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EVALUATING THE IMPACT OF ONLINE LEARNING PLATFORMS ON ENGLISH LANGUAGE ACQUISITION AMONG UNIVERSITY-LEVEL ESL STUDENTS

Annotation

This study examines the impact of online platforms, specifically Duolingo and Quizlet, on English language acquisition among university-level ESL students in Uzbekistan. Using a mixed-methods approach combining surveys and platform activity analysis, the research identifies significant improvements in vocabulary, reading comprehension, and motivation. However, the platforms' effectiveness in enhancing writing and speaking skills was found to be limited. The study recommends integrating online tools into blended instruction, with emphasis on teacher feedback and peer collaboration. Future research should include longitudinal studies and explore adaptive digital learning technologies.

Key words: ESL learning, online platforms, Duolingo, Quizlet, language acquisition, university education, mobile-assisted language learning, blended learning.

ONLAYN O'QUV PLATFORMALARINING UNIVERSITET DARAJASIDAGI ESL (INGLIZ TILINI IKKINCHI TIL SIFATIDA O'RGANAYOTGAN) TALABALARINING INGLIZ TILI O'ZLASHTIRISHI JARAYONIGA TA'SIRINI BAHOLASH

Annotatsiya

Ushbu maqolada onlayn platformalar, xususan Duolingo va Quizlet, O'zbekistondagi universitet talabalari orasida ingliz tili o'zlashtirilishiga ta'siri o'rganildi. Aralash metodologiya asosida olib borilgan tadqiqot so'z boyligi, o'qish ko'nikmalari va motivatsiyaning sezilarli darajada oshganligini ko'rsatdi. Biroq, yozish va gapirish ko'nikmalarini rivojlantirishda platformalarning samaradorligi cheklanganligi aniqlandi. Maqolada onlayn vositalarni an'anaviy ta'limga integratsiya qilish, o'qituvchi fikr-mulohazasi va tengdoshlar hamkorligini kuchaytirish tavsiya etiladi. Kelgusidagi tadqiqotlar uzoq muddatli kuzatuv va moslashuvchan raqamli texnologiyalarni o'rganishni nazarda tutadi.

Kalit so'zlar: ESL o'rganish, onlayn platformalar, Duolingo, Quizlet, universitet ta'limi, til o'zlashtirish, raqamli o'quv vositalari, ta'limdagi texnologiyalar.

ОЦЕНКА ВЛИЯНИЯ ОНЛАЙН-ОБРАЗОВАТЕЛЬНЫХ ПЛАТФОРМ НА ОВЛАДЕНИЕ АНГЛИЙСКИМ ЯЗЫКОМ СТУДЕНТАМИ ВУЗОВ, ИЗУЧАЮЩИМИ АНГЛИЙСКИЙ КАК ВТОРОЙ ЯЗЫК (ESL)

Аннотация

В данной статье рассматривается влияние онлайн-платформ, в частности Duolingo и Quizlet, на овладение английским языком среди студентов университетов Узбекистана. Исследование, основанное на смешанной методологии, выявило значительное улучшение навыков лексики, понимания прочитанного и мотивации. Однако эффективность платформ в развитии навыков письма и устной речи оказалась ограниченной. В статье рекомендуется интеграция онлайн-инструментов в смешанное обучение с акцентом на обратную связь преподавателя и сотрудничество студентов. Будущие исследования должны включать долгосрочные наблюдения и изучение адаптивных цифровых технологий.

Ключевые слова: Изучение английского как второго языка (ESL), онлайн-платформы, Duolingo, Quizlet, университетское образование, овладение языком, цифровые учебные инструменты, технологии в образовании.

Introduction. The rapid growth of digital technology has impacted higher education, particularly ESL instruction. Mobile devices and internet access have helped Duolingo and Quizlet grow into flexible and interactive language learning tools (Godwin-Jones, 2022). Universities are using these techniques to improve language acquisition, motivation, and participation in ESL classes. English is essential for university students worldwide for academic performance and international communication. According to the "Development Strategy of New Uzbekistan 2022–2026," educational reforms in Uzbekistan focus using innovative digital tools to increase foreign language skills. Gamified and adaptable Duolingo helps with vocabulary, grammar, and reading (Loewen & Isbell, 2021). Interactive flashcards and quizzes on Quizlet improve memory through active recall and spaced repetition (Nakata, 2020). Both platforms encourage self-learning outside of school. Research shows mixed results. The platforms improve vocabulary and motivation (Bai & Guo, 2022), however Reinders & Sundqvist (2023) worry about their impact on productive skills like writing and speaking. Cultural and technological issues may also affect platform performance (Barrot, 2021).

Given these trends, this study examines how Duolingo and Quizlet improve English language acquisition among university ESL students in Uzbekistan, where internet penetration is expanding but unequal. The project intends to improve university ESL curricula's digital tool integration and inform educational policy reforms.

Literature Review. The rise of digital technologies has affected second language acquisition (SLA), particularly university-level ESL instruction. Mobile-Assisted Language Learning (MALL) tools like Duolingo and Quizlet provide flexible, self-directed, and engaging environments for university students to learn languages (Godwin-Jones, 2022). This review critically evaluates their efficacy, benefits, drawbacks, and research gaps in university contexts,

referencing ESL/EFL findings. COVID-19 accelerated online platform adoption, sustaining language education through remote models (Barrot, 2021). Duolingo's gamified curriculum and adaptive lessons improve word retention and reading comprehension (Loewen & Isbell, 2021), while Quizlet's flashcards and spaced repetition boost long-term vocabulary (Nakata, 2020; Bai & Guo, 2022). Reading and listening have improved beyond vocabulary (Loewen & Isbell, 2021). Gamified badges and tracking systems encourage consistent engagement, which boosts motivation and autonomy (Lee & Drajati, 2021). Self-paced platforms enable independent study, which is crucial to SLA for university students with multiple obligations (Barrot, 2021). These platforms mostly improve receptivity. Studies show that passive tasks like matching exercises and limited authentic communication opportunities limit productive skills like writing and speaking (Reinders & Sundqvist, 2023). Feedback mechanisms rarely address complex grammatical and pragmatic issues (Godwin-Jones, 2022). Cultural and contextual issues hinder effectiveness. For non-Western students like Uzbekistan, standardized global content lacks cultural relevance (Barrot, 2021). Platform use and learning outcomes are also affected by inconsistent internet access and digital literacy (The Strategy of New Uzbekistan, 2022; Chen, 2022).

Online platforms can improve classroom learning when carefully integrated. Research shows that Duolingo and Quizlet with structured feedback and communicative tasks are beneficial. Task-Based Language Teaching (TBLT) frameworks with real-world applications bridge digital learning and practice. Duolingo excels at gamified vocabulary learning, while Quizlet is better for academic English (Loewen et al., 2020). Yet neither platform alone supports productive skill development, emphasizing the need for hybrid approaches. Constructivism, Self-Determination Theory, and sociocultural theory support digital learning's educational potential (Lee & Drajati, 2021; Chen, 2022), but most designs lack social interaction. Even with more research, gaps remain. For sustained proficiency gains, longitudinal studies are needed (Reinders & Sundqvist, 2023). MALL effectiveness research in developing regions like Central Asia is scarce (Bai & Guo, 2022). Further, optimal strategies for integrating online tools into structured ESL curricula are unknown. Using Duolingo and Quizlet to improve vocabulary acquisition and learner motivation requires careful instructional integration and adaptation to specific educational and cultural contexts.

Research Methodology. This mixed-methods study examined how Duolingo and Quizlet affect English language acquisition in university-level ESL students. Following Creswell and Creswell's (2022) guideline for examining difficult educational challenges, quantitative and qualitative methods were used to collect measurable outcomes and learners' subjective experiences.

To assure platform experience, 60 undergraduate ESL students from a public university were purposively sampled. Participants must have used Duolingo and/or Quizlet for at least three months and range from B1 to C1 competency according to the CEFR framework to ensure diversity across language development stages. Structured online surveys and

platform activity analysis collected data. From validated tools (Loewen & Isbell, 2021; Barrot et al., 2022), the survey included Likert scales, closed-ended usage questions, and open-ended comments to assess reported improvements in vocabulary, grammar, reading, listening, speaking, and writing. Modest pilot research clarified and verified it. Participants supplied screenshots or reports from Duolingo and Quizlet accounts showing hours spent, courses finished, study sets mastered, and accomplishment records along with the survey. The learning analytics technique (Godwin-Jones, 2022) triangulated self-reports and objective usage data to improve validity. SPSS 26 analyzed quantitative data. Descriptive data detailed demographic and engagement patterns, while Pearson correlations examined platform usage and reported language gains. Statistical significance was determined at $p < 0.05$ for independent samples t-tests comparing high and low usage groups. Braun and Clarke's (2021) approach was used to thematize open-ended qualitative data. Themes about platform benefits, motivation, and learning hurdles supplemented quantitative data and provided context. Participants gave informed consent and were anonymous. University Institutional Review Board approved the project. Overall, data security and voluntary participation were prioritized. Triangulation compared multiple data sources to guarantee validity and reliability. Pilot testing and survey adaption improved content validity. According to Taber (2018), Likert items' Cronbach's alpha reached an acceptable threshold of $\alpha > 0.70$, showing internal consistency.

Analysis and Results. The survey and platform activity logs reveal how Duolingo and Quizlet affect English language acquisition among university-level ESL students in Uzbekistan. After quantitative survey results and platform engagement analysis, this section discusses platform usage and self-reported language improvement correlations.

These 60 undergraduate ESL students had used Duolingo, Quizlet, or both platforms for at least three months before taking the structured survey. Participants were 58% female and 42% male, with an average age of 21.2 years. Participants' self-assessed English proficiency was intermediate (B1, 35%), upper-intermediate (B2, 50%), and advanced (C1, 15%). 78% of students said Duolingo improved their vocabulary, and 72% said it improved their reading comprehension. In Quizlet, 65% of respondents said customized flashcard sets aligned with their university coursework helped them remember academic vocabulary. Although less consistently than vocabulary retention, 59% of students said Quizlet improved grammar awareness. Students were less optimistic about writing and speaking. Only 40% of respondents said Duolingo helped them write, and 32% said it helped them speak. Quizlet improved speaking fluency less, with only 35% of students reporting significant improvement. We also examined motivation. Gamified Duolingo features like daily streaks, level badges, and time challenges motivated 85% of users to practice English regularly. Quizlet's game-based modes like "Match" and "Gravity" engaged 68% of respondents and encouraged sustained study.

Table 1: Students' Self-Reported Improvements by Language Skill and Platform

Language Skill	Duolingo Improvement (%)	Quizlet Improvement (%)
Vocabulary Acquisition	78%	65%
Grammar Awareness	54%	59%
Reading Comprehension	72%	48%
Listening Comprehension	63%	41%
Writing Development	40%	38%
Speaking Fluency	32%	35%

As shown in Table 1, Duolingo was particularly effective in supporting receptive language skills, notably vocabulary and reading comprehension. Quizlet demonstrated

a strong impact in vocabulary and grammar retention but exhibited lower perceived effectiveness in productive and

receptive skills requiring more contextual application, such as writing and listening.

Statistical analysis further substantiated the relationship between platform engagement and language skill development. A positive Pearson correlation was observed between total time spent on Duolingo and self-reported vocabulary acquisition ($r = 0.62$, $p < 0.01$). Similarly, a moderate positive correlation ($r = 0.55$, $p < 0.01$) was found between the number of Quizlet study sets mastered and perceived improvements in grammar accuracy. Moreover, an independent samples t-test revealed that students categorized as "high users" (defined as engaging with the platforms for more than 4 hours per week) reported significantly higher perceived improvements in vocabulary and reading skills ($M = 4.3$, $SD = 0.6$) compared to "low users" ($M = 3.6$, $SD = 0.7$), with $t(58) = 4.21$, $p < 0.001$. Interestingly, no significant correlation was found between the frequency of platform use and improvements in writing or speaking skills, reinforcing previous literature that highlights the limitations of self-directed digital platforms in developing productive language skills (Reinders & Sundqvist, 2023). The results indicate that Duolingo and Quizlet improve Uzbek university students' English language acquisition, particularly in vocabulary, reading comprehension, and learner motivation. Without communicative, instructor-led activities, they have little effect on productive skills.

Conclusion and Recommendations. We found that learning platforms improve receptive skills, especially word retention and reading comprehension. Achievement badges and progress tracking motivated students to practice autonomous English, complementing mobile-assisted language learning research (Godwin-Jones, 2022; Bai & Guo, 2022). Quantitative investigation showed substantial relationships between frequent platform use and vocabulary and grammatical gains. Study and activity data showed modest increases in productive skills like writing and speaking. Students produced few complicated written or oral outputs despite significant involvement. This supports findings indicating online platforms without organized support promote communicative competence less (Reinders & Sundqvist, 2023; Klimova, 2021).

These findings provide numerous recommendations. To balance skill development, Duolingo and Quizlet should be used as supplements to formal ESL curricula with in-class writing, speaking, and communicative assignments. Second, instructors should regularly monitor students' digital activities and offer focused corrections and extra exercises. Third, sociocultural learning theories suggest that group vocabulary lists and team tasks can boost motivation and communication abilities (Vygotsky, 1978; Chen, 2022). Longitudinal studies of language development and platform efficacy across learner proficiency levels and cultures should fill current gaps. Integrating adaptive technology like AI-driven speech recognition and personalized writing assessment would advance digital language learning. Duolingo and Quizlet improve language acquisition and learner motivation, but they work best when integrated into larger educational tactics. Universities in Uzbekistan and elsewhere can improve ESL learning outcomes by combining digital resources with structured pedagogy.

REFERENCES

1. Albiladi, W., & Alshareef, K. (2021). Blended learning in English language teaching: A review of the current literature. Journal of Language and Linguistic Studies, 17(2), 886–902.
2. Bai, B., & Guo, W. (2022). The effectiveness of mobile-assisted vocabulary learning apps: A meta-analysis. Language Learning & Technology, 26(1), 56–76.
3. Baralt, M., Gurzynski-Weiss, L., & Kim, Y. (2021). Task-Based Language Teaching: Theoretical and Pedagogical Perspectives. John Benjamins Publishing.
4. Barrot, J. S. (2021). Social media as a language learning environment: A systematic review of the literature (2015–2020). Computer Assisted Language Learning, 34(7), 1–29.
5. Barrot, J. S., Pacampara, M. C., & Gabinete, M. (2022). Online learning challenges and experiences of language students during the COVID-19 pandemic. Asian Journal of Distance Education, 17(1), 144–153.
6. Braun, V., & Clarke, V. (2021). Thematic Analysis: A Practical Guide. SAGE Publications.
7. Chen, X. (2022). Challenges and opportunities of online learning for ESL/EFL students: A global perspective. International Journal of Educational Technology in Higher Education, 19(1), 1–17.
8. Creswell, J. W., & Creswell, J. D. (2022). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (6th ed.). SAGE Publications.
9. Godwin-Jones, R. (2022). Emerging Technologies: The Evolving Landscape of Mobile Language Learning. Language Learning & Technology, 26(2), 1–7.
10. Klimova, B. (2021). Mobile learning and its impact on university students' English language skills. Education Sciences, 11(3), 121.
11. Lee, J., & Drajati, N. A. (2021). Gamification in language learning: A systematic review. Journal of Language Teaching and Research, 12(2), 223–232.
12. Loewen, S., & Isbell, D. R. (2021). Mobile-assisted language learning: A Duolingo case study. ReCALL, 33(3), 229–245.
13. Reinders, H., & Sundqvist, P. (2023). Out-of-class language learning and digital media: New insights into learners' practices and preferences. Language Teaching Research, 27(1), 7–25.
14. Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. Research in Science Education, 48(6), 1273–1296.
15. Zhang, Y., & Wang, J. (2021). Cultural factors influencing language learning: Implications for digital language instruction. International Journal of Applied Linguistics, 31(3), 462–478.