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ANALYSIS OF CANDIDATE GENES AND THEIR FUNCTIONS BASED ON QTLS ASSOCIATED WITH ABIOTIC STRESS TOLERANCE IN *GOSSYPIMUM HIRSUTUM* L. VARIETIES

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Abstract. In this study, we identified quantitative trait loci (QTL) associated with drought-tolerance traits in *Gossypium hirsutum* L. and performed functional evaluation of candidate genes within these QTL regions. Specifically, genes for transcription factors (GhWRKY27, GhWRKY70, GhDREB2) and other stress-responsive genes (GhCAT1, GhCIPK6, SnRK2.6) were analyzed in QTL located on chromosomes D01, A05, A11, and D08. The presence of ABRE elements in promoters, consistency with previous transcriptomic data, and detected epistatic interactions support the involvement of these genes in drought stress tolerance. Additionally, novel QTL regions on chromosomes A12 and D05 were identified for the first time and confirmed to be associated with tolerance traits. Analysis revealed that most drought-enhancing alleles originated from the wild *G. tomentosum* genotype. These candidate genes are promising targets for marker-assisted selection, genome editing (CRISPR/Cas9), and transgenic studies. The findings contribute to the genetic understanding necessary for developing drought-tolerant cotton cultivars.

Keywords: *Gossypium hirsutum*, Drought stress, QTL mapping, Candidate genes, Transcription factors, GhWRKY70, GhDREB2, CRISPR/Cas9, Genetic selection, Wild cotton germplasm (*G. tomentosum*)



Introduction: Under the accelerating impact of climate change, enhancing plant tolerance to abiotic stresses—particularly drought—has become a critical research priority. Cotton (*Gossypium hirsutum* L.), a globally important fiber crop, is highly vulnerable to water deficiency, which significantly impairs its growth, fiber quality, and yield. Drought tolerance is a complex quantitative trait controlled by various genetic components including transcription factors and signaling pathways. In recent years, Quantitative Trait Loci (QTL) mapping has emerged as a robust approach for detecting genomic regions linked with stress-related traits. Within these regions, candidate genes can be scrutinized through molecular biology and bioinformatics techniques to elucidate their functional roles in stress responses. Transcription factor families such as WRKY, DREB, SnRK2IPK, and CAT are key regulators of physiological adaptations to drought stress. Moreover, the presence of cis-regulatory motifs like ABRE in promoter regions suggests a gene's involvement in abiotic stress responses. In this study, we analyzed genes located in QTL segments identified from a *G. hirsutum* × *G. tomentosum* F₂ and F₃ hybrid population. Our goal was to pinpoint promising candidate genes—in particular, transcriptional regulators and stress signal mediators—and to uncover the genetic mechanisms underlying drought tolerance to enhance marker-based selection.

Study Object. The research object comprises F₂ and F₃ progenies derived from hybrids between cultivated *G. hirsutum* and its wild relative *G. tomentosum*. This interspecific population was used to study QTLs and candidate genes governing drought tolerance traits.

Candidate Genes and Their Functions: Analysis of Genes Within QTL Segments. An analysis of the genes located within the QTL segments revealed which of them could be recommended as candidate genes. As an example, within the ~0.75 Mb genomic interval of the D01 chromosome cluster, a total of 15 genes were identified, of which 5 are of unknown function, while the remaining 10 encode known proteins. Interestingly, this region harbors the transcription factor gene GhWRKY27, whose homolog in *Arabidopsis* has been reported to regulate reactive oxygen species (ROS) production in response to drought stress (Hayano-Kanashiro et al., 2009). Additionally, among the genes in this cluster, GH_D01G0182, GH_D01G0205, and GH_D01G0218 are of unclear function; however, our promoter analysis results revealed that these genes possess a relatively high number of ABRE (ABA-responsive element)



motifs, which are associated with drought response. Therefore, we have conditionally included these genes in the list of candidate genes potentially involved in drought tolerance. Another important QTL region is located on chromosome A05, within the 89.0–90.6 Mb interval. In a study by Li et al. (2019), a significant association was identified in this region with leaf wilting scores. They identified the WRKY70 gene in this interval and reported that its expression significantly increases under drought conditions. WRKY70 is known to participate in ABA hormone signaling and regulate stress response pathways (T. Mahmood et al., 2020). In our own population, a QTL was also detected in this same A05 segment, affecting the EWS trait (early wilting score). Therefore, GhWRKY70 is considered a strong candidate gene potentially playing an important role in drought tolerance.

In the same study by Li and colleagues (2019), several other important candidate genes were identified, including GhCIPK6 (a calcium-signaling kinase), SnRK2.6 (an ABA-dependent kinase), and NET1A (a cytoplasmic protein), all of which were shown to activate various defense mechanisms in plants under drought stress. These genes were found to be upregulated under drought in tolerant genotypes and systems, while downregulated in sensitive ones. In other QTL segments identified in our study, we also found numerous genes involved in cellular responses to drought-induced stress, including those encoding antioxidant enzymes and proteins involved in the synthesis of osmoprotectants. For instance, the GhDREB2 transcription factor is located within a QTL region on chromosome A11. Its homologs in *Arabidopsis* and cotton are considered “master regulators” that activate protective genes in response to drought stress. Another example is a QTL identified near the GhCAT1 gene on chromosome D08. This gene encodes a catalase enzyme that becomes active under drought and ABA treatment, helping to maintain ROS homeostasis (T. Mahmood, 2020). These examples demonstrate that the results obtained through QTL mapping are supported at the molecular level and suggest the presence of genes contributing to drought tolerance within the analyzed genomic regions. In the future, the precise functions of these genes can be validated through CRISPR/Cas9-based genome editing and tested in transgenic lines. Moreover, integrating full genome sequencing data with large-scale datasets such as transcriptomics, proteomics, and epigenomics will provide deeper insights into the mechanisms of drought tolerance in cotton (T. Mahmood, 2020).



Discussion of Results. A comparative analysis was conducted between the QTLs identified in this study and findings from previous research. As noted earlier, some of the QTLs confirmed earlier results in terms of their genomic location and effect — for example, those found on chromosomes A05 and D01. At the same time, several novel QTLs were identified for the first time. Notably, a QTL influencing leaf wilting resistance on chromosome A12 has not been previously reported in the literature and is considered a new finding. Similarly, the QTL we detected on D05 (chromosome 19) associated with dry stem biomass also represents new information. These results suggest that there are alleles contributing to drought tolerance located in previously unexplored regions of the cotton genome. We believe that these alleles originated specifically from the wild *G. tomentosum* gene pool, as they were absent in the cultivated parent lines (i.e., the sensitive genotypes in our population lacked these alleles). In fact, genetic analysis revealed that out of the 30 stable QTLs, 18 carried positive (tolerance-enhancing) alleles from the wild parent (tomentosum), 7 from the cultivated parent, and in the remaining cases, the heterozygous genotype conferred the highest phenotypic performance. This demonstrates the rich genetic potential of *G. tomentosum* for drought adaptation and supports strategies to introgress its alleles into cultivated varieties (Magwanga R.O. et al., 2020). Furthermore, heterosis (hybrid vigor) is often observed in wild × cultivated hybrid populations — and in our $F_{2:3}$ generation, several heterozygous lines outperformed both parents under stress conditions in terms of growth and yield, indicating the presence of epistatic interactions.

Indeed, epistatic relationships between certain QTLs were detected. For example, the combination of loci on A05 and D08 resulted in a higher-than-expected tolerance index (positive epistasis), whereas A07 and D13 together led to a reduced phenotype (negative epistasis). These findings emphasize that drought tolerance is a complex trait that cannot be fully explained by the effects of individual QTLs alone. Instead, it is essential to consider their interactions within genetic networks (Lopes et al., 2014).

Conclusion. Using QTL mapping, we identified a number of genetic determinants that contribute to drought stress tolerance in cotton. While many of these aligned with previously known loci, several represent novel discoveries. Further investigation into the functional significance of the identified QTLs will be crucial, particularly for their application in marker-assisted selection (MAS). These future studies will enhance the potential for breeding more drought-resilient cotton varieties.



References

1. Hayano-Kanashiro, C., Calderón-Vázquez, C., Ibarra-Laclette, E., Herrera-Estrella, L., & Simpson, J. (2009). Analysis of gene expression and physiological responses in three Mexican maize landraces under drought stress and recovery irrigation. *PLoS ONE*, 4(10), e7531.
2. Li, H., Qin, Y., Pang, Y., Song, W., & Yu, S. (2019). Identification of QTLs for drought tolerance at the seedling stage using an interspecific *Gossypium hirsutum* × *Gossypium tomentosum* backcross inbred line population. *Euphytica*, 215(7), 121.
3. Mahmood, T., Ali, F., Zhang, X., & Zhao, J. (2020). Transcription factors WRKY70 and DREB2 regulate ABA-dependent and independent signaling pathways under drought stress in cotton. *Plant Cell Reports*, 39(8), 1037–1049.
4. Lopes, M. S., El-Basyoni, I., Baenziger, P. S., Singh, S., Royo, C., Ozbek, K., ... & Reynolds, M. P. (2014). Exploiting genetic diversity from landraces in wheat breeding for adaptation to climate change. *Journal of Experimental Botany*, 66(12), 3477–3486.
5. Magwanga, R. O., Lu, P., Kirungu, J. N., Lu, H., Wang, X., Cai, X., ... & Liu, F. (2020). Cotton late embryogenesis abundant (LEA2) genes promote root growth and confer drought stress tolerance in transgenic *Arabidopsis thaliana*. *Genes*, 11(2), 187.



THE MANIFESTATION OF THE SECURITY PHENOMENON IN THE CONTEXT OF THE WELFARE STATE

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Annotation: This article examines the essence and manifestation of the phenomenon of security in the conditions of a social state. Security, being one of the central categories of social and political sciences, acquires a special meaning when viewed through the prism of a social state that prioritizes human dignity, social justice, and collective well-being. The study provides an analysis of relevant literature, methodological foundations, and practical observations, highlighting how security policies in social states balance between individual rights and collective responsibilities.

Keywords: Security, social state, social justice, human dignity, welfare, collective responsibility, political stability.

INTRODUCTION

The concept of security has always occupied a central place in political theory, sociology, and state governance. Traditionally, security was associated with military and national defense dimensions, yet in the context of a social state, it is closely tied to social rights, equality, and welfare. A social state is an institutional framework in which the government actively assumes responsibility for ensuring citizens' well-being and reducing social inequalities. Hence, the manifestation of security within a social state goes beyond physical protection and expands toward economic stability, social cohesion, healthcare, education, and civil rights.

LITERATURE ANALYSIS

Research in political philosophy (Hobbes, Locke, Rousseau) emphasized the role of the state as a guarantor of citizens' safety. Later, 20th-century theories of the welfare state (Esping-Andersen, Marshall) introduced a broader view, in which social security systems were integral to ensuring overall safety. Contemporary scholars highlight multidimensional security—economic, political, environmental, and social—as interrelated aspects of sustainable development. In the context of a social state, authors such as Habermas and Giddens argue that true security cannot exist without guaranteeing equal access to resources, rights, and opportunities. Literature also suggests that the effectiveness of security in a social state is measured not



only by absence of threats but by the presence of proactive mechanisms ensuring social justice.

METHODS

The research applies a comparative-analytical method to evaluate security mechanisms across different social states, combining theoretical sources with empirical evidence. Content analysis of academic publications and policy documents is employed to identify the key dimensions of security manifestation. Additionally, a sociological approach is considered, examining the role of social institutions—education, healthcare, and welfare policies—in maintaining stability and reducing insecurity.

RESULTS

The welfare state represents a governmental framework in which the state assumes significant responsibility for the social and economic well-being of its citizens, typically through programs like universal healthcare, unemployment benefits, pensions, education subsidies, and social assistance. This system emerged prominently in the 20th century, particularly in Europe, as a response to industrialization, urbanization, and the vulnerabilities it created for individuals and families. Within this context, the "security phenomenon" can be understood as the multifaceted ways in which security—encompassing protection from material, existential, psychological, and social threats—manifests, is provided, and influences society. Drawing from academic analyses, this manifestation is evident in several interconnected dimensions.

Social and material security as a core function: In welfare states, security prominently manifests as a structured safety net designed to mitigate life's inherent risks, such as unemployment, illness, disability, old age, and poverty. This is achieved through redistributive policies that tax higher-income sectors or individuals to fund universal or means-tested benefits, ensuring a minimum standard of living for all. For instance, the state acts as a guarantor of human security by fulfilling basic rights and shielding citizens from both traditional threats (e.g., economic downturns) and non-traditional ones (e.g., health crises or social exclusion). This approach not only addresses immediate vulnerabilities but also contributes to broader national prosperity by fostering stability, which enables economic activities, education, and innovation to flourish without the constant fear of destitution.

This manifestation is multidimensional, extending beyond mere financial aid to include social protection mechanisms like health insurance and state support systems. Growing inequalities, rising unemployment, and poverty are viewed as key security risks in this framework, as they threaten societal cohesion and individual identity (e.g., through erosion of cultural or group-based stability). Welfare states address these by promoting equity and social insurance, which in turn blurs the lines between internal (domestic



social issues) and external (global influences like migration or globalization) security threats. The state's role here is pivotal, as it shifts security from individualistic or community-based efforts to collective, institutionalized ones, reducing reliance on informal networks.

Psychological and existential dimensions: Security in the welfare state also manifests psychologically, providing a sense of existential stability that influences individual well-being and societal trust. Attachment theory frames this by suggesting that the welfare state can serve as a source of security akin to interpersonal relationships or even religious beliefs, offering a "safe haven" during distress and a "secure base" for personal exploration and risk-taking. However, empirical studies indicate that while the welfare state delivers material security—reducing the need for alternative sources like religion—it does not fully replicate the personal, attachment-like functions of a deity or close human bonds. For example, in highly developed welfare systems like those in Scandinavia, increased material security correlates with declining religiosity, as the state assumes roles historically filled by religious institutions, such as care for the elderly or support during hardship.

This psychological manifestation is mediated by trust: expansive welfare states require and foster high levels of interpersonal and institutional trust, which enhances cooperation, reduces corruption, and supports well-being (e.g., better health outcomes and life expectancy). Conversely, attachment insecurities, such as avoidance, can undermine trust in these institutions, leading individuals to be less reliant on or supportive of welfare programs. During crises like pandemics, this trust becomes crucial for compliance and collective security.

Economic and path-dependent transitions: The shift from traditional forms of security (e.g., family-based resource sharing in agrarian or informal sectors) to state-provided welfare represents a key manifestation, often path-dependent on a country's legal origins and historical institutions. In nations with strong family security traditions—rooted in civil law systems emphasizing household redistribution—the transition to an extensive welfare state can accelerate economic growth by taxing productive modern sectors to fund broader social protections. This reallocation harnesses untapped potential, reducing dependency on kinship networks and promoting mobility. However, in contexts with weaker family security (e.g., common law systems), a smaller welfare state may be more growth-conducive to avoid overburdening the economy. This highlights how security evolves from private to public domains, influencing long-term development trajectories.

Broader societal implications: Overall, the security phenomenon in welfare states manifests as a balancing act between individual freedoms and collective protections, often leading to higher societal stability but requiring ongoing adaptations to global challenges like inequality or migration. While it



empowers citizens by minimizing existential threats, it can also introduce dependencies or debates over universality (e.g., whether benefits should be equal for all or targeted). In postmodern contexts, this extends to non-military threats, emphasizing human-centered security that integrates social, economic, and cultural elements for holistic well-being.

DISCUSSION

The results highlight that the manifestation of security in a social state differs fundamentally from traditional, military-centered notions of security. In this framework, economic inequality is seen as a threat equal to external aggression, while unemployment or lack of healthcare may destabilize society as much as political unrest. The preventive and inclusive nature of social security policies enhances the legitimacy of state institutions, contributing to stability. However, debates remain about sustainability, efficiency, and potential dependency risks that social states might create. Critics argue that over-expansion of social guarantees may undermine economic competitiveness, whereas proponents emphasize their long-term stabilizing effect.

CONCLUSIONS

The phenomenon of security in a social state is multidimensional, encompassing political, economic, and social aspects. It manifests not only as protection from external and internal threats but also as assurance of social justice, dignity, and equality. A social state strengthens security by combining state responsibility with citizen participation, ensuring sustainable stability.

Strengthen Preventive Measures – Focus on early interventions in healthcare, education, and employment to reduce insecurity.

Balance Economic Growth and Social Security – Develop sustainable economic models that support, rather than undermine, social guarantees.

Promote Inclusive Governance – Enhance citizen participation in decision-making processes to strengthen legitimacy and trust.

Integrate Multidimensional Security Policies – Align national security strategies with social welfare priorities.

Invest in Human Capital – Recognize that the security of a social state rests on educated, healthy, and socially protected citizens.

REFERENCES.

1. BAILLIET, C. M. 2009. Security: A Multidisciplinary Normative Approach. Leiden : Martinus Nijhoff Publishers, 2009. 383 p. ISBN 978-90-04-17296-8.
2. Cambridge Dictionary. 2018.Security. [online] [cit. 2021-07-01] Available at internet:
3. DOMALEWSKA, D. 2021. A Longitudinal Analysis of the Creation of Environmental Identity and Attitudes towards Energy Sustainability Using the Framework of Identity Theory and Big Data Analysis. In



- Energies, 2021, 14, 647. ISSN 1996-1073.[online] [cit. 2021-07-01] Available at internet: doi.org/10.3390/en14030647
4. CHOJNOWSKI, L. 2015. Bezpieczeństwo: zarys teorii. Słupsk : Wydawnictwo Naukowe Akademii Pomorskiej, 2015. 250 p. ISBN 978-83-7467-256-6.
 5. Taylor-Gooby, P. (2004). *New Risks, New Welfare?*. Oxford: Oxford University Press
 6. TODOROVIC, B. – TRIFUNOVIC, D. 2020. Security Science as a Scientific Discipline – Technological Aspects. In Security Science Journal, 2020, roč. 1, č. 1, s. 9-20. ISSN 2737- 9493. [online] [cit. 2021-07-01] Available at internet:
 7. LO (2017). *World Social Protection Report 2017–2019: Universal Social Protection to Achieve the Sustainable Development Goals*. Geneva: International Labour Organization.
 8. United Nations Development Programme (UNDP). (2020). *Human Development Report 2020: The Next Frontier – Human Development and the Anthropocene*. New York: UNDP.



TALABALAR BILAN O'TKAZILADIGAN SPORT VA SOG'LOMLASHTIRISH TADBIRLARINI MODELLASHTIRISH METODIKASI

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Annotatsiya. Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish ularning aqliy va intellektual rivojlanishga hissa qo'shadi. Talabalarning jismoniy tarbiya va sport faoliyatini pedagogik modellashtirish muammosi, ayniqsa, sport va sog'lomlashtirish mashg'ulotlarini tashkil etish va uni amaliy amalga oshirish ko'nikmalarini shakllantirishning nazariy va pedagogik asoslari yetarli darajada rivojlanmaganligi sababli dolzarbdir.

Maqolada talabalarning jismoniy tarbiya va sport faoliyati bo'yicha ko'nikmalarni rivojlantirish, sport va sog'lomlashtirish tadbirlarini modellashtirish metodikasi ta'minlash uchun zarur pedagogik shartlar yoritib berilgan.

Kalit so'zlar. Dastur, gimnastika, jismoniy tarbiya, mashq, bilim, ko'nikma, musobaqa, yurish, chiniqtirish, modernizatsiya.

Yosh avlodni jismoniy baquvvat, chaqqon, irodali, vatanparvarlik ruhida tarbiyalab voyaga yetkazish uchun sport va sog'lomlashtirish tadbirlarini O'zbekiston Respublikasining "Ta'lim to'g'risidagi" Qonuni [1], O'zbekiston Respublikasi Prezidentining 2002 yil 24 oktabrdagi PF-3154 sonli "O'zbekiston bolalar sportini rivojlantirish jamg'armasini tuzish" to'g'risidagi farmoni [2] va uni bajarish tadbirlari asosida yangi metodologiyalar orqali tashkil qilish va o'tkazish maqsadga muvofiqdir. Ushbu ishlar samarali bajarilishi uchun talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini harakatli va milliy o'yinlar vositasida modellashtirish orqali jismoniy salomatlik poydevorini qurish mumkin.

So'nggi paytlarda sport va sog'lomlashtirish tadbirlarini modellashtirish muammolarini o'rganuvchi olimlar jismoniy tarbiya nazariyasi va metodikasining ma'naviy-psixologik jihatlarini ochib beradigan ilmiy materiallar bilan to'ldirishga intilmoqdalar.

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini mazmunli, qiziqarli va shu bilan bir qatorda talab doirasida o'tkazish masalalari A.A.Pulatov, Sh.X.Israilov [12], L.R.Ayrapetyans [3], A.V.Belyaev [6] va boshqalar tomonidan o'rganilgan. Bu asarlarda sport va sog'lomlashtirish tadbirlari ijodiy hamkorlik, qadriyatlar, ehtiyojlar, qiziqishlar, motivlar, maqsadlarga ega bo'lgan shaxsni shakllantirishi asoslab berilgan.



Bugungi kunda jismoniy tarbiya va sport sohasida malakali kadrlar tayyorlash, jismoniy tarbiyani moddiy-texnik ta'minotini yaxshilash, sport zallari va sport maydonchalari, suzish havzalari qurish, sport anjomlarini olish orqali talabalarda sport va sog'lomlashtirish tadbirlarini modellashtirish bo'yicha faol ishlar amalga oshirilmoqda. Shu bilan birga, jismoniy tarbiya va sport sohasidagi nazariy va amaliy ishlanmalar faollashib, talabalar sog'lig'ini mustahkamlash muammosi sport va sog'lomlashtirish tadbirlarini modellashtirish metodikasini takomillashtirishni taqozo etmoqda.

Jismoniy, madaniy va sport tadbirlarini tashkil etish ko'nikmalarini shakllantirishning asosiy omillari quyidagilardan iborat:

- bo'lajak o'qituvchining kasbiy rivojlanishining muhim tarkibiy qismi sifatida oliy ta'lim muassasalari talabalariga sog'lom turmush tarzi standartlarini singdirish;

- talabalar o'rtasida jismoniy tarbiya va sport mashg'ulotlarini tashkil etish shakllari va usullarini o'rganish;

- darslarni sport seksiyalarida o'tkazish;

- talabalarining jismoniy tarbiya, sog'lomlashtirish va sport tadbirlarida, turli sport turlari bo'yicha musobaqalarda faol ishtirok etishini ta'minlash.

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish ularning aqliy va intellektual rivojlanishga hissa qo'shadi. Talabalarining jismoniy tarbiya va sport faoliyatini pedagogik modellashtirish muammosi, ayniqsa, sport va sog'lomlashtirish mashg'ulotlarini tashkil etish va uni amaliy amalga oshirish ko'nikmalarini shakllantirishning nazariy va pedagogik asoslari yetarli darajada rivojlanmaganligi sababli dolzarbdir. Talabalar bilan sport va sog'lomlashtirish tadbirlarini o'tkazish asosan ularning jismoniy tayyorgarligi darajasini oshirish va oliy ta'lim muassasasi standart dasturlarini o'zlashtirishga qaratilgan tor doiradagi vazifalar bilan chegaralanadi. Talabalarining dars oldidan gimnastika, jismoniy tarbiya daqiqalari, darslarda jismoniy tarbiya tanaffuslari, tanaffus paytida jismoniy mashqlardan foydalanish bo'yicha turli pedagogik vaziyatlarini tahlil qilish ijodiy vazifalarni bajarish uchun bilim va ko'nikmalarni talab qiladi. Talabalar bilan jismoniy tarbiya va sport mashg'ulotlarini tashkil etishga to'g'ri nazariy va uslubiy tayyorgarlik ko'rish, darslarni to'g'ri tashkil etish, musobaqa, yurish yoki chiniqtirish orqali sport va sog'lomlashtirish tadbirlarini modellashtirish nafaqat salomatlikni yaxshilash, balki shaxsiyatni rivojlantirish, jamoani shakllantirish, psixologik qobiliyatlarni yaxshilash mumkin. Shuning uchun ham oliy ta'lim muassasalaridagi butun o'quv jarayoni sport va sog'lomlashtirish tadbirlarini amalga oshirishning shakl va metodlarini doimiy ravishda takomillashtirish bilan chambarchas bog'liqdir. Aynan mana shu komponent talabalarni kasbga tayyorlash sifatining muhim ko'rsatkichidir. Ta'lim tizimidagi kadrlar tayyorlash muammosini hal qilish ta'lim tizimini modernizatsiya qilish doirasida amalga oshiriladi, bunda



mutaxassislarni yuqori sifatli tayyorlash o'quv jarayonini tashkil etishni, o'qitishning shakllari, metodlari va vositalarini takomillashtirishni talab qiladi [4; 6; 8; 9; 10; 11; 13; 15].

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish metodikasi quyidagi vazifalarni o'z ichiga oladi:

- talabalarga jismoniy tarbiya va sport sohasidagi nazariy bilimlarni berish;

- talabalarining talabiga ko'ra dars va darsdan tashqari vaqtlarda sport va sog'lomlashtirish tadbirlarini o'tkazish;

- talabalarining salomatligini mustahkamlash, kasalliklarning oldini olish, faol kasbiy faoliyatga tayyorligini oshirish uchun sport va sog'lomlashtirish tadbirlariga qiziqish va ehtiyojni shakllantirish;

- talabalar bilan sinf rahbari va darsdan tashqari mashg'ulotlar tashkilotchisi sifatida sport va sog'lomlashtirish tadbirlarini tashkil etish va o'tkazish sohasida talabalarining ko'nikma va malakalarini shakllantirish.

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish ular kasbiy tayyorgarligi mazmunining tarkibiy qismlaridan biridir. Zamonaviy sport va sog'lomlashtirish tadbirlari jismoniy tarbiyani o'z ichiga oladi. Jismoniy tarbiyaning maqsadi - sog'liqni saqlash va mustahkamlashga g'amxo'rlik, jismoniy rivojlanish va jismoniy faoliyatning ahamiyati bilan bir qatorda o'quv jarayonining yetakchi yo'nalishlaridan biri bo'lgan qadriyatlar va qadriyat yo'nalishlari tizimini shakllantirishdir. Amaliy harakatlarni takrorlash paytida jismoniy tarbiya va sport faoliyatida avtomatlashtirilgan mahorat turli shart va sharoitlarda jismoniy tarbiya va sport muammolarini muvaffaqiyatli hal qiladi.

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish jismoniy tarbiya va sport faoliyati bo'yicha ko'nikmalarni rivojlantirish uchun quyidagilarga alohida e'tibor qaratish zarur:

1. Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlari, jismoniy tarbiya va sportga barqaror ehtiyojni shakllantirish.

2. Talabalarni jismoniy tarbiya va sport mashg'ulotlariga, jumladan, sog'lom turmush tarziga odatlanishga motivatsiyani shakllantirish.

3. Talabalarining sport va sog'lomlashtirish tadbirlari bo'yicha nazariy bilimlarni egallashini ta'minlash, talabalar bilan birgalikda jismoniy tarbiya va sport tadbirlarini tashkil etish va o'tkazish ko'nikmalarini shakllantirish.

4. Mustaqil ravishda sport va sog'lomlashtirish tadbirlarining turli shakllarini tashkil etishga o'rgatish.

5. Sog'lom turmush tarzini targ'ib qilish, talabalarni yomon odatlarga qarshi kurashishga undash, jismoniy tarbiya va sport bilan muntazam va tizimli shug'ullanishga qiziqishni rivojlantirish elementlarini o'rgatish.



Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish metodikasi quyidagi pedagogik shartlarni amalga oshirish orqali ta'minlanadi:

- oliy ta'lim muassasalari ta'lim jarayonida sport va sog'lomlashtirish faoliyati ko'nikma va malakalarini rivojlantirish modelidan foydalanish;
- sport va sog'lomlashtirish tadbirlari o'rtasida tarkibiy, funksional va mazmunli bog'lanishlarni o'rnatish, sog'lom turmush tarzi asoslarini bilish, pedagogik ta'sirlarning izchilligi va tizimlilikini ta'minlash;
- talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini ijodiy jismoniy tarbiya va sport faoliyatiga yo'naltirish;
- talabalarni guruhlariga bo'lish, bu ularning sog'lig'i, motivatsiyasi va individual sport turlari bo'yicha muvaffaqiyatlariga muvofiq amalga oshiriladi;
- kasbiy ta'lim darajalarining integratsiyalashuvi darajasi;
- talabalarining jismoniy tayyorgarligi darajasi, ular asosida oliy ta'lim muassasalarida jismoniy tarbiyaning mazmuni, shakllari va usullari belgilanadi;
- talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish jismoniy tarbiya va sport mashg'ulotlarining yaxlit jarayonini ifodalaydi.

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish quyidagilarni o'z ichiga oladi:

- salomatlikni tejaydigan texnologiyalardan foydalanish;
- talabalarining yosh xususiyatlarini hisobga olgan holda jismoniy tarbiya, sog'lomlashtirish va sport mashg'ulotlarini o'tkazish usullari;
- jismoniy tarbiya va sport mashg'ulotlarini tashkil etishning yangi turlari va shakllari (maxsus kurslar, kompyuter o'yinlari va boshqalar).

Talabalar bilan o'tkaziladigan sport va sog'lomlashtirish tadbirlarini modellashtirish ularning jismoniy tarbiya va sport sohasida ko'nikmalarini rivojlantiradi va ish samaradorligini oshiradi.

Foydalanilgan adabiyotlar

1. O'zbekiston Respublikasining Qonuni. Ta'lim to'g'risida. 23.09.2020 y. 637-son.
2. O'zbekiston Respublikasi Prezidentining Farmoni. O'zbekiston bolalar sportini rivojlantirish jamg'armasini tuzish to'g'risida. 2002 yil 24 oktabr. PF-3154-son.
3. Ayrapetyans L.R., Pulatov A.A., Isroilov Sh.X. Voleybol. // Oliy o'quv yurtlari umumiy kurs talabalari uchun o'quv qo'llanma. T.: 2009. – 77 b.
4. Асмолов А.Г. Психология личности: культурно-историческое понимание развития человека. М.: Академия, 2007. 528с.



5. Axmatov M. S. "Uzluksiz ta'lim tizimida ommaviy sport-sog'lomlashtirish ishlarini samarali boshqarish". 2001 y. Toshkent.
6. Беляев А.В., Савин М.В., Волейбол. // Учебник для студентов вузов ФК. М.: ТБТ, 2009. – 360с.
7. Болонов Г.П. Сценарии спортивно-театрализованных праздников: игровые упражнения, физкультминутки, подвижные игры, полезные советы. Кн.2. М.: Изд-во Шк. Пресса, 2004. 95с.
8. Володин В.А. Энциклопедия для детей в 20-ти томах. Т.1. М.: Изд-во Аванта, 2001. 620с.
9. Грачев О.К. Физическая культура. М.: ИКС «МарТ»; Ростов-на Дону: Изд. центр «МарТ», 2005. 464с.
10. Дубровский В.И. Гигиена физического воспитания и спорта. М.: Изд-во Владос, 2003. 512с.
11. Илин Е.П. Психофизиология физического воспитания: (деятельность и состояния). М.: Изд-во Просвещение, 1980. 199с.
12. Pulatov A.A., Israilov Sh.X. Voleybol nazariyasi va uslubiyati. // O'quv qo'llanma. T.: 2007. - 148s.
13. Савченко М.Б. Физическая культура. Таганрог: Изд-во ТРТУ, 2001. 74с
14. Salomov R. S, Kerimov F. A. "Jismoniy tarbiyada pedagogik texnologiyalar". 2002 y. Toshkent.
15. Современные проблемы в области физической культуры, спорта и здорового образа жизни: Труды Международной научно-практической конференции / Отв. ред. Ю.А.Зубарев, А.И. Шамардин, Г.Ф.Гребенщиков и др. Волгоград: Изд-во ВГИФК, 2006. 724с.
16. Шарипова Д.Д. "Формирование здорового образа жизни". 2001 г. Ташкент.
17. Схарипов Т. Ю, Усмонходжаев Т.С. "Жисмоний тарбия. Дарс исхланмалари ва ҳаракатли о'йинлар". 2000 й.



“Ko‘zgu oldidagi odam” romanida tush motivi

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Annotatsiya: Maqolada yozuvchi Omon Muxtorning “Ko‘zgu oldidagi odam” romanidagi tush motivi talqinlari xususida fikr yuritilgan. Tush motivining personaj ruhiyatini yoritishdagi ahamiyati ochib berilgan. Shuningdek, evrilish motivi vositasida qiyosiy tahlil orqali adabiy ta’sir va ijodkor individualligi masalasiga to‘xtalangan.

Kalit so‘zlar: Motiv. tush motivi, assotsiativ tafakkur, transformatsiya, metamorfoza,

Iste’dodli adib Omon Muxtorning “Ko‘zgu oldidagi odam” romanida tush motivi qahramon kelajagiga, aniqrog‘i, u tanlashi mumkin bo‘lgan ikki yo‘l – ezgulik va yovuzlik yo‘liga ishora qiladi. Shuningdek, personaj ruhiyatidagi qarama-qarshiliklar, ikkilanish vaziyatini ifodalab beradi. Dastavval, roman qahramoni Valijonning qanday vaziyatda, qanday ruhiy holatda tush ko‘rganiga e’tibor qaratish zarur. U Siroj muallimni – o‘lgan odamni qayta uchratib, hayratlanib, har qancha ta’qib etsa-da, bir og‘iz ham gaplasha olmay, sarosimaga tusha boshlagan. Shunday bo‘lsa-da, aql mantig‘iga ko‘ra harakatlanib, birinchi navbatda, muallim ortidan maktabga boradi, natija chiqmagach, qabrini tekshiradi, hech bir o‘zgarishsiz turgan qabrni ko‘rib ajablanadi, qo‘rquvga tushadi. Ayni shu pallada Hanifaga yo‘liqadiki, yuqorida to‘xtalganimizdek, qiz farishta, ruhiy qiynoqlardan qutqaruvchi najotkorday ko‘rinadi. Valijon shu kuni tunda iztirobli o‘ylar, ikkilanishlar vaziyatida tush ko‘radi. Bu yerda tush Valijonning shartli ravishda hoziri, ajabtovur voqealar sodir bo‘lgandan keyingi holati haqida xulosa beradi. U tushda Hanifaning qo‘lini o‘pib, ezgulik tomon yurganday, ammo Siroj muallim ham qo‘lini uzatib, o‘pishni talab qiladiki, arosatda qolgan qahramon noxush holda uyg‘onadi. Bu o‘rinda Siroj muallim harakati orqali muallif qadimdan Sharqda e‘zozlangan qadriyat – pir-murid (ustoz-shogird) munosabatini urg‘ulab ko‘rsatadi. O‘z jamiyatida kishilarning qiyofasizlashib, “maydalashib” ketishining asosiy omilini “pir” – ustoz bergan tarbiyaning oqibati sifatida ko‘radi. Bilamizki, murid o‘ziga pir deb bilgan insonning qo‘lini o‘pib, unga butun inon-ixtiyorini topshiradi. Shu ma’noda, Valijon ham Siroj muallimga qattiq ixlos qo‘ygan, shogird o‘laroq hamisha hurmat saqlagan. Ammo sodir bo‘layotgan voqealar uni o‘z o‘tmishiga tanqidiy nazar solishiga olib keladiki, oqibatda muallim bilan bog‘liq ilk taassurotlarga, avvalroq aytganimizdek, darz keta boshlaydi. Buni quyidagi o‘ylarda ham ko‘rishimiz mumkin.



“Inson har qanday sharoitda asranishi mumkin! Demak, keyingi **tarbiya**. <...> Biz yaxshi tarbiya olmaganmiz, xolos!”¹. Qahramonning bu xulosasini o‘z xohishi bilan dor ostiga borgan odam haqidagi rivoyat ham bir qadar to‘ldiradi.

“... Hech narsani eshitma!” – deyishdi. Qulog‘imga paxta tiqib oldim. “Hech narsani ko‘rma!” – deyishdi. O‘zim o‘z ko‘zlarimni bog‘ladim. “Gapirma!” – deyishdi. Tilimni tishlab yurdim. <...> Endi “... O‘ylama” – deyishyabdi. Men tirik odamman. Idrok qilmay yashayolmayman! Undan ko‘ra meni osib qo‘yaqolinglar².

Rivoyatni eshitgan Siroj muallim munosabati: “Xo‘p, o‘ylab nima qilasiz?! Biz uchun o‘ylaydiganlar bor! Yashab yuravermaysizmi?!”³, – tarzida ifodalangan. Albatta, o‘z vaqtida bu “tarbiya” minglab o‘quvchilar qatorida Valijonning ham ongu shuuriga singgan, mutlaq haqiqat sifatida qabul qilingan. Rivoyatdagi odam va Valijon ulg‘aygan muhit, undagi inson ma‘naviy qiyofasini shakllantiruvchi tashviqotlar o‘zaro parallel, syujetda avvalgisi keyingisini to‘ldiradi. Rivoyat maksimal darajada ixcham, unda qahramon tafakkurining uyg‘oq holati muhrlangan. Valijon hayotida bu vaziyat hali yetilmagan, bosqichma-bosqich shunga sari borish kuzatiladi. Orttilgan gunohlar, yo‘l qo‘yilgan xatolarni tushunib yetish barobarida fikrlay boshlaydiki, endi u ham “dor” tomon o‘z ixtiyori bilan yurib boradi.

Romandagi ikkinchi tush esa ijtimoiy tuzum bergan “tarbiya”ning achchiq mevasi to‘g‘risida o‘ylashga majbur qiladi.

“Tushimga ulg‘ayib qolgan Begona-bolam kirgan edi! U katta soch qo‘ygan; boshini egib, mendan silashimni so‘rayabdi!

Silab ko‘rsam, soch ostida bilinmay turgan – ikkita shox bor!”⁴.

Tushdagi voqea Valijon o‘ylariga uyqash; u Begona bolasini xotirlaganda yovuzlik, jaholat xayolidan ketmaydi. Soch ostidagi ikkita shox shaytonlik belgisiday tuyulib, bolaning Siroj muallimga, Iblislik o‘chog‘i bo‘lgan uning xonadoniga aloqador ekanini eslataveradi. Qahramon gunohkor bo‘lsa-da, ota sifatida o‘z bolasi bobosining (Siroj muallimning) jirkanch ishlarida davomchi bo‘lishini istamaydi. Vujudidagi eng katta qo‘rquv ham shundan. Zahhok haqidagi rivoyat Valining ayni damdagi ruhiy holatini chuqurroq tushunishga, tasavvur etishga ko‘maklashadi. Rivoyatga ko‘ra, Iblis Zahhokning muborak ikki kiftini o‘pgach, shohning yelkalaridan ikki ilon o‘sib chiqadi. “Ular Zahhokning miyasini kemirmoqchi bo‘lishar, Zahhok endi talvasaga tushgancha odamlarni so‘yib, ularning miyasi bilan ilonlarni boqib-tinchitar ekan”⁵. Mazkur rivoyat Firdavsiyning “Shohnoma”si orqali kitobxonlarga

¹ Мухтор О. Кўзгу олдидаги одам // Китобда: Мухтор О. Тўрт томон қибла. – Тошкент: Шарқ, 2000. – Б. 244.

² Yuqoridagi manba. – B.247.

³ Yuqoridagi manba. – B.247.

⁴ Yuqoridagi manba. – B.274.

⁵ Yuqoridagi manba. – B.244.



yaxshigina tanish. Shoir Faxriyorning “Zahhoklar uliydi, miyaxo‘r shoqol”⁶ satri ham assosiativ ravishda ushbu rivoyatga bog‘lanadi. Omon Muxtor qahramoni xuddi rivoyatdagi Zahhok holida; nikohsiz tug‘ilgan Begona bola uchun bir umr ruhiy azob va yurakni kemiruvchi o‘ylar bilan tovon to‘lashga majbur. Umuman olganda, syujetga singdirib yuborilgan rivoyatlar qahramoni va roman qahramoni parallel qo‘yilgan. Ijodkor unitilib borayotgan rivoyatlarni qayta jonlantirish –transformatsiya orqali, avvalo, o‘z qahramonining ichki olamini, qolaversa, butun bir davr qiyofasini yoritib bera olgan.

M.Baxtin evrilish jarayonini boshidan kechirayotgan qahramonning avantiyur zamon va maishiy makon sathi bo‘ylab asliga qarab intilishi, shu asnoda ma‘nan o‘zgarishi, o‘zini anglab borishini “Oltin eshak” asari misolida tushuntiradi. Olimning yozishicha, asar qahramonining “evrilgan qiyofadan asl qiyofaga yetib kelguncha bosib o‘tgan yo‘li sinov va o‘z-o‘zini topish yo‘li sifatida metamorfozaviy mohiyat kasb etadi”⁷. Shu ma‘noda Baxtinning Apuley yaratgan qahramon haqida chiqargan xulosasi, o‘z navbatida, Valijonga nisbatan aytilsa ham, zarracha yanglish tuyulmaydi. E‘tibor bering: “Lyusiy tushgan vaziyat zohiran qaraganda uning fojeasi bo‘lib ko‘rinsa ham, mohiyatan qahramon shu qiyofa va shunday g‘ayriinsoniy vaziyat bois tozaradi. Tamomila boshqa odamga aylanadi”⁸.

Omon Muxtor qahramoni Lyusiydan farqli ravishda botiniy evrilishni boshdan kechiradi. (Evrilish Lyusiyning tashqi qiyofasiga ta‘sir etib, u hayvon (eshak)ga aylanib qoladi) Metamorfoza badiiy matnda har ikki obrazning uch ko‘rinishini yuzaga chiqaradi. Bu Apuley asarida quyidagicha: “yengiltak, maishatga moyil Lyusiy, eshak Lyusiy va iztiroblar olovida poklangan, ko‘ngil halovatiga erishgan Lyusiy”⁹. Ushbu evrilish sxemasi “Ko‘zgu oldidagi odam” romanida o‘zgacharoq: bola Valijon (garchi u roman xronotopida bevosita ishtirok etmasa ham qahramon xayollarida bir necha bor eslanadi), Siroj muallim ta‘siri ostidagi Valijon va iymonga qaytgan Valijon.

Apuley uchun Lyusiy hayotining dastlabki bosqichi ideal emas: xulq-atvori o‘zgarishi shart. Ayni zarurat metamorfozaga yo‘l ochadi. Valijonda esa birinchi va uchinchi ko‘rinish o‘zaro yaqin: uning iymonga qaytishi mohiyatan asliga qaytishdir. Lyusiyning eshakka aylanib, odamlar tomonidan kamsitilishi, qiynoqqa solinishi, xo‘rlanishi jamiyatning asl qiyofasiga chetdan nazar tashlashi uchun omil bo‘lganidek, Valijon ham Shaytonni tanib olishi uchun evrilish yo‘lini bosib o‘tishi shart.

⁶ Фахриёр. Излам. – Тошкент: Akademnashr, 2016 – Б.258.

⁷ М.Бахтин. Романда замон ва хронотоп шакллари. У.Жўракулов таржимаси – Тошкент: Akademnashr, 2015. – Б.30.

⁸ Yuqoridagi manba. – B.30.

⁹ Yuqoridagi manba. – B.85.



O'zi aytganidek: "Xudoning borligiga ishonmagan odamgina Iblisning borligiga ham ishonmaydi!"¹⁰. Ayon bo'ladiki, metamorfoza Valijon uchun haqiqatni anglash yo'lidagi muhim bosqich edi.

Foydalanilgan adabiyotlar ro'yxati

1. Мухтор О. Тўрт томон қибла: Уч романдан иборат Шарқ дафтари: (Трилогия) – Тошкент: Шарқ, 2000. – 432 б.
2. Фахриёр. Излам. – Тошкент: Akademnashr, 2016 – 368 б.
3. М.Бахтин. Романда замон ва хронотоп шакллари. У.Жўракулов таржимаси – Тошкент: Akademnashr, 2015. – 288 б.
4. Қуронов Д, Шералиева М, Мамажонов З. Адабиётшунослик луғати. – Тошкент: Akademnashr, 2013. – 406 б.
5. Йўлдошев Қ. Бадий таҳлил асослари. – Тошкент: Kamalak, 2016. – 306 б.

¹⁰ Мухтор О. Кўзгу олдидаги одам // Китобда: Мухтор О. Тўрт томон қибла. – Тошкент: Шарқ, 2000. – Б. 298.



KASBIY TA'LIM TIZIMIDA FIZIKA FANINI O'QITISHNING METODOLOGIK ASOSLARI

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Annotatsiya: Ushbu maqolada kasbiy ta'lim muassasalarida fizika fanini o'qitishning metodologik asoslari va dars samaradorligini oshirishga qaratilgan innovatsion yondashuvlar hamda zamonaviy pedagogik texnologiyalarni qo'llashning afzalliklari yoritilgan. Fizika ta'limini hayotiy voqeliklar bilan bog'lash, tajriba va modellashtirish orqali o'quvchilar tafakkurini rivojlantirishga alohida urg'u berilgan.

Kalit so'zlar: fizika ta'limi, kasbiy ta'lim, o'qitish metodologiyasi, innovatsion texnologiyalar, tajriba, modellashtirish, STEAM yondashuvi, fanlararo integratsiya.

Аннотация: В статье рассматриваются методические основы преподавания физики в учреждениях профессионального образования, инновационные подходы, направленные на повышение эффективности урока, и преимущества использования современных педагогических технологий. Особое внимание уделяется связи обучения физике с реальными реалиями, развитию мышления учащихся посредством экспериментирования и моделирования.

Ключевые слова: преподавание физики, профессиональное образование, методика преподавания, инновационные технологии, экспериментирование, моделирование, STEAM-подход, междисциплинарная интеграция.

Abstract: This article discusses the methodological foundations of teaching physics in vocational education institutions, innovative approaches aimed at increasing the effectiveness of the lesson, and the advantages of using modern pedagogical technologies. Particular emphasis is placed on connecting physics education with real-life realities, developing students' thinking through experimentation and modeling.

Keywords: physics education, vocational education, teaching methodology, innovative technologies, experimentation, modeling, STEAM approach, interdisciplinary integration.

KIRISH

Zamonaviy kasbiy ta'lim tizimi o'quvchilardan nafaqat nazariy bilimlarni egallashni, balki ularni amalda qo'llay olish ko'nikmalarini ham



talab qiladi. Fizika fani esa bu borada yetakchi o'rin egallaydi. kasbiy ta'lim bosqichida fizika fanining chuqurlashtirilgan holda o'qitilishi nafaqat oliy ta'limga tayyorlov, balki ilmiy dunyoqarashni shakllantirish vositasi hisoblanadi. Shu sababli, fizika ta'limining metodologik asoslarini takomillashtirish dolzarb masalalardan biridir.

Asosiy qism

1. Fizika o'qitishning an'anaviy va zamonaviy usullari

Kasbiy ta'lim darajasida fizika fanini o'qitishda quyidagi metodlar keng qo'llaniladi:

An'anaviy metodlar: leksiya, amaliy mashg'ulot, laboratoriya ishi;

Zamonaviy metodlar: muammoli ta'lim, loyiha asosida o'qitish, aks ettiruvchi (reflektiv) ta'lim, raqamli simulyatsiyalar asosida o'qitish.

Bugungi kunda an'anaviy yondashuvlar innovatsion usullar bilan uyg'unlashgandagina yuqori natijaga erishish mumkin.

2. Tajriba va modellashtirish metodlari

Fizika fanining asosiy ustunligi – bu eksperimental yo'nalishdir. Litseylarda amaliy laboratoriya mashg'ulotlari yordamida o'quvchilarda: kuzatish, o'lchash, nazoratli tajriba olib borish, xulosalash kabi ko'nikmalar shakllanadi.

Zamonaviy texnologiyalar yordamida tajribalarni virtual modellashtirish (PhET, Algodoo, Labster kabi platformalar) orqali ham tashkil etish mumkin. Bu o'quvchilarni xavfsiz, ammo chuqur o'zlashtirishga asoslangan ta'lim bilan ta'minlaydi.

3. STEAM va fanlararo integratsiya

STEAM (Science, Technology, Engineering, Arts, Mathematics) yondashuvi orqali fizika ta'limini real hayotiy muammolar bilan bog'lash, texnologik loyihalar yaratish, muhandislik tafakkurini shakllantirish imkoniyati tug'iladi. Masalan, fizika va informatika fanlarining integratsiyasi orqali Arduino, robototexnika yoki mikrokontrollerlar bilan ishlash ko'nikmalari berilishi mumkin.

4. Litsey o'quvchilarida motivatsiyani oshirish

Fizika faniga nisbatan qiziqishni oshirish uchun:

hayotiy misollar keltirish,

taniqli fiziklarning hayotiy yo'li haqida suhbatlar tashkil etish,

fizika bo'yicha tanlovlar va olimpiadalar o'tkazish,

laboratoriya ko'rgazmalari va ekskursiyalar tashkil etish lozim.

Bu metodlar o'quvchilarda mustaqil izlanishga va ilmga mehr uyg'otadi.

XULOSA

Fizika ta'limini kasbiy ta'lim bosqichida samarali tashkil etish uchun darslarni zamonaviy metodlar asosida olib borish, laboratoriya va modellashtirish ishlarini takomillashtirish, STEAM yondashuvini keng joriy



etish zarur. Bu esa o'quvchilarning nafaqat fanga bo'lgan qiziqishini oshiradi, balki ularning ilmiy va amaliy salohiyatini ham rivojlantiradi.

Foydalanilgan adabiyotlar:

1. Abdukarimov A. Fizika o'qitish metodikasi. – Toshkent: TDPU, 2020.
2. Tohirov B. Fizika fanini o'qitishda innovatsion yondashuvlar. – Samarqand, 2021.
3. PhET Interactive Simulations. University of Colorado Boulder. <https://phet.colorado.edu>
4. Xolmatova M. STEAM yondashuv va fizika ta'limi. // "Ilm va taraqqiyot" jurnali, 2022, №2.
5. O'zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi PF-60-son Farmoni. "Ta'lim sifatini oshirish va raqobatbardosh kadrlar tayyorlash tizimini rivojlantirish bo'yicha strategiya".



KOMMUNIKATSIYA VA VIRTUAL MULOQOT

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Annotatsiya. Dunyo tilshunosligida, xususan, o'zbek tilshunosligida ham nutqiy muloqotning noverbal vositalari (ovozdagi turli holatlar, ishoralar, mimika va gavda harakatlari) tadqiqi tilning turli aspektlarida amalga oshirilgan. Zamonaviy hayot realiyalari shuni ko'rsatmoqdaki, hozirgi dunyoning barcha jamiyatida muloqot o'ta erkin, kutilmagan hamda til qoidalaridan yiroqligi bilan xarakterlanadi. Bunda noverbal vositalarning o'rni har qachongidan ortgan va ular o'z zimmalariga katta pragmatik yukni ola boshladi. Ayniqsa, ularning virtual muloqotda noverbal vositalar tadqiqotchilar e'tiboridan chetda qolmoqda.

Mazkur maqolada paralingvistik vositalar haqida qisqacha ma'lumot berilgan, hamda ularning o'rganilish darajasi va ahamiyati ochib berilgan. Murojaatda noverbal shakllari ham keng tahlil qilingan. Shuningdek, lingvistik va nolingvistik aloqalar, ular o'rtasidagi o'zaro ta'sir va qarama-qarshiliklar, ma'lum tas'virni yaratish imkoniyatlari muhokama qilinadi. Muloqot jarayonida noverbal vositalarning xususiyatlar masalasi ham yoritilgan. Bundan tashqari, o'zbeklarda aloqa-aralashuv jarayonida qadimdan tarkib topgan va ishlatib kelinayotgan muomala shakllari ham berilgan.

Kalit so'zlar: virtual muloqot, noverbal vositalar, noverbal shakl, lingvistik va nolingvistik aloqa, jestlar, imo-ishoralar.

Аннотация. В мировой лингвистике, в частности, в узбекской лингвистике, изучение невербальных средств речевого общения (различных состояний голоса, жестов, мимики и движений тела) осуществлялось в различных аспектах языка. Реалии современной жизни свидетельствуют о том, что во всем обществе современного мира общение характеризуется крайней свободой, непредсказуемостью и далекостью от языковых правил. Роль невербальных инструментов в этом возросла, чем когда-либо прежде, и они начали брать на себя большую прагматическую нагрузку. Особенно их невербальные инструменты в виртуальном общении остаются незамеченными исследователями. В процессе общения также освещается вопрос о свойствах невербальных средств. Кроме того, в процессе общения-вмешательства у узбеков давались формы обращения, которые издавна складывались и использовались.



Ключевые слова: виртуальное общение, невербальные средства, невербальная форма, лингвистическое и нелингвистическое общение, жесты, кинестетика, жесты, мимика, такесики.

Abstract. In World linguistics, in particular in Uzbek linguistics, the study of nonverbal means of speech communication (various states in the voice, gestures, facial expressions and posture movements) was carried out in different aspects of the language. The realities of modern life show that in all societies of the current world, communication is characterized by being extremely free, unexpected and far from the rules of language. In this, the role of nonverbal tools has grown more than ever, and they began to take on a huge pragmatic load. In particular, in their virtual communication, nonverbal tools remain unnoticed by researchers. Mzakur's paper provides a brief overview of paralinguistic tools, and reveals the degree and significance of their study. The appeal also extensively analyzed nonverbal forms. Also discussed are linguistic and non-linguistic relations, interaction and contradictions between them, the possibility of creating a certain establishment. In the process of communication, the issue of properties of nonverbal means is also covered. In addition, forms of treatment have also been given in Uzbeks, which have long been composed and used in the process of communication and intervention.

Key words: virtual communication, nonverbal means, nonverbal form, linguistic and non-linguistic communication, gestures.

Tadqiqotning obykti sifatida o'zbeklar nutqiy muloqotining noverbal (fonatsion, kinetik va proksemik) vositalari tanlangan.

Tadqiqotning predmetini o'zbek paralingvistik vositalarining genderologik va pragmatik xususiyatlari tashkil etadi.

Tadqiqotning ilmiy yangiligi quyidagilardan iborat:

- paralingvistik vositalar shaxsning psixologik, ijtimoiy, milliy-madaniy, ma'naviy va jinsiy xususiyatlarini o'zida mujassamlashtirgan nutqiy muloqotning zaruriy komponenti ekanligi dalillangan;
- virtual muloqotda noverbal vositalarining nutqiy vaziyat bilan bog'liq ma'nolari ochib berilgan;
- jinsiy xoslangan o'zbek paralingvistik vositalarining aksiologik vazifa bajarishi, vaziyat, holat va insonlarning xarakter xususiyatlarini ijobiy yoki salbiy baholash imkoniyatlari ochib berilgan;
- o'zbeklar muloqotidagi paralingvistik vositalarining genderologik va pragmatik tahlili asosida erkak va ayollarga xos bo'lgan noverbal vositalarning jamiyat hayotidagi madaniy me'yorlari aniqlangan.

Tadqiqotning amaliy natijalari quyidagilardan iborat:

- paralingvistik vositalar milliy xususiyatlarni o'zida gavdalantiruvchi, urf-odatlar, rituallar, adab xatti-harakatlari bilan aloqador bo'lgan nutqiy



muloqotning ajralmas uzvi ekanligi hamda o'ziga xos pragmatik mazmun kasb etishi va genderologik xususiyatlari ko'rsatib berilgan;

– aniq misollar asosida nutqiy muloqotda qo'llanuvchi noverbal vositalar fonatsion, kinetik va proksemik noverbal vositalar guruhlariga ajratilgan;

Tadqiqot natijalarining ishonchliligi respublika va xalqaro miqyosdagi ilmiy-uslubiy va ilmiy-amaliy konferensiyalarda qilingan ma'ruzalar, ilmiy jurnallarda chop etilgan maqolalar, xulosalar, taklif hamda tavsiyalarining amaliyotda joriy etilgani, olingan natijalarning vakolatli tashkilotlar tomonidan tasdiqlanganligi bilan izohlanadi.

Tadqiqot natijalarining ilmiy va amaliy ahamiyati. Tadqiqot natijalarining ilmiy ahamiyati dissertatsiyada keltirilgan fikr- mulohazalar shakllanish bosqichida turgan o'zbek funksional tilshunosligini nazariy jihatdan boyitishga xizmat qilishi bilan belgilanadi.

Tadqiqot natijalarining amaliy ahamiyati shundaki, o'zbek paralingvistik vositalarining misolida amalga oshirilgan genderologik va pragmatik tahlillar lingvomadaniyatshunoslik, nutq madaniyati, pragmalingvistika, sotsiolingvistika, psixolingvistika fanlari bo'yicha yaratiladigan o'quv qo'llanmalarining mukammallashuvi uchun xizmat qilishi bilan belgilanadi.

Tadqiqot natijalarining joriy qilinishi. Paralingvistik vositalarning genderologik va pragmatik tadqiq etish bo'yicha olingan ilmiy natijalar asosida:

muloqot jarayonida uzatilayotgan axborotning emotsional-ekspressiv bo'yog'ini yetkazishda, uning tushunarli va ta'sirli bo'lishini ta'minlashda lingvistik birliklar bilan bir qatorda paralingvistik vositalarning o'rni hamda ularning virtual muloqotda noverbal vositalarning yoritishdagi xulosalaridan "A- 1-126. Uzluksiz ta'limda o'quvchilar til kompetentligini shakllantirishning zamonaviy usullari" davlat ilmiy-texnika dasturlari doirasidagi amaliy loyihada foydalanilgan (O'zbekiston Respublikasi Oliy va o'rta maxsus ta'lim vazirligining 202- yil 10-fevraldagi 89-03-815-son ma'lumotnomasi). Natijada, o'quvchilar til kompetentligini shakllantirishda nafaqat lisoniy birliklar va ularning voqelanish usullari haqidagi bilimlar, balki ularga yondosh bo'lgan paralingvistik vositalar hamda ularning muloqot jarayonidagi ahamiyati haqidagi bilimlari ham muhimligi aniqlangan.

Hozirgi kunda virtual muloqot faqat yangi aloqa kanalini hosil qilmasdan, balki yosh avlod ongi shakllanadigan o'ziga xos sotsiomadaniy muhit ham hisoblanmoqda. Internetdagi muloqot akti yozma-suhbat shaklida kechganda ideogrammalardan foydalanish ko'p kuzatiladi. **Ideogramma** (grekcha εἶδος — g'oya va γράμμα — yozuv belgisi, harfdan olingan) - muallifning muayyan g'oyasiga mos keladigan yozuv belgisi yoki shartli tasvirni bildiradi. Ideogrammalar fikrlarni ifodalash uchun xizmat qilib, so'zlar va harflarning



to'laqonli almashtiriluvchan shakliga aylanadi. Ideogramma, piktogrammadan farqli ravishda, nafaqat tasvirlangan tushunchani, balki u bilan bilvosita bog'liq tushunchalarni ham belgilashi mumkin (masalan, ko'pgina muharrir dasturlarida disket tasviri fayl saqlash mazmunini ifodalashi mumkin. Emodzilarning quyidagi xususiyatlarini qayd etishimiz mumkin:

1. Emodzilar ideogrammaning bir turi sifatida qaralishi mumkin.
2. Emodzilar nafaqat til vositalarini tejashga, balki nutqqa ekspressiya berishga, "qabul qiluvchi - muloqotchi" tizimini takomillashtirishga va haqoratli leksika ishlatilishini qisqartirishga mo'ljallangan degan taxminlar mavjud. Bugungi kunda emodzilar muayyan tizimni hosil qilgan va va nafaqat hissiyotlarni, balki turli shaxslar, buyumlar va abstrakt tushunchalarning aniq belgilarini ham qamrab oladi.
3. Ba'zi hollarda emodzilar implitsit konnotatsiyalarni bildirishga, ma'noli urg'ularni joylashtirish va kuchaytirishga yordam beradi.
4. Emodzilarda pretsedentlik va madaniy tolerantlik o'zaro chambarchas bog'langan bo'ladi.
5. Emodzilar e'tiborni tez jalb qiladi, bu esa ularni yoshlar uchun jozibali qiladi.
6. Emodzilar virtual media makonini shakllantiruvchi axborot obrazlari tarkibida ta'sir ko'rsatishning muhim funksiyasini bajaradi.
7. Ideogrammalar norasmiy muhitda - chatlar yoki shaxsiy xarakterdagi xabarlarda keng qo'llanadi. Chunki muloqotning emotsional xususiyatlarini yetarlicha ifodalash va to'g'ri yetkazish uchun zarur hisoblanadi.

Hozirgi kunda internet faqat ma'lumotlarni uzatish usuli emas, balki doimiy ravishda tezlashayotgan hayot tempi sharoitida insonning dunyoda yo'nalishini belgilovchi muhim vositalardan biri sanaladi. Internet - bu faqat elektron signallar orqali muloqotni vositachilik qiladigan yangi aloqa kanali emas, balki muloqotning barcha jihatlariga, jumladan, uning asosiy vositasi bo'lgan tilga ta'sir o'tkazadigan yangi sotsiomadaniy muhit sifatida baholanmoqda. Hozirgi kunda yozma-suhbat nutqining asosini emodzi. Ya'ni elektron xabarlarda va veb-sahifalarda g'oya yoki hissiyotni ifodalash uchun ishlatiladigan ideogrammalar va smayliklar tili tashkil etadi. Smayl (angl. smile 'tabassum') yoki emotikon (angl. emoticon - emotion 'hissiyot' va icon 'piktogramma' so'zlaridan olingan akronim) deganda harflar, raqamlar, tinish belgilari va h.k. dan iborat bo'lgan belgi tushuniladi, u yozma nutqda ma'lum bir tushuncha yoki hissiy munosabatni bildiradi. Smayl muxbirlikda ishtirok etuvchilar qo'llaydigan tildan qat'iy nazar, uning grammatik qoidalariga bo'ysunmaydi va xalqaro tushuncha hisoblanadi. Smaylning asosiy maqsadlaridan biri og'zaki nutqda mimika va intonatsiya orqali uzatiladigan noverbal ma'lumotlarni (hissiyotlarni) yozma ravishda ifodalashdir.

Virtual muloqotda ham oddiy muloqot jarayoni kabi muayyan bosqichlar mavjud. Odatdagi nutqiy muloqot bir necha bosqichlarga bo'linadi. Bular:



nutqiy muloqotning boshlanishi (salomlashish), nutqiy muloqotni saqlash (suhbat jarayoni) va nutqiy muloqot yakuni (xayrlashish). Salomlashish ham, xayrlashish ham ma'naviy tamoyillarga asoslanadigan xatti-harakat shakli, nutq odobi unsuri. Har qanday nutqiy muloqot turi salomlashish bilan boshlanib, xayrlashish bilan yakunlanadi. Salomlashish bu madaniy va ijtimoiy munosabatlarni o'zida aks ettiruvchi harakat. Suhbatning qanday samara berishi, qanday davom etishi salomlashish jarayoni, usuliga bog'liq. Xayrlashish ham suhbatda suhbatning yakuni sifatida bir qator o'ziga xos vazifani o'taydi: birinchidan, bu odatdagi odobga rioya etish; ikkinchidan, kommunikativ aloqani yakunlovchi bir harakat[5]. Virtual muloqot jarayonida ham salomlashish va xayrlashish jarayoni muhim ahamiyatga ega. Bu bosqichlarni ifoda etuvchi noverbal vositalar ham shakllangan hamda milliy-madaniy-ijtimoiy muhit bilan aloqadorlikka ega. Ya'ni, o'zbek tilida aynan salomlashish va xayrlashishga oid stikerlar ham ishlab chiqilgan. Bugungi kunda virtual muloqot jarayonida qo'llanuvchi noverbal grafik vositalar – emodjilar, stikerlar, logogrammalar, ideogrammalar tizimi shakllangan va o'ziga semiotik tizim deb aytishimiz mumkin. Chunki bu birliklarda ham til belgilari kabi shartlanganlik, shakl va mazmun jihatlari mavjud.

Axborot texnologiyalari davrida ideogrammalar maktab o'quvchilari va talabalarning internet hayotiga shunchalik chuqur kirib bordiki, deyarli barcha ijtimoiy tarmoqlar va messengerlarga smayliklarni kiritish imkoniyati qo'shildi. Ko'plab yigit-qizlar endi ularsiz muloqot qilishni tasavvur qila olmaydi. Har kuni butun dunyo bo'ylab mobil ilovalar yordamida taxminan 6 milliard emodzi yuboriladi va qabul qilinadi. Amerikaning "Global til monitoringi" fondi ma'lumotlariga ko'ra, emodzilar foydalanuvchilarning fikrlarini ifodalash uchun tobora ko'proq xizmat qiladi va so'zlar va harflarning to'laqonli almashtiriluvchan shakliga aylanadi. Hozirgi kunda kompyuterlar va mobil elektron qurilmalar minglab emodzi belgilarini taniydi. Emodzilarning tarixi 1990-yillardan boshlanadi, shu paytda yaponiyalik NTT Docomo kompaniyasi xodimi Sigetaka Kurita peyjer va elektron pochta orqali muloqotni hissiyotlarni ifodalovchi ramzlar bilan to'ldirish mumkinligini payqadi. Smartfonlar davri boshlangach, emodzilar soni bir necha yuzga yetdi. Yaponiyalik olimlarning tadqiqotlari natijalari ko'rsatganidek, biz bir-birimizga yuboradigan smayliklarni miyamiz haqiqiy tabassumlar sifatida qabul qiladi. Insonning kayfiyati o'zgaradi va u ma'lum bir stiker namoyish etayotgan hissiyotlarni boshdan kechira boshlaydi. Emodzilar noverbal muloqot usuliga aylanadi. Shunday qilib, insonning idrok etishida smayliklar - bu so'zlar emas, balki vizuallashtirilgan hissiyotlar bo'lib, ular xabarining ma'nosini muloqotchiga yetkazishda juda muhim rol o'ynaydi. Emodzilar telefon orqali suhbatdagi ovoz ohangi yoki shaxsiy muloqotdagi imo-ishoralar va yuz ifodalari bilan bir xil vazifani bajaradi.



Internetdagi muloqot matnlarni yozma ravishda qayd etishni taqozo qilsa-da, onlayn rejimdagi muloqot foydalanuvchilar tomonidan suhbat sifatida qabul qilinadi va ular qandaydir tarzda uni suhbat uchun odatdagi ogʻzaki shaklga yaqinlashtirishga harakat qiladilar. Yana shu muhimki, emodzi tilning vositalarini tejashdan koʻra, nutqni ekspressiya bilan toʻldirish, "qabul qiluvchi – kommunikator" tizimini takomillashtirishga moʻljallangan. Bundan tashqari, yoshlarning virtual muloqotida smayliklarni qoʻllash haqoratli soʻzlarni ishlatishni kamaytirishga yordam berishi aniqlandi. Yaqinda oʻtkazilgan tadqiqotlardan birida Instagram (fotosuratlar va videolarni almashish uchun ilova, ijtimoiy tarmoq elementlariga ega) ishlab chiqaruvchilari foydalanuvchilar orasida sleng soʻzlarni ishlatish sezilarli darajada kamayganini, chunki endi ular emodzilarni afzal koʻrishlarini aniqlashgan. Aynan shu virtual maydonda emodzi tili universal muloqot vositasiga aylandi. Kompaniyaning hisobotiga koʻra, Instagramdagi barcha izohlarning deyarli 50%i bir yoki ikkita stiker bilan birga keladi. Eng mashhurlari - bu xursandchilikni ifodalovchi smayliklar (qiyiq koʻz bilan qarash, oʻpish, tabassum va kulgi): ularni muloqotda foydalanuvchilarning 44,7% dan ortigʻi qoʻllaydi. Shuningdek, odamlar bir-biriga koʻpincha xafa boʻlgan va gʻazablangan yuzlar, yurakchalar, turli xil imo-ishoralar va romantik rasmlarni yuboradilar. Dasturiy taʼminot ishlab chiqaruvchilari hatto maxsus kastom klaviatura emodzi - Emojimo yaratilgan.

Uning asosiy vazifasi - matnni smayliklarga tarjima qilish. Dastur quyidagicha ishlaydi: foydalanuvchi matnni kiritadi va klaviatura uni sinxron ravishda skaner qiladi va soʻzlarni rasmlarga tarjima qiladi. Shunday qilib, 2,5 mingdan ortiq soʻz taniladi.

Emodzilar nisbatan salbiy fikrlar ham mavjud. Ular taʼsirida yosh avlodda badiiy nutq mahorati yoʻqoladi, til qobiliyatlari pasayadi, deb taʼkidlanadi. Chunki til muloqotning eng muhim vositasi ekanligini inkor etib boʻlmaydi. Virtual muloqot diskursiga emotikonlarning kirib kelishi bilan, bir tomondan, ekspressiyani ifodalash uchun grafik vositalarni boyitish, boshqa tomondan esa, gapirish vositalarini qashshoqlashtirish tendensiyasi kuzatilmoqda. Shuningdek, muloqotda smayliklarni koʻp ishlatish nutq va intellekt darajasi pasayishi bilan ham bogʻlanadi-betlar]. Lekin ayrim tadqiqotchilar emodzilarni ishlatish haqida shunchalik pessimistik prognozlar berish kerak emas, deb hisoblashadi. Chunki ramzlar har doim lingvistik kommunikatsiya bilan parallel yoki birga mavjud boʻlgan, matematik mantiqda yozuvlarni samarali qisqartirib va navigatsiya uchun koʻrsatmalarni soddalashtirgan, bular kam joy egallaydi. Emodzilar, bular ramzlar toʻplami emas, balki qurilmalar oʻrtasida lingvistik boʻlmagan kontentni uzatishning alohida texnologiyasi boʻlgan, oʻz funksiyasiga ega. Bu funksiya tilni toʻldirishdan, anʼanaviy nutqni almashtirishdan iborat. Emodzilarni ishlatish



xavfli hodisa emas, ammo shuni tushunish kerakki, paralingvistik ramzlar so'zlarning o'rnini to'liq kompensatsiya qila olmaydi.

Xulosa sifatida shuni aytish mumkinki, virtual muloqot ham oddiy muloqot kabi muayyan bosqichlarga, o'zining modeliga ega. Unda verbal va nonverbal vositalar birday ahamiyatli. Virtual muloqot jarayoni ham oddiy, bevosita muloqot jarayoni kabi milliy-madaniy, pragmatik, psixolingvistik, sotsial omillar ta'sirida muayyan shaklga ega bo'ladi. Ya'ni bu jarayonda ham yozma suhbat olib borayotgan kommunikatorlarning Yoshi, jinsi, madaniyati, ijtimoiy kelib chiqishi, psixologiyasi kabi omillar muayyan darajada rol o'ynaydi. Bu xususiyatlarni turli ijtimoiy-madaniy qatlam kishilari nutqiy jarayonlari tahlili misolida o'rganish, nonverbal grafik vositalarning shakliy va mazmuniy, funksional jihatlarini tadqiq etish dolzarb vazifalardan sanaladi.

FOYDALANILGAN ADABIYOTLAR RO'YXATI

1. Байкулова А.Н. Повседневное деловое общение: коммерческий чат, его специфика и роль в организации быта горожан // Известия Саратовского университета. Новая серия. Серия: Филология. Журналистика. 2023. Т. 23, вып. 1. С. 11–16 Izvestiya of Saratov University. Philology. Journalism, 2023, vol. 23, iss. 1, pp. 11–16 <https://bonjour.sgu.ru>
2. Бергельсон М. Б. Языковые аспекты виртуальной коммуникации // Вестн. Моск. ун-та. Сер. 19, Лингвистика и межкультурная коммуникация. 2002. № 1. С. 55–67
3. Глобальный мониторинг языка [Электронный ресурс]. Режим доступа: <http://www.languagemonitor.com>
4. Маматов А. Наиболее важных функций языка/Тилнинг энг муҳим 100 та функцияси. – Тошкент, 2014. – 22 б.
5. Тоирова Г., Зарипова А. Нутқий мулоқотнинг яқуни.// Filologiyaning dolzarb masalalari. – Qo'qon, 2020. – B. 118-120.
6. Yuasa M., Saito K., Mukawa N. Brain activity when reading sentences and emoticons: an fMRI study of verbal and nonverbal communication // Electron. commun. Japan. 2011. № 94 (5). P. 17–24.
7. Richter B. First steps in theoretical and applied linguistics. - Budapest, 2006.
8. Xolmonova Z. Tilshunoslik nazariyasi. – Toshkent, 2020.



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