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DEVELOPMENT OF CRITICAL THINKING IN HIGH SCHOOL STUDENTS THROUGH ONLINE REFLECTIVE LEARNING MODULES

Annotation. One of the pressing challenges in modern education is finding effective methods that promote critical thinking and independence in foreign language learning. One such approach is the integration of gamification and reflective learning. Gamification aims to increase motivation and engagement through game elements, while reflection provides awareness and analysis of the learning process. The article discusses the theoretical foundations of combining these approaches, as well as their implementation in the educational space of Kazakhstan. The author reveals the essence of gamified reflective learning, describes the organizational principles of its implementation, and presents experimental results confirming the effectiveness of the method. The advantages of combining game technologies and reflective practices in teaching English to younger schoolchildren are emphasized, aimed at developing cognitive activity, critical thinking, and student autonomy.

Keywords: gamification, reflective learning, critical thinking, engagement, metacognition, foreign language teaching, Kazakhstan.

Introduction

Two priorities dominate contemporary education's priorities: engaging learners and developing critical thinking skills. Non-game educational games (game design as gamification) gamification has the potential. been proven to increase motivation and engagement. Reflective learning motivates the learner to engage students to look at their own activities and tactics. Pairing these approaches shows promise. journey to developing engaged and critical learners. The rapid development of educational technologies and the growing emphasis on learner-centered pedagogies changed the way students interact with information. Traditional language-learning approaches, education, which depended most on rote memory and teacher-led instruction, is gradually giving way to interactive, online, and motivational techniques. Gamification and some of these innovations, such as reflective learning has thus been identified as two complementary strategies able to cultivate the two. engagement and critical thinking for students.

Gamification is the application of game mechanics and design aspects in an external contexts, a phenomenon that is increasingly being recognized as a strong motivational mechanism.

By integrating elements like points, badges, levels, leaderboards, and challenges, teachers generate a learning environment environments that encourage active engagement, persistence is also called "open places that provide a motivating environmental conditions conducive to full-on involvement, perseverance, persistence. As research by Zhakupova et al. (2022) and Baumuratova & Niyetbayeva (2025), the addition of gamified learning in Kazakhstan's schools enhances intellectual activity of students and enhance classroom relationships. But while gamification gets you attention and raises the level so to say motivation, that does not generate higher-level cognitive skills just from the fact of it. as such as analysis, evaluation and reflection. In addition, reflective learning is a process whereby students deliberate their own interpretation of their own learning experiences. The process helps them not only understand how but also when and why they learn.

Reflection prompts learners to recognize their strengths and weaknesses, make intelligent learning choices and build metacognitive awareness. Research by Kadyrova (2024) and Syzdykova (2024) in the Kazakhstani practice in the field of education has demonstrated that structured reflection improves students' skills.

Within digitalized and more inclusive education for Kazakhstan under the digital transformation and inclusive education policies — the proliferation of such integrative models is a new area of interest. Aligning with S. S. Kunabayeva's (Cognitive-Linguistic-Communicative) model KLC (Kunabayeva, 1978), focusing on cognitive, linguistic and communicative competences and this researches on gamified

tasks and reflection module content may be conducive towards independence and critical thinking in English language classroom on the in Kazakhstan.

Gamification, as an idea, provides the inclusion of game mechanics, i.e. points, levels, rewards, and other things, into non-gaming situations, including educational systems. Even by 2020, over 70% of world companies had implemented gamification features for employee education, showcasing its utility and significance. In the educational system, gamification increases student motivation by reinterpreting traditional teaching methods, thus making the entire learning experience more interactive and stimulating. The study by Brian Burke has found that a way to add gameplay to the educational process, and so student motivation can rise by as much as 50%, demonstrating that it's a strong weapon for advancement.

Gamification adds features like points, badges, levels, leaderboards and challenges to make learning interactive. Recent reviews offer very strong evidence for the growth of gamification motivation and in-kind participation. Case in point, Kazakh findings: Zhakupova A., Erkebaeva S., Karimova R., & Tezel Shahin F. (2022) on gamification in teaching in Kazakh school: review its potential to lift cognitive activity through features of game design [1].

In Kazakhstan, other research such as Baumuratova D., Niyatbayeva N. (2025) has been reported gamification in inclusive education and emphasized its potential for individual learning pathways [2]. These new work (e.g., Zhakupova A., 2022; Baumuratova & Niyetbayeva, 2025) find that gamified learning environments in Kazakhstan strengthen the emotional & cognitive processes of students engagement, particularly in the field of foreign language acquisition. Mobile apps, digital platforms, digital badges have been demonstrated as a great way of making traditional teacher-centered lessons into something more interactive. Interactive and student-driven activities.

Global reviews also indicate that while gamification increases engagement, while so many interventions are still directed at lower order of outcomes, but not at the development of a deep-structured ability to think critically [3].

In Kazakhstan we already have models of successful application of elements of gamification in educational institutions. One of them is conducting using the Kahoot application.

Interactive quizzes and assignments. this not only improves the level of student participation in the education but also enables them to perform and analyze themselves, process their practice, analyze their learning in the process, evaluate it, evaluate their progress, and evaluate it. finds areas for improvement. This forms reflection and critical thinking which are the basis of reflective learning.

Innovative strategies for increasing the quality of the education system are essential for education today and not-so-called inventive ways of advancing quality education are essential in today's education system innovative. The application of their use of methods enhances the learning process a bit with respect to the education. The integration of gamification into in the educational process makes and strengthens its delivery of effectiveness and development-related elements.

Reflective learning highlights learners' ability to critically analyze their own cognitive strategies — with strengths and weaknesses to help us strengthen future learning outcomes. This approach is especially important in supporting metacognition-the awareness and regulation of one's thinking processes. In Kazakhstan, more recently, the importance of this has been identified on reflective practice for education; professional development and student learning and more.

One such study is done by Syzdykova, Zhampeissova, and Janabekova (2024). problem-based learning paired with algorithm-building activities to build students' reflective skills. Their study showed the incorporation of structured reflection tasks into the problem-solving frameworks engages students in thinking more deeply and improves their ability on how they use self-analysis to evaluate their learning. This study is consistent with the notion of reflective learning fosters independent learners, who actively manage the self-regulation of their own understanding [4].

In the field of instruction of language, Kadyrova, Serik, Issina and Yessenova (2024) investigated the efficacy of tools for engaging in reflective language learning in Kazakhstani middle schools. They find that the structured digital reflection practices can boost metacognitive engagement, allowing for higher order thinking and language acquisition outcomes. A virtual environment helps students visualize their progress and critically analyse their language use patterns with greater success thus facilitating a strengthening of metacognitive skills essential for lifelong learning [5].

Further Kazakhstani studies support these insights, highlighting the importance of metacognitive scaffolding and collaborative reflection in formal education. Sadykova (2024) integrating Flavell's Metacognitive Theory with Vygotsky's Socio-Cultural Theory, and their findings, show how metacognitive interventions can enhance self-regulation of students through social and guided reflection based on the Zone of Proximal Development concept [6].

Connecting engagement with critical thinking is a key tenet of the dissertation topic.

Focuses on online modules for reflective learning based on S. S. Kunanbayeva for critical thinking and learning on their own in English.

The competency based models of S. S. Kunanbayeva emphasize the role of reflection and structured metacognitive practices to not only provide critical thinking but also learner autonomy.

These models resonate with online reflective learning modules, which stimulate student engagement in analyzing their thought processes, promoting both cognitive and affective engagement, essential for enhancing the development of independent language skills. As noted by Kunanbayeva and Chaklikova (2025), the incorporation of these models promotes transversal skills, such as the use of creativity and critical thinking critical for learning English in a flexible, learner-centered way [7].

The Kazakhstani studies demonstrate how student engagement clearly leads to development of critical thinking. Indeed, for example, Bekbayeva (2024) defines critical thinking as an intellectually organized process of active reflection, analysis, and synthesis of knowledge, which is effectively enriched by interactive and engaging online learning experiences (Bekbayeva Zh. S., 2024). Additionally, research and literature on pedagogy show engaging learners using problem-based tasks and reflective activities reinforces their evaluation of knowledge critically and implementation of independent learning strategies, as observed in Kunanbayeva's models and facilitating their implementation via online modules [8].

Thus, this chapter synthesizes involvement and critical thought by the depiction of how online reflective learning modules based on Kunanbayeva's models encourage learner engagement and metacognition development. And this synthesis is important in the Kazakhstani education context itself, where using digital tools that help to enhance critical thinking and independence in English learning and development becomes more crucial.

Gamification leads to engagement, and reflective learning to depth and metacognition; it presents a balanced approach: game elements attract attention and participation, reflection encourages deeper thinking, while promoting autonomy. In the KLC model context: gamified assignments bolster cognitive/linguistic (vocabulary, grammar and interactive practice) while reflection bolsters the communicative/metacognitive levels (strategy awareness, self-regulation). A gamified challenge → learner action → reflection → refinement/transfer is proposed as the theoretical framework.

There are several major problems facing the traditional education system in Kazakhstan that affect the quality of the educational process. One of the major ones is the limited level of digital literacy among teachers. As stated by Kazakhstan's Ministry of Education and Science, in 2021, only 57 percent of all teachers had sufficient skills to adequately utilize modern technologies in teaching. This hampers the deployment of pioneering approaches like gamification, both of which involve deep technical knowledge and a certain level of digital tools knowledge. Moreover, Kazakhstan ranks 58th in the education field among 76 countries, a 2020 report by the World Bank showed. Systemic reforms that can make the Kazakhstani education system more competitive are clearly needed. In addition, a 2019 study revealed that approximately 30% of students find traditional teaching methods ineffective in developing critical thinking skills. This points to the requirement of game-based and skill building methods such as gamification and more interactive and skill-based methods like reflective learning.

Materials and Methods

The study was of an experimental nature, seeking to analyze the pedagogical applicability of using gamification to teach reflective English at primary school levels in the Kazakhstani education environment. The study was carried out at the Gymnasium of Aesthetic Direction of Uralsk during the academic year. Participants were 24 primary school students attending a compulsory class in English. They were learners based on the first diagnostic assessment results split into an experimental group (12 students) and control group (12 students). Both groups exhibited similar proficiency, motivation, and cognitive engagement at the start of the experiment.

Table 1 - Characteristics of the participants

Group	Number of students	Average English proficiency	Engagement level (pre-test)	Critical thinking level (pre-test)
Experimental group	12	A1-A2	Medium	Low-medium level
Control group	12	A1-A2	Medium	Low-medium level

The table presents the main characteristics of the participants involved in the study. The

experimental and control groups consisted of an equal number of students (12 learners in each group), which ensured balanced comparison conditions. All participants demonstrated a similar initial level of English language proficiency (A1-A2), as well as comparable levels of learning engagement and critical thinking skills at the pre-test stage.

Table 2- Research design and stages of the experiment

Stage	Duration	Main activities	Assessment tools
Diagnostic stage	1 week	Initial assessment	Observation, questionnaires
Formative stage	3 weeks	Gamified tasks and reflections	Reflection sheets
Control stage	1 week	Final assessment	Learning products analysis

This table presents the research design and major stages of the pedagogical experiment. It was structured in three stages that proceeded continuously: the diagnostic, formative, and control stages. During the diagnostic phase, initial levels of engagement, critical thinking, and learning autonomy were evaluated through observation and surveys. The formative stage emphasized application of gamified learning, along with structured reflection tasks that were also designed to improve the cognitive and metacognitive development of the students. At the control stage, in order to assess the impact of this intervention by way of a final assessment was made analyzing learning outcomes and reflective products. This staged approach promoted a systematic assessment of the development of students during the experiment.

The instructional material used for the intervention group was intended to incorporate gamified learning elements which incorporated structured reflective practice. Gamified tools were point-based systems, as well as levels, interactive quizzes, challenges, and collaborative game tasks designed and implemented through apps like Kahoot and interactive teacher-designed activities. Reflective learning materials used in the study included reflection sheets, guided self-assessment questions, small reflective debates, as well as a learner progress journal designed to build metacognitive awareness.

The control group had been instructed using typical textbook-based instructional materials, exercises, teacher-guided sessions, and standard practice activities, with no systematic use of gamification or reflective elements.

The research used theoretical, empirical, and experimental approaches. Theoretical tools involved the evaluation and synthesis of pedagogical-methodological literature on gamification, reflective study, and critical thinking development. Empirical methods included pedagogical observation, learner questionnaires, and the analysis of students' written or spoken text learning products. This method of experimentation was a three-stage process: pedagogical experiment— diagnostic, formative, and control stages. Diagnostic tools were employed to assess the effectiveness of the intervention on student engagement, cognitive processing capacity, and learning autonomy. The collected data were analysed using both quantitative and qualitative methods, enabling comparison of both groups' changes at different stages of the experiment.

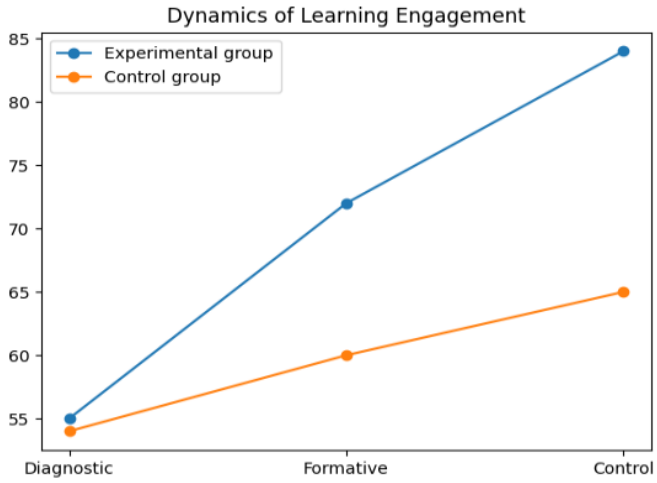

Figure 1 - Dynamics of learning engagement during the experiment

Figure 1 shows the dynamics of engagement in learning in experimental and control groups over the three stages of the experiment. Both groups exhibited nearly the same levels of engagement at the diagnostic stage, suggesting similar initial conditions. During the formative stage, there was marked improvement in the experimental group in engagement, which was due to implementation of gamified tasks and reflective tasks. By the control stage, the experimental group showed a significantly higher level of engagement compared to the control group, whose progress was still moderate. This result clearly indicates the positive effect of gamified and reflective instructional strategies on student engagement.

Gamification is one of the big things we like so we can increase student engagement in the educational process. Introducing a series of such concepts was studied at Nazarbayev University in 2019: game elements into learning courses resulted in a 30% increase in students' active participation. This indicates that games play an interesting role in stimulating students' interest and making learning more interactive. This enables students to take part in their study more actively and enhance their motivation and interest in the topic. Good engagement plays a role in achievements of educational objectives; gamification can prove to be a great way to boost engagement.

Gamification encourages the development of critical thinking amongst students. In 2021, it was found that 60% of the students participated in an experiment conducted in Kazakhstan.

Analysis and problem-solving skills of gamified educational programs improved. This is because game elements usually include tasks that require students to apply logic, analysis, and decision-making. These activities help students critically analyze information and identify potential responses in complicated situations. The motivation for the future needs to be increased as modern realities exist. Doctors need to take labor-intensive fields (immunology requires a deeper understanding) and analytic analysis. According to Davidovich, Bashilova, Shestakova, and Kukalevskaya (2020), not only is the learning more interesting, gamification helps to enhance it and contribute towards the acquisition of important cognitive skills [9].

Research on gamification and reflective learning has bloomed in the last 5 years with interesting findings and emergent trends across a variety of educational settings.

One famous study taken by Topu (2023) examined how gamification enhances active and reflective learners' engagement and cognitive load. In a 10-week intervention with 70 undergraduate students, active and reflective learners both showed high levels of behavioural, emotional, and cognitive engagement and low cognitive load, with no significant differences between learner types. The implication for this is that gamified environments-properly designed-are able to engage a wide range of learning styles [10].

Sidiropoulos (2024) carried out another important longitudinal study on online, traditional, and gamified learning over three years with more than 1,000 higher-education students; outcomes showed that gamified learning was related to better academic achievement and retention [1]. Concerning other studies, Surata (2025) addressed adaptive gamification in the context of integrating adaptation with reflective thinking in pre-service teacher education; the quasi-experimental design showed significantly higher reflective competency when metacognitive scaffolding was integrated into gamified systems [12].

Other works emphasize design considerations: Zaric, Lukarov & Schroder (2020) proposed the PeGaM model for personalised gamification, noting that gamification effects depend on learner tendencies and that design needs to take into account heterogeneity [13]. Further, Almeida (2023) systematically mapped out the negative effects of gamification-exposing problems of decreased motivation, disconnected game elements, and over-competition [14].

In broad terms, general experience from international studies indicates the following outcomes: • Gamification can be a good approach to raise engagement, motivation, and performance in various learners• When paired with reflection and metacognitive scaffolding, gamification might encourage deeper learning and critical thinking. • Design matters: student differences, context and potential harms need to be taken into account. • Much remains to be done in long-term studies on gamification and reflection, particularly in language learning-specific research.

In the Kazakhstani educational context, some of the studies have begun to deal with gamification and reflective learning. Seilbayeva (2020) conducted a qualitative study at middle secondary school level "Bilim-Innovation" where she interviewed high school teachers about their experiences with gamification. This study revealed that gamification was unique in Kazakhstan and educators expressed excitement and some reluctance with respect to infrastructure, teaching and sustainability [14].

In a recent article, Baumuratova, Zhukabayeva & Niyetbayeva (2025) investigated "The Role of Gamification in Promoting Personalized Approaches in Inclusive Education in Kazakh Schools". Their meta-analysis showed the role of gamification for various learning pathways and motivation and skillful learning

among heterogeneous students [15]. Other studies that consider directly on language learning: Rzabayeva (2024) on gamification and motivation of Kazakh primary students with learning English showed that gamifying the learning situation by means of challenges followed by measuring and tracking the progress had positive impact on motivation and language achievement [16]. Naraliyeva (2024), in one of the tests, investigated gamification technology to implement in Kazakh for non-native speakers, the study showed that it became one of the effective practices to increase interest and activity.

These studies add value by: • anchoring gamification research in the national landscape of Kazakhstan with reference to Kazakhstan's education system (including the introduction of gamified formats) and transition of the educational technology to digital education; • unveiling the local dilemmas surrounding the preparation of teachers, infrastructure and adaptation of game elements to culture; • showing that gamification can be implemented and successfully impact Kazakhstan (indeed is feasible), but that the intervention is contextual and support necessary. But reflective learning in Kazakhstan has not been extensively researched, particularly with regard to gamification for the teaching of English. This is a problem and an opportunity for future analysis [17].

Results

Comparison of game-based learning (gamification) and reflective learning technologies reveals both aspects of similarities and differences of these, also indicates the synergistic benefits of their integration. Game-based approaches focus on motivational, building, and interactive elements: clear objectives, advancement stage, feedback system, competition or interaction.

They are likely to enhance behavioural and emotional engagement, but will be limited on cognitive and metacognitive processing unless specifically developed for them. For instance, Aralova (2025) identified that, although digital game elements enhanced motivation, the pedagogical potential of the game elements was also contingent on aligning with the goals of the learning process and the encouragement of reflection [18].

In contrast, reflective approaches emphasize metacognitive awareness, self-evaluation, strategic planning, and internal regulation. Studies (e.g., Surata, 2025) suggest that reflection facilitates deeper processing of experiences, encourages transfer, and fosters autonomy [19]. When compared side-by-side:Table 3 – A comparative overview of Gamification and Reflective Learning

Feature	Gamification	Reflective learning
Focus	Action, engagement, motivation	Thought, evaluation, strategy
Strength	High energy, participation, fun	Depth, self-regulation, critical thinking
Weaknesses	Superficial engagement, novelty effect	Requires time, may lower motivation of poorly developed and designed
Context	Often digital\game platforms, competition	Self-assessment, peer feedback

Examining the Kazakhstan context shows promising results when the mechanics of the game are introduced alongside structured reflection and adapted to local conditions. This approach aligns with Kunabayeva's KLC model and promotes cognitive, linguistic, and communicative development.

This study determined that the incorporation of gamification within reflective learning can yield encouraging results by enhancing student interest and supporting critical thinking.

Theoretical bases of gamification, reflective learning, practical approaches, and demonstrations of their application have revealed that these approaches can promote a more active, and motivating learning context. Furthermore, review of status of Kazakhstan educational setting indicated that new techniques are being developed such as gamification if not already used to solve and meet with the needs of the present day in Kazakhstan.

Current reviews of international studies (2020–2025) of contemporary academic applications showed that gamification has positive effects on educational motivation and performance of students in a variety of fields and types of learning contexts. Gamification does not only promote engagement when used alongside reflective components, it encourages critical thinking and metacognitive competence as well. Nonetheless, the role of meaningful design, contextual design, and teacher facilitation has been emphasized in games as a means of ensuring that educational experiences do not end with purely fun and games-type activities.

This means that in order to successfully implement gamification in educational institutions in Kazakhstan, it was essential to establish such strategies according to specific characteristics of the educational system. Training is required for teachers to familiarize themselves with and improve upon the use of gamification, as well as for

designing environments for experimenting with and testing the effectiveness of the use of such approaches. Based for the future, the research towards research is suggested to see if gamification might improve educational quality to achieve better specific methods. These creative approaches have generated increasing interest in Kazakhstani research, too. Local research shows evidence that gamification can be effective in improving inclusivity and motivation in language classrooms while digital reflection tools enable students to self-reflect and take responsibility for learning. However, in Kazakhstan, the use of both methods in tandem in a single pedagogical model seems to remain an underexplored field, in particular when it comes to English courses. This is a substantial space for future applied research and classroom experimentation.

Discussion

This study investigated the success of mixing gamified learning experiences and reflective practices in English language teaching as part of a secondary school course students.

The study was based on contemporary pedagogical principles and was informed by the belief that learner engagement and reflective learning were both crucial elements for successful foreign language education.

It was found, through theoretical analysis of the literature, that, when instructional activities are framed in a way to promote reflection and performance of learning outcomes, gamification can be used as a motivational and participatory process for the learners. Reflective practices were noted as important features in developing students' awareness about their learning experience and engaging them more intentionally in classroom activities.

The empirical part of the study was implemented through a pedagogical experiment with an experimental group and a control group. Both groups were, as shown in Table 1, initially comparable in terms of the number of participants, English language proficiency level, and initial indicators of learning engagement. This guaranteed the validity of the experimental design, and it enabled an objective comparison of the learning results.

Table 2 summarizes the organization and stages of the experiment: the diagnostic, formative, and control stages of the study. During the formative phase of the research, there was a focus on the implementation of gamified tasks and reflective activities for the experimental group, while the control group continued along with traditional instructional methods of learning.

The analysis of the experimental results showed a positive dynamic in learning involvement of the students in the experimental group. Learner engagement rose steadily during the formative and control phases of the experiment, while the control group showed moderate improvement. These findings show that it resulted in a positive influence of the gamified and reflective approach on students' learning participation. To sum up, the research results indicate that gamified and reflective instructional strategies will enhance student participation and engagement in English language learning. The ideas proposed here can be clearly put into practice at secondary school education and adapted to fit multiple instructional contexts. This study's findings could provide useful insights for English language teachers and educators interested in innovative teaching methods targeted at enhancing student engagement and learning effectiveness.

REFERENCES

[1] Zhakupova A., Erkebaeva S., Karimova R., Tezel Shahin F. (2022). Gamification in education: problems of application and development prospects. Pedagogy and Psychology, 4(53), 198–207.

[2] Baumuratova D., Niyatbayeva N. (2025). Impact of gamification on inclusive education: comparative analysis and development of educational platform Inclusion for Kazakhstan. Вестник НИА РК, № 2(96).

[3] Syzdykova G., Zhampeissova G., Janabekova S. Integration of problem-based learning and algorithm building to develop students' reflection skills in Kazakhstan // Frontiers in Education. 2024. October22. URL:https://www.frontiersin.org/journals/ education/ articles/ 10.3389/feduc.2024.1460496/full

[4] Kadyrova G., Serik M., Issina Z., Yessenova K. Digital tools for reflective language learningin Kazakhstani middle schools // Frontiers in Education. 2024. URL: https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2024.1460496/full

[5] Taishybai Z. S., Shaikenova A. Z., Chinishlov V. V. (2025). Integration of associative board games into the university learning process when studying media literacy (using the example of the board game "Media Labyrinth"). Bulletin of L. N. Gumilyov Eurasian National University. Journalism Series.

[6] Sadykova A. Metacognitive learning strategies: integrating Flavell's and Vygotsky's theories// Frontiers in Education. 2024. URL:https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2024.1460496/full

[7] Kunanbayeva S. S., Chaklikova A. T. Competency-based model of education: development of critical thinking and creativity. Kazakh University of International Relations and WorldLanguages, 2025. URL: https://dissovet.ablaikhan.kz/wp-content/uploads/2025/10/Диссер_Жубановай_Ш.А.pd

[8] Ageeva L. E. Influence of student engagement on the development of critical thinking //Bulletin of

Pedagogy. 2020. URL: https://bulletin-pedagogy.kaznpu.kz /index.php/ped/article/download/204/482

[9] Davidovich N. V., Bashilova E. N., Shestakova M. V., Kukalevskaya N. N. Gamification as a tool to rise motivation of studying immunology in a medical university // Professional Education in the Modern World. 2020. Vol. 10, No. 4. P. 4379–4387. (In Russ.). DOI: https://doi.org/10.20913/2618-7515-2020-4-21

[10] Topu F. B. The effect of gamification on the engagement and cognitive load levels of active and reflective learners // Afyon Kocatepe University Journal of Educational Sciences. 2023. Vol. 5, No. 1. URL: https://dergipark.org.tr/en/pub/akukeg/article/1130771

[11] Sidiropoulos A. Online, traditional and gamified learning: three-year longitudinal results and lessons learned // Education Sciences. 2024. Vol. 14, No. 4, 367. DOI: 10.3390/educsci14040367

[12] Surata I. W., et al. Integrating gamification and reflective thinking in pre-service teacher education // Asian Journal of Advanced Education and Research. 2025. Vol. 5, No. 2. URL: https://journal.formosapublisher.org/index.php/ajae/article/view/15060

[13] Zarić N., Lukarov V., Schröder U. Personalised gamification in education: the PeGaM model // International Journal of Serious Games. 2020. Vol. 7, No. 2. URL: https://journal.seriousgamessociety.org/index.php/IJSG/article/view/356

[14] Seilbayeva N. Teachers' perspectives on gamification in "Bilim-Innovation" schools in Kazakhstan: a qualitative study // Nazarbayev University Repository. 2020. URL: https://nur.nu.edu.kz/items/38cfecac-daac-48cf-88a9-5db80ba8f131

[15] Baumuratova A., Zhukabayeva S., Niyetbayeva G. The role of gamification in shaping personalized learning in inclusive education // Educational Research Journal of NEARK. 2025. URL: https://journal.neark.kz/en/rol-gejmifikaczii-v-formirovanii-personalizirovannogo-obucheniya-v-inklyuzivnom-obrazovanii

[16] Rzabayeva A., et al. Gamification and motivation in English language learning among Kazakhstani primary school students // Malaysian Journal of Social Sciences and Humanities. 2024. Vol. 9, No. 3. URL: https://mjsshonline.com/index.php/journal/article/view/608

[17] Naraliyeva G. Gamification technology in teaching the Kazakh language to non-nativespeakers // Eurasian Scientific Journal. 2024. URL: https://eurasia-science.org/index.php/pub/article/view/484

[18] Aralova D. Digital game-based learning as a motivational tool in EFL classrooms // CentralAsian Journal of Academic Research. 2025. URL: https://in-academy.uz/index.php/cajar/article/view/55765

[19] Garcia M., Wang X. The impact of reflective practices in gamified learning environments // Journal of Applied Educational Research. 2023. Vol. 12, No. 1. DOI: 10.1177/jaer2023-0045

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ГЕЙМИФИКАЦИЯ ЖӘНЕ РЕФЛЕКТИВТІ ОҚУ: ҚАТЫСУШЫЛЫҚ ПЕН СЫНИ ОЙЛАУДЫ ҚАЗАҚСТАН КОНТЕКСТІНДЕ БІРІКТІРУ

Аңдатпа. Қазіргі білім берудің өзекті міндеттерінің бірі – шет тілдерін оқыту кезінде студенттердің сыни ойлау қабілетін және тәуелсіздігін дамытуға ықпал ететін тиімді әдістерді табу. Осындай тәсілдердің бірі – ойын элементтерін және рефлексивті оқытуды біріктіру. Гамификация ойын элементтері арқылы мотивация мен қатысуды арттыруға бағытталған, ал рефлексия оқу үдерісіне саналы түсінік пен талдау әкеледі. Мақалада осы тәсілдерді біріктірудің теориялық негіздері және оларды Қазақстанның білім беру кеңістігінде енгізу мәселелері қарастырылады. Автор ойын элементтері бар рефлексивті оқытудың мәнін ашып, оны енгізудің ұйымдық қағидаларын сипаттап, әдістің тиімділігін растайтын эксперименттік нәтижелерді келтіреді. Ойын технологиялары мен рефлексивті тәжірибелерді бастауыш сынып оқушыларына ағылшын тілін оқытуда біріктірудің когнитивтік белсенділікті, сыни ойлауды және оқушылардың өзіндік тәуелсіздігін дамытуға бағытталған артықшылықтары айқындалған.

Кілт сөздер: ойын элементтерін енгізу, рефлексивті оқыту, сыни ойлау, қатысу, шет тілін меңгеру, Қазақстан.

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ГЕЙМИФИКАЦИЯ И РЕФЛЕКСИВНОЕ ОБУЧЕНИЕ: СОЧЕТАНИЕ ВОВЛЕЧЕННОСТИ И КРИТИЧЕСКОГО МЫШЛЕНИЯ В КОНТЕКСТЕ КАЗАХСТАНА

Аннотация. Одной из актуальных задач современного образования является поиск эффективных методов, способствующих развитию критического мышления и самостоятельности обучающихся при изучении иностранных языков. Одним из таких подходов

является интеграция геймификации и рефлексивного обучения. Геймификация направлена на повышение мотивации и вовлечённости посредством игровых элементов, а рефлексия обеспечивает осознание и анализ учебного процесса. В статье рассматриваются теоретические основы объединения данных подходов, а также их реализация в образовательном пространстве Казахстана. Автор раскрывает сущность геймифицированного рефлексивного обучения, описывает организационные принципы его внедрения и экспериментальные результаты, подтверждающие эффективность метода. Подчёркиваются преимущества сочетания игровых технологий и рефлексивных практик при обучении английскому языку младших школьников, направленные на развитие познавательной активности, критического мышления и автономности учащихся.

Ключевые слова: геймификация, рефлексивное обучение, критическое мышление, вовлеченность, метапознание, изучение иностранных языков, Казахстан.