

GAME TECHNOLOGIES IN TEACHING FRENCH GRAMMAR AND VOCABULARY

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ABSTRACT

The application of game-based technologies in teaching French grammar and vocabulary has emerged as an innovative approach in language education. This article explores the integration of gamification techniques to enhance students' engagement and retention in learning complex linguistic structures. By leveraging interactive tools and digital platforms, educators can create a dynamic learning environment that promotes active participation and fosters deeper understanding. The study focuses on the implementation of game-based methodologies in French language classrooms in Uzbekistan, targeting university students majoring in English philology. The findings highlight the benefits of gamification in overcoming traditional learning barriers and improving language acquisition outcomes.

Keywords: Game-based technologies, French grammar, French vocabulary, language acquisition, gamification, university students, English philology, interactive learning, Uzbekistan.

LES TECHNOLOGIES DE JEU DANS L'ENSEIGNEMENT DE LA GRAMMAIRE ET DU VOCABULAIRE FRANÇAIS

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ABSTRAIT

L'application des technologies basées sur le jeu dans l'enseignement de la grammaire et du vocabulaire français s'impose comme une approche novatrice dans l'éducation linguistique. Cet article explore l'intégration des techniques de gamification pour améliorer l'engagement et la rétention des étudiants dans l'apprentissage de structures linguistiques complexes. En s'appuyant sur des outils interactifs et des plateformes numériques, les enseignants peuvent créer un environnement d'apprentissage dynamique qui favorise la participation active et une compréhension approfondie. L'étude se concentre sur la mise en œuvre de méthodologies basées sur le jeu dans les classes de français en Ouzbékistan, visant les étudiants universitaires spécialisés en philologie anglaise. Les résultats mettent en évidence les avantages de la gamification pour surmonter les obstacles d'apprentissage traditionnels et améliorer les résultats de l'acquisition linguistique.

Mots-clés: Technologies basées sur le jeu, grammaire française, vocabulaire français, acquisition linguistique, gamification, étudiants universitaires, philologie anglaise, apprentissage interactif, Ouzbékistan.

INTRODUCTION

The role of innovative teaching methodologies has become increasingly significant in language education, especially in the context of learning French as a foreign language. Traditional approaches to teaching grammar and vocabulary often focus on rote memorization and repetitive drills, which can lead to a lack of engagement and motivation among students. In contrast, the integration of game-based technologies into the curriculum offers a dynamic alternative that addresses these challenges while promoting interactive and immersive learning experiences.

Gamification, defined as the application of game elements in non-game contexts, has gained traction in educational settings for its ability to engage learners and sustain their interest in the subject matter. In teaching French grammar and vocabulary, gamification leverages interactive tools, such as digital games, quizzes, and role-playing activities, to create an environment where students actively participate and practice linguistic structures. This approach not only enhances language retention but also fosters creativity, critical thinking, and collaboration.

French Grammar

(Quickstudy: Academic)

ARTICLES

DEFINITE ARTICLES

le jour <i>m.</i>	<i>the day</i>
la nuit <i>f.</i>	<i>the night</i>

Les is the plural article for both masculine and feminine nouns.

les hommes <i>m. plural</i>	<i>the men</i>
les femmes <i>f. plural</i>	<i>the women</i>

When the noun begins with a vowel or a silent 'h', the le or la becomes l'.

l'ombre <i>m.</i>	<i>the shade</i>
l'abeille <i>f.</i>	<i>the bee</i>
l'hôtel <i>m.</i>	<i>the hotel</i>

INDEFINITE ARTICLES

un bâtiment <i>m.</i>	<i>a building</i>
une maison <i>f.</i>	<i>a house</i>
des choix <i>m.</i>	<i>some choices</i>
des filles <i>f.</i>	<i>some girls/daughters</i>

GENDER

le gosse	<i>the kid (male)</i>
la gosse	<i>the kid (female)</i>

Many nouns have both masculine and feminine forms.

le fermier	<i>farmer (male)</i>
la fermière	<i>farmer (female)</i>
le vendeur	<i>salesperson (male)</i>
la vendeuse	<i>salesperson (female)</i>

Some people nouns are always masculine or feminine, regardless of whether it refers to a guy or a girl.

la vedette	<i>star</i>
le savant	<i>wise person</i>
le pilote	<i>pilot</i>
le professeur	<i>teacher (high school or university)</i>

SUBJECT PRONOUNS

Je suis le professeur.	<i>I am the teacher.</i>
Tu es un élève.	<i>You are a student.</i>
Il est Français.	<i>He is French.</i>
Elle est Française.	<i>She is French.</i>
Nous sommes des élèves.	<i>We are students.</i>
Ils sont de France.	<i>They are from France.</i>
Elles sont de Paris.	<i>They (women) are from Paris.</i>

When je is followed by a word that begins with a vowel, it becomes simply j'.

J'arrive !	<i>I'm coming!</i>
Excusez-moi. Vous parlez français ?	<i>Excuse me. Do you speak French?</i>

In Uzbekistan, where the demand for multilingual education is on the rise, incorporating innovative methods like gamification into teaching French has become a priority for higher education institutions. For students majoring in English philology, acquiring proficiency in French represents an opportunity to expand their linguistic repertoire and improve their professional prospects. However, the challenges associated with mastering French grammar

and vocabulary can be daunting, necessitating a shift towards more engaging and student-centered teaching strategies.

This article explores the potential of game-based technologies in addressing these challenges. By examining various gamification techniques and their application in the French language classroom, the study aims to highlight the practical benefits of this approach. Additionally, it evaluates the impact of gamified learning on student outcomes, focusing on motivation, language retention, and overall academic performance.

The following sections detail the materials and methods used to implement game-based technologies, the main findings from classroom applications, and the results achieved in terms of student progress. The conclusion synthesizes these insights, offering recommendations for educators and policymakers seeking to optimize language education in Uzbekistan.

MATERIALS AND METHODS

The implementation of game-based technologies in teaching French grammar and vocabulary required a structured approach, combining theoretical frameworks with practical tools. This section outlines the materials utilized and the methods employed to evaluate the effectiveness of gamification in the language learning process.

FRENCH VERB TENSES							
Time Line →							
	Imperfect	Perfect Conditn	Pluperfect	Perfect	Present	Future	Conditional
Eng:	I was doing I used to do	I would have done	I had done	I have done I did	I am doing I do	I will do I am going to do	I would do If I were ... Maybe... Possibly ...
Fre:							
Reg:	je portais	j'aurais porté	j'avais porté	j'ai porté	je porte	je porterai	je porterais
Irreg:	je faisais	j'aurais fait	j'avais fait	j'ai fait	je fais	je ferai je vais faire	je ferais
Tips:	ais, ais, ait ions, iez, aient	conditional avoir + past participle unless it's eg sortir, then it's être + past participle and must agree	imperfect avoir + past participle unless it's eg sortir, then it's être + past participle and must agree	present avoir + past participle unless it's eg sortir, then it's être + past participle and must agree	e, es, e, ons, ez, ent	regular verbs: infinitive + ai, as, a ons, ez, ont	regular verbs: infinitive + longer vous are endings (like imp) ais, ais, ait ions, iez, aient
to be être	I was being j'étais	I would have been j'aurais été	I had been j'avais été	I have been j'ai été	I am je suis	I will be je serai	I would be (If) I were je sois
to have avoir	I was having j'avais	I would have had j'aurais eu	I had had j'avais eu	I have had j'ai eu	I have j'ai	I will have j'aurai	I would have (If) I had j'aie

The study was conducted with undergraduate students majoring in English philology at a university in Uzbekistan. The participants were selected from second-year classes with a basic knowledge of French. The group included 50 students who were divided into two cohorts: an experimental group, which participated in gamified learning activities, and a control group, which followed traditional teaching methods.

The primary materials used in this study included a variety of digital platforms, such as Duolingo, Quizlet, and Kahoot, which were tailored to practice French grammar rules and vocabulary. Additionally, custom-designed interactive games were created using software like Genially, focusing on specific linguistic challenges such as verb conjugations, sentence structuring, and thematic vocabulary. Offline tools, including flashcards and board games,

were also integrated to complement digital activities and foster collaborative learning in a classroom setting.

The teaching methods employed in the experimental group emphasized active participation and real-time feedback. Lessons were structured around game-based tasks, including team competitions, role-playing scenarios, and interactive storytelling. For instance, students engaged in activities like creating sentences within a timed game environment, solving grammar puzzles, and participating in vocabulary quizzes with point-based systems. The control group, by contrast, relied on lectures, textbook exercises, and individual assignments. Data collection methods included pre- and post-intervention tests to assess grammar and vocabulary proficiency, as well as surveys and interviews to evaluate student motivation and engagement. The proficiency tests measured accuracy and fluency in applying grammatical rules and using vocabulary in context, while the surveys captured students' perceptions of the learning process.

To ensure a comprehensive evaluation, qualitative data from classroom observations and teacher feedback were also analyzed. This mixed-methods approach allowed for a detailed understanding of how game-based technologies influenced both cognitive and emotional aspects of language learning.

	SUBJONCTIF	CONDITIONNEL	IMPÉRATIF	
	Présent	Présent	Présent	Participes
ÊTRE	que je sois que tu sois qu'il, elle soit que nous soyons que vous soyez qu'ils, elles soient	je serais tu serais il, elle serait nous serions vous seriez ils, elles seraient	sois soyons soyez	participe présent étant participe passé été
AVOIR	que j' aie que tu aies qu'il, elle ait que nous ayons que vous ayez qu'ils, elles aient	j' aurais tu aurais il, elle aurait nous aurions vous auriez ils, elles auraient	aie ayons ayez	participe présent ayant participe passé eu, eue, eus, eues
1^{er} groupe AIMER (verbes en -er)	que j' aimé que tu aimes qu'il, elle aimé que nous aimions que vous aimiez qu'ils, elles aiment	j' aimerais tu aimerais il, elle aimerait nous aimerions vous aimeriez ils, elles aimeraient	aimé aimons aimez	participe présent aimant participe passé aimé, aimée, aimés, aimées
2^e groupe FINIR (verbes en -ir et part. présent en -issant)	que je finisse que tu finisses qu'il, elle finisse que nous finissions que vous finissiez qu'ils, elles finissent	je finirais tu finirais il, elle finirait nous finirions vous finiriez ils, elles finiraient	finis finissons finissez	participe présent finissant participe passé fini, finie, fins, finies
3^e groupe FAIRE	que je fasse que tu fasses qu'il, elle fasse que nous fassions que vous fassiez qu'ils, elles fassent	je ferais tu ferais il, elle ferait nous ferions vous feriez ils, elles feraient	fais faisons faites	participe présent faisant participe passé fait, faite, faits, faites

The data analysis involved comparing test scores between the experimental and control groups to identify statistically significant improvements. Qualitative data were coded and categorized to identify recurring themes related to student motivation, interaction, and overall satisfaction with the learning experience.

MAIN PART

The integration of game-based technologies into the process of teaching French grammar and vocabulary revealed a range of benefits and challenges that shaped the learning experience for students. By employing gamified activities, educators were able to transform traditionally monotonous language exercises into engaging and interactive sessions, fostering a higher level of participation and enthusiasm among learners.

One of the most significant advantages observed was the increase in student motivation. The gamification approach capitalized on the inherent appeal of games, which include elements such as competition, rewards, and immediate feedback. For instance, activities like vocabulary quizzes on Kahoot encouraged students to actively participate, as they were motivated by the prospect of earning points and achieving recognition among their peers. Similarly, interactive grammar games created through Genially allowed students to visualize their progress in real time, providing a sense of accomplishment that further incentivized their efforts.

Another noteworthy outcome was the improvement in retention rates for both grammar rules and vocabulary. The repetitive and immersive nature of gamified tasks enabled students to practice linguistic structures in a variety of contexts, reinforcing their understanding. For example, a verb conjugation game required students to identify and correct errors within a time limit, helping them internalize grammatical patterns more effectively than traditional drills. This dynamic approach facilitated long-term retention by encouraging active rather than passive engagement with the material.

The gamified methods also promoted collaborative learning, as many activities were designed to involve teamwork and peer interaction. Group-based competitions and role-playing exercises fostered a sense of community within the classroom, enabling students to learn from one another and develop their communication skills. Role-playing scenarios, such as simulating a French café conversation, not only enhanced vocabulary usage but also allowed students to practice grammar in a naturalistic setting.

Despite these successes, several challenges emerged during the implementation of game-based technologies. One of the primary issues was the varying levels of digital literacy among students, which occasionally hindered their ability to fully engage with online platforms. Technical difficulties, such as connectivity issues or unfamiliarity with specific applications, also posed obstacles that required additional instructional time to address.

Furthermore, while gamification proved highly effective for certain aspects of language learning, it was less suitable for addressing more complex grammatical concepts that required in-depth explanation. For example, intricate topics like subjunctive mood usage were better understood through traditional lectures and guided practice, as opposed to gamified activities. This limitation highlighted the need for a blended approach that combines gamification with conventional teaching methods to ensure comprehensive language instruction.

In addition, managing the gamified classroom environment required careful planning and facilitation. The competitive nature of some activities occasionally led to heightened emotions among students, necessitating the teacher's active role in maintaining a positive and inclusive atmosphere. Educators also needed to balance the time allocated to games with other instructional components to avoid over-reliance on gamification at the expense of broader curriculum goals.

Passé simple = используется в литературных произведениях и, как правило, в повествовании . А в речи персонажей - passé composé.

pronom	I groupe	II groupe	III groupe	
Je	restai	choisis	sortis	courus
Tu	restas	choisis	sortis	courus
Il	resta	choisit	sortit	courut
nous	restâmes	choisîmes	sortîmes	courûmes
Vous	restâtes	choisîtes	sortîtes	courûtes
ils	restèrent	choisirent	sortirent	coururent

Особая форма: **être** - il fut, ils furent,
avoir - il eut, ils eurent
venir - il vint, ils vinrent

Overall, the findings underscore the potential of game-based technologies to revolutionize the teaching of French grammar and vocabulary, particularly when applied in a strategic and balanced manner. By addressing the identified challenges and integrating gamification into a well-rounded instructional framework, educators can create a learning environment that is both effective and enjoyable for students.

RESULTS

The implementation of game-based technologies in teaching French grammar and vocabulary produced measurable improvements in student outcomes, particularly in motivation, retention, and overall language proficiency. The comparative analysis of pre- and post-intervention test scores revealed significant progress among students in the experimental group, confirming the effectiveness of gamification as a teaching strategy.

In terms of grammar proficiency, students in the experimental group demonstrated a 25% improvement on average in their ability to apply grammatical rules accurately, compared to a 10% improvement in the control group. This was particularly evident in areas such as verb conjugation and sentence structure, where interactive games and real-time feedback enabled students to identify and correct their mistakes efficiently. For example, a timed activity involving the placement of correct verb forms in a sentence helped students internalize the rules of conjugation more effectively than traditional worksheets.

Vocabulary retention also showed marked improvement, with students in the experimental group scoring 30% higher on post-intervention tests than their initial assessments. This outcome was attributed to the repetitive and engaging nature of vocabulary games, such as

digital flashcards and matching exercises, which encouraged students to revisit and practice new words in various contexts. Students reported that the gamified approach made learning vocabulary more enjoyable and less stressful, contributing to their willingness to invest time and effort in the learning process.

Motivation and engagement levels among students in the experimental group were significantly higher compared to their counterparts in the control group. Surveys revealed that 85% of students found the gamified activities enjoyable and stimulating, while 90% agreed that the approach helped them stay focused during lessons. Many participants highlighted the competitive and interactive elements of the games as key factors that made learning French grammar and vocabulary less intimidating and more accessible.

Qualitative feedback from classroom observations supported these findings. Teachers noted that students in the experimental group were more active and collaborative during lessons, often taking the initiative to participate in discussions and group tasks. The interactive nature of the games encouraged students to practice their language skills in real-time scenarios, such as role-playing conversations or solving grammar puzzles in teams. This interactive dynamic contributed to a positive classroom atmosphere and enhanced the overall learning experience. However, some challenges and limitations were identified during the study. Students with lower levels of digital literacy faced initial difficulties navigating the gamified platforms, which occasionally resulted in frustration or disengagement. Additionally, technical issues, such as internet connectivity problems or software glitches, disrupted some activities, highlighting the need for reliable infrastructure and teacher training in managing digital tools.

The results also indicated that while gamification significantly improved engagement and retention, it was not as effective for teaching complex grammatical concepts. For instance, students struggled with advanced topics like subjunctive mood and complex sentence structures, suggesting the necessity of combining gamified methods with more traditional instructional techniques to address these challenges.

In summary, the results of this study demonstrate the potential of game-based technologies to enhance the teaching and learning of French grammar and vocabulary. The significant improvements in student outcomes and the overwhelmingly positive feedback underscore the value of gamification as a complementary approach in language education.

CONCLUSION

The integration of game-based technologies in teaching French grammar and vocabulary has proven to be a valuable tool in enhancing the learning experience for university students. By transforming traditional language instruction into an engaging and interactive process, gamification has demonstrated its capacity to address key challenges in language acquisition, including low motivation, limited retention, and lack of active participation.

The study conducted with English philology students in Uzbekistan highlighted several significant outcomes of employing gamified learning methods. Among these were notable improvements in grammar accuracy and vocabulary retention, which were achieved through the use of digital platforms, interactive exercises, and collaborative tasks. The combination of

these elements fostered an environment where students actively participated in their learning, leading to deeper comprehension and long-term retention of linguistic structures.

Motivation emerged as a central factor in the success of gamification. The inclusion of competitive and reward-based elements, such as point systems and team challenges, encouraged students to engage enthusiastically with the material. Surveys and classroom observations revealed that gamified activities made the learning process more enjoyable and less stressful, resulting in increased willingness to practice and improve.

However, the study also identified certain limitations of the gamified approach. Challenges such as digital literacy disparities, technical issues, and the limitations of gamification in addressing complex grammatical concepts emphasized the need for a balanced instructional framework. Blending gamified methods with traditional teaching techniques proved to be essential for ensuring comprehensive language instruction and addressing diverse student needs.

The findings of this research carry significant implications for educators and policymakers aiming to optimize language education in higher education settings. To maximize the benefits of game-based technologies, it is essential to invest in teacher training, reliable digital infrastructure, and the development of customized gamified resources that align with curricular goals. Additionally, further research should explore the long-term impact of gamification on language proficiency and its potential application across different linguistic and cultural contexts.

In conclusion, game-based technologies represent a promising avenue for revolutionizing the teaching of French grammar and vocabulary. By embracing innovative methods that prioritize engagement and active participation, educators can empower students to overcome learning barriers and achieve greater success in mastering the French language. The results of this study underscore the potential of gamification as a transformative tool in language education, particularly in settings that aim to promote multilingualism and cultural exchange.

REFERENCES

1. Kosimova, K. (2024). Zamonaviy tilshunoslikda gap bo'laklari masalasi va ularga bo'lgan turlicha yondashuvlar. *Journal of Academic Research and Trends in Educational Sciences*, 559-563.
2. Khusnurakhon, K. (2024). Various approaches to the theory of introductory parts of the sentence in modern linguistics. *World Bulletin of Social Sciences*, 33, 63-65.
3. Qosimova, H. (2022). The syntactic status of introductory parts of sentences and their communicative-pragmatic aspects in non-related languages (English and Uzbek). *Евразийский журнал социальных наук, философии и культуры*, 2(7), 31-34.
4. Oybekqizi, Q. K. (2022). Sentences With Introductory Parts In Modern Linguistics And Their Structural And Semantic Characteristics In Non-Related Languages (English And Uzbek). *Journal of Positive School Psychology*, 6(11), 3324-3327.
5. Tojiboyeva, G. R. (2022). Development of the skill of calligraphic writing as a professional competence in a future primary school teacher. *Galaxy International Interdisciplinary Research Journal*, 10(12), 830-835.
6. Shalola, E. (2024). Efimizmlar tahlili. *Miasto Przyszlosci*, 55, 672-673.

7. Erbutayeva, S. U., & Iroda, M. (2024, September). THE PROCESS OF ASSISTANCE AND ITS SCIENTIFIC BASIS. In International Conference on Linguistics, Literature and Translation (London) (Vol. 7, pp. 40-44).
8. Erbutayeva, S. (2023). BADIY MATNNI SHAKLLANTIRISHDA FUNKSIONAL KO 'MAKCHILARNING O 'RNI. Namangan davlat universiteti Ilmiy axborotnomasi, (7), 391-395.
9. Utkirovna, E. S. (2023). BADIY MATNNI SHAKLLANTIRISHDA FUNKSIONAL KO' MAKCHILARNING O'RNI. XOPAZM MA'YMUN AKADEMİYASI AXBOROTHOMASI <http://mamun.uz/uz/page/56>, 4, 43-45.
10. Utkirovna, E. S. (2023). TOHIR MALIK ASARLARIDA DISFEMIK VA EVFEMIK VOSITALARNING SEMANTIK TAHLILI ("ALVIDO BOLALIK" ASARI QIYOSIDA). Лучшие интеллектуальные исследования, 11(3), 26-29.
11. Erbo'tayeva, S. (2022). SOME COMMENTS ON THE AUXILIARY WORT. МЕЖДУНАРОДНЫЙ ЖУРНАЛ ЯЗЫКА, ОБРАЗОВАНИЯ, ПЕРЕВОДА, 3(6).
12. Utkirovna, E. S. (2021). O 'ZBEK TILIDAGI KO 'MAKCHILASHAYOTGAN AYRIM SO 'ZLAR XUSUSIDA. FAN, TA'LIM VA AMALIYOTNING INTEGRASIYASI, 2(4), 1-7.
13. Boltaeva, M., & Isakulova, N. (2024). Alternative socio-political strategies for solving environmental problems. In BIO Web of Conferences (Vol. 141, p. 04007). EDP Sciences.
14. Isakulova, N. J. (2024). DARSLAR TIPOLOGIYASI VA OZIGA XOS XUSUSIYATLARI. Inter education & global study, (4 (2)), 118-126.
15. Исакулова, Н. (2023). Educational project and its essence. in Library, 4(4), 6-15.
16. RIFOVNA, T. G. (2022). The specificity of the school" rivoge"(development) in the development of the professional competence of the future primary education teacher. Conferencea, 478-480.
17. Umarova, Z. A. (2023). UMUMIY O 'RTA TA'LIM MAKTABLARIDA PEDAGOGIK KONFLIKTLARNING TURLARI VA ULARNING RAQAMLI TIZIMI. Academic research in educational sciences, 4(CSPU Conference 1), 720-724.
18. Abdujalilova, S. A. (2022). Characteristics of physical education of children of kindergarten and school age. Galaxy International Interdisciplinary Research Journal, 10(10), 54-56.
19. Abdujalilova, S. A., & Humoyun, U. (2022). Abdulla Avloniyning Ta'lim-Tarbiya Haqidagi Ta'limoti va Tarbiya Yo 'nalishlari To 'g 'risidagi Fikrlari. Miasto Przyszlosci, 25, 380-382.
20. Abdujalilova, S. A. (2022). O'qituvchining shaxsiyati pedagogik aloqa samaradorligining omili sifatida. O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali, 1(9), 163-166.
21. Абдужалилова, Ш. (2022). Факторы, связанные с «педагогическим правом» в трудах Абдурауфа Фитрата. Central Asian Journal of Literature, Philosophy and Culture, 3(4), 123-128.
22. Муминджанова, С. Х. (2024). Применение медиа на занятиях русского языка. Science and innovation, 3(Special Issue 36), 589-591.
23. Mumindjanova, S. X., Ibragimova, D.A. (2024). Yoshlarni milliy va umuminsiniy qadriyatlar ruhida tarbiyalash "Temur tuzuklari"ning ahamiyati. Международная научно-методическая конференция, 2(3), 155-158.

24. Муминджанова, С. Х. (2023). Нетрадиционные уроки русского языка, игровые технологии как средство обучения. *O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali*, 2(23), 167-171.
25. Дониёрова, Л. Х., & Муродова, Ш. Р. (2022). Тесная связь и сотрудничество между школами и высшими учебными заведениями. *Academic research in educational sciences*, 3(9), 44-49.
26. Khudayberdiyevna, D. L. (2023). Teaching Students in Feminities. *Pedagogical Cluster-Journal of Pedagogical Developments*, 1(2), 303-316.
27. Doniyorova, L. K. (2023). Using interactive methods in the lessons. *Web of Teachers: InderScience Research*, 1(7), 71-76.
28. Saydalievna, L. M. (2023). Formation of medical geographical environment in Fergana region. *Ethiopian International Journal of Multidisciplinary Research*, 10(11), 366-369.
29. Saydalieva, L. M. (2024). Development Of Logical Thinking Of Primary School Students. *Pedagogical Cluster-Journal of Pedagogical Developments*, 2(2), 319-323.