed the population of Tashkent with a heavy handed and chillingly brutal authority. However, the underlying purpose of Akram Haji's line of questioning was to determine the loyalties of his dearest friend's son*[4.3].

**The lexeme** *valine'mat* given in the original text can be said to combine kinship and respect. Because, in the culture of the Uzbek people, " *vali* " is a patron, protector and " *nemat* " - *goodness, blessing* means. So, *thank you* lexeme embodies the work, **sorrow and respect** of parents. The lexeme "near" is used in the sense of closeness and kinship. The expression son of a friend shows the importance of family relationships and family values.

*Dearest friend* in the English translation of the text the phrase means " *close friend* ", but does not mean family relations. The lexeme *Loyalties* means " *loyalty* " and affects social and personal relationships rather than kinship. *Son* lexeme meaning " *son* " is one of the main archetypes of blood kinship, but the importance of family values is not emphasized in the text.

It should be noted that the concept of *kinship is more emphasized in the original text, while the concepts of friendship and loyalty prevail in the English translation*. We think that this may be related to the fact that kinship and family relationships are highly valued in Uzbek culture, and personal and social relationships are more important in English culture.

In the Uzbek language, lexemes such as *valine'mat*, *close*, *friend* contain the meaning of kinship. In English, we can understand from the meaning of the text that words such as " *dearest friend* ", " *number* ", " *loyalties* " influenced social and personal relations rather than kinship.

Given text *consanguinity* shows the different expressions of the concept in Uzbek and English cultures. In the Uzbek language, kinship is more emphasized, and this concept gives high value to family values. In English, personal and social relationships are more important, which depends on its language characteristics and cultural values.

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## THE FEATURES OF HOMONYMS IN TECHNICAL TEXTS

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**Abstract:** Homonyms are fascinating words that can cause confusion because they sound the same or are spelled the same but have different meanings. In the world of technical writing, where clarity is essential, the use of homonyms can create both challenges and opportunities. Let's explore the features of homonyms in technical texts in a way that's easy to understand.

**Keywords:** Homonyms, explore, diagrams, woodworking, chemical, confusion, Illustrations, standardized.

**Introduction. 1. Clarity and Precision.** Ambiguity: One of the biggest challenges with homonyms is that they can lead to ambiguity. For example, consider the word "bark." It can mean the sound a dog makes or the outer covering of a tree. In a technical document, if you say, "The bark was observed," readers might not know whether you're talking about a dog or a tree. This uncertainty can hinder effective communication.

**Providing Context:** To avoid confusion, it's crucial to provide enough context. For instance, instead of saying, "The bark was observed," you might say, "The dog's bark was heard during the experiment." This additional information helps clarify what you mean.

### *Providing Context*

To avoid ambiguity, it's crucial to provide sufficient context. Contextual clues help readers infer the correct meaning of a homonym.

### *Example:*

- Instead of "The bark was observed," you might write, "The bark of the oak tree was analyzed for its chemical properties." This sentence clearly indicates that "bark" refers to the tree's outer covering.

### *Additional Techniques:*

- Use descriptive adjectives: "The dog's bark was loud."
- Include explanatory phrases: "The bark, or outer layer of the tree, was studied."

### *2. Standardization and Consistency*

**Terminology:** In technical writing, using standardized terms can reduce confusion. For example, the word "current" can refer to the flow of electricity or the present time. By using specific phrases like "electrical current" or "current date," you can eliminate ambiguity and ensure that your readers understand exactly what you're referring to.

**Glossaries:** Including a glossary at the end of your document can be extremely helpful. A glossary defines key terms and can specify any homonyms relevant to your text. This way, if a reader encounters a term they're unsure about, they can quickly find the definition.

### *Example:*

- The word "current" can refer to the flow of electricity or the present time. Using specific terms like "electrical current" or "current date" helps clarify the intended meaning.

*Glossaries*

Including a glossary in your document can be immensely helpful. A glossary defines key terms and can clarify any homonyms used in the text.

*Example:*

- Glossary Entry: "Current (Electrical): The flow of electric charge."
- Glossary Entry: "Current (Time): The present moment."

**3. Impact on Communication**

**Reader Interpretation:** Different readers bring various backgrounds and experiences to a technical document. Because of this diversity, a homonym can be interpreted in multiple ways. For instance, the word "file" can mean a tool for smoothing surfaces or a collection of documents. Anticipating these different interpretations and addressing them in your writing is essential for clear communication.

**Examples and Illustrations:** Using examples can greatly clarify your points. If you mention a homonym, follow it up with a specific example. For instance, "In the context of computing, a 'file' refers to a collection of data stored on a computer. However, in woodworking, a 'file' is a tool used to smooth surfaces." Including visual aids, such as charts or diagrams, can also help illustrate your points and enhance understanding.

*Examples and Illustrations*

Using examples and visual aids can greatly clarify the meaning of homonyms. Providing concrete examples helps readers understand the specific context in which a homonym is used.

**Example:**

- "In the context of computing, a 'file' refers to a collection of data stored on a computer. For example, you might save a text document as a file on your hard drive. In woodworking, a 'file' is a tool used to smooth surfaces, such as a metal file used to shape wood."

**Visual Aids:**

- Diagrams, charts, and illustrations can further aid in conveying the correct interpretation of homonyms.

**4. Relevance to Technical Jargon**

**Field-Specific Homonyms:** Some homonyms may have specialized meanings in different fields. For example, "cell" can refer to a biological unit in living organisms or a small room in a prison. Understanding your audience is crucial: if you're writing for biologists, you'll want to make sure that your use of "cell" is clear in that context.

**Avoiding Jargon Overload:** While technical writing often includes specialized vocabulary, it's important not to overwhelm the reader with jargon. Too many complex terms can make the text difficult to follow. Striking a balance between using technical terms and maintaining readability is essential for effective communication.

**Example:**

- Instead of saying, "The cell's cytoplasmic organelles exhibited intracellular transport," you might simplify to, "The parts inside the cell moved substances around."

**Tips:**

- Balance technical accuracy with readability.
- Use simpler language where possible, without sacrificing precision.

### 5. Editing and Proofreading

**Review Process:** A careful editing process is vital when dealing with homonyms. Having another person review your work can help identify ambiguous terms that you might have overlooked. Feedback from colleagues or subject matter experts can provide valuable insights and help ensure clarity.

**Use of Software Tools:** There are many writing and editing tools available that can help you spot homonyms and other potential issues in your text. These tools can highlight words that may need clarification, allowing you to address any ambiguities before finalizing your document.

#### **Example:**

● Peer reviews and feedback from subject matter experts can provide valuable insights. They can spot potential ambiguities that the original writer might have missed.

#### *Use of Software Tools*

Writing and editing software can help identify homonyms and other potential issues. These tools can highlight words that may need clarification, allowing

**Conclusion.** In conclusion, while homonyms can add richness to language, they also pose challenges, particularly in technical writing where precision is key. By focusing on clarity, providing context, and understanding your audience, you can effectively navigate the complexities introduced by homonyms. This approach will help ensure that your technical documents are clear, informative, and easily understood by all readers. By being mindful of these features, you'll enhance the quality of your writing and improve communication with your audience.

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## SOCIO-PHILOSOPHICAL ANALYSIS OF SOCIAL LIFE AND GLOBALIZATION PROCESSES

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**Abstract:** This article analyzes the processes of social life and globalization, the role of information in the globalization of the economy, the introduction of information and communication and computer technologies and their transition to a path of rapid development, which will bring great changes to our society, the formation of a general information society in the world, ensuring the rapid and high-quality circulation of information, which has become the main criterion for the development and prosperity of the country.

**Keywords:** economy, globalization, information, information and communication, computer technologies, information society, information systems, telecommunications.

**Introduction.** The social-reformist ideas and communist utopia that prevailed until the nineties of the 20th century did not justify themselves. On the eve of the 21st century, the world experienced, on the one hand, ideological instability, and on the other hand, ideological indifference. In particular, if ideological instability is manifested in the absence of ideas that can unite entire peoples in the world, then ideological indifference is expressed in the indifference of people to the idea that occupies their consciousness and activities.

### Materials and methods

We have shown that the main object of influence of religious extremism, nationalism and many similar ideas remains the countries that have gained their independence. Because the main goal of geopolitics is to strengthen its position in other regions and to take these regions under its influence, and the various political forces in the world include young sovereign states in their interests, promoting the ideas we have mentioned in order to weaken their independence.

### Results and discussion

He is using various ideological, religious, and ideological means to undermine the socio-economic, cultural, and educational ties that have formed in the region, to provoke conflict between peoples and nations, and to create foci of tension. Ideological pressure on independent states is carried out as information warfare, psychological warfare, technological warfare, the true purpose of which is to instill in the nation a system of alien lifestyles and values, to mislead it from its chosen path, to introduce its own technology, and ultimately to take it under its influence and pursue a colonial policy.[1] These tools can be conditionally attributed to three areas:

Informed war. In the context of expanded information transmission capabilities, information warfare has dangerous consequences. On the eve of the nineties, only in the United States did 1850 periodicals focus on ideological goals. To date, the introduction of satellite antennas into everyday life and the development of the internet system have accelerated the possibilities of information transmission.



Psychological warfare. It is a desire to instill in the people of independent states the incorrectness of their chosen path, to justify the fact that social shocks await them in the end. All this is done in order to lower the spirit of the nation, to turn it back from its chosen path.

Technological warfare. To attract the attention of independent states, attempts are being made to promote their own economic, social, and information technologies. The goal of this is to create a market for the implementation of these technologies, which, along with new technologies, will allow for the assimilation and export of one's own development model.

In such conditions, conditions are being created for the development and spread of such inhuman ideas as religious extremism, nationalism, which primarily affects countries that have just gained their independence. These ideas are disseminated and promoted to realize the geopolitical goals of various political forces.[3]

The process of globalization has fundamentally changed the world's ideological landscape, creating new goals and directions of geopolitics. As a result, on the one hand, methods and techniques for instilling various ideas in people's minds were perfected, and on the other hand, the ability to protect citizens from the influence of inhuman ideas decreased. In the current situation, the collapse of the Soviet Union and the socio-political events that took place in other regions of the world pose a particularly serious threat to the security of countries that have gained independence.[4] Therefore, to gain comprehensive information about the nature of ideological pressure on countries that have gained independence, it becomes necessary to study the ideological image of the present time.

Indeed, the ideological image of the modern era is characterized by a diversity of ideas and the intensity of ideological struggle. In the context of ideological instability and ideological indifference, these factors threaten the security of Uzbekistan. It is precisely for this reason that it is necessary to understand that the ideological landscape that has emerged today is a legitimate product of the development of human society in the 20th century, and it is necessary to understand that its stability and security can only be ensured by forming an idea that expresses the dreams and interests of the nation in the context of an intensified ideological struggle.

Ideology is a superstructural phenomenon that is shaped by socio-economic and political events. Therefore, the acceleration of globalization in the 20th century and the beginning of the formation of global civilization changed the nature of world ideologies. The lack of a powerful ideology to replace them, and the changing geopolitical goals, further exacerbated the negative impact of these ideas.[5] In such conditions, only a nation that has clearly defined its goals, well-aware of its needs and interests, has its own beliefs, in short, has formed its own national idea, will preserve its future and determine its prospects.

### **Conculion**

Therefore, the following conclusions can be drawn: globalization creates conditions for national, religious, and cultural ties between people on a global scale; through the exchange of scientific and technical information, technologies, and scientific and technological achievements, it opens up unprecedented opportunities for human development on an international scale; large opportunities and benefits inherent in globalization are widely distributed among countries and people, and the results of scientific and technological progress are reaching countries that are not their creators. For example, the vast capabilities



of the Internet can be used in all countries; on the basis of global technological capabilities, opportunities arise to improve human development and eradicate poverty.

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## INCREASING THE COMPETITIVENESS OF HIGHER EDUCATION INSTITUTIONS AS A FACTOR OF ENSURING ECONOMIC DEVELOPMENT.

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### Annotation:

This article talks about competition and competitiveness, factors affecting the competitiveness of higher education institutions, issues of education system and economic integration. A series of analyses of higher education institutions' performance indicators are also presented, including data on their coverage and number of graduates. The relationship between the higher education system and economic development is explained.

**Keywords:** competition, competitiveness, integration, competitiveness of higher education institutions.

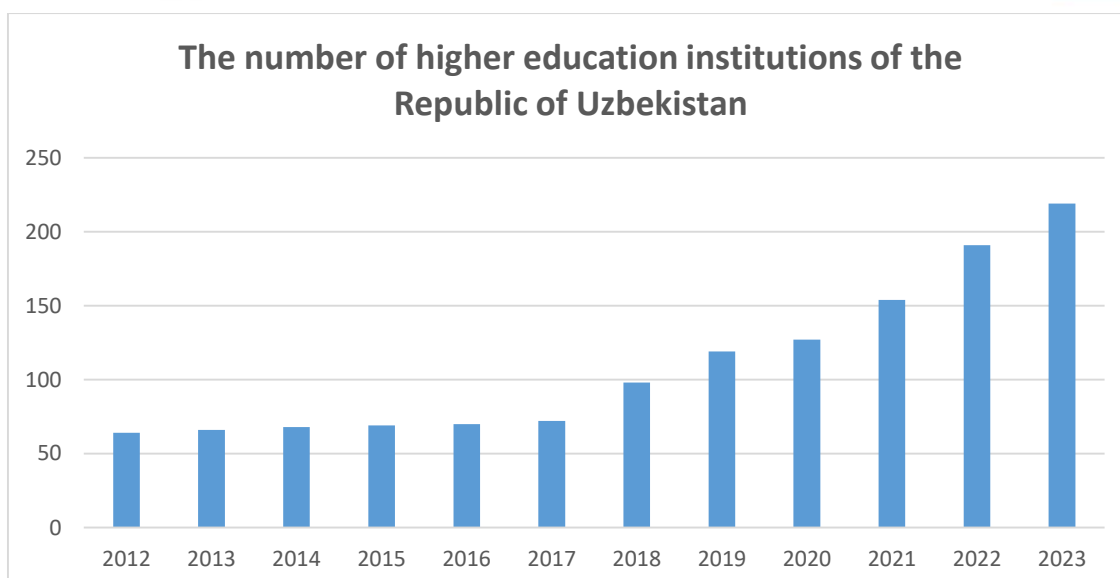
The higher education system plays an important role in ensuring the country's development and industrial development. For this purpose, today every country pays attention to human capital, its further development, and the quality of education. If we take the example of the Republic of Uzbekistan alone, in the last seven years, the level of coverage in preschool education has increased from 27% to 72%, and in higher education from 9% to 42%. Although the non-state educational services of developed countries, including Germany, Great Britain, and Asian countries, China, Singapore, South Korea, and Japan, are organized in different ways, the organization of educational and methodological work in them is also positive. is distinguished by its sides.

As a result of these international observations, it is time to bring the higher education system of our country to a new level. Because we need to raise a generation that has acquired modern knowledge and technologies. The first task will be to continuously increase the level of coverage of the population with higher education.

In the following years, the entry of the non-state and private sector, many foreign higher education institutions and branches into the higher education system was a positive situation. On the one hand, the scope of higher education expands, and on the other hand, it ensures positive competition between state and non-state educational institutions, and the laws of the market begin to work in the system.

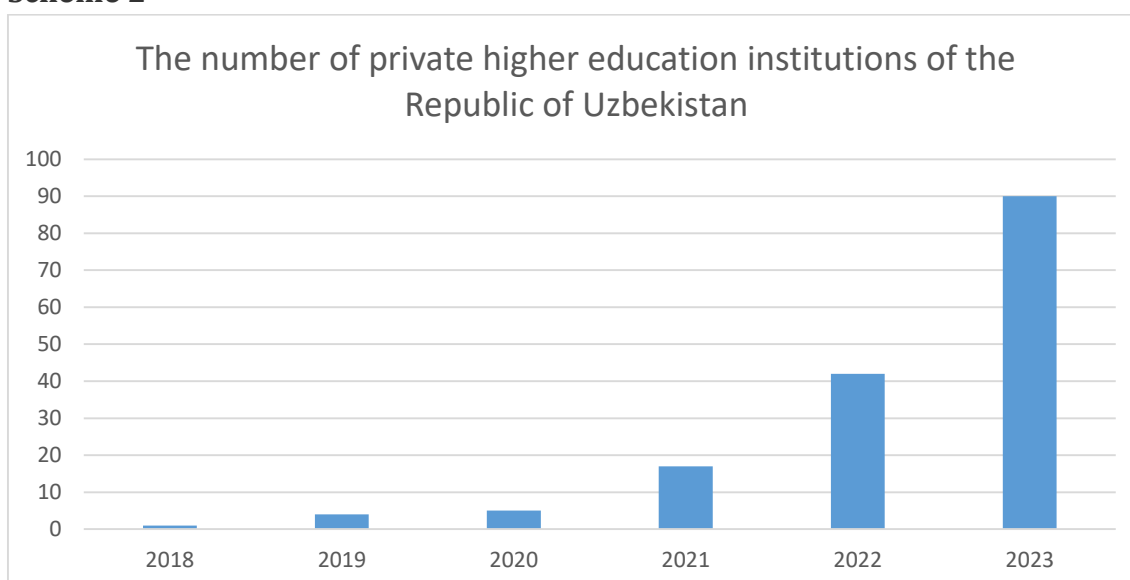
### Scheme 1





The above information is also a vivid example of the attention paid to the social sphere, in particular, higher education in the Republic of Uzbekistan. In 2023 alone, compared to 2012, the number of higher education institutions increased from 64 to 219, i.e. by 242.2%.

#### Scheme 2



If we analyze the number of private higher education institutions, in 2018, their number was 1, and by the end of 2023, the number of non-state higher education institutions will be 90.

Competition is a key factor for a favorable economic environment by encouraging firms to be more efficient and to offer better conditions to consumers. By competing with each other, companies become more competitive, innovative, and efficient, based on merit. This market dynamic makes the economy grow, creating jobs and well-being for society.

The competitive dynamics promote competitiveness and the efficiency of companies ensuring better prices. When companies create [cartels](#) or get involved in other [anticompetitive practices](#), the exact opposite happens — costs rise and consumers are harmed. In a market governed by openness and equity, everyone has the same opportunities. Competition promotes freedom of initiative, the right of anyone to create a business and enter the market. Therefore, the Competition Law prohibits and the Competition Authority sanctions the [abuse of a dominant position](#).

Clearly the educational provisions within any given country represent one of the main determinants of the composition and growth of that country's output and exports and constitute an important ingredient in a system's capacity to borrow foreign technology effectively. For example: health and nutrition, and primary and secondary education all raise the productivity of workers, rural and urban; secondary education, including vocational, facilitates the acquisition of skills and managerial capacity; tertiary education supports the development of basic science, the appropriate selection of technology imports and the domestic adaptation and development of technologies; secondary and tertiary education also represent critical elements in the development of key institutions, of government, the law, and the financial system, among others, all essential for economic growth. Education is indispensable to economic development. No economic development is possible without good education. A balanced education system promotes not only economic development, but productivity, and generates individual income per capita. Its influence is noticable at the micro level of an individual family.

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## INCREASING THE COMPETITIVENESS OF THE EDUCATIONAL SERVICES MARKET BY STRENGTHENING THE INTEGRATION OF SCIENCE AND PRODUCTION IN HIGHER EDUCATIONAL INSTITUTIONS IN UZBEKISTAN.

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### Abstract

This article is devoted to the issues of increasing the competitiveness of the educational services market by strengthening the integration of science and production in higher educational institutions in Uzbekistan. The importance of scientific and technological development in ensuring economic growth by increasing the efficiency of the education system in the country and improving the quality of higher education is increasing. Therefore, the integration of educational institutions with science and production plays an important role in increasing the competitiveness of the educational services market.

The article analyzes the need for integration between science, education and production, its contribution to increasing the competitiveness of the country's economy and education system. It also examines state policies and initiatives implemented in Uzbekistan to strengthen these integration processes, including measures aimed at effectively linking scientific and educational activities with the production sector and developing innovations.

**Keywords:** Integration, technology, individual, monographs, non-state higher education.

### Introduction:

The integration of the higher education system and the science sector plays an important role in realizing the development prospects of Uzbekistan. Today, changes in the economic, social and technological spheres around the world require highly qualified specialists and innovative approaches. Therefore, the integration of education and science systems with production is of great importance in the formation of a competitive economy, especially in the development of the educational services market.

By combining scientific research and production processes in higher educational institutions, it is possible not only to improve the quality of education, but also to create opportunities for the production of innovative products and services. At the same time, increasing competitiveness in the educational services market, training high-quality personnel and providing various sectors of the economy with modern scientific achievements serve the sustainable development of the country.

This article analyzes the integration processes in the higher education system and science of Uzbekistan, their interaction with production, and their role in increasing the competitiveness of the educational services market. The article presents the current state of integration relations, existing problems and ways to solve them, as well as proposals for the development of effective cooperation between the education system and production.

### Literature Review

The issue of strengthening the integration of science and industry in higher education institutions is one of the most relevant topics both globally and in Uzbekistan. This analysis is based on information from various sources and includes the following main areas:

Integration is defined as the process of strengthening interactions and cooperation between several institutions or sectors. Higher education institutions provide opportunities for the creation of new knowledge and innovations by combining scientific research and production processes.

In the framework of the renewal and modernization of the education system in the Republic of Uzbekistan, the issue of integration between science and production in higher education institutions is of great importance. The "Development of Education" programs, which have been implemented since 2017, include a number of initiatives aimed at strengthening this integration. Higher education institutions support innovative development by adapting scientific research to the needs of industry.

In the era of globalization, in contrast to the focus on supporting enterprises that form a single structure in the industrialized era, the main strategic goal of the state in the highly industrialized era has become to increase the international competitiveness of countries and regions through the development of clusters. A.V. Babkina emphasizes: "The cluster structure of the economy shifts the conditions and factors of innovation-oriented economic dynamics to the regional level, increasing their importance in solving development problems." It is shown that the role of the agglomeration factor, which is studied by Ye.I. Lazareva as a field of accumulation of a "critical mass" of human and social capital, scientific and production and innovation potential, which ensures the stability, systemic emergence and competitiveness of clusters, is significantly increasing. In the late 20th and early 21st centuries, in the context of an active search for sources of sustainable innovative evolution, various theories were formed in the field of innovative economics and innovation management. Among these studies, the theory of innovations associated with the names of Y. Schumpeter and E. Hansen is most popular. The search for new (additional) factors of added value growth led to the activation of theoretical research in the field of a resource-based approach to the analysis of sustainable innovation-oriented development of the economy, which contributes to the gradual introduction of human capital into the management system as a fundamental resource of sustainable, innovative dynamics. Scientific approaches from the point of view of human capital give priority to separate, mutually exclusive sources of development, such as technique, technology, and innovative management. In addition, the problems of the innovative orientation of economic development are mainly studied within a specific cycle of reproduction, without paying attention to the future and not showing what will happen in the long term. In the studies of B.Z. Milner, B.N. Kuzik, Yu.V. Yakoves, there is a tendency to expand the interpretation of human capital, leading to the gradual transfer of not only its economic, individual, but also non-economic, social indicators to the strategic management system [10]. In the current conditions, in the transition to an innovation-oriented economy, completely different points of view are emerging on the mechanism for transferring new, modernized structures and functions of human potential into the strategic decision-making system.



This article examines the prospects for strengthening the integration of science and industry in higher education institutions. The research methodology includes the following main directions:

The main objective of the study is to strengthen the integration of science and industry in higher education institutions, to identify the benefits and difficulties of such integration.

The study is conducted using the following methods:

- Analysis and synthesis: Analysis of existing literature on the topic and drawing conclusions based on them.

- Sociological surveys: Studying the opinions of students, teachers and specialists in the production sector.

- Interviews: Conducting interviews with scientists and industry representatives in order to delve deeper into the problems and opportunities.

- Analysis of forms of evening and correspondence education: Studying the existing forms of education in higher education and assessing their integration with production.

- Existing links between science and production.

- Necessary conditions for strengthening integration relations.

- Successful integration experiences in other countries.

- Problems arising in the integration process and ways to solve them.

The research results include proposals and recommendations for strengthening the integration of science and industry in higher education institutions. These results are also expected to be useful for the development of the education system.

In the research process, methodological foundations are formed by studying scientific articles, monographs, state statistical data and international experience.

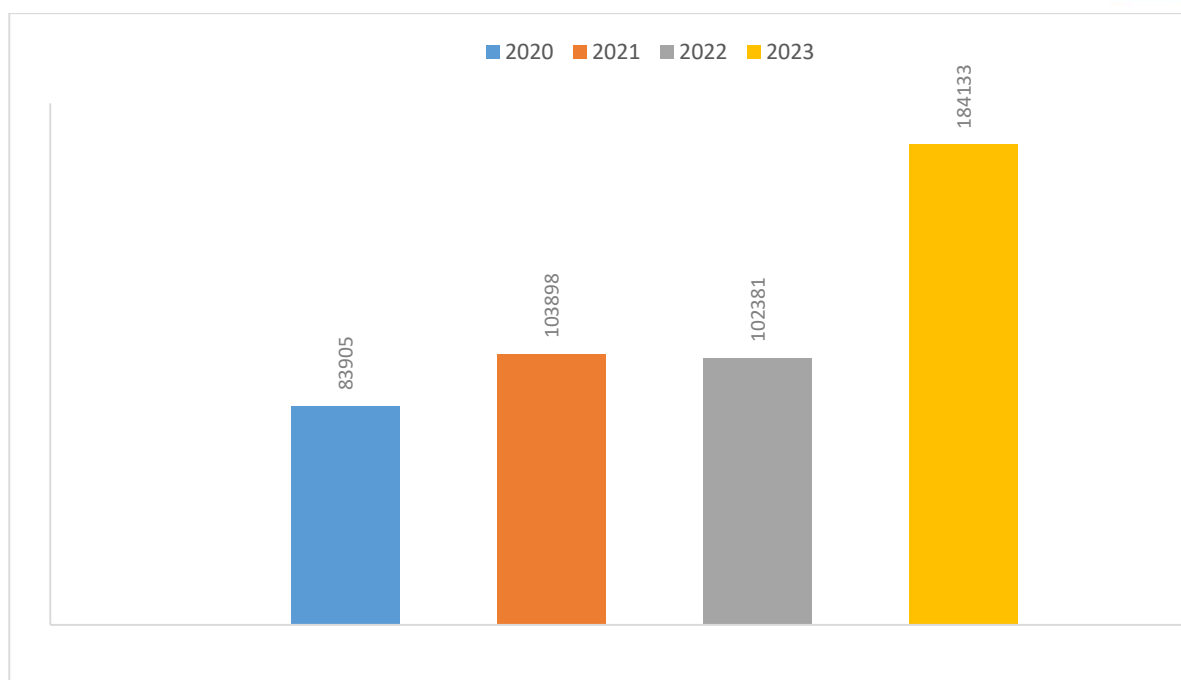
This methodology allows for a comprehensive and in-depth study of strengthening integration relations and provides the necessary basis for the implementation of research results in practice.

### **Results and analysis**

The links between the research activities of higher education institutions and the production sector have significantly strengthened. As of 2023, more than 37% of scientific research conducted in higher education institutions in Uzbekistan is focused on industrial sectors, including light industry, chemistry, energy and information technology. This indicates the existence of a direct connection between science and production. More than 150 research centers of higher education institutions operate, in which an average of more than 2,000 scientific works per year are aimed at improving production and technologies.

Innovative products and technologies produced by higher education institutions play an important role in the formation of a competitive market. For example, in 2022, more than 1,500 patents and utility model certificates were obtained from higher education institutions of Uzbekistan, which is an increase of 15% compared to 2021. Also, the number of startups and innovative projects implemented through the integration of science and production in Uzbekistan is growing by 20-25% annually.





**Figure 1. Number of graduates of higher education institutions.**

The results of the analysis show that from 2020 to 2021, the number of graduates increased by 19,993. This represents an increase of 23.8%. From 2021 to 2022, the number of graduates decreased by 1,517, which represents a decrease of 1.5%. From 2022 to 2023, the number of graduates increased sharply - by 81,752, which is an increase of 80%.<sup>1</sup>

The increase in the number of graduates is also associated with an increase in the quality of education in higher education institutions. The reforms being implemented in the education system in Uzbekistan, including the renewal of educational programs and the improvement of the personnel training process, are contributing to the increase in the number of graduates.

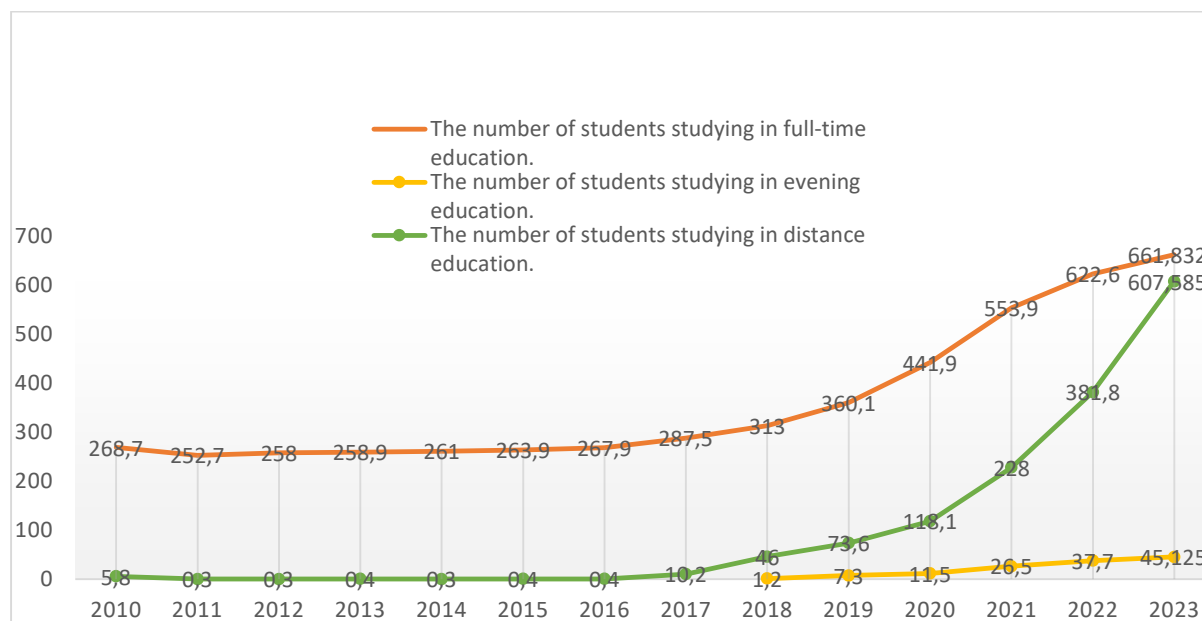
Changes in the number of graduates also show the impact of different forms of education in higher education. While in the early years, full-time education dominated, in recent years the number of graduates has increased further as a result of the development of evening and part-time forms of education. This allows for flexible education for students and meeting production needs.

The need to increase the number of graduates of higher education institutions has increased in order to ensure the economic development of Uzbekistan and meet the demands of the younger generation. An increase in the number of graduates plays an important role in ensuring social stability, employment, and stimulating economic growth.

This analysis shows the change in the number of graduates of higher education institutions in Uzbekistan. The increase observed during 2020-2023 is associated with an improvement in the quality of education, a diversity of forms of education, and increased socio-economic demands. Changes in Uzbekistan's education system are expected to create a basis for a further increase in the number of graduates in the future.

This study aims to study the number of students in higher education institutions in Uzbekistan by different forms of education for the period 2010-2023. The data reflect changes in the number of students studying in full-time, evening and part-time forms of education.

According to the table, the number of students studying in full-time education increased from 2010 to 2023:



**Figure 2. The number of students in higher education institutions in the Republic of Uzbekistan by form of education**

This means an increase of 393,132 people in 13 years. This increase is 146.4%. In the form of evening education, the number of students has increased very little from 0 to 45,125 from 2010 to 2023. This indicates an increase in demand for evening education and the need to develop it.

In the form of correspondence education, the number of students has increased from 5.8 to 607,585 in 2010. This is due to the adaptation of correspondence education to practice and the opportunities for students to get a job.<sup>2</sup>

This increase is also associated with an improvement in the quality of education. The reforms implemented by the government of Uzbekistan in the education system, including the renewal of curricula and the improvement of pedagogical skills, are aimed at improving the quality of education for students and ensuring their competitiveness.

The increase in the number of students in full-time education indicates economic growth and an increase in the level of knowledge of society. The development of other forms of education, on the other hand, creates new opportunities for students, which plays an important role in ensuring social stability.

The change in forms of education, the increase in the number of students and the improvement of the quality of education serve as the basis for the further development of the education system of Uzbekistan. In the future, further expansion of education and the introduction of new formats will allow students to familiarize themselves with modern requirements.

This analysis shows the change in various forms of education in higher education institutions in Uzbekistan. The increase in the number of students in full-time, evening and part-time forms of education over the period 2010-2023 is associated with the increase in the number of students in full-time, evening and part-time forms of education, the improvement of the quality of education and the strengthening of socio-economic requirements. These



changes are an important factor for the future development of the education system of Uzbekistan.

This study examines the change in the number of non-state higher education institutions and the number of students in them over the period 2018-2023. The data reflect changes in the number of non-state educational institutions and the creation of new opportunities for students.

**Table 3**

**Number of higher education institutions in the Republic of Uzbekistan.**

	2018	2019	2020	2021	2022	2023
<i>Number of non-state higher education institutions (total)</i>	1	4	5	17	42	90
<i>Number of foreign higher education institutions</i>	10	16	18	25	26	31
<i>Number of higher education institutions</i>	98	119	127	154	191	219

The number of non-state higher education institutions increased from 1 to 90 between 2018 and 2023. This represents an increase of 8,900% and indicates the strengthening of the private sector in education in Uzbekistan.

**Number of students** The number of students studying in non-state higher education institutions has also increased, but is limited to 10 students in 2018 and 31 students in 2023. Although this increase is at least 210%, the level of student attraction and satisfaction in this area needs to be further increased.

**Number of higher education institutions** The number of higher education institutions in Uzbekistan also increased from 98 to 219 between 2018 and 2023. This is due to the increase in the number of educational institutions, the expansion of educational opportunities in the regions, and the increased demand for modern knowledge.<sup>3</sup>

The increase in the number of non-state higher education institutions is associated with several factors:

**State support** Reforms in the education system, aimed at attracting the private sector to the education sector, have stimulated the emergence of new non-state educational institutions.

**Increased demand for higher education** The desire of the younger generation to get an education and changing economic conditions have increased the demand for education.

**Diversity of educational programs** Non-state higher education institutions offer a variety of educational programs, creating more opportunities for students.

In the near future, the number of non-state higher education institutions is expected to increase and create more opportunities for students. These changes will serve to improve the quality of education, increase the number of students, and contribute to the socio-economic development of society.

This analysis shows the presence of non-state higher education institutions in Uzbekistan and their growth. The growth in the number of non-state educational institutions and the number of students in them from 2018 to 2023 confirms the success of educational reforms. These changes are important for the future development of the education system in Uzbekistan.

### Conclusion

Strengthening the integration of science and production in higher education institutions is of great importance for the socio-economic development of Uzbekistan. This integration plays an important role not only in the implementation of scientific research in practice, but also in the training of competitive personnel.

The main conclusions considered in the article are as follows:

1. "Need for Integration" Effective integration between science and production accelerates the processes of development and implementation of innovations. This, in turn, contributes to economic growth.

2. "Practical Experience" It is necessary for higher education institutions in Uzbekistan to conduct joint research in cooperation with the production sector to create new knowledge and technologies. Such cooperation allows students to develop practical experience and skills.

3. "Existing Problems" In the process of strengthening integration, there are problems such as lack of financial resources, shortcomings in the training process, and lack of communication between scientific research and production.

4. "Future Prospects" It is necessary to develop new strategies to strengthen the integration of science and production in higher education institutions. This includes the development of innovation ecosystems, the establishment of joint research centers, and programs to involve students in practice.

These conclusions identify the main areas that will help to effectively implement the integration process in higher education institutions. As a result, it will create an opportunity to increase the competitiveness of the economy of Uzbekistan and ensure knowledge-based economic development.

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## STATE SUPPORT MEASURES FOR FRUIT AND VEGETABLE AGRICULTURAL CLUSTERS

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**Abstract.** In the article, the cluster method of production in agriculture has been established, the size of the agricultural areas divided into clusters by crop types is 67% in cotton and textile, 8% in animal husbandry, and 7.5% in fruit and vegetable growing. It is analyzed that serious attention should be paid to the organization of interest.

**Key words.** Advanced technologies, efficiency, strategy, agriculture, viticulture network, organizational and economic mechanisms.

**INTRODUCTION.** In recent years, consistent measures have been taken to reform agriculture and introduce market mechanisms to the sector.

As a result of the processing of raw materials grown in the cluster method, it is possible to deliver them to the consumer in the form of a finished product.

Today, more than 80 types of agricultural products grown in our republic are exported to 66 countries of the world. In 2010, cotton fiber accounted for 11.3% of exports, but by 2018, this figure decreased to 1.6%.

At the same time, the lack of systematic implementation of effective market mechanisms, especially in the development of fruit and vegetable growing and viticulture, and the insufficient scientific approach lead to underutilization of the available opportunities of the sector.

According to calculations, it is possible to earn 7 times more from grapes, 6 times from cherries, and 5 times more from walnuts than raw cotton grown on 1 hectare.

Targeted programs for the organization of fruit and vegetable clusters, allocating land areas, attaching farms to them, establishing intensive orchards and vineyards, providing working capital, expanding or building the necessary infrastructure facilities in each potential project section. The one-by-one review and assessment laid the groundwork for effective organization of work in this regard.

In order to correctly assess the possibilities of the regions of the republic, the proposals for the establishment of 86 clusters were thoroughly studied by the experts of the Ministry of Agriculture.

In particular, the following measures are defined for the organization and development of fruit and vegetable clusters. In particular, according to stage 1 (86 clusters):

Applicants forming clusters have their own areas of 18,322 hectares, and 60,519 hectares have been allocated to 7,851 farms.

The area attached to the clusters is 30% of the area of fruit and vegetable cultivation in the respective regions.

In 2020, based on the contracts concluded by the clusters to export 359 thousand 812 tons (342.4 million dollars) of fruits and vegetables and the existing processing capacities, the crops were planted.

In 2022, the export indicators of the selected clusters will be increased by 5 times compared to last year, and the processing indicators will be increased by 2 times.

As a result of these ongoing measures, by 2025, productivity in intensive gardens will be 200 s/ha, in vineyards 150 s/ha, in vegetable growing 29 s/ha, in policing 28 s/ha, in potato growing 23 s/ha and in leguminous crops 7 s/ha is achieved, which in turn makes it possible to reduce the cost of manufactured products and increase competitiveness in export-oriented foreign markets.

It is necessary to create a mechanism of state support for the established clusters, including:

1. Some farms attached to clusters have debts to the budget, and when the cluster makes an advance payment, the budget debts are recovered. Extending the period of payment of debts to such farmers to the budget and state special purpose funds, as well as the collection of fines and fines until this year's harvest;

2. This year, very big plans have been made to create an intensive garden and vineyards. It is known that the investments made in this field in agriculture are intended for a long period of time, and the profit will start to bear fruit after 3 years. Today, the State Fund for the Support of Entrepreneurs provides practical assistance in providing a guarantee of up to 50% of the collateral for loans allocated for the creation of intensive gardens and vineyards. However, when the guarantee is presented, no concession is given on the loan interest payment. Taking into account the social importance of creating intensive orchards and vineyards for our country and the importance of the export potential, it is necessary to give an opportunity to use both benefits at the same time by our initiators who have formed clusters and farms attached to them.

3. Today, when commercial loans are granted to our farms creating intensive gardens and vineyards, up to 8% of the excess over the refinancing rate of the Central Bank will be compensated for the full term (for 7 years). Entrepreneurs who create an intensive garden or vineyard will have financial difficulties until the created garden or vineyard begins to harvest.





## Development of activity of fruit and vegetable clusters and cooperatives

## FRUIT AND VEGETABLE CLUSTER

Actions taken		growth rate	
Number of clusters	146	575	
Attached Farmer	9868	15320	+5452
Combined land area (per thousand)	117.5	466	
Land area of farms (per thousand)	87	351	+264
Land area divided into clusters (per thousand)	30.5	115	+84,5
Number of jobs, (a thousand people)	22	132	+110
Engaged investment, (mlrd.dollar)	128	320	+192
Processing steps coverage, (%)	15	50	+35
Export volume	575		

- agricultural associations, ensuring mutual cooperation of farmers and peasant farms with clusters;
- supporting various forms of associations: clusters, cooperatives and production associations;
- determination of measures for the development and promotion of clusters in all sectors.

## CONCLUSIONS AND SUGGESTIONS

*In Uzbekistan, fruit orchards, especially orchards using the intensive method, are not organized enough, orchards and vineyards have fallen into disrepair, their economic efficiency is extremely low, and thousands of hectares of old orchards in a number of districts have not produced crops for years. The cooperative system that forms the chain of "production - purchase - storage and processing - export" has not yet been introduced.* **SHAVKAT MIRZIYOEV**

We need to create a mechanism of state support for the established clusters, including:

1. Some farms attached to clusters have debts to the budget, and when the cluster makes an advance payment, the budget debts are recovered. Extending the period of payment of debts to such farmers to the budget and state special purpose funds, as well as the collection of fines and fines until this year's harvest;

3. Today, when commercial loans are granted to our farms creating intensive gardens and vineyards, up to 8% of the excess over the refinancing rate of the Central Bank will be compensated for the full term (for 7 years). Entrepreneurs who create an intensive garden or vineyard will have financial difficulties until the created garden or vineyard begins to harvest.

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## SOME APPROACHES TO IMPROVING THE INVESTIGATIVE ACTION OF INTERROGATION

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**Annotation:** In this article, as a result of the analysis of existing problems in the process of interrogation and investigative action, errors and shortcomings are identified and practical proposals for their elimination are developed. Opinions were previously requested to highlight the main content of the implemented reforms aimed at improving the investigative process of interrogation. Interrogation draws conclusions about the tactics of the investigative action.

**Keywords:** interrogation, tactics, law, dignity, respect, torture, punishment, treatment, right, wrong, inconvenience, language, video recording.

The systemic and consistent reforms implemented in the judicial and legal sphere during the years of independence are primarily significant for their aim to strengthen the principles of humanism in criminal and criminal procedural legislation.

To achieve the goals of the reforms, our legislation is regularly analyzed, and continuous changes and additions are made to address the identified errors and shortcomings. Indeed, if we do not call everything by its proper name, recognizing achievements as achievements and shortcomings as shortcomings, we cannot achieve our goals. If we do not correct the mistakes and deficiencies in our work, if we do not solve the problems ourselves, no one will come from outside to do these things for us [1].

The amendments and additions being made to the Criminal Procedure Code in recent years through adopted laws, aimed at improving the investigative action of interrogation, confirm the validity of the aforementioned opinions.

In particular, we can cite as vivid examples the additions and changes made to the Criminal Procedure Code regarding interrogation based on the following laws of the Republic of Uzbekistan: No. ZRU-442 of September 6, 2017 "On Amendments and Additions to Certain Legislative Acts of the Republic of Uzbekistan in Connection with the Improvement of the Institute of Inquiry" [2], No. ZRU-476 of April 18, 2018 "On Amendments and Additions to Certain Legislative Acts of the Republic of Uzbekistan" [3], No. ZRU-567 of September 15, 2019 "On Amendments and Additions to Certain Legislative Acts of the Republic of Uzbekistan in Connection with the Improvement of the System of Psychiatric Care" [4], No. ZRU-587 of December 6, 2019 "On Amendments and Additions to Certain Legislative Acts of the Republic of Uzbekistan in Connection with the Further Strengthening of Guarantees of Children's Rights" [5], and No. ZRU-735 of December 7, 2021 "On Amendments and Additions to Certain Legislative Acts of the Republic of Uzbekistan in Connection with the Further Improvement of the System for Ensuring Guarantees of Children's Rights" [6].

The adoption of these laws has further strengthened the legal framework for ensuring the creation of necessary conditions to protect individual rights and freedoms during interrogation, and to prevent the use of torture and other cruel, inhuman, or degrading

treatment and punishment. However, it should be noted that an analysis of the norms regarding the procedure for conducting interrogations in the Criminal Procedure Code revealed a number of legal gaps. Additionally, an analysis of the work carried out to study the current state of interrogation practices and judicial-investigative procedures showed that there are still several unresolved problems in this area.

Before discussing the existing problems in conducting interrogations, it is advisable to categorize them into a specific system. In our opinion, it would be appropriate to divide the problems in judicial and investigative practice related to current interrogation procedures into the following two categories:

- 1) practical problems related to conducting interrogations;
- 2) theoretical problems related to conducting interrogations.

Practical problems related to conducting interrogations include summoning the person to be interrogated to the interrogation site, mandatory bringing of the person in cases of refusal to appear, and in short, issues arising in the process of preparing for the interrogation, during its conduct, as well as in the process of formalizing its results after completion. Moreover, these problems include the lack of knowledge, experience, skills, and abilities due to the fact that most investigators currently serving in investigative offices are very young and inexperienced, and there is a shortage of experienced staff who should mentor them.

Theoretical problems related to the conduct of interrogative investigative actions include gaps, misunderstandings, and contradictory situations in the norms of the law and subordinate legal acts regulating the process of procedural and legal formalization of the grounds, types, procedure, and results of conducting this investigative action.

If these problems in the conduct of interrogative investigative actions are not analyzed and resolved in a timely manner, then the results of interrogation, which are the most frequently conducted investigative actions in the future and are considered an important and effective tool for gathering evidence, will destroy the possibilities of using them in the process of proof, and the obtained information will be considered unacceptable evidence in the future. The most negative aspect is that the norms of the Criminal Procedure Code are interpreted differently and applied differently. In short, shortcomings in investigative, prosecutorial, and judicial practice can also lead to legal nihilism, a violation of legal consciousness [7].

Therefore, it is necessary to timely analyze existing errors and shortcomings, problems, and eliminate them through the improvement of legislative norms. However, the decision of the President of the Republic of Uzbekistan

Approved by Decree of the President of the Republic of Uzbekistan dated January 28, 2022 No. UP-60

The 14th goal of the "Strategy for the Development of New Uzbekistan for 2022-2026," titled "Ensuring the rule of law and constitutional legality, as well as defining human dignity as the main criterion of this process," outlines a number of tasks, such as the consistent continuation of the policy of improving criminal, criminal procedural, and criminal enforcement legislation, the widespread introduction of the principle of humanism into the system of criminal punishments and their execution.

Based on the foregoing, let's move on to the current state of interrogative investigative actions and proposals aimed at discussing some errors and shortcomings, problems identified as a result of the analysis of judicial and investigative practice, and improving the legislation on their elimination, which should be paid special attention to.



It is known that the Uzbek language has two levels that are independent of each other: official written and unified (not to be confused with literary language) and living colloquial language [9]. Even in very close villages, people can speak different dialects.

Dialect is a type of colloquial language that is used as a means of direct communication in a community of people located in a certain limited territory and is distinguished by a relatively holistic linguistic system, is the lower level of the colloquial language, it has a broader meaning than dialect, and consists of a set of dialects. There are three main dialects in the Uzbek language: the Karluk-Chigil-Uyghur dialect, the Kipchak dialect, and the Oghuz dialect [10].

Since the population speaks various dialects, the testimony of the interrogated person included in the interrogation protocol is subjected to subjective literary processing by the investigator. In this process, the method of recording the testimony of the investigator in the protocol is formed. In this case, conditions arise that work both in favor and at the expense of the interrogator and the subjects. On the one hand, the interrogator is more likely to bring the logical content of the testimony to the desired form, and on the other hand, the interrogated person may change their actual testimony in court in their own interests and claim that they did not actually give such testimony during the investigation, and the investigator adapted his statements to himself. In both cases, the criterion of justice may be violated and the evidence obtained may be recognized as inadmissible. Therefore, the Decree of the President of the Republic of Uzbekistan No. UP-5268 of November 30, 2017, "On Additional Measures to Strengthen Guarantees of the Rights and Freedoms of Citizens in Judicial and Investigative Activities" [11] stipulates that the use of information collected in serious violation of procedural legislation or using illegal methods as evidence in criminal cases is not allowed.

Therefore, the use of scientific and technical means during interrogation contributes to a more complete and objective integration of information obtained during questioning and influences its effectiveness. The use of video and audio recordings enables a complete and accurate reproduction of the interrogated person's testimony, including their intonation and speech characteristics. This allows for an objective assessment of these statements. Moreover, the awareness that audio and video recordings can be replayed in court compels the interrogator to perform every action in accordance with the law. It also serves to deter the interrogated person from changing their testimony for various objective and subjective reasons. Additionally, it is a means of safeguarding the rights and interests of the interrogated person during the investigation. The interrogator is forced to refrain from various attempts to influence the interrogated person, realizing that the investigative action is being recorded through video and audio.

Therefore, the Decree of the President of the Republic of Uzbekistan dated April 18, 2017, No. PP-2898 "On Measures to Fundamentally Improve the Activities of Internal Affairs Bodies in the Field of Crime Investigation" [12] was timely.

In accordance with the decree, special rooms have been created in internal affairs bodies equipped with systems for stenography of the interrogation process, video surveillance, as well as audio and video recording of investigative actions. Furthermore, this decree prohibited the use of testimony from witnesses, victims, suspects, accused persons, defendants, expert opinions, physical evidence, audio and video recordings, and other materials obtained in violation of procedural law as evidence [13]. Also, in accordance with this decision, it was prohibited to use as evidence the testimony of a witness, victim, suspect,



accused, defendant, expert opinion, material evidence, audio and video recordings, and other materials obtained in violation of the norms of procedural legislation [13].

However, Part 4 of Article 91 of the Criminal Procedure Code does not include interrogation in the list of procedural actions that must be recorded on video. Only Part 2 of Article 106 indicates that during the interrogation process, along with keeping a record, sound recording, video recording, and filming can be used. Despite this, investigators are currently recording investigative actions through video for security reasons, to ensure a deeper understanding of the interrogated person's obligation to give testimony, to deter false testimony, and to prevent future intentions to change statements. However, since the legislator has not established specific criteria and procedures for video recording interrogations, everyone is implementing this in different ways, according to their own methods. For example, some warn the interrogated person that their testimony will be video recorded and indicate this in the protocol, while others limit themselves to verbal warnings. Unfortunately, since there is no provision on this matter in the Criminal Procedure Code, we cannot assess either case as "correct" or "incorrect."

In our opinion, before interrogation, the person to be questioned must be warned about the use of audio and video recordings during the process. The audio and video recording should reflect the entire interrogation process and contain complete testimony from the persons being interrogated. After the preliminary investigation is completed, the audio and video recordings must be sent to the court together with the case file in a sealed form.

When examining the experiences of neighboring countries with similar legislation in this regard, it became clear that Article 219 of the Criminal Procedure Code of the Republic of Kazakhstan, Article 118 of the Criminal Procedure Code of the Republic of Turkmenistan, and Article 194 of the Criminal Procedure Code of the Kyrgyz Republic are titled "Use of Audio and Video Recording Equipment During Interrogation." Unlike the others, Article 971 of the Criminal Procedure Code of the Republic of Tajikistan is titled "Use of Audio and Video Recording Equipment During Interrogation and Other Investigative Actions." In the Criminal Procedure Code of the Russian Federation, the procedure for using audio and video recording equipment during interrogation is detailed in Article 190, titled "Interrogation Protocol." Notably, all of the aforementioned codes clearly state what circumstances should be included in the protocol if audio and (or) video recordings were used during the interrogation.

In our opinion, the interrogation protocol must indicate that audio or video recording equipment was used during interrogation, that the person being interrogated was informed about this; information about the technical means used; conditions for audio or video recording; information about the reason and duration if audio or video recording was suspended; statements of the interrogated person regarding the audio or video recording of their testimony; confirmation that the audio and video recordings were played back to the interrogated person; and confirmation by the interrogated person and the investigator that the protocol and audio or video recording were carried out correctly.

In our opinion, it was appropriate and permissible to use the word "may" in relation to this investigative action, unlike other investigative actions. However, in our opinion, the Criminal Procedure Code should stipulate that individuals who have reliable information about the possibility of giving false testimony; persons accused of committing especially serious crimes; persons who cannot come to court in the future; when being questioned with the

participation of an interpreter; when a person confesses their guilt, and in other similar cases, the use of these means should be mandatory, and the Resolution of the Plenum of the Supreme Court of the Republic of Uzbekistan dated August 24, 2018 No. 24 "On Certain Issues of Applying the Norms of

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## OPPORTUNITIES FOR DEVELOPING SPIRITUALITY OF FUTURE MUSIC TEACHERS

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**Annotation:** This article discusses the issues of developing the spirituality of future music teachers. The educational and cultural impact of music education, the directions of enriching the spiritual world of a person through the art of music are analyzed. Also, innovative educational technologies, effective methods of harmonizing national and universal values in increasing the spiritual level of music teachers are shown. The article studies the theoretical and practical aspects of developing spirituality in pedagogical processes and reveals its importance in the future education system.

**Keywords:** music teacher, development of spirituality, educational impact, music education, national values, innovative technologies, cultural heritage, pedagogical process.

### Introduction.

In today's era of globalization, the spiritual upliftment of society has become one of the pressing issues of the education system. The issue of forming and developing the spirituality of future music teachers is especially important. Music is a powerful tool that enriches the spiritual world of a person, has cultural and educational significance. Through the art of music, there is an opportunity to develop such qualities as kindness, patriotism, and respect for national values.

In the process of reforming the education system in Uzbekistan, the spiritual development of the younger generation through music education has been identified as one of the priority tasks. It has become necessary to enrich not only the professional qualifications of future music teachers, but also their spiritual world. This task requires not only a deep study of the national musical heritage, but also the integration of universal values in the process of music education.

This article is devoted to the analysis of the possibilities of developing the spirituality of future music teachers, which is analyzed on the basis of innovative pedagogical approaches and educational opportunities of musical art in education.

### Pedagogical opportunities:

The following pedagogical opportunities are considered effective in developing the spirituality of future music teachers:

Educational impact through musical-educational content: Formation of national pride and respect for universal values in students through the introduction of educational programs based on national and world musical heritage. Enrichment of the inner world of students through in-depth analysis of the spiritual, aesthetic and artistic content of musical works.

Application of innovative pedagogical technologies: Making music lessons more interesting and effective through digital educational platforms, interactive methods and visual aids. Development of individual musical creativity of students using virtual music laboratories.

Integrated approaches: Expanding the worldview of the individual by teaching music in conjunction with other disciplines, including history, literature, and philosophy. Developing multicultural perspectives in students by teaching them music from around the world along with national music.

Organization of practical activities: Increasing responsibility and professional motivation in students by organizing musical and educational events during their internships at schools. Developing students' creative potential through active participation in cultural and spiritual events, concerts, and music festivals.

Leadership in the process of spiritual education: Forming a desire for high spirituality in students by setting an example for the teacher. Expanding students' spiritual knowledge by introducing them to national and international musical traditions. These pedagogical opportunities are aimed at ensuring that future music teachers achieve a high level not only professionally, but also spiritually.

### **Literature analysis:**

Many scientific and methodological sources are of great importance in the development of the spirituality of future music teachers. In this direction, national and foreign studies, literature on pedagogical and musical sciences have been studied. The views of Uzbek pedagogical scientists A. Avloniy, F. Khodjayev, and other thinkers on education reveal the educational potential of music education. In particular, A. Avloniy expressed many reasonable ideas about the role of education and upbringing in the spiritual development of society. Sources that illuminate the connections between music education and spirituality in modern Uzbek pedagogy.

The issues of music education are widely covered in world pedagogical scientific schools. The views of scientists such as J. Dewey, C. Freinet on the importance of artistic education and musical art in the educational process provide important practical results. In particular, the methodology for developing students' musical worldview through the systems of G. Orff and Z. Kodai helps to more deeply study the educational potential of music education. The studies of P. Abelson and L. Vygotsky on the positive impact of music education on human spirituality explain the psychological aspects of the musical and spiritual development of the individual.

Research conducted on the history of national and world musical culture creates great opportunities for the development of the spirituality of the younger generation through the art of music. In particular, works written on teaching national values through melodies set to Navoi's ghazals are an important source in this regard. The scientific and theoretical foundations identified as a result of the analysis of the literature serve as an important foundation for creating an effective pedagogical model for the development of the spirituality of future music teachers. Also, the integration of national and foreign literature creates a basis for further expanding the educational potential of music education.

### **Discussion**

The development of the spirituality of future music teachers is recognized as one of the urgent issues of today's educational process. The analysis shows that the art of music serves not only as an artistic aesthetic education, but also as an important tool for the spiritual upliftment of the individual. As a main component of spiritual upliftment, the harmonization of national musical culture, the historical heritage of the people and universal values takes an



important place in the educational process. The pedagogical opportunities identified during the study show that:

Providing spiritual education through national music is one of the most effective ways to form national pride and historical memory in future music teachers. In particular, in the process of teaching folk melodies and traditional instruments, a sense of respect for the values specific to their nation is formed in students.

The use of innovative pedagogical technologies serves to modernize music education. For example, by interactively presenting national and international musical materials using digital platforms, it is possible to improve the musical level of students and enrich their spirituality.

The use of international experience and methodological approaches expands the musical worldview of future music teachers. For example, the systems of Z. Kodaly and G. Orff help to develop the creative abilities of students, as well as to raise their personal spirituality.

Also, the role of the teacher's own example in the formation of spiritual and moral qualities in future teachers is of great importance. The teacher's role model through his own educational and educational activities directs students towards spiritual maturity.

As a result of the discussion, it was found that the integration of national and international approaches in music education, the use of innovative technologies, as well as the expansion of creative activities are of great importance in increasing the spirituality and professional competence of future music teachers. The successful implementation of these factors makes it possible to increase the effectiveness of the educational process and contribute to the spiritual upliftment of society.

### Conclusion

Developing the spirituality of future music teachers is one of the important tasks of the modern education system. The results of the study show that in the process of music education, it is possible to ensure the spiritual elevation of the individual by harmonizing national and universal values, using innovative pedagogical approaches.

When national musical culture is incorporated into the educational process, historical memory and national pride are formed among students and teachers. In this regard, teaching and analyzing folk melodies and classical music samples is one of the effective methods of developing the spirituality of future teachers. Also, the use of international experiences and advanced methodologies of music education, for example, the systems of Z. Kodaly and G. Orff, is of great importance in expanding the musical worldview and ensuring personal development.

In conclusion, music education is an effective tool not only for improving a person's professional qualifications, but also for enriching his inner world and forming high spirituality. By actively implementing this approach in the educational process, it is possible to achieve the spiritual upliftment not only of future music teachers, but also of society as a whole. Therefore, the issues of harmonizing national values, modern pedagogical technologies and creative activity in the educational process should be considered as a priority task.

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## RESULTS OF THE STUDY ON THE WEAR RESISTANCE OF STONE CRUSHER WORKING PARTS

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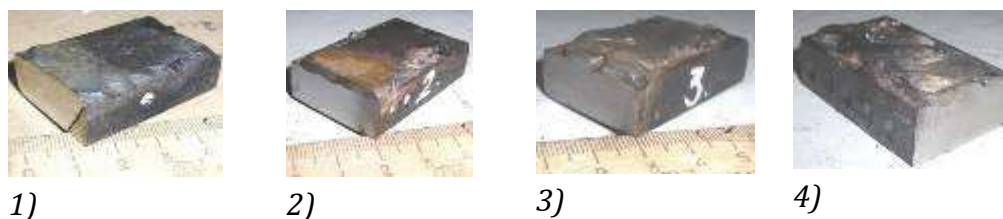
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In our country, comprehensive measures are being implemented to increase the volume of road construction, building, excavation in mining, processing of rocks, and loading and transportation works. These measures aim to reduce material and energy costs of production and to effectively use widely applied technical means. Certain results are being achieved in these areas.

Notably, scientific works and research by Uzbek scientists such as U.A. Ikramov, T.I. Askarhodjaev and their students, and S.M. Kodirov, K.H. Makhkamov, K.Z. Kosimov, M.U. Turaev, R.J. Tojiev, R.U. Shukurov, A. Ruzibaev, Sh.H. Yuldashev, G.D. Ulugov, and others have explored issues related to increasing the durability, reliability, and wear resistance of working parts of road construction, building, and mining machinery. However, these studies have not sufficiently examined existing technologies for enhancing the service life of the working parts of machinery used to crush rocks for high-quality building materials. Additionally, they have not adequately addressed the use of promising materials with sufficient hardness and wear resistance, as well as local raw materials, to improve the resource of the working parts.

Taking the above into account laboratory studies were conducted to investigate the composition, structure, hardness, and wear resistance of materials that can improve the wear resistance of existing working parts of stone crushers.

Samples from the working parts of stone crushers used in our country were selected for the laboratory studies (Figure 1).



**Figure 1: Samples taken from the working parts of Stone Crushers**

The main equipment used for preparing and studying the samples is listed below:

1. The working surfaces of the samples were ground using the MY1224 machine (Figure 2).
2. The chemical composition of the samples was studied using the SPECTROLAB optical emission spectrometer (Figure 3).
3. The microstructure of the metals was examined using the A13.0201-V2 metallographic microscope (Figure 4).
4. The hardness of the samples was determined using a Rockwell press in accordance with the GOST 23677-79 standard.
5. The wear resistance of the samples was tested using an abrasive wear testing device (Figure 5).



**Figure 2: MY1224 machine for grinding samples.**



**Figure 3: Exquis T4 optical emission spectrometer.**



Figure 4: A13.0201-B2 metallographic microscope.



Figure 5: Device for testing samples for abrasive wear.

**Results Obtained.** Below are the results of the chemical composition study of samples taken from the materials used to manufacture the working parts of stone crushers in our country (Table 1).

**Table 1**

**Chemical Composition of Samples**

№	Намуна материали маркаси	Chemical element quantities, %										
		C	Si	Mn	Cr	Ni	Cu	B	Ti	W	Zn	Fe
1.	Sample 1	1.1	0.29	9.5	2.1	0.05	0.06	-	0.08	-	-	86.7
2.	Sample 2	0.94	1.05	12.1	1.6	0.51	0.16	-	0.01	-	-	83.2
3.	45Г	0.43	0.32	0.86	0.05	0.06	0.12	-	-	-	-	88.1
4.	110Г13Л Hadfield Steel	0.9- 1.4	0.8- 1.0	11.5-15	1.0	1.0	0.30	0	0.03	0	0	82
5	ЧХ22	3,56	1,89	1,86	18,09	0,19	0,19	-	-	-	-	74,5

### Results of Hardness Study of Samples

The determined hardness of the samples is presented in the following Table

**Table 2**

**Average Hardness of Samples**

Samples	110G13L Hadfield Steel	Sample 1 (China)	ChX22 Sample	45G Steel (Untempered)	45G Steel (Tempered)
Hardness HRA(HRC)	75 (49)	68 (37)	70 (41)	65 (31)	79 (56)

It is well-known that the primary cause of the rapid wear of stone crusher working parts is abrasive wear, which occurs due to friction against rocks. One of the main ways to combat the abrasive wear of machine parts is to ensure that the working surface has a hardness greater than the abrasive material while maintaining the surface's durability and toughness [4, 5, 6].

To determine the reasons behind the high hardness of the above-mentioned samples, their composition was studied. It was found that samples with high hardness contain larger amounts of carbide-forming elements such as carbon, chromium, silicon, and manganese compared to others. Literature indicates that the hardness of chromium carbides formed with carbon is significantly higher than the hardness of abrasive materials like stone and sand. Additionally, it is well-known that the presence of up to 15% manganese in the steel used for the working parts of machinery significantly increases the impact strength and toughness of the steel. This effect, known as Hadfield steel, occurs because the surface layer of the steel work-hardens when struck by hard rock during operation. As a result, the surface hardness increases from 60-62 HRA to 80-82 HRA, greatly enhancing its wear resistance. Based on these findings, it can be concluded that achieving the required hardness of the working parts of stone crushers will ensure their high resistance to abrasive wear.

### Results of Wear Testing of Samples from Stone Crusher Working Parts

The wear testing program for the samples considered factors such as the applied pressure force, testing time, friction speed, and abrasive material consumption. Quartz sand was used as the abrasive material. The wear amount was determined by the difference in the mass and dimensions of the samples before and after the test.

A non-tempered 45-grade steel sample was used as the reference sample. The selected samples were tested for wear, and the results were compared with the reference steel indicators.

The wear testing of the samples was conducted under conditions that simulated the pressure force and friction speed corresponding to the stone crushing process. The samples were weighed before and after the test using a digital MH-696 balance with an accuracy of 0.01 grams. The wear rate of the samples was determined based on the amount of wear per unit time.

$$\varepsilon_{one} = \frac{m_{start} - m_{end}}{t}, \quad (1)$$



In this context:  $m_{\text{start}}$  - is the mass of the sample before the experiment;  $m_{\text{end}}$  - is the mass of the sample after the experiment.  $t$  - is the duration of the experiment.

Since the wear amount expressed in terms of mass for different materials may not be entirely accurate, it is convenient to express the wear amount relative to the material's density, i.e., in terms of volume.

$$\Delta_n = \Delta_m / \rho \cdot 1000 \quad (2)$$

In this context:  $\rho$  is the density of the material in  $\text{kg/m}^3$  (for example, the density of steel is  $7800 \text{ kg/m}^3$ ).

Each sample was tested for wear in an abrasive environment using quartz sand as the abrasive medium. The tests were conducted for 2 hours under varying loads of 10N, 20N, 30N, 40N, and 50N. To ensure the reliability of the results, each test was repeated 5 times.

During the tests, the pressure force applied by the abrasive particles on the friction surface was gradually increased. The test results are presented below.

1. The initial hardness of the standard 110G13L steel bucket tooth sample is 60-62 HRA, and its hardness after impact work hardening is 80-82 HRA. The total wear amount of this sample was found to be 0.32 g.
2. The hardness of the 205-70-19570 sample manufactured in China is 73-75 HRA. The total wear amount of this sample was found to be 0.39 g.
3. The hardness of the tempered 45G steel sample is 77-79 HRA. The total wear amount of this sample was found to be 0.45 g.
4. The hardness of the ChX22 cast iron sample is 68-70 HRA. The total wear amount of this sample was found to be 0.53 g.
5. The hardness of the untempered 45G steel sample is 63-65 HRA. The total wear amount of this sample was found to be 0.89 g.

Table 3  
Wear Rates of Samples

No	Sample material	Wear amount (g)	Relative Wear Resistance
1	110G13L Steel Sample	0,32	2,8
2	205-70-19570 Sample (China)	0,39	2,3
3	Tempered 45G Steel Sample	0,45	2,0
4	ChX22 Cast Iron	0,53	1,7
5	Untempered 45G Steel	0,89	1,0

The test results indicate that, compared to untempered 45 steel, the wear resistance of the other samples is 1.7 to 2.8 times higher.

### Conclusion

To increase the wear resistance of the materials used in the working parts of stone crushing machines, which are widely used in the construction of buildings, structures, and roads, it is necessary to enhance their hardness in addition to their strength and impact toughness. The studies conducted in this direction have shown that it is possible to improve the wear resistance of the working parts of stone crushing machines by optimizing the amount of

alloying elements such as chromium and manganese in steel and cast iron materials and through thermal treatment.

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## THE LANGUAGE OF ARTISTIC WORKS: STYLISTIC FEATURES AND EXPRESSIVE MEANS

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**Abstract:** The article examines the role of stylistics in the language of literary works, focusing on the use of syntactic figures and tropes (figurative meanings) in artistic discourse. This material is useful for students and specialists in the field of stylistics. Social, political, and cultural changes in modern life have an impact on language, requiring new approaches to the language of literary works and the study of stylistics. The article is divided into theoretical and practical sections, analyzing various stylistic types and the use of linguistic tools in literary texts. The connection between stylistics and the language of literary works, as well as how language elements are employed in literary texts, is thoroughly discussed in the article.

**Keywords:** Stylistics, language of literary works, syntactic figures, metaphors, literary studies, language tools, speech culture, poetic style, novel, poem.

This article discusses certain aspects of the use of language elements in artistic discourse, including "syntactic figures" and "tropes," serving as special educational material for students in these fields. Additionally, it can be utilized by specialists dealing with stylistic issues.

Modern life is introducing many innovations. The scope of words and phrases used in daily social-political, economic, cultural-spiritual, legal, and scientific communications is changing and expanding. Furthermore, the rules, arrangements, and methods of using these elements are becoming more diverse. Such changes and innovations are manifesting in all areas, including the subjects taught in higher education institutions.

This process began with the updating of state education standards, which led to the revision of curricula and course programs. The review of previously created textbooks and aligning their content with global standards has become a priority. In higher education institutions, especially in philology and journalism faculties, the use of artistic discourse is considered one of their main tasks. Up to this point, significant works have been published, such as "Stylistics of the Uzbek Language" by A. Shomaqsudov, I. Rasulov, R. Qo'ng'urov, and H. Rustamov in 1953, and "Fundamentals of Speech Culture and Stylistics" by R. Qo'ng'urov, E. Begmatov, and Y. Tojiyev in 1992, which focus primarily on linguistic concepts. The "language of artistic works" serves as a material for constructing artistic works based on a thorough analysis of numerous factual materials.

Since independence, the increase in the number of newspapers and magazines has necessitated the development of journalistic language in accordance with new demands in the field of stylistics, leading to the creation of textbooks and guides on the language of artistic works that meet contemporary requirements. The publication of this article showcases the incorporation of new information and innovative methods.

This article consists of two interrelated parts: theoretical and practical. The theoretical part deals with the stylistics of speech and its manifestation as the language of artistic works. The practical side expresses the peculiarities of using materials characteristic of conversational, formal, scientific, journalistic, and artistic styles in literary works.

Stylistics is derived from the Greek word "stylos," meaning "a pointed stick made of bone." Ancient Greeks would write on wax tablets with a pointed stick. If they made a mistake, they would smooth out the wax with the flat end of the stick and correct it with the pointed end.

The word "style" has given rise to terms like "stiletto" (a thin dagger) and "stilo" (a fountain pen). Historically, the term "style" began to be used to refer to speech style or manner. Horace famously stated, "If you wish to write something worthy of reading, change your style frequently. If you cannot impress narrow-minded people, do not despair; be content with those who understand you at least a little." This expression about frequently changing one's style later became proverbial among the Greeks.

Thus, to write something that does not resonate with people's hearts but provides useful information, one must frequently change their style. Explanatory dictionaries provide several meanings for the word "style."

The presentation on the word "style" and its meanings is undoubtedly of great importance in the fields of literary studies and linguistics. The meanings of the word "style" provided in D.N. Ushakov's "Explanatory Dictionary of the Russian Language," as well as the explanations in the explanatory dictionary of the Uzbek language, demonstrate how this word is used in various contexts.

1. A collection of artistic expressions: This refers to the distinctive features of a work of art or an artist, meaning that style represents a general system of artistic expressions. In this sense, style can express an Eastern style in architecture or visual arts. Such a broad understanding allows one to see artistic expressions and works of art as a whole.

2. Ideas specific to a literary work and its author: Here, style refers to the system of an author's ideas and linguistic tools related to literary genres or directions. As illustrated by the styles of writers such as A. Qahhor or Oybek, each creator possesses a unique style through which they express their thoughts.

3. Styles of expressing thoughts: In this sense, style indicates how thoughts are expressed. For example, it can refer to an elevated or concise style. The elevated style in G'. G'ulom's poetry and the revealing phrases in A. Qahhor's works further deepen this meaning.

4. Use in relation to time: This meaning connects style with time. Just as it can be used concerning the year of melody, this meaning is not directly related to literature and language.

Additionally, the concept of stylistics is also shaped by this second meaning. Stylistics is the study of literary works and authors' styles through the system of language and artistic expressions. It allows for a deep analysis of the writer's uniqueness and the linguistic tools in their works.

Such analysis is important not only in literary studies but also in linguistics, as it reveals the connection between language and art. Each creator expands the possibilities of language and introduces new artistic expressions during the process of creating their style. Therefore, the concepts of style and stylistics play a significant role in literature and art.

In the works of A. Qahhor, significant attention is given to the concepts of linguistics. The "language of artistic works" is manifested based on the analysis of a vast amount of factual

material, where linguistic tools serve as the material for the construction of artistic works. Following independence, the increase in the number of newspapers and magazines has necessitated the development of the language of the press, requiring the creation of textbooks and guides on the language of artistic works that meet new demands. The publication of this article demonstrates the opportunity to utilize new information and innovative methods.

With his comedies "Shohi Sozana" (1951), "Og'riq Tishlar" (1954), "Tobutdan Tovush" (1962), and "Ayajonlarim" (1967), he made a significant contribution to the development of Uzbek dramaturgy. In particular, in the play "Shohi Sozana," the playwright skillfully explores the theme of land reclamation and cultivation.

The language of artistic works is one of the interrelated fields of literary studies and linguistics, each holding its own significance. This language is important not only as a means of communication but also as a form of aesthetic, cultural, and artistic expression. The language of artistic works plays a decisive role in fully revealing the genre, style, and content of a work. At the same time, it is one of the main tools for constructing the aesthetic world created by the work.

One of the distinctive features of artistic language is its multi-layered nature and the diversity of expressive means. Unlike everyday language, it widely employs metaphors, epithets, comparisons, symbols, and other artistic devices. These tools help evoke the reader's aesthetic feelings and understand the inner essence of depicted events or characters. Moreover, through artistic language, the author's worldview, philosophy, and emotional experience are reflected.

The language of artistic works is considered an important factor that defines a writer's style. Each writer has their own unique rhythm of speech, descriptive tools, and syntactic characteristics. For example, G'afur G'ulom's colloquial and rich expression, Abdulla Qodiri's skillfully constructed descriptions, or O'tkir Hoshimov's lyrical and sincere style set their language apart from that of other writers.

Artistic language serves as the primary tool for creating character images. The inner world, character, and emotions of characters are revealed through their speech. For instance, a character's dialect may indicate their origin or social status. Additionally, through artistic language, the place, time, and atmosphere depicted in a work are enlivened. These elements bring the reader closer to the world of the work and influence their internal experiences.

Furthermore, through artistic language, the author expresses their attitude towards society. Especially in modern artistic works, language is used as a means to reveal social issues, critique them, or draw the reader's attention to a particular problem. For example, the expressive means employed by Cho'lpon and Fitrat during their time played a crucial role in promoting ideas of national awakening and social renewal.

In conclusion, the language of artistic works is a complex tool that surpasses ordinary speech, providing deep meaning and aesthetic pleasure. It allows the reader to enter the depicted world and express the author's goals and ideas in a unique form. Therefore, studying artistic language is essential not only for understanding the value of a work as an art piece but also for comprehending the development of national culture and language.

Language serves as the foundation of artistic expression, providing the tools necessary for authors to convey their thoughts, emotions, and cultural narratives. In literature, the language employed is not merely a means of communication but an intricate system that shapes the reader's experience and interpretation of the text. This relationship between



language and art has been a subject of extensive study in fields such as linguistics, literary theory, and cultural studies.

One of the primary functions of language in artistic works is its ability to evoke imagery and emotion. Authors utilize various linguistic devices—such as metaphors, similes, and personification—to create vivid pictures in the minds of readers. For instance, in the poetry of John Keats, the use of rich imagery and sensory details transports readers to lush landscapes, allowing them to experience the beauty and transience of life. This evocative power of language is crucial in establishing an emotional connection between the reader and the text.

Moreover, the structure of language itself plays a significant role in shaping narrative style and character development. Different authors have distinct linguistic styles that reflect their individual voices and perspectives. For example, Virginia Woolf's stream-of-consciousness technique allows readers to delve into the inner thoughts of her characters, creating a profound sense of intimacy and immediacy. Such stylistic choices not only enhance the narrative but also contribute to the thematic depth of the work.

In addition to individual expression, language also serves as a vehicle for cultural commentary. Through their choice of words and expressions, authors can critique societal norms and provoke thought about pressing issues. In works like George Orwell's "1984," the manipulation of language becomes a central theme, illustrating how language can be used as a tool for control and oppression. Orwell's exploration of Newspeak highlights the relationship between language and power, emphasizing how linguistic structures can shape reality and influence thought.

The evolution of language in artistic works also reflects broader societal changes. As cultures evolve, so too does their language, leading to new forms of expression that resonate with contemporary audiences. The emergence of postmodern literature, characterized by its playful use of language and fragmentation, reflects a shift in cultural paradigms and challenges traditional narrative forms. Authors like Thomas Pynchon and Don DeLillo employ complex linguistic structures to mirror the chaos and complexity of modern life, inviting readers to engage with the text on multiple levels.

Furthermore, linguistic diversity enriches artistic expression by introducing varied cultural perspectives. Multilingual authors often blend languages within their works, creating a unique tapestry that reflects their diverse backgrounds. This practice not only enhances the authenticity of character voices but also challenges readers to confront their own linguistic assumptions. Works by authors such as Jhumpa Lahiri and Salman Rushdie exemplify how multilingualism can deepen thematic exploration and broaden the scope of narrative.

In conclusion, the language of artistic works is a multifaceted tool that transcends mere communication. It serves as a means of evoking emotion, shaping narrative structure, critiquing society, and reflecting cultural evolution. Understanding the significance of language in literature allows readers to appreciate the artistry involved in crafting texts that resonate across time and space. As we continue to explore the interplay between language and art, we uncover deeper layers of meaning that enrich our understanding of both literature and the human experience.

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## THE GENESIS OF CONCEPTUAL IDEAS FOR THE FORMATION OF AN INNOVATIVE EDUCATIONAL ENVIRONMENT

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**Annotatsiya:** Mazkur maqolada, innovatsion ta'lim muhitini yuzaga keltirish, zamonaviy ta'limda kompleks o'zgarishlarni o'zida aks ettirgan innovatsion loyihalarni joriy etish, professor-o'qituvchilarning innovatsion faoliyatiga bo'lgan kasbiy kompetensiyasini zamon talabi nuqtai nazaridan o'zgartirish, zamonaviy ta'lim samaradorligi mezonini ishlab chiqish hamda innovatsion ta'lim muhitini shakllantirishning konseptual g'oyasi davlat ta'lim siyosatini zamonaviy kompleks taraqqiyot traektoriyasiga asoslanishi lozimligi ilmiy nuqtai nazardan tahlil etilgan.

**Kalit so'zlar:** Innovatsiya, ta'lim, xalqaro standart, ta'lim tizimi, barqaror innovatsion rivojlanish, zamonaviy mexanizm, taraqqiyot traektoriyasi, zamonaviy o'quv jarayon talab va tamoyili, milliy va xalqaro standart uyg'unligi, assemilyatsiya jarayoni, mobil transformatsion omillar, konsepsiya.

**Аннотация:** В данной статье раскрывается концептуальная идея создания инновационной образовательной среды, внедрения инновационных проектов, отражающих комплексные изменения в современном образовании, изменения профессиональной компетентности профессорско-преподавательского состава к инновационной деятельности с учетом потребностей времени, развития критерием эффективности современного образования, а также создания инновационной образовательной среды, с научной точки зрения проанализирована необходимость базирования государственной образовательной политики на траектории современного комплексного развития.

**Ключевые слова:** Инновации, образование, международный стандарт, образовательная система, устойчивое инновационное развитие, современный механизм, траектория развития, требования и принципы современного образовательного процесса, гармония национального и международного стандарта, процесс ассимиляции, мобильные факторы трансформации, концепция.

**Abstract:** In this article, the conceptual idea of creating an innovative educational environment, introducing innovative projects that reflect complex changes in modern education, changing the professional competence of professors and teachers for innovative activities in terms of the demands of the times, developing a criterion of modern educational efficiency, and creating an innovative educational environment the need to base the state education policy on the trajectory of modern complex development was analyzed from a scientific point of view.

**Key words:** Innovation, education, international standard, educational system, sustainable innovative development, modern mechanism, development trajectory, requirements and principle of modern educational process, harmony of national and international standard, assimilation process, mobile transformation factors, concept.

The information society is characterized by changes and developments in all spheres, the emergence of modern advanced ideas and projects and their rapid implementation in real life, the development of innovative processes in all spheres of socio-cultural life.

In today's world, innovations, reflecting the general essence of the cultural process of society, are becoming a strategic goal for the development of the innovative potential of socially organized systems and serve as a driving factor for economic sectors. This process is characterized by a scientific model that is directly based on a clear system and has a stable development trajectory. The development of all spheres of society today and the determination and forecasting of a promising strategy for tomorrow are explained by the organization and coordination of the continuity of the educational process characterized by innovative factors.

From this point of view, the creation of a competitive economy, stable social infrastructure, a seamless cultural environment, a high spiritual worldview that drives society and ensures the coherence of activities, aligns them with the interests of the state and society, the systematic formation of innovative ideas and projects, and the inculcation of patriotic elements in the personality of the individual depend on how well the education organized today and the teachers and educational environment that implement it are integrated with modern innovations.

Indeed, the prospects for social development and cultural and spiritual stability, as well as promising economic growth in the 21st century world, largely depend on the state of the education system and its ability to meet the needs of the individual and society for high-quality educational services.

From this point of view, it is appropriate to revise state educational standards today and update the main elements of the educational process based on the requirements and principles of the modern educational process. This primarily requires modern educational content, its teaching technology, increasing funds to support non-standard education and liberalizing the legal framework, as well as aligning the interconnections between all elements of the education system with innovative factors, thereby displacing the existing authoritarian approach to education from the "life" of education.

This approach, requiring a change in the educational environment and the processes taking place in it, puts on the agenda the introduction of innovative projects that reflect complex changes in education, as well as the transformation of the professional competence of professors and teachers in innovative activities from the point of view of modern requirements, as well as the development of modern criteria for the effectiveness of education.

Today, the conceptual idea of forming an innovative educational environment is characterized by basing state educational policy on a modern complex development trajectory, organizing targeted education and an education system aimed at achieving high results that meet international standards, characterized by factors of sustainable innovative development, and the creation of its modern mechanisms.

From this point of view, the introduction of innovations in educational organizations should be accompanied by the introduction of concepts such as "new", "innovation" and "innovative process" and by paying attention to the essence of these concepts and approaches.

Innovation (Russian новшество) means a new, newly created and newly applied concept, while [2] (lat. novatio) means change, renewal.

The concept of innovation is analyzed in two approaches: broad and narrow. When applied in a broad format, it is characterized by a changed algorithm of activity, reshaping existing devices based on new technologies, replacing parts, changing designs, any qualitatively new additions and changes that affect the movement and function, as well as the characteristics of the product.

In a short-form analysis, innovation is explained by a previously non-existent novelty, new theoretical knowledge, new method and principle [2].

From this point of view, innovation is the basis of a scientific and technological revolution of a revolutionary nature for every era and society, and is considered an invention that sets in motion the driver of development.

An invention is the result of research into a new device, mechanism, tool, technology, method, etc created by man.[1]

Research is characterized by obtaining previously unknown information to science and humanity, and by bringing the information learned in the process of observing nature and society into a scientific system, clarifying the trajectory of combining its theoretical foundations with practical activities.

From this point of view, despite the understanding that discoveries and inventions are the result of research and are based on the fundamental basis of innovative analysis and approach, they are carried out by individual and group inventors (researchers). Also, this process has a high probability of occurring by chance, and the fact that it is described as the result of an approach in accordance with a scientific hypothesis indicates its innovative aspect. According to our scientific analysis and approach, innovations in all areas should be classified according to the object and subject of research. The main emphasis is on the effectiveness of the result obtained, the advantage and convenience of the change, and the time and energy saving of the process, as appropriate.

It is appropriate to base our scientific reasoning on the scientific views of T.I.Budaev on innovation. According to his point of view, innovation is the replacement of an old object (phenomenon) with a new one, characterized by innovation as a process and the resulting innovation.[1]

The concept of innovation was used in scientific research carried out in the 19th century, where it mainly meant the introduction of certain elements of knowledge into another, while the concept of innovation reflected in scientific research at the beginning of the 20th century was characterized by a new field of knowledge, non-standard approaches that emerged in science and technology, and technical changes in the field of material production.

In the 21st century, the concept of innovation has a broad meaning, characterized by changes and innovations that have occurred in all fields, and is the final result of creative activity, which includes the results of scientific and theoretical research and the compatibility of categorical qualities, national and international standards, and in a certain sense reflects the process of mutual assimilation, an improved technological process of concepts combined with mobile transformation factors.

The concept of innovation, as in all fields, is gaining its place in the field of education, becoming a driver of education, expressing the criteria for the emergence of educational



technologies in a new context, and serving as a basis for training mobile specialists necessary for the state and society.

In this regard, the scientific considerations of T.N. Remizova are of great importance. In her opinion, an "innovative" approach to managing the educational and training process is of great importance, characterized by the introduction of new things into the goals, content, methods and forms of education and upbringing, and serves as the basis for bringing the organization of joint activities of participants in the educational process to a new qualitative level.[3]

In our opinion, innovation is a purposeful change that introduces new approaches and stable elements into all areas, has scientific, theoretical and practical significance, and causes a transition of a certain system and process from one state to another.

It is inappropriate to apply the concept of innovation to processes related to changes in the life of the state and society, renewal and coordination of systems, reflection of the intersection between sectors in a new format, the emergence of functional tasks, new positions and structures, and optimization, and this situation is qualified by the concept of reform. From this point of view, it is appropriate to distinguish between the concepts of "reform" and "innovation", a comparative analysis of which is presented in Table 1.

Educational reforms are an approach in the form of a social project aimed at changing the content, structure, methods and forms of education, while carrying out changes and reconstruction without destroying the foundations of the existing social structure.

Reforms in the field of higher education create a healthy competitive environment in the market of educational services, introduce advanced standards of higher education, raise the content of higher education to a qualitatively new level, and create a system for training highly qualified personnel.

Also, educational reform involves the introduction of non-fundamental and normative changes and changes into this process, without affecting the functional foundations of the existing education system in society.

Innovation in the field of education is a pedagogical innovation aimed at developing educational methods, enriching and improving the quality of educational content, organizing the educational process, improving learning technologies and assessing them. Innovations in education are characterized by relevant and systematically self-organizing innovations that are promising for the evolution of education and have a positive impact on the development of all forms and methods of education. Also, innovations in education arise in the specific context of teaching, in improving the implementation of standard practices and introducing new practices, and are manifested in achieving quality learning outcomes, identifying problems arising in the educational process, and developing new methods for solving these problems.

Table 1

Reform	Innovation
Changing the dates of the study process in the educational system	Introducing new methodologies into the education system and learning process
Changing the equipment of educational institutions	Introduction of modern pedagogical technology to the educational process
Changing the duration of education	Applying elements of artificial intelligence

	to the educational process
Division of the educational process into bachelor's and master's degrees	Realization of specialist training system based on individual education technology in practice

In conclusion, the difference between reform and innovation is that while reform is carried out by government bodies on the basis of certain decisions, laws, and orders, innovation is developed and implemented by researchers, academics, and organizations operating in the science and technology system.

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## SOCIAL-PEDAGOGICAL ASPECTS OF ENSURING THE SAFETY OF LIFE OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN CONTINUOUS INCLUSIVE EDUCATION

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**Annotatsiya:** Mazkur maqolada alohida ta'limga ehtiyoji bo'lgan bolalarni hayot xavfsizligini ta'minlashning ijtimoiy pedagogik jihatlarini ilmiy nuqtai nazardan yoritilgan bo'lib, ta'lim jarayoni bilan bevosita bog'liq bo'lgan texnogen xususiyatli favqulodda vaziyatlar, tabiat hodisalariga munosib yondashish, informatsion g'oya va targ'ibotlarga qarshi kurash kontekstida o'quvchilarni favqulodda vaziyatlarning salbiy ta'siridan himoya qilish masalalarini psixologik-pedagogik jihatdan o'rganilgan hamda ilmiy mulohazalar berilgan.

**Kalit so'zlar:** Alohida ta'limga ehtiyoji bo'lgan bolalar, ruhiy va jismoniy, kognitiv faoliyat kamchiliklari, hayot xavfsizligi, uzluksiz inklyuziv ta'lim jarayoni, motivatsion omillar, o'quv jarayoni, tayyorgarlik darajasi va kasbiy rivojlanish qobiliyatlari, pedagogik-psixologik mexanizm, integratsiya, xavfsiz xatti-harakat.

**Аннотация:** В данной статье социально-педагогические аспекты обеспечения безопасности детей с особыми образовательными потребностями освещены с научной точки зрения, а образовательный процесс напрямую связан с чрезвычайными ситуациями техногенного характера, соответствующим подходом к природным явлениям, информативные идеи и рекламные акции. в контексте борьбы с ним изучены психолого-педагогические и научные заключения по вопросам защиты студентов от негативного воздействия чрезвычайных ситуаций.

**Ключевые слова:** Дети с особыми образовательными потребностями, психическое и физическое, дефицит познавательной активности, безопасность жизнедеятельности, непрерывный инклюзивный образовательный процесс, мотивационные факторы, образовательный процесс, уровень подготовки и профессионального развития навыков, педагогико-психологический механизм, интеграция, безопасное поведение.

**Annotation:** In this article, the socio-pedagogical aspects of ensuring the safety of children with special educational needs are covered from a scientific point of view, protecting students from the negative effects of emergencies in the context of man-made emergency situations that are directly related to the educational process, appropriate approach to natural phenomena, informative ideas and propaganda. psychological-pedagogical issues were studied and scientific opinions were given.

**Key words:** Children with special educational needs, mental and physical, cognitive activity deficits, life safety, continuous inclusive educational process, motivational factors, educational process, level of training and professional development skills, pedagogical-psychological mechanism, integration, safe behavior.

In every society where the human factor is glorified, the mechanism of social protection rises to the level of state policy and all factors of its implementation are aligned with the principles of humanism. Organization of the practical activities of children with mental and physical special educational needs is one of the important issues, and creating an effective educational environment in the process of professional training and personal development (taking into account age, gender and individual characteristics) to form their readiness for a safe life remains one of the demands of the time.

From this point of view, it is necessary to scientifically research the factors and sources of children with special educational needs to increase their motivation for practical activities, to encourage them, to develop their skills and abilities, to alleviate the deficiencies of cognitive activity, and to form individual typological characteristics.

Creating a healthy continuous educational environment for children with special educational needs, developing the appropriate knowledge, skills and qualifications to prepare them for certain fields and professions is an important social necessity in shaping their readiness for a safe life.

The educational and rehabilitation environment of continuous inclusive education in our society is organizationally, methodologically and technologically adapted to the specific needs of children with special educational needs, and creates conditions for developing vocational education programs, protecting their health, and implementing independent activities. The goal of this program is to further strengthen the information and socio-cultural space of a continuous inclusive educational institution.

This environment is the basis for full or partial compensation (compensation) of the limitations of the vital activity of children with special educational needs, allowing them to act as competitive specialists in the labor market.

In the vocational training of children with special educational needs, it is advisable to implement the educational process on the basis of:

- creating conditions for the development of the potential abilities of the individual (taking into account the general laws of the development of the personality of children with special educational needs with impaired physical and mental abilities and specific features);
- forming a barrier-free learning environment (differentiated and individually oriented approaches to children with special educational needs);
- ensuring the health of children with special educational needs;
- creating conditions for the theoretical and practical training of future specialists in the field of therapeutic physical education in combination with therapeutic and recreational activities and therapeutic exercises (medical, physical and psychological training);
- developing optimal methods of assisting in the development of professional rehabilitation of children with special educational needs;
- ensuring self-employment of children with special educational needs in a socialized environment (in classrooms, limiting isolated employment);
- special design of classrooms for children with special educational needs, creation of sanitary and hygienic conditions, organization of treatment and rehabilitation work;
- psychological assistance for children with special educational needs, socio-legal consultations, practical assistance in finding a job, solving social, household and socio-cultural issues related to the process of continuous education;



- strengthening pedagogical and psychological work on adapting children with special educational needs to social life and labor activity, as well as self-realization.

The orientation of children with special educational needs to practical activities requires the creation of a specialized material and technical base, including training classes in professional disciplines for visually impaired students and classrooms well-equipped with demonstration tools (models, raised tablets and tables), stands, technical equipment. Devices for connecting to social networks must also be adapted to the characteristics of their disease (personal computers, voice recorders, CD players). Also, all sources of professional and interdisciplinary cycles for each child with special educational needs should be provided with specially individualized electronic publications. It is very important that the library fund of the educational institution is provided with basic and additional educational literature for all stages, as well as official, reference and bibliographic and periodical publications. This creates the opportunity for children with special educational needs to quickly exchange information with local, regional and regional continuing education institutions.

The educational process aimed at solving the problems of continuous inclusive education is distinguished by the degree of goal-setting, which is aimed at implementing important issues related to the age characteristics of children with special educational needs, their level of preparation and professional development capabilities.

It should be emphasized that today, in order to effectively implement the continuous inclusive education system in our society and form the professional skills of children with special educational needs, it is advisable to teach the main and special parts of the educational cycles based on modern, state and social needs, as well as the requirements of the market economy.

We believe that it is necessary to pay attention to the following:

history (it should be supplemented with the life and work of historical figures who provide internal motivation and educate the will of man); the foundations of spirituality (understanding human dignity as the highest value and aligning it with factors directed towards the conscious activity of forming oneself as a person); psychology (enriched with human will, its inherent qualities, the foundations of conscious activity, motivational training and practical exercises); physical culture (replenished with sources of conscious education and stimulation of the human body); life safety (replenished with socio-pedagogical and psychological factors of human self-preservation); information security (aimed at blocking negative sources of information attacks and threats, as well as the psychological impact on consciousness and activity).

Also, the following issues are considered priority in organizing the practical processes of children with special educational needs:

- firstly, training and production should be aimed at the full formation of professional skills and qualifications of children with special educational needs, and should be carried out in school laboratories and production organizations equipped with specially individualized modern innovative technological equipment for mastering practical competencies;

- secondly, the formation of professional skills and improvement of practical competencies of children with special educational needs should be carried out on the basis of a coordinated program developed with the educational institution and partner organizations;

- thirdly, the practical process should be carried out without affecting the health and mental state of children with special educational needs, taking into account physical fatigue,

and based on the essence of the concept of unhindered movement from the point of view of "convenient time" and "convenient place";

- fourthly, children with special educational needs should be directed to activities that strengthen their health and provide professional motivation, based on their desires and wishes, as well as interests and abilities;

- fifthly, the organization of internships for children with special educational needs is provided with a program and conditions that allow them to evaluate their qualifications, knowledge, practical experience and acquired professional competencies;

- sixthly, the formation of the competence of perseverance, critical self-evaluation and self-control, as a necessary component of the internship process for children with special educational needs, as well as the correct assessment of their successes and shortcomings in their activities;

- seventhly, the full implementation of programs aimed at ensuring the socialization process of children with special educational needs with others during the internship process, and the formation of a healthy socio-psychological environment for the formation of adequate behavior in the team.

It is necessary to develop a methodology for the formation of life safety competence of children with special educational needs in practice-oriented activities.

The integration and implementation of the pedagogical and psychological potential of general professional disciplines, which allows updating and enriching the knowledge and skills of children with special educational needs, their individual capabilities in the field of life safety, helps to develop a holistic perception of life activity. Also, self-preservation and the environment as a recognized type of activity are formed, their integration with society is formed, and the process of social adaptation is transferred to a recognized type of activity.

From this point of view, it is necessary to develop the subject "Life Safety" in accordance with the knowledge, skills and qualifications of children with special educational needs in terms of their life direction and type of activity, and to develop the safety features of professional and social adaptation.

It is also advisable to pay attention to the following as pedagogically implemented tasks in the formation of children with special educational needs for a safe life: determining pre-existing (basic) knowledge in the field of life safety; identifying structural and functional systems of environmental perception in children with special educational needs, and analyzing their changes; determining the role of the field of professional knowledge in managing and organizing the life safety of children with special educational needs; developing certain methods of protecting children with special educational needs from negative factors in the life process, and promoting their social adaptation in society; developing the concept of safe behavior in the personality of children with special educational needs; forming the readiness of children with special educational needs for a safe life based on pedagogical and psychological factors; saturating children with special educational needs with a source of knowledge that prioritizes issues of personal safety and health.

A person undergoes formation processes at different stages of ontogenesis. The use of a differentiated approach in the educational process, taking into account the age and individual characteristics of children with special educational needs, allows us to compensate for or correct the identified shortcomings in the development of the individual.

We believe that it is appropriate to base this scientific hypothesis on the ideas of B.K. Tuponogov. According to his point of view, differentiated training improves the processes of perception, thinking, memory, speech activation, completeness of reproductive activity, adequacy of concepts, and knowledge of the surrounding world in students with disabilities[7].

In conclusion, based on the above considerations, it is important to prioritize practical activities in order to fully align the goals and objectives of continuous inclusive education, developing the motivation of students to live a safe life in an environment of continuous inclusive education, creating a healthy lifestyle for children with special needs and becoming the most active members of society, while putting forward the scientific hypothesis that the integration of special subjects taught to children with special needs with vocational subjects is a necessary condition for their social adaptation.

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## TECHNOLOGY OF GROWING AND PROCESSING OF MEDICINAL PLANTS

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**Keywords:** Medicinal plants, heritage, Avicenna, Cardamom, Black ginger Chile, Aloe, Plant selection, vegetarianism, apricot, method,

**ANNOTATION:** This article discusses the wealth of food and plant life endowed with nature and the role of the heritage left by our ancestors in folk medicine and modern medicine.

Medicinal plants, their cultivation, processing, and proper use are the demands of this era. Nowadays, science and technology have advanced to such an extent that they are making progress in agriculture, medicine, folk medicine, and various other fields. The role of modern technologies that facilitate these works and the spiritual heritage left to us by our ancestors is incomparable. In particular, the works of our grandfather Abu Ali Ibn Sina are recommended as the main reference in both medicine and folk medicine. Ibn Sina (Avicenna) provided information about many medicinal plants through his famous work "The Canons of Medicine" (Al-Qanun fi al Tibb). This work had a great influence on the development of medicine at that time and created a scientific idea about many medicinal plants. Some of the medicinal plants that Ibn Sina used and recommended were:

1. Lavender - used for mild nervous system disorders, headaches, and mild colds.
2. Cardamom - used to treat stomach and intestinal problems, as well as to improve the functioning of the heart and nervous system.
3. Ginger - used to improve the digestive system and digestion, and was also used against inflammation.
4. Black Ginger (Chile) - used to improve blood circulation and against colds.
5. Rosemary - used to enhance memory and mental performance, and to calm the nervous system.
6. Aloe Vera - used for skin diseases, wounds, and inflammation.

Ibn Sina's scientific approach to medicinal plants was based on the study of natural medicines, which often used a combination of plants and minerals. He based his approach to the use of plants in medicine on scientific and practical methods of healing.

Medicinal plant cultivation technology includes special methods and techniques for using the therapeutic properties of plants. The main stages of this technology are as follows:

1. Selection of plants

When selecting medicinal plants, their healing properties, suitability for climatic conditions and ease of harvesting are taken into account. Typically, plants are used as natural medicines and are selected based on their chemical composition (for example, alkaloids, flavonoids, terpenoids).



## 2. Soil preparation

Medicinal plants need clean and fertile soil for good growth. When preparing the soil:

- Check the pH level of the soil
- Enrich with the necessary mineral and organic fertilizers.
- It is necessary to choose a soil with good water permeability.

## 3. Planting crops

Medicinal plants are mostly planted by the following methods:

- Propagation: Through seedlings or seeds
- Vegetative propagation: These are mainly carried out using roots and shoots.

## 4. Watering and care

Medicinal plants usually require gentle and constant watering.

It may also be necessary to use chemical and biological protection against pests. When caring for plants, it is necessary to pay attention to the root system, leaves and flower beds.

## 5. Collection and storage of plants

In order not to affect the chemical composition of medicinal plants when collecting them, the following rules should be observed:

- Choose the right time for collection (when the leaves or flowers are newly opened and their activity is high)
- Protect the plants from external conditions, use drying or other storage methods.

6. Drying and processing It is important to properly dry and store the medicinal parts of plants (for example, leaves, roots, flowers). Natural or artificial methods are used for drying, but they help preserve the active substances of the plant. Extracts and other preparations are also prepared from medicinal plants.

## 7. Quality control.

Quality control is important in the production of medicinal plants. The chemical composition of plants, methods of pest control and storage conditions should be regularly checked.

These technologies are necessary to make the cultivation of medicinal plants effective and safe. At each stage, attention should be paid to environmental cleanliness and a scientifically based approach.

We are surrounded by medicinal plants, healing benefits. But we do not know how to use them for what purpose, and this is our biggest shortcoming. As an example, I would like to bring to your attention some information about the benefits of our country and their beneficial properties:

### Apricot

Apricot (*Prunus armeniaca*) is a very useful fruit, which has many positive health properties. Below are some of the beneficial aspects of apricot:

1. Source of vitamins and minerals: Apricot is a rich source of vitamin A, vitamin C, vitamin K, and B vitamins. Vitamin A is necessary for eye health, and vitamin C is necessary for strengthening the immune system.

2. Antioxidants: The carotenoids, flavonoids, and polyphenols present in apricot protect cells from free radicals and help reduce inflammation.

3. Tone and Skin Health: The vitamin A in apricots helps in skin renewal and keeps it healthy. It also reduces skin inflammation.

4. Digestive Support: Apricots are high in fiber, which improves digestion and normalizes bowel movements. This helps prevent constipation.

5. Heart Health: The potassium in apricots helps improve heart function and helps maintain normal blood pressure.

6. Good mood and energy: The magnesium and other minerals present in apricots calm the nervous system and increase overall energy levels.

7. Apricot nuts (seeds): Apricot nuts also have their own benefits, as they contain omega-3 fatty acids and antioxidants. These are beneficial for the heart and vascular system.

Thus, apricots are not only a delicious fruit, but also have health-promoting properties. I present the following information about the technology of growing apricots (*Prunus armeniaca*) and its consumers:

#### Apricot Growing Technology

The following stages and technologies should be considered for growing apricots:

1. Soil preparation - The most optimal soil for growing apricots is well-drained, light and enriched with organic matter. The pH level should be between 6.0–7.5.

2. Planting seedlings - It is preferable to propagate apricots through seedlings. The best time for planting is in spring or autumn, when the soil is warm enough. The distance between seedlings should be 3–4 meters, since the apricot tree spreads widely and upwards.

3. Watering - Although apricots are resistant to acute drought, they require regular watering during the growth period. The best method of irrigation is drip irrigation.

4. Fertilization - Apricots need moderate fertilization. Organic fertilizers or mineral fertilizers can be used, but excessive nitrogen fertilizer should not cause the plant to overgrow.

5. Management and care - It is important to lighten the trees and cut off excess branches to ensure that their shape and length spread upwards. This helps to obtain high-quality fruits.

6. Protection from diseases and pests - For the full growth and development of apricot fruit, it is necessary to work regularly with insecticides and fungicides. Countries That Love and Consume Apricots Apricots are consumed all over the world, but they are mainly famous in the following countries:

#### Advanced countries in apricot cultivation

##### ➤ Turkey:

Turkey, especially the Malatya region, is a leader in apricot cultivation and is one of the largest producers of apricots in the world. In Turkey, apricots are consumed in many different forms, including dried.

##### ➤ Uzbekistan:

Uzbekistan is one of the countries with extensive experience in apricot cultivation. In addition to fresh apricots, dried apricots are also widely used as a fruit here.

##### ➤ Iraq and Iran:

Apricots are also grown and consumed in large quantities in these countries, especially dried apricots (often made by "drying the fruit").

##### ➤ Kazakhstan and Tajikistan:

In Central Asian countries, there are various varieties of apricots, and the fruit is consumed both in a dried state and in a fresh state.

##### ➤ China and India:

Apricots are also grown well in China and India, but their main consumption is as fresh fruit.

➤ France and Spain:

Apricots are very popular in Europe. In France, apricot desserts, jams and marmalades are widespread, while in Spain they are mainly consumed as fresh fruit.

Conclusion

Apricot cultivation technology is based on simple but effective care and proper agricultural techniques. Uzbekistan, Turkey, Iraq, and Central Asian countries are leaders in apricot cultivation, which is also widespread in European and Asian countries. Apricots are consumed fresh, dried or in the form of products (jam, compote, etc.).

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## LEXICAL-SEMANTIC BRANCHING OF THE CONCEPT «YOUTH» IN UZBEK AND ENGLISH LANGUAGES

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### Abstract

The purpose of this study is to reveal the linguistic significance of the concept theory by means of analyzes and to consider the concept of “youth” in two typological groups and within the framework of languages belonging to different language families - Uzbek and English - which are genetically unrelated. The article presents the concept of “youth” in the form of networks based on English and Uzbek dictionaries. The different and common features of the concept of “youth” are analyzed in two languages.

**Key words:** concept, lexeme, lexical-semantic network, cognitive linguistics, linguistics, category, dichotomy, ethnolinguistics.

Concept theory plays an important role in cognitive psychology, which studies the processes of thinking and understanding. It is a system aimed at understanding how people create knowledge about the world, how they understand information, and how they form categories. Concepts are, simply put, the «building blocks» for our thinking. They consist of mental models that reflect the general characteristics of groups of objects, events or ideas. The main aspects of the concept theory include:

- Types of concepts: Concepts can be different. Some have clear boundaries (eg. pen), others are vague (eg. trust). Concepts can be represented by prototypes (the most typical representative of a category), exemplars (objects that do not have all the properties of a category), and properties (characteristics that define a category).
- Formation of concepts: Concepts are formed based on experience. Children learn and develop concepts through interaction with the world. Comparison, generalization and abstraction play an important role in this process.
- Representation of concepts: Concepts can be represented in the mind in different ways, for example, through words, pictures, symbols. Language is an important tool for understanding and communicating concepts.
- Interdependence of concepts: Concepts are related to each other and there may be a hierarchy between them. For example, the concepts of «animal» include lower-level concepts such as «cat» and «dog» [8].

The set of views of an entire people or a specific person about the surrounding realities forms a national conceptual consciousness. The lexical fund of the language plays an important role in the formation of such a conceptual landscape. As a part of the language system, the lexicon functions as a «repository of cultural traditions» that most clearly reflects the worldviews and observations of reality of the representatives of a certain language community. Linguistic and cultural differences are clearly visible in the perception of reality by speakers of different languages. This also creates differences in concept networks. In particular, the concept of «youth» represents a universal component of human culture. When

analyzing these conceptual groups in Uzbek and English languages, we encounter national-cultural differences. In this article, linguistic and cultural differences between the two languages are revealed based on the concept of «youth».

Culture reflects the psychology and philosophy of a people, its mentality, history, ideas about the world, and its own belief system. In addition, the processes of globalization, the growth of migration processes and the formation of linguistic consciousness cannot fail to influence the ethnolinguistic and linguistic landscape of the world. At the same time, researchers emphasize the interaction of the linguistic and cultural landscape of the world, which has its own characteristics depending on the language and people. This creates certain difficulties when considering the specific features of a particular language system. The dichotomy of «youth» is widespread in the culture of both countries and is a rich material for comparative analysis of similarities and differences in the outlook of two nations - Uzbek and English.

Let's look at the linguistic units expressing the concept of «youth» in English and Uzbek.

According to the «Oxford» explanatory dictionary: «Youth - the period between childhood and adult age; the qualities of vigor, freshness, or immaturity as associated with being young; an early stage in the development of something; young people considered as a group» [5].

In the «Collins» dictionary, the lexeme «youth» is defined as follows: «the quality or condition of being young, immature, or inexperienced; the period between childhood and maturity, esp. adolescence and early adulthood; the freshness, vigor, or vitality characteristic of young people; any period of early development; young people collectively» [1].

Douglas Harper's «Etymological Dictionary of the English Language» provides the following information about the etymology of the lexeme «youth»: «youth (n.) In Old English «geoguð» «youth; young people, small warriors», geong is related to «young», the etymological root of the word is the abstract noun «yeu» - «vital force, strength» from the ancient proto-Germanic language, with «-itho» suffix is added» [4].

In the «Annotated Dictionary of the Uzbek Language» we come across the following explanation: «1. Being young; the time of youth, period; 2. Adolescence, youth; 3. Behavior, characteristic of young people» [3]. There are no final conclusions about the etymology of this word. According to assumptions, the words «yashil» and «yoshlik» are etymologically cognates, and «yash» (yosh) was used in the meanings of new, fresh.

Based on the interpretation of the «Oxford» explanatory dictionary, it can be seen that the concept of «youth» is derived from the following semantic circles: «period of life», «quality of life», «young people as a group», «early stage of development». [6]. The conceptual framework «Period of life» can be connected with the following associative networks: «childhood» and «adolescence». During these two periods, a person's personality, mental, spiritual and physical abilities are formed. Within the «Childhood» network, it can be divided into sub-sections: «physical development» and «development of cognitive skills».

- «Physical development». In the initial stages, the child learns to crawl, walk, run, talk, etc., this concept network also creates an association with «physical development»: to crawl, to walk, to talk, to run.

- The next link is «development of cognitive skills». At the initial stage of childhood (about 3 years old), the child learns about the world through touch, smells, tastes, and feelings. So, this process can be expressed with the following verbs: to touch, to smell, to taste,



to feel. When a child grows up, he begins to learn about the world through books, asking questions, listening, etc. (to read, to write, to think, to ask, to keep in mind).

- «Emotional development». This subslot includes the following branches: to cry, to smile, to shout, to frown, to laugh.
- «Spiritual development». The child is explained what is bad and what is good, what is right and what is wrong, what can be done and what cannot be done.
- «Adolescence» slot can be represented by the following subsections: «further physical development», «development of cognitive skills», «emotional development», «spiritual development».

Now let's take a closer look at these subslots.

- «Further physical development». At this stage of life, higher physical abilities of a person are formed: strength, energy.
- «Development of cognitive skills». At the «youth» stage, a teenager learns about the world by reading, asking questions, and observing. The most appropriate verbs to describe this conceptual network are: to read, to listen, to reflect, to realize, to ask, to keep in mind, to argue.
- The «emotional development» network of the adolescent period subframe is similar to the «emotional development» subslot of the childhood period subframe, the only difference is the focus on emotional diversity at this stage: to cry, to smile, to shout, to frown, to laugh.
- «Spiritual development». At this stage of life, the spiritual development of a teenager is influenced by books, music, television, the press and the Internet. But the most important influence on the formation of a person is shown by family and society. Accordingly, this part of our concept network can be expressed by the following words: family, society, friends, books, music, TV, Internet.

Thus, we divided the «youth» concept into slots according to age and created subslots according to the skills and qualities that a person acquires at each stage.

Let's look at the structure of the concept of «youth» in the Uzbek language. As we mentioned above, in explanatory dictionaries, the word «youth» has only one meaning – the period of infancy and maturity. However, we suggest dividing the concept of «youth» into subframes, similar to the English concept of «youth». Thus, we described 4 small conceptual branches in the Uzbek language: «life period», «vital qualities», «youth as a group», «early stage of development». The Lifetime subframe is divided into slots such as childhood and adolescence. The «Childhood» network, in turn, can be divided into such subsections as «physical development», «perception», «emotional development», «spiritual development». The initial stages are characterized by the child's learning to crawl, walk, run, talk, etc. The following are the main associations in the Uzbek language of this period: crawling, walking, running, talking. A child's acquaintance with the outside world occurs through emotional perception. This means knowing through different touch, smells, tastes. As the child grows and develops, he learns to read, listens when people speak to him, and asks questions. This stage includes the following series of verbs: read, listen, ask questions. In the East, the spiritual development of a child is connected with network concepts such as family environment, education, neighborhood and friends, and reading, and this link is not found in the conceptual network of «youth» in the English language.

Analyzing the concept of «youth» in English and Uzbek languages, we came to the following conclusions: 1. The concept of «youth» presented in the form of a network in both languages can be divided into 4 small conceptual frameworks: «life period»; «quality of life»; «youth as a group» or «youth as people in a collective sense»; «early stage of development»; 2. The basis of the lexical-semantic group «youth» in English is the lexeme «youth», and in the Uzbek language it is the lexeme «yoshlik»; 3) a comparative analysis of the meanings of the word «youth» and the English word «youth» showed that the English concept «youth» has a wider conceptual network.

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## TREATMENT OF VARIOUS PSYCHOLOGICAL CHANGES MANIFESTED IN PRESCHOOL CHILDREN THROUGH "FAIRY TALE THERAPY".

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Scientific and theoretical study of psychological characteristics of preschool children is of great practical importance in higher pedagogical education.

That is why psychological changes in preschool children are one of the important factors affecting the development of society. When a child reaches school age, serious changes occur in his mental development. The reason is that it is from this period that the child's independent activity expands. At the same time, anxiety, fear, lack of communication skills, and inability to get along with peers begin to appear. One of the effective ways to overcome these changes is "Fairy tale therapy".

Fairy tale therapy is a method of psychological support and development, a method of education and treatment aimed at exploring and solving the child's inner world, feelings and problems through fairy tales. Through this method, children can see and understand themselves or their situation through the characters of fairy tales. Fairytale therapy has many advantages in learning and developing the child's inner world.

The use of fairy tale therapy allows us to:

- ✓ Effectively helps in emotional expression and understanding, reducing stress and tension. The reason is that through this method, children can easily express their frustrations and fears. This will reduce their stress and improve their mood.
- ✓ At the same time, fairy tale therapy helps to develop imagination and creativity in children, increase self-confidence, improve communication skills, and develop self-awareness. Through fairy tales, children acquire new skills in communicating with others and expressing themselves.

Not using fairy tale therapy means losing opportunities for self-development and emotional support for children. If this therapy is not used, it can lead to difficulties in understanding problems, increased stress and emotional burden, reduced ability to develop creativity and imagination, decreased self-confidence, limited communication skills, inability to approach difficulties artistically, and slowed down self-awareness. we can observe.

Bruno Bettelheim, a famous psychoanalyst and child psychology researcher in the United States, conducted a study on fairy tale therapy. He has conducted several studies on the positive effect of fairy tales on the psyche of children. Her book The Uses of Enchantment discusses how fairy tales can help children overcome their fears and anxieties. Bettelheim's research has shown that fairy tales help children to understand their inner feelings.

In Switzerland, the famous psychoanalyst Carl Jung and his followers studied fairy tales in relation to the human psyche and explored their archetypal (ancient symbolic) nature. He and his followers did a lot of research on the influence of fairy tales on the inner world and

development of a person . They noted that fairy tale therapy is an effective way to work with a person's subconscious.

Salvador Minuchin, another well-known specialist in family therapy from the USA, noted that fairy tales can be used to improve communication between family members. Her research has explored ways to solve family problems through storytelling and has shown that this approach is effective in overcoming family problems.

In Uzbekistan, psychologists and pedagogues have learned and are trying to apply the method of fairy tale therapy, but this direction is still at the stage of development. Some local psychologists and teachers have used this method in working with children and received positive results. An example of them is Dilfuza Fayziyeva, an Uzbek psychologist. Having studied the methods of using fairy tale therapy in preschool educational institutions, he found that it has a positive effect on the mental development of children. His research shows that through stories, children can better understand their feelings, improve their self-explanatory skills, and develop their imagination.

Research centers in Tashkent and other major cities are also studying fairy tale therapy as a method of psychological support for children and families. Studies have shown that story therapy is beneficial in reducing children's fears and anxieties, as well as increasing self-confidence. In the research conducted by some local psychologists of the State Institute of Psychology of Uzbekistan, they developed a manual and methodical recommendations for teachers and psychologists using fairy tale therapy. Their results showed that story therapy can facilitate learning, reduce stress and develop social skills for children.

Tale therapy as a result of research conducted abroad and in Uzbekistan

- Reducing stress and anxiety in children
- To improve emotional expression and self-awareness
- To increase the ability of creative and logical thinking
- to increase self-confidence

- It has been found to have a positive effect on improving family communication and solving family problems with a light approach.

Including, based on the results of our own observation and research, we can say that fairy tale therapy has a positive effect on children, and indeed, one of the most pressing problems today is the lack of communication skills, fear and anxiety in children. we should emphasize that it is one of the effective ways to eliminate psychological problems that arise in children due to the high level.

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## MEDICAL EPONYMS: LEXICAL-SEMANTIC RELATIONSHIPS AND UNIQUE FEATURES

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**Abstract:** Medical terminology, with its extensive range and complexity, often incorporates eponyms—terms derived from the names of individuals, places, or mythological figures. This study explores the lexical-semantic relationships of medical eponyms, emphasizing their development, linguistic characteristics, cultural significance, and role in global medical terminology. Through an examination of linguistic distinctions and synonymy in medical eponyms, the study highlights the cultural and scientific value of eponyms in promoting cross-cultural understanding and knowledge exchange in healthcare.

**Key words:** Medical Eponyms, Terminology, Lexical-Semantic Relationships, Synonymy, Homonymy, Polysemy, Linguistic Characteristics, Cross-Cultural Variations, Universal Eponyms, Medical Discourse, Cultural Significance, Historical Figures, Naming Conventions, Standardization, International Medical Terminology, Knowledge Exchange, Cultural Exchange, Scientific Progress, Historical Contributions.

**Introduction:** The structural nature of medical eponyms influences their integration into medical terminology, textbooks, scientific literature, and clinical practice. Eponyms serve as key elements of medical language, enriching the vocabulary used by healthcare professionals, educators, and researchers.

**Discussion and Results:** We propose the following classification for medical eponyms:

1. **Simple (single-word) eponyms** – referred to as deonyms;
2. **Affixal eponyms** – eponyms formed with the addition of prefixes or suffixes;
3. **Compound eponyms** – combining multiple words or names;
4. **Abbreviated eponyms** – shortened forms derived from names or terms.

**The Deonyms Group** (Single-word Eponyms):

This category includes terms derived directly from the inventor's name. In medical terminology, this group often represents units of measurement, such as **Roentgen**, **Weber**, **Volt**, **Ampere**, or **Gray**. For instance:

"The exposure of mice to total physical doses resulted in structural damage to coronary vessels at 0.2 Gray <...>."

These eponyms serve as concise, universally recognized terms that enhance clarity and precision in medical discourse.

**Affixal Eponyms:** These eponyms are formed by adding affixes to a base eponym. Common suffixes used in their formation include:

- **"-ia"** (e.g., Crohnia – hypothetical example),
- **"-osis"** (e.g., Hansenosis),
- **"-itis"** (e.g., Wegeneritis),
- **"-ism"** (e.g., Cushingism),
- **"-ella"** (e.g., Salmonella),

- **"-oma"** (e.g., Kaposioma).

Such modifications expand the original eponym into specific medical conditions, diseases, or entities, facilitating their usage in detailed clinical contexts.

**This Trend Reflects the Relevance of Latin in Modern Terminology:** Affixal eponyms illustrate the ongoing influence of Latin in contemporary medical language. These terms are created by combining personal names with affixes, forming new terminological constructs. Examples include:

- **Theileria** and **Theileriosis** (derived from Sir Arnold Theiler's name),
- **Scopolia** (from Giovanni Scopoli),
- **Babesia** and **Babesiosis** (from Victor Babes),
- **Listeria** and **Listeriosis** (from Joseph Lister),
- **Brucellosis** (from David Bruce),
- **Bartolinitis** (from Kaspar Bartholin the Younger),
- **Parkinsonism** (from James Parkinson),
- **Escherichia** and **Escherichiosis** (from Theodor Escherich),
- **Salmonella** and **Salmonellosis** (from Daniel Elmer Salmon),
- **Pasteurella** (from Louis Pasteur),
- **Schwannoma** (from Theodor Schwann).

Additionally, there are numerous other forms of affixal eponyms created by appending affixes to personal names. These terms enrich medical vocabulary and reflect a systematic approach to honoring contributors to medical science. (Refer to Table 3.2 for a comprehensive list of examples).

**Table 3.2: Affixal Eponyms Related to Personal Names**

No	Suffixes name	Examples
1	-it	ergusonit, gotit, grenokit, pikeringit, sossurit
2	-n	begonia, claytonia
3	-ize	bovdlizerize, galvanize, mesmerize, pasteurize
4	-izm	darwinizm, spunerizm

**Several Lexical Units Formed from Compound Terms:** Galvanoskop, galvanokustika, galvanopalpatsiya, galvanoterapiya (named after Luigi Galvani); radiography, radiologist, radiology, radioscopy, radiotherapy, radiogram (named after Wilhelm Röntgen), and others.

**Compound Eponyms** are terminological units consisting of several words. They are used to denote diseases, phenomena, and processes.

**Abbreviated Eponyms** are formed by shortening disease names or terms. Examples include:

- **Pap smear** (derived from the abbreviation of Georgios Papanikolaou's name),
- **HeLa** (cell line derived from the cervical cancer cells taken from the patient Henrietta Lacks),
- **BCG** (derived from the abbreviation of Bacillus Calmette-Guérin, named after Albert Calmette and Camille Guérin).

These abbreviated eponyms are widely used in medical terminology for convenience and clarity.

Eponyms are primarily used in medical language, and their importance in medical discourse cannot be denied. When discussing the morphological-structural nature of medical eponyms, several key aspects should be considered.

**1. Formation of Eponyms:** Medical eponyms are typically formed by combining a person's name with a specific medical term. This combination often follows certain morphological rules, such as adding a possessive form to the person's name (e.g., Alzheimer's disease, Parkinson's disease) or combining the name with a medical suffix or prefix to create a compound term (e.g., Broca, Wolff-Parkinson-White syndrome).

**2. Adaptation of Eponyms:** Eponyms may undergo adaptation in their morphological structure to conform to the linguistic rules of the target language or to simplify pronunciation. For example, the original spelling or pronunciation of a person's name may be adjusted to align with the phonological rules of the target language, or it may be modified to facilitate communication among healthcare professionals worldwide.

**3. Variability and Irregularity:** The morphological-structural nature of medical eponyms can be variable and irregular, leading to inconsistencies in their formation and usage. Eponyms may exhibit different morphological structures, such as compounds, prefixation, addition, or abbreviation, which can make it difficult for learners and practitioners to predict the form of a given eponym.

**4. Legacy and Tradition:** Medical eponyms often carry historical and cultural significance, reflecting the legacy of prominent figures in the field of medicine. Despite the shift towards anatomical or descriptive terminology, the preservation of eponyms is influenced by traditions, academic conventions, and the recognition of the contributions made by the individuals after whom the terms are named.

**5. Ambiguity:** The use of eponyms in medical terminology can lead to ambiguity, as different names may exist for the same medical person or concept. Such variations in naming conventions can create challenges for standardization and interoperability in healthcare institutions.

**6. Criticism and Debate:** The reliance on eponyms in medical terminology has faced criticism due to concerns about elitism, Eurocentrism, and the persistence of outdated or inaccurate historical associations. Some scholars advocate for the use of descriptive or generic terms over eponyms to improve clarity and inclusivity in medical communication.

**6. Global Changes:** Eponyms in medicine may differ in their morphological structure across different languages, cultures, and healthcare systems. Translating and adapting eponyms to various linguistic contexts may lead to adjustments in spelling, pronunciation, or form to align with the rules of the target language.

**8. Historical Significance:** The morphological structure of medical terms reflects the historical context and contributions of the individuals after whom they are named. The inclusion of a person's name in an eponym serves as a tribute to their achievements, discoveries, or significant impact on the field of medical science.

**Conclusion:** Over time, the structural nature of medical eponyms may undergo modernization or revision to align with contemporary linguistic standards, terminological guidelines, or ethical considerations. The evolving composition of these terms reflects ongoing

efforts to adapt medical language to the changing demands of society and communication practices.

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