Exploring the Efficacy of Digital Vocabulary Games for Enhancing English Language Skills in Primary School Learners

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Abstract

This qualitative study explores the perspectives of primary school teachers regarding the contribution of digital games to students' growth in vocabulary in English. Five key themes emerge from the study's interview data: the benefits of digital games for student engagement, enhanced vocabulary retention, personalized learning opportunities, implementation challenges, and the significance of combining digital games with conventional teaching techniques. These findings are consistent with those of other studies, which have demonstrated that the use of digital games has the potential to improve language learning experiences in elementary school. The study highlights how crucial it is to properly balance the incorporation of digital games in order to maximize their advantages, despite obstacles like technological limitations and the requirement for teacher training. The findings provide educators and policymakers with useful insights that may be utilized in the process of properly utilizing digital technologies in language instruction at the elementary school level.

Keywords: Digital games, English language learning, vocabulary development, student engagement, individualized learning, educational technology.

Introduction

In today's increasingly globalized world, the acquisition of English language skills is an essential component, as it plays a crucial part in the realms of communication, education, and professional achievement. Beyond national boundaries, proficiency in the English language is vital for people in a variety of occupations and cultural contexts (Malik & Pervaiz, 2023).

English is frequently used as the medium of instruction for a wide range of academic subjects, including the humanities, social sciences, and science and technology. According to Huang and Flores (2018), students who are proficient in English have more access to academic resources, a plethora of information, and possibilities for postsecondary education. Furthermore, a lot of the best research and academic institutions in the globe present their material in English, highlighting the language's importance for those seeking higher learning and intellectual development (Panhwar & Bell, 2023).

English ability is becoming more and more valued in the professional sphere. Employers are looking for people with great English communication abilities in an increasingly globalized labor market where multinational corporations operate internationally (Ahmad, 2016). Proficiency in English improves a person's employability by providing access to a wider array of job options and enabling professionals to participate in international conferences, commercial transactions, and teamwork (Akram et al., 2020).

Because English is the most widely used language online, digital literacy and English competence are synonymous. A strong command of the language makes it much easier to access a wide range of online information, communication, and resource platforms (Akram et al., 2021). Fluency in English enables people to engage and traverse the digital era with ease, from social

media and e-commerce to online research papers and courses. Akram (2020) and Akram and Yang (2021) analyze Pakistan's educational environment and contend that practices and policies have wide-ranging effects. According to Azar and Tanggaraju (2020), these results emphasize the value of inclusive methods that incorporate students with English competence appropriate to their field.

Furthermore, vocabulary not only serves as a key building block that impacts many areas of communication, understanding, and expression, but it also plays a significant part in the process of learning the English language (Vu & Peters, 2021). Strong vocabulary is essential for more than just word memorizing; it's a crucial component of both academic success and linguistic competency. Rich vocabulary directly improves reading comprehension, which is one of its main advantages (Ilmiddinovich, 2021). The ability to interpret difficult texts more effectively and extract nuanced meanings and complexities is made possible for students who have a solid command of the English language. A strong lexical repertoire is essential for academic achievement in all areas because as students advance in their education, they will inevitably come across a variety of words (Thompson & von Gillern, 2020).

Furthermore, having a strong vocabulary improves writing abilities dramatically. Students are better equipped to express their ideas clearly and elegantly when they use a wide variety of well-chosen words. When writing essays, reports, or creative pieces, having a large vocabulary helps one to communicate concepts clearly, drawing readers in and demonstrating a greater comprehension of the subject (Chiew & Ismail, 2021). In addition, there is a strong correlation between vocabulary and strong communication skills. The capacity for accurate expression promotes more powerful and clearer communication in both written and spoken forms of communication (Ajisoko, 2020). When speaking informally or in formal settings, having a large vocabulary helps people express themselves clearly, preventing misunderstandings and fostering productive discourse (Katemba, 2021).

Ramzan et al. (2023) have said that the English has prestigious significance in this interconnected world. The advantages of having a large vocabulary extend beyond the fields of academic and professional communication and contribute to the development of cognitive abilities. Acquiring knowledge of new terms entails not just memorizing them but also comprehending their definitions, applications, and use (Yawiloeng, 2020). This cognitive activity sharpens the brain's ability to reason analytically and manipulate language by encouraging critical thinking and linguistic dexterity. Additionally, vocabulary is essential to the learning and retention of a language. A learner's language abilities get more complex and adaptable the more words they encounter and add to their vocabulary (Tran, 2020). The basis for lifelong learning is laid by this ongoing vocabulary development, which enables people to understand complicated ideas, adapt to new situations, and pursue a wide variety of intellectual interests (Hasram et al., 2021).

Digital game integration has become a popular and successful pedagogical strategy for teaching English language skills. It offers several advantages to students, including engaging them in new and creative ways and accommodating a variety of learning styles (Wang, 2023). Because they may increase motivation, encourage active involvement, and create a dynamic environment for language acquisition, digital games are important for learning English (Akram & Abdelrady, 2023). The intrinsic incentive that digital games provide to the learning process is one of the main benefits of integrating them into language instruction. According to Khanam et al. (2022), games, by their very nature, produce an experience that is both immersive and

pleasurable, therefore grabbing the interest of learners and maintaining their involvement from beginning to end. This psychological lift promotes regular engagement and a positive outlook on language learning, fostering an atmosphere that is favorable to successful learning (Abdelrady & Akram, 2022).

Additionally, encourages active engagement and hands-on learning are digital games. Games help learners to use language abilities in interactive contexts, in contrast to traditional learning approaches that may depend primarily on rote memory (Kiyançiçek & Levent, 2022). Through the completion of language-rich gaming settings, virtual chats, and puzzles, learners actively apply and reinforce their linguistic skills, developing a deeper comprehension of English language ideas (Rahmani, 2020). Digital games' versatility allows for individualized and differentiated training by accommodating different learning styles. In a safe and accepting virtual setting, learners may repeat difficult ideas, go at their own speed, and get quick feedback. Because it can accommodate a wide range of learners with different competence levels and learning preferences, its flexibility improves the effectiveness of English language acquisition (Huseinović, 2024).

Digital games help with contextual learning, which is the process of learning a language in meaningful and applicable circumstances, claim Panmei and Waluyo (2022). By using gaming scenarios, students interact with language in real-world contexts, naturally strengthening their vocabulary, grammar, and communication abilities (Kaya & Sagnak, 2022). Contextualized learning improves language transferability and retention because students are more likely to use newly learned abilities outside of the gaming environment. A feeling of community is fostered among students by the inclusion of collaboration and social interaction as essential elements in many digital games. Features of multiplayer and cooperative games provide students the chance to interact, bargain, and plan in English (Kiyançiçek & Levent, 2022). This social component helps students' language development because it allows them to communicate with others in a genuine and intentional way that mimics language usage in everyday situations.

Students in elementary school now spend a significant portion of their life on the internet. Children are naturally drawn to digital gadgets and interactive material in a society where technology is pervasive (Acquah & Katz, 2020). Comprehending the role that digital games may play in the development of English vocabulary becomes crucial when educators aim to match their teaching approaches to the learning styles and backgrounds of their pupils. With the understanding that digital games may be interesting and useful resources for improving vocabulary, the purpose of this study is to determine whether or not it is feasible to incorporate them into the primary school curriculum.

Moreover, teachers in elementary schools have a significant influence on how young students develop their linguistic abilities (Akram et al., 2023). Acknowledging the significance of vocabulary acquisition as a fundamental facet of language development, educators are progressively exploring tactics that surpass conventional approaches. This study intends to provide light on how educators view the usefulness of digital games by investigating their viewpoints in relation to their use. Their viewpoints can provide insightful information on the real-world difficulties, educational possibilities, and pedagogical approaches associated with using digital games to help students build their vocabulary in primary school settings.

Additionally, the research supports the more general educational goal of developing 21st-century abilities (Al-Adwan et al., 2022). As the need of digital literacy in the future becomes more widely acknowledged, including digital games into language instruction offers a chance to

advance both linguistic ability and technology know-how. The study intends to add to the existing conversation on modernizing primary education by gaining insight into how educators view the role of digital games in accomplishing these two goals. The following research questions were the focus of the study:

1. How do primary school teachers perceive the effectiveness of digital games as tools for English vocabulary development among their students?
2. What challenges and opportunities do primary school teachers encounter when integrating digital games into the English language curriculum for the purpose of enhancing vocabulary skills in young learners?

Review of Literature

Using insights from earlier research in the sector, the study of prior literature investigates the effect of digital games on primary school kids' development of English vocabulary. Studies conducted in this field have yielded insightful opinions about the usefulness of video games as teaching aids and how they affect language learning.

Thompson and von Gillern's (2020) study looked into how language is learned in primary school contexts through the use of digital games. The results indicated that students' increased language abilities and interactive game-based learning were positively correlated. One important element linked to higher motivation and active engagement in language-related activities was the engaging quality of digital games.

Similarly, Acquah and Katz (2020) focused on how crucial it is to match game content with curricular objectives when they investigated the usage of educational games in elementary school classes. Through the immersion of students in linguistically rich virtual worlds, their research highlights the potential of digital games to offer contextualized learning experiences that improve vocabulary development. Ramzan et al. (2023) have explained that modern digital platform is facilitating for educators and learners.

Ramzan et al. (2020) have explained that the power of mass media for the last few decades has been considerably influencing our lives directly or indirectly, so the role of media discourse has become very significant in the lives of people. Wu et al. (2020) did a meta-analysis that combined data from many research on the influence of digital games on language acquisition, exploring differing views. The meta-analysis acknowledged the potential advantages but also emphasized that to optimize learning results, game design, and instructional tactics must be carefully considered. It emphasized how crucial teacher engagement is in planning game-based activities so that they are in line with learning objectives. Ramzan et al. (2023) have described motivation as the key to success and Chen and Ramzan (2024) have confirmed by performance. Ramzan, & Alahmadi, (2024) have confirmed that technology task-based and culturally relevant framework implication is possible in ESL education.

Sigurjónsdóttir and Nowenstein (2021) looked at the long-term impact of adding digital games to the English curriculum for elementary schools in a longitudinal study. The findings showed that students' vocabulary abilities continued to increase over time when they participated in consistent game-based language exercises. This long-term viewpoint offers insightful information on the possible long-term effects of video games on language learning.

Furthermore, Alsuhaymi and Alzebidi's (2019) research explored how educators felt about incorporating video games into language learning environments. Their qualitative investigation showed that although teachers were aware of the possible advantages, they were

frequently concerned about evaluation, classroom management, and matching games to curricular requirements. This study clarifies the issues and difficulties that teachers have while putting game-based learning strategies into practice.

After combining these research studies, it is clear that digital games have potential as useful resources for improving elementary school pupils' vocabulary in English. To optimize the educational benefits of game-based language learning, the literature also emphasizes the significance of careful design, alignment with curricular goals, and teacher engagement. By highlighting the need for a comprehensive understanding of both the potential benefits and difficulties involved with incorporating digital games into primary school language teaching, the current review adds to the body of information already in existence.

Methodology

The study employed a qualitative research design to gain in-depth insights into primary school teachers' perspectives on the role of digital games in English vocabulary development. Qualitative methods were deemed suitable for exploring nuanced experiences, attitudes, and perceptions, allowing for a comprehensive understanding of the complexities surrounding the integration of digital games in educational contexts.

Participants

The research included of 29 primary school teachers who were specifically chosen from a variety of schools in the targeted area. Primary English instructors with a range of experience levels were included in the inclusion criteria. With regard to the usage of digital games for vocabulary acquisition, a variety of viewpoints, experiences, and practices were intended to be captured by this varied sample.

Data Collection

Semi-structured interviews with the participating instructors were used to gather data. The interview methodology, which examined instructors' opinions, experiences, and difficulties with integrating digital games into the English language curriculum, was created based on pertinent literature. Flexibility in the semi-structured framework allowed for the investigation of emerging ideas while guaranteeing that predefined subjects were covered (Magaldi & Berler, 2020).
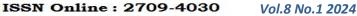
Interview Procedure

Depending on participant preferences and practical issues, in-person or video conference interviews were performed. Every interview lasted between forty-five and sixty minutes. In order to build rapport, the interviews started with broad questions and then moved into more focused ones regarding the instructors' experiences with digital games, how they felt they affected vocabulary development, and any difficulties they ran into.

Data Analysis

The interview data was analyzed using thematic analysis. Familiarization with the data, initial code generation, theme search, theme review, theme definition and naming, and final report production were all part of this iterative process. Because the study was done methodically, it was possible to make sure that any new patterns or discoveries were carefully recorded.

Trustworthiness

To enhance the trustworthiness of the study, member checking was implemented, allowing participants to review and validate the findings (Dockrell, 2004). Additionally, triangulation was employed by cross-referencing interview data with other relevant sources, such as classroom observations or teachers' reflective journals.

Ethical Considerations

The study adhered to ethical guidelines, ensuring informed consent, confidentiality, and anonymity of participants. Teachers were provided with information about the study's purpose, procedures, and their right to withdraw at any stage. Ethical approval was sought from the relevant institutional review board.

Limitations

While qualitative research provided rich insights, the findings may not be generalizable to all primary school settings. The study focused on teachers' perspectives, and triangulation with student perspectives or quantitative measures could offer a more comprehensive understanding.

By employing this qualitative approach, the study uncovered the depth and nuances of primary school teachers' views on the integration of digital games in English vocabulary development, contributing valuable insights to the existing body of knowledge in educational research.

Results

The qualitative analysis of interviews with 29 primary school teachers revealed five overarching themes that encapsulate the most significant insights into the role of digital games in English vocabulary development.

1. Positive Impact on Engagement

Instructors' opinions on digital games were overwhelmingly favorable, with a focus on how they may raise student involvement. These exercises' interactive and gamified elements were linked to students' improved interest and more favorable attitudes toward language learning. Just a small percentage of the educators mentioned:

> "I've noticed a significant shift in students' enthusiasm since we started incorporating digital games. They are more eager to participate in language activities, and the interactive nature of games keeps them actively involved."

> "Absolutely, it's like they forget they're learning. They're having fun, and that positive energy spills over into their overall attitude towards English classes."

2. Improved Vocabulary Retention

A recurring subject was the effect of digital games on word memory. Teachers saw that games' interactive features exposed students to words repeatedly in a variety of circumstances, which improved their recall. Students who played digital games to boost their vocabulary showed better word recall and application. A small percentage of the educators said:

> "I've seen a real improvement in how well students remember words. The games expose them to vocabulary in different contexts, making it stick. They're not just memorizing; they're understanding and applying the words."

> "It's fascinating to see them use words they learned from games in their writing and discussions. The retention is much better compared to traditional methods."

3. Individualized Learning Opportunities

One important aspect that was emphasized was the adaptability of digital games, which made customized learning experiences possible. Instructors valued how games could be customized to meet the different learning styles and skill levels of their pupils. The primary school cohort's diverse demands were met by the tailored vocabulary development made possible by this individualization. Just a small percentage of the educators mentioned:

> "What's great about these games is that they adapt to each student. It's not one-size-fits-all. Students with different learning styles and levels can all benefit from the same game."

"I've noticed struggling students gaining confidence because they can progress at their own pace. It's a more personalized approach to learning vocabulary."

4. Challenges in Implementation

Instructors noted that using digital games effectively presents some problems. Obstacles included technical limitations, restricted device access, and screen time concerns. It was determined that in order to overcome these obstacles and successfully include digital games into the curriculum, extensive training and assistance were necessary. Just a small percentage of the educators mentioned:

"The tech challenges are real. Not all students have access to devices, and even if they do, technical issues can disrupt the flow of the lesson."

"Training is crucial. Some teachers feel overwhelmed with incorporating games into their teaching. We need more support to navigate these challenges effectively."

5. Integration with Traditional Teaching

A recurrent subject was the significance of combining digital games with conventional teaching techniques. Teachers acknowledged the advantages of games, but they also stressed the importance of balancing digital activities with traditional teaching tactics in order to approach vocabulary development holistically. For a lasting effect, it was determined that incorporating games into larger language learning situations was essential.

"Games are fantastic, but they can't replace everything. We still need a balance. Combining games with traditional teaching methods ensures a more comprehensive language learning experience."

"Exactly. We don't want to isolate vocabulary development; it should seamlessly blend with our overall language curriculum. That integration is key for lasting impact."

These five themes collectively highlight the positive aspects, challenges, and considerations associated with the use of digital games in English vocabulary development among primary school students. The findings provide valuable insights for educators seeking to leverage digital tools effectively within the context of language learning in primary schools.

Discussion

The results of this study support and expand upon other studies on the contribution of digital games to the acquisition of vocabulary in English. Comparing the results with previous research reveals a number of consistency issues and provides information about the wider effects of incorporating digital games into language instruction in elementary schools.

The results of Fadda et al. (2022) indicating the beneficial effects of digital games on student involvement are consistent with the current study. Students' enhanced excitement seems to be consistently attributed to these activities' engaging and gamified character. This is consistent with the idea that fostering a joyful and pleasant learning environment increases students' engagement and motivation (Coleman & Money, 2020).

The results of Bin-Hady (2021) are consistent with the reported improvement in vocabulary retention, indicating that frequent exposure to words in different situations through digital games may improve retention. This bolsters the notion that digital games might provide dynamic, contextualized learning experiences that enhance vocabulary retention over the long run (Patra et al., 2022).

The idea of tailored learning experiences is consistent with Hassan et al.'s study from 2021, which highlights how digital games may be tailored to meet the needs of a wide range of

skill levels and learning preferences. The concept that individualized techniques lead to more successful vocabulary acquisition is consistent with the flexibility of games in offering customized learning experiences (Khamparia & Pandey, 2020).

The identification of obstacles to the successful use of digital games aligns with the conclusions drawn by Behnamnia et al. (2020). In order to maximize the advantages of game-based learning, practical barriers such as restricted access to devices, concerns around screen time, and technical limitations must be addressed (Robinson et al., 20201).

The focus on combining digital games with conventional teaching techniques is consistent with the opinions of educators as reported in the Mohanty et al. (2021) study. The understanding of the significance of integration and balance is consistent with the theory that successful language acquisition requires a blend of different teaching approaches (Bado, 2022). The results support the opinions of instructors in the Mohanty et al. (2021) study by highlighting the value of combining digital games with conventional teaching techniques for the purpose of developing vocabulary in English. One interesting line of inquiry for future study on this integration is teacher professional development initiatives. This field of study would examine the structure and efficacy of initiatives meant to provide teachers with the know-how and abilities to successfully integrate digital games into more conventional teaching methods. It would be beneficial to the sector to comprehend how professional development programs affect teachers' preparedness and competency in using a balanced pedagogical approach (Li & Akram, 2023).

Another line of inquiry is to concentrate study on how the integrated approach affects students' motivation and involvement in learning English. Researchers can find ways that improve the overall learning experience by evaluating how students' attitudes and dedication to language learning are affected by the combination of traditional teaching methods with digital games. This line of inquiry has the potential to improve English language instruction in primary schools by educating educators and policymakers on strategies for sustaining students' excitement and interest in the language learning process.

In summary, the current study's findings corroborate and extend existing research on the use of digital games in English vocabulary development. The positive impact on engagement, improved vocabulary retention, individualized learning opportunities, challenges in implementation, and the importance of integration with traditional teaching methods collectively contribute to the growing body of evidence supporting the thoughtful incorporation of digital games into primary school language education. These findings underscore the need for continued exploration and refinement of pedagogical strategies that leverage the potential of digital games to enhance language learning outcomes.

Conclusions

this study sheds light on the significant role of digital games in English vocabulary development among primary school students, as perceived by teachers. The positive impact on student engagement, improved vocabulary retention, and the provision of individualized learning opportunities underscore the potential of digital games as effective pedagogical tools. Despite the challenges identified in implementation, such as technical constraints and the need for comprehensive teacher training, the overall findings advocate for a balanced integration of digital games with traditional teaching methods. These insights contribute to the evolving landscape of language education, emphasizing the importance of adapting instructional approaches to align with students' digital experiences and preferences.

Suggestions for Future Research

Subsequent studies in this field could focus more intently on the precise aspects of digital game design that best support vocabulary growth. Examining the complex interactions between many game genres and how they affect different facets of language acquisition may offer educators more focused knowledge. Furthermore, longer-term research monitoring children' vocabulary retention and language skills may provide a more thorough picture of the long-term impacts of using digital games in primary school language instruction. In addition, investigating the viewpoints of parents and kids alongside educators may offer a comprehensive understanding of the general effects of video games on the ecology for language learning. Ongoing research in this area is crucial to support evidence-based approaches and guarantee the best possible integration of digital games into language curriculum for primary school students as technology continues to advance.

References

Abdelrady, A. H., & Akram, H. (2022). An empirical study of ClassPoint tool application in enhancing EFL students' online learning satisfaction. *Systems*, *10*(5), 154.

Acquah, E. O., & Katz, H. T. (2020). Digital game-based L2 learning outcomes for primary through high-school students: A systematic literature review. *Computers & Education*, *143*, 103667.

Ahmad, S. R. (2016). Importance of English communication skills. *International Journal of Applied Research*, *2*(3), 478-480.

Ajisoko, P. (2020). The use of Duolingo apps to improve English vocabulary learning. *International Journal of Emerging Technologies in Learning (iJET)*, *15*(7), 149-155.

Akram, H. (2020). Education governance in Pakistan: A critical analysis of challenges. *Journal of Social Sciences Advancement*, *1*(1), 38-41.

Akram, H., & Abdelrady, A. H. (2023). Application of ClassPoint tool in reducing EFL learners' test anxiety: an empirical evidence from Saudi Arabia. *Journal of Computers in Education*, 1-19.

Akram, H., & Yang, Y. (2021). A critical analysis of the weak implementation causes on educational policies in Pakistan. *International Journal of Humanities and Innovation (IJHI)*, *4*(1), 25-28.

Akram, H., Al-Adwan, A. S., Aslam, S., & Khan, M. I. (2023). Pedagogical practices and challenges in cultivating moral values: A qualitative study of primary school teachers in Pakistan. *Education 3-13*, *51*(4), 607-619.

Akram, H., Yang, Y., Ahmad, N., & Aslam, S. (2020). Factors Contributing Low English Language Literacy in Rural Primary Schools of Karachi, Pakistan. *International Journal of English Linguistics*, *10*(6), 335-346.

Al-Adwan, A. S., Nofal, M., Akram, H., Albelbisi, N. A., & Al-Okaily, M. (2022). Towards a Sustainable Adoption of E-Learning Systems: The Role of Self-Directed Learning. *Journal of Information Technology Education: Research*, *21*.

Alsuhaymi, D., & Alzebidi, A. (2019). Saudi Teachers' Perceptions Regarding Adopting Digital Games in Teaching Practice. *Turkish Online Journal of Educational Technology-TOJET*, *18*(4), 62-69.

Azar, A. S., & Tanggaraju, D. (2020). Motivation in second language acquisition among learners in Malaysia. *Studies in English Language and Education*, *7*(2), 323-333.

Bado, N. (2022). Game-based learning pedagogy: A review of the literature. *Interactive Learning Environments*, *30*(5), 936-948.

Behnamnia, N., Kamsin, A., Ismail, M. A. B., & Hayati, A. (2020). The effective components of creativity in digital game-based learning among young children: A case study. *Children and Youth Services Review*, *116*, 105227.

Bin-Hady, W. R. (2021). The role of games in enhancing EFL students' vocabulary acquisition. *Faculty of Education Scientific Journal*, *17*(1), 59-68.

Chen, Z. Ramzan, M. (2024). Analyzing the role of Facebook-based e-portfolio on motivation and performance in English as a second language learning *International Journal of English Language and Literature Studies*, *12*(3), 123-138

Chiew, M. T. L., & Ismail, H. H. (2021). Exploring vocabulary learning strategies in a second language setting: A review. *International Journal of Academic Research in Business and Social Sciences*, *11*(12), 1298-1309.

Coleman, T. E., & Money, A. G. (2020). Student-centred digital game–based learning: a conceptual framework and survey of the state of the art. *Higher Education*, *79*, 415-457.

Dockrell, J. E. (2004). How can studies of memory and language enhance the authenticity, validity and reliability of interviews?. *British Journal of Learning Disabilities*, *32*(4), 161-165.

Fadda, D., Pellegrini, M., Vivanet, G., & Zandonella Callegher, C. (2022). Effects of digital games on student motivation in mathematics: A meta- analysis in K- 12. *Journal of Computer Assisted Learning*, *38*(1), 304-325.

Hasram, S., Nasir, M. K. M., Mohamad, M., Daud, M. Y., Abd Rahman, M. J., & Mohammad, W. M. R. W. (2021). The effects of wordwall online games (Wow) on english language vocabulary learning among year 5 pupils. *Theory and Practice in Language Studies*, *11*(9), 1059-1066.

Huang, B. H., & Flores, B. B. (2018). The English language proficiency assessment for the 21st century (ELPA21). *Language Assessment Quarterly*, *15*(4), 433-442.

Huseinović, L. (2024). The effects of gamification on student motivation and achievement in learning English as a foreign language in higher education. *MAP Education and Humanities*, *4*, 10-36.

Ilmiddinovich, K. S. (2021). The methodologies of learning English vocabulary among foreign language learners. *ACADEMICIA: An International Multidisciplinary Research Journal*, *11*(4), 501-505.

Katemba, C. V. (2021). Enhancing vocabulary performance through mobile assisted language learning at a rural school in Indonesia. *Acuity: Journal of English Language Pedagogy, Literature and Culture*, *6*(1), 1-11.

Kaya, G., & Sagnak, H. C. (2022). Gamification in English as second language learning in secondary education aged between 11-18: A systematic review between 2013-2020. *International Journal of Game-Based Learning (IJGBL)*, *12*(1), 1-14.

Khamparia, A., & Pandey, B. (2020). Association of learning styles with different e-learning problems: a systematic review and classification. *Education and Information Technologies*, *25*(2), 1303-1331.

Khanam, L., Akram, H., & Kamran, M. (2022). Parental Expectations and Students' Academic Interests: A Case Study of the Islamia University of Bahawalpur, Pakistan. *Pakistan Journal of Social Sciences*, *42*(1), 61-70.

Kiyançiçek, E., & Levent, U. Z. U. N. (2022). Gamification in English Language Classrooms: The Case of Kahoot!. *Bilim Eğitim Sanat ve Teknoloji Dergisi*, *6*(1), 1-13.

Li, S., & Akram, H. (2023). Do emotional regulation behaviors matter in EFL teachers' professional development? A process model approach. *Porta Linguarum Revista Interuniversitaria de Didáctica de las Lenguas Extranjeras*, 273-291.

Magaldi, D., & Berler, M. (2020). Semi-structured interviews. *Encyclopedia of personality and individual differences*, 4825-4830.

Malik, S. F., & Pervaiz, A. (2023). Investigating the effects of ESL learners' motivation and anxiety on task based language teaching in Pakistan. *Linguistics and Literature Review*, *9*(1), 65-87.

Mohanty, A., Alam, A., Sarkar, R., & Chaudhury, S. (2021). Design and Development of Digital Game-Based Learning Software for Incorporation into School Syllabus and Curriculum Transaction. *Design Engineering*, *8*, 4864-4900.

Panhwar, A. H., & Bell, M. J. (2023). Enhancing student engagement in large ESL classes at a Pakistani university. *Educational Action Research*, *31*(5), 964-980.

Panmei, B., & Waluyo, B. (2022). The pedagogical use of gamification in English vocabulary training and learning in higher education. *Education Sciences*, *13*(1), 24.

Patra, I., Shanmugam, N., Ismail, S. M., & Mandal, G. (2022). An Investigation of EFL Learners' Vocabulary Retention and Recall in a Technology-Based Instructional Environment: Focusing on Digital Games. *Education Research International*, *2022*.

Rahmani, E. F. (2020). The benefits of gamification in the English learning context. *IJEE (Indonesian Journal of English Education)*, *7*(1), 32-47.

Ramzan, M., Awan, H.J., Ramzan, M., and Maharvi, H., (2020) Comparative Pragmatic Study of Print media discourse in Baluchistan newspapers headlines, Al-Burz, Volume 12, Issue 01

Ramzan, M., Bibi, R., & Khunsa, N. (2023). Unraveling the Link between Social Media Usage and Academic Achievement among ESL Learners: A Quantitative Analysis. Global Educational Studies Review, VIII(II), 407-421. https://doi.org/10.31703/gesr.2023(VIII-II).37

Ramzan, M., Javaid, Z. K., & Fatima, M. (2023). Empowering ESL Students: Harnessing the Potential of Social Media to Enhance Academic Motivation in Higher Education. Global Digital & Print Media Review, VI(II), 224-237. https://doi.org/10.31703/gdpmr.2023(VI-II).15

Ramzan, M., Oteir, I., Khan, M. A., Al-Otaibi, A., & Malik, S. (2023). English learning motivation of ESL learners from ethnic, gender, and cultural perspectives in sustainable development goals. *International Journal of English Language and Literature Studies*, *12*(3), 195-212.

Ramzan, M.& Alahmadi, A. (2024). The Effect of Syntax Instruction on the Development of Complex Sentences in ESL Writing, World Journal of English Language 14(4),25-32. https://doi.org/10.5430/wjel.v14n4p25

Robinson, G. M., Hardman, M., & Matley, R. J. (2021). Using games in geographical and planning-related teaching: Serious games, edutainment, board games and role-play. *Social Sciences & Humanities Open*, *4*(1), 100208.

Sigurjónsdóttir, S., & Nowenstein, I. (2021). Language acquisition in the digital age: L2 English input effects on children's L1 Icelandic. *Second Language Research*, *37*(4), 697-723.

Thompson, C. G., & von Gillern, S. (2020). Video-game based instruction for vocabulary acquisition with English language learners: A Bayesian meta-analysis. *Educational Research Review*, *30*, 100332.

Thompson, C. G., & von Gillern, S. (2020). Video-game based instruction for vocabulary acquisition with English language learners: A Bayesian meta-analysis. *Educational Research Review*, *30*, 100332.

Tran, T. Q. (2020). EFL Students' Attitudes towards Learner Autonomy in English Vocabulary Learning. *English Language Teaching Educational Journal*, *3*(2), 86-94.

Vu, D. V., & Peters, E. (2021). Vocabulary in English language learning, teaching, and testing in Vietnam: A review. *Education Sciences*, *11*(9), 563.

Wang, Y. C. (2023). Gamification in a news English course. *Education sciences*, *13*(1), 90.

Yawiloeng, R. (2020). Second language vocabulary learning from viewing video in an EFL classroom. *English Language Teaching*, *13*(7).