



PEDAGOGICAL EFFECTIVENESS OF GAME TECHNOLOGIES IN TEACHING FOREIGN LANGUAGES TO PRIMARY SCHOOL PUPILS: THEORETICAL AND METHODOLOGICAL FOUNDATIONS

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Abstract: *The article examines the pedagogical effectiveness of game technologies in teaching foreign languages to primary school pupils. The problem is considered from a theoretical and methodological perspective, because game-based activities are often used in primary classrooms, yet their educational value depends on how accurately they are connected with language aims. The purpose of the article is to define the main conditions under which game technologies become a productive instrument for vocabulary acquisition, oral interaction, motivation and classroom engagement. The research is based on a focused analysis of recent studies on gamification, digital game-based language learning and educational games for young learners. The article clarifies the difference between a simple entertaining game and a pedagogically organized game task. It also proposes criteria for evaluating effectiveness in primary foreign language lessons. The main result is a methodological model that connects game rules, language material, feedback, cooperation and age-appropriate assessment. The study argues that game technologies are most useful when they support repeated meaningful use of language rather than isolated amusement.*

Keywords: *game technologies, foreign language teaching, primary school pupils, gamification, digital game-based language learning, motivation, communicative competence*

ПЕДАГОГИЧЕСКАЯ ЭФФЕКТИВНОСТЬ ИГРОВЫХ ТЕХНОЛОГИЙ В ОБУЧЕНИИ ИНОСТРАННЫМ ЯЗЫКАМ УЧАЩИХСЯ НАЧАЛЬНЫХ КЛАССОВ: ТЕОРЕТИКО-МЕТОДИЧЕСКИЕ ОСНОВЫ

Аннотация: *В статье рассматривается педагогическая эффективность игровых технологий при обучении иностранным языкам учащихся начальной школы. Проблема анализируется с теоретико-методологической точки зрения, поскольку игровые виды деятельности широко применяются в начальных классах, однако их образовательная ценность зависит от того, насколько точно они связаны с языковыми целями обучения. Цель статьи заключается в определении основных условий, при которых игровые технологии становятся продуктивным средством*



формирования словарного запаса, развития устного взаимодействия, мотивации и вовлеченности учащихся в учебный процесс. Исследование основано на целенаправленном анализе современных работ, посвященных геймификации, цифровому игровому обучению иностранным языкам и образовательным играм для детей младшего школьного возраста. В статье уточняется различие между обычной развлекательной игрой и педагогически организованным игровым заданием. Также предлагаются критерии оценки эффективности игровых технологий на уроках иностранного языка в начальной школе. Основным результатом исследования стала методическая модель, объединяющая правила игры, языковой материал, обратную связь, сотрудничество и возрастосообразное оценивание. В исследовании обосновывается, что игровые технологии наиболее эффективны тогда, когда они обеспечивают многократное осмысленное использование языка, а не сводятся исключительно к развлечению.

Ключевые слова: игровые технологии, обучение иностранным языкам, учащиеся начальной школы, геймификация, цифровое игровое обучение иностранным языкам, мотивация, коммуникативная компетенция

BOSHLANG'ICH SINIF O'QUVCHILARIGA XORIJIY TILLARNI O'QITISHDA O'YIN TEXNOLOGIYALARINING PEDAGOGIK SAMARADORLIGI: NAZARIY-METODIK ASOSLAR

Annotatsiya: Maqolada boshlang'ich sinf o'quvchilariga chet tillarini o'qitishda o'yin texnologiyalarining pedagogik samaradorligi tahlil qilinadi. Muammo nazariy va metodologik nuqtai nazardan ko'rib chiqiladi, chunki o'yin asosidagi faoliyat boshlang'ich ta'lim jarayonida keng qo'llaniladi, biroq uning ta'limiy ahamiyati til o'qitish maqsadlari bilan qanchalik aniq bog'langaniga bog'liq. Maqolaning maqsadi o'yin texnologiyalari lug'at boyligini oshirish, og'zaki muloqotni rivojlantirish, motivatsiyani kuchaytirish va o'quvchilarning darsdagi faolligini ta'minlashda samarali vositaga aylanishi uchun zarur bo'lgan asosiy shartlarni aniqlashdan iborat. Tadqiqot gamifikatsiya, raqamli o'yin asosidagi til o'qitish hamda kichik yoshdagi o'quvchilar uchun mo'ljallangan ta'limiy o'yinlarga bag'ishlangan zamonaviy ilmiy ishlarning maqsadli tahliliga asoslanadi. Maqolada oddiy ko'ngilochar o'yin bilan pedagogik jihatdan tashkil etilgan o'yin topshirig'i o'rtasidagi farq izohlanadi. Shuningdek, boshlang'ich sinflarda chet tili darslarida o'yin texnologiyalarining samaradorligini baholash mezonlari taklif etiladi. Tadqiqotning asosiy natijasi sifatida o'yin qoidalari, til materiallari, qayta aloqa, hamkorlik va yoshga mos baholashni birlashtiruvchi metodik model ishlab chiqilgan. Tadqiqotda o'yin texnologiyalari tilning mazmunli va takroriy qo'llanilishini ta'minlagan holatdagina eng samarali bo'lishi asoslab beriladi, faqatgina ko'ngilochar faoliyat sifatida emas.



Kalit soʻzlar: *oʻyin texnologiyalari, chet tillarini oʻqitish, boshlangʻich sinf oʻquvchilari, gamifikatsiya, raqamli oʻyin asosidagi til oʻqitish, motivatsiya, kommunikativ kompetensiya*

INTRODUCTION

Teaching a foreign language in primary school is not only a matter of presenting words, grammar patterns and pronunciation models. It is also a matter of organizing a learning situation in which a child feels able to repeat, try, make small mistakes and return to the task without losing interest. At this age, attention is still unstable. Memory works more effectively when the material is connected with movement, visual support, rhythm, simple rules and emotional involvement. For this reason, game technologies occupy a special place in the methodology of teaching foreign languages to young learners.

The topic is relevant because foreign language lessons in the early grades often face the same difficulty. Pupils may understand a word when the teacher presents it, but they do not always use it actively. They can repeat after the teacher, yet they remain passive when they need to ask a question or answer a classmate. A game can reduce this distance between recognition and use. It creates a short communicative situation where a word is not merely remembered, but used for a purpose. This is a small detail, but in primary education it is essential.

Modern research on digital game-based language learning and gamification pays attention to motivation, vocabulary development, contextualized learning and

learner agency. Chowdhury et al. (2024), for example, link game-based vocabulary learning with intrinsic motivation and contextual use of language. Systematic reviews on gamification in primary and secondary education also emphasize engagement, but they warn that engagement should not be reduced only to visible excitement or participation (Ramirez Ruiz et al., 2024). The same position is important for foreign language methodology. A child may enjoy a game, but enjoyment itself is not the final pedagogical result.

The research problem of this article can be formulated as follows: under what methodological conditions do game technologies become pedagogically effective in teaching foreign languages to primary school pupils? The purpose of the article is to identify the theoretical and methodological foundations of such effectiveness. The object of the study is the process of teaching foreign languages in primary school. The subject is the use of game technologies as a means of developing motivation, vocabulary retention and elementary communicative activity.

The hypothesis of the article is that game technologies are pedagogically effective when they combine four components: a clear language aim, age-appropriate rules, active pupil participation and immediate feedback. If one of these components is absent, the



game may still be pleasant, but its educational result becomes weaker. This idea is not very complicated, perhaps even obvious at first sight. Still, many classroom failures with games begin exactly here, when the teacher starts from the game itself rather than from the language task.

Methods

The article uses a theoretical and methodological research design. The method includes analysis of scientific literature, conceptual comparison and pedagogical modelling. The literature base includes studies on educational games, gamification, digital game-based language learning and school engagement. Special attention is given to research that discusses young learners or elementary English language learners, because the developmental characteristics of primary pupils are not the same as those of adolescents or university students.

The analytical procedure was organized in three stages. At the first stage, the concepts of game, game technology, gamification, serious game and digital game-based language learning were compared. At the second stage, the main learning outcomes relevant to primary foreign language lessons were selected. These outcomes included vocabulary acquisition, pronunciation practice, oral participation, willingness to communicate, cooperation and emotional involvement. At the third stage, a methodological model of game-based foreign language teaching was developed.

The article does not present a quantitative experiment. Its task is different. It offers a theoretical framework that can later be used for classroom observation, lesson planning and empirical measurement. This choice is justified because a master's research project first needs clear criteria. Without criteria, the teacher may count any lively lesson as successful. Such an approach is unsafe from a scientific point of view.

Results

1. Conceptual distinction between game and game technology

The first result of the analysis is the need to distinguish an ordinary game from a game technology. An ordinary game may be used for relaxation, emotional discharge or a change of activity. A game technology, in contrast, is deliberately built into the structure of the lesson. It has a pedagogical aim, rules, language content, interaction and a form of feedback. In foreign language teaching this distinction is especially important because pupils may be active in a game without actually using the target language.

Game technologies in primary foreign language lessons may include role-play, card games, lexical races, picture matching, team quests, guessing games, board games, movement games, digital quizzes and simple story-based tasks. These forms are not equal in methodological value. A vocabulary card game may be useful for recognition and recall. A role-play may be more suitable for short dialogues. A digital quiz may



provide quick feedback, but it can also create superficial competition if the language aim is weak. The teacher therefore needs to select a game according to the planned language outcome.

Gamification should also be separated from game-based learning. Gamification usually means the use of game elements such as points, badges, levels, leaderboards and rewards in a non-

2. Criteria of pedagogical effectiveness

Criterion	Main indicator	Possible classroom evidence
Motivational criterion	Interest and readiness to participate	Pupils volunteer, repeat willingly, return to the task after mistakes
Cognitive criterion	Retention and recognition of words or structures	Pupils identify, match, classify and recall target vocabulary
Communicative criterion	Use of language in interaction	Pupils ask and answer short questions, use phrases in pairs or groups
Social criterion	Cooperation and respect for rules	Pupils wait for turns, help partners, accept simple roles
Reflective criterion	Elementary awareness of result	Pupils can say what they practised and what was difficult

The analysis made it possible to define five criteria for evaluating the effectiveness of game technologies in primary foreign language teaching.

These criteria help avoid a common methodological mistake. The effectiveness of game technologies cannot be measured only by noise, speed or laughter in the classroom. A foreign language lesson may be emotionally bright and still give weak language results. On the other hand, a quiet game with picture cards and short dialogues may be highly effective if each pupil repeatedly uses the target words.

game learning context. Game-based learning means that the game itself becomes the learning environment. In primary school, both approaches can be useful, although both require careful control. A leaderboard may motivate some pupils and discourage others. A role-play may support speaking, but only if pupils have enough language material to participate.

3. Pedagogical conditions of effective use

The second result of the study is the definition of pedagogical conditions. The first condition is the connection between the game and the language aim. The teacher should be able to answer one simple question before using any game: what exact word, phrase, pronunciation pattern or communicative function will pupils practise? If the answer is unclear, the game should be redesigned.

The second condition is age appropriateness. Primary school pupils need short rules, visible materials and tasks that can be understood quickly. When the explanation of the game takes



more time than the language practice, the lesson loses its rhythm. Children may become interested in the mechanics of the game but forget the foreign language component.

The third condition is repetition without monotony. Vocabulary learning requires several returns to the same word. A game allows the teacher to repeat the same material through different actions: seeing a picture, hearing a word, saying it aloud, choosing a card, asking a question, moving to another group. Such repetition is not mechanical. It is varied and meaningful.

The fourth condition is feedback. In a game, feedback may be provided by the teacher, classmates, game rules or digital tools. For young learners feedback should be immediate and kind. If correction is too formal or too late, the game loses part of its pedagogical value. If correction is harsh, pupils may stop speaking.

The fifth condition is balance between cooperation and competition. Competition can increase attention, but it can also lead to anxiety. Cooperation is safer for many primary pupils, especially in the early stages of foreign language learning. Team games, pair tasks and role distribution help pupils participate even when their language level is not high.

4. Methodological model

The proposed model of game technologies in primary foreign language teaching includes four interconnected components. The target component defines the planned language result. The content component selects vocabulary,

phrases, pronunciation models and communicative situations. The procedural component includes the rules of the game, grouping, materials, timing and teacher support. The assessment component includes observation, oral checking, short tests, self-evaluation and teacher feedback.

For example, if the lesson aim is to teach words connected with food, the game should not merely ask pupils to name pictures. It may include a shop role-play, a memory card game, a guessing activity and a short dialogue such as 'Can I have an apple?' or 'Do you like rice?' The same vocabulary is then used in several contexts. This movement from recognition to simple communication is the main methodological value of the game.

The model also includes the principle of gradual complication. At the first stage, pupils recognize and repeat words. At the second stage, they choose and classify them. At the third stage, they use them in short phrases. At the fourth stage, they use them in a controlled communicative task. This sequence corresponds to the actual abilities of primary pupils. It does not force them to speak freely before they have enough support.

Discussion

The results of the theoretical analysis are consistent with contemporary research on game-based language learning. Studies emphasize that games may support motivation, vocabulary learning, engagement and contextualized



practice. Saleh and Althaqafi (2022) found that educational games improved young learners' engagement and vocabulary retention in comparison with repetition-based instruction. Chowdhury et al. (2024) also place emphasis on learner agency, intrinsic motivation and contextualized vocabulary learning in digital game-based environments.

At the same time, the pedagogical use of games has certain risks. The first risk is entertainment without learning. This appears when the teacher chooses a game because it is popular or amusing, not because it fits the language objective. The second risk is cognitive overload. If pupils must understand complicated rules, compete, move around the classroom and remember new words at the same time, the language aim may disappear. The third risk is unequal participation. In many team games, active pupils speak more, while shy pupils hide behind the group. The teacher needs to design roles so that every pupil has a small but real language task.

Another point concerns digital tools. Digital games and quizzes are attractive, and they provide quick feedback. Yet their value depends on the quality of the task. A digital quiz with isolated translation items may train recognition, but it does not automatically develop communication. A simple non-digital role-play with cards may produce more oral language if it is organized carefully. This does not mean that digital tools are weak. It only means that technology does not replace methodology.

For master's research, this discussion has practical meaning. The pedagogical effectiveness of game technologies should be measured through several indicators, not through one general impression. Motivation, vocabulary retention and communicative activity should be observed separately. A pupil can be motivated but still use few words. Another pupil can remember vocabulary but avoid speaking. The teacher's task is to see these differences and select games that address them.

The proposed model can be applied in lesson planning, classroom observation and small-scale pedagogical experiments. It can also be adapted to English, Russian, German, French or other foreign languages taught in primary school. The language may change, but the methodological logic remains close: a clear aim, a simple rule, active use, feedback and reflection.

Conclusion

Game technologies can be a pedagogically effective means of teaching foreign languages to primary school pupils, but their effectiveness is not automatic. A game becomes educationally valuable when it is connected with a language aim, adapted to pupils' age, based on repeated meaningful practice and supported by feedback. The article proposed five criteria of effectiveness: motivational, cognitive, communicative, social and reflective. These criteria can be used by teachers and researchers to evaluate game-based activities more accurately.



The main methodological position of the article is that the game should serve the language task, not replace it. In primary school, this position is especially important because pupils easily respond to playful forms, but they also need clear structure. Game technologies help pupils remember words, practise phrases and

participate in interaction when they are embedded into the lesson as a planned pedagogical instrument. Further research may test the proposed model in classroom conditions through pre-test and post-test diagnostics, observation rubrics and analysis of pupils' oral performance.

REFERENCES:

1. Budiarti, F., Al Masjid, A., & Djufri, E. (2025). Gamification in L2 vocabulary acquisition for primary education: A systematic literature review (2019-2024). *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 13(2). <https://doi.org/10.24256/ideas.v13i2.8918>
2. Chowdhury, M., Dixon, L. Q., Kuo, L.-J., Donaldson, J. P., Eslami, Z., Viruru, R., & Luo, W. (2024). Digital game-based language learning for vocabulary development. *Computers and Education Open*, 6, 100160. <https://doi.org/10.1016/j.caeo.2024.100160>
3. Ramirez Ruiz, J. J., Vargas Sanchez, A. D., & Boude Figueredo, O. R. (2024). Impact of gamification on school engagement: A systematic review. *Frontiers in Education*, 9, 1466926. <https://doi.org/10.3389/feduc.2024.1466926>
4. Saleh, A. M., & Althaqafi, A. S. A. (2022). The effect of using educational games as a tool in teaching English vocabulary to Arab young children: A quasi-experimental study in a kindergarten school in Saudi Arabia. *SAGE Open*, 12(1). <https://doi.org/10.1177/21582440221079806>
5. Shang, X. (2025). Mapping the integration of gamification into foreign language learning in e-learning settings: A bibliometric analysis. *Results in Engineering*, 28, 108452. <https://doi.org/10.1016/j.rineng.2025.108452>
6. Zhou, S. (2024). Gamifying language education: The impact of digital game-based learning on Chinese EFL learners. *Humanities and Social Sciences Communications*, 11, 1518. <https://doi.org/10.1057/s41599-024-04073-3>