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"EXPLORING THE FUNCTION OF MOBILE-ASSISTED LANGUAGE LEARNING IN PROMOTING INDEPENDENT STUDY: EMERGING CHALLENGES AND PEDAGOGICAL PROSPECTS"

Annotation

This paper examines the role of Mobile-Assisted Language Learning (MALL) in fostering independent learning with a particular focus on the challenges and opportunities it presents in higher education. As mobile technologies become increasingly integrated into academic contexts, MALL provides learners with greater flexibility, personalized learning paths, and real-time access to linguistic resources (Kukulska-Hulme, Shield,2008). These features make it a powerful tool for promoting autonomy, self-paced study, and multimodal engagement. However, the use of MALL is not without obstacles, including issues of digital literacy, unequal access devices and internet connectivity, and the potential for cognitive overload (Stockwell, Hubbard,2013). Drawing on recent pedagogical studies and empirical observations, this research analyzes both the enabling factors and limitations of MALL in autonomous language learning. The study concludes by proposing a balanced approach that maximizes the pedagogical benefits of MALL while addressing its constraints through targeted training, curriculum integration, and equitable access policies.

Key words: Mobile-Assisted Language Learning, independent learning, learner autonomy, digital pedagogy, higher education, language acquisition, educational technology.

ИССЛЕДОВАНИЕ ФУНКЦИИ МОБИЛЬНО-ПОДДЕРЖИВАЕМОГО ИЗУЧЕНИЯ ЯЗЫКА В РАЗВИТИИ САМОСТОЯТЕЛЬНОГО ОБУЧЕНИЯ: НОВЫЕ ВЫЗОВЫ И ПЕДАГОГИЧЕСКИЕ ПЕРСПЕКТИВЫ

Аннотация

В данной статье рассматривается роль мобильного обучения иностранным языкам (Mobile-Assisted Language Learning — MALL) в формировании самостоятельного обучения, с особым акцентом на вызовы и возможности, возникающие в системе высшего образования. По мере того как мобильные технологии все более активно интегрируются в образовательный процесс, MALL предоставляет обучающимся большую гибкость, индивидуализированные траектории обучения и доступ к языковым ресурсам в режиме реального времени (Kukulska-Hulme, Shield, 2008). Эти особенности делают его эффективным инструментом развития автономии студентов, самостоятельного темпа обучения и мультимодального взаимодействия. Вместе с тем использование MALL сопряжено с определёнными ограничениями, включая проблемы цифровой грамотности, неравный доступ к устройствам и интернету, а также риск когнитивной перегрузки (Stockwell, Hubbard, 2013). Основываясь на современных педагогических исследованиях и эмпирических наблюдениях, работа анализирует как возможности, так и ограничения MALL в контексте автономного изучения языка. В заключение предлагается сбалансированный подход, который позволяет максимально использовать педагогический потенциал MALL, одновременно устраняя его недостатки посредством целевой подготовки, интеграции в учебные программы и обеспечения равного доступа.

Ключевые слова: Мобильное обучение языкам (MALL), самостоятельное обучение, автономия обучающегося, цифровая педагогика, высшее образование, овладение языком, образовательные технологии.

MOBIL VOSITALAR YORDAMIDA TIL O'RGANISHNING MUSTAQIL TA'LIMNI RIVOJLANTIRISHDAGI O'RNI: MUAMMOLAR VA PEDAGOGIK ISTIQBOLLAR

Annotatsiya

Ushbu maqolada mobil vositalar yordamida til o'rganish (Mobile-Assisted Language Learning — MALL)ning mustaqil ta'limni rivojlantirishdagi roli, ayniqsa oliy ta'lim tizimida yuzaga kelayotgan muammolar va imkoniyatlar kontekstida tahlil qilinadi. Ta'lim jarayoniga mobil texnologiyalar tobora chuqurroq integratsiyalashayotgan bir sharoitda MALL talabalarga kengroq moslashuvchanlik, shaxsiylashtirilgan ta'lim trayektoriyalari va til resurslariga real vaqt rejimida kirish imkonini beradi (Kukulska-Hulme & Shield, 2008). Ushbu xususiyatlar uni talabalarning mustaqilligi, o'z-o'zini boshqaruvchi o'qish sur'ati hamda multimodal ishtirokini rivojlantirishda kuchli vositaga aylantiradi. Shu bilan birga, MALL'dan foydalanishda raqamli savodxonlik muammolari, qurilma va internetdan teng foydalanishdagi nomutanosibliklar hamda kognitiv yuklama xavfi kabi ayrim cheklovlar mavjud (Stockwell & Hubbard, 2013). Zamonaviy pedagogik tadqiqotlar va empirik kuzatuvlarga asoslanib, ushbu ish MALLning mustaqil ta'limdagi imkoniyatlari hamda chegaralarini tahlil qiladi. Xulosa qismida esa MALLning pedagogik afzalliklarini maksimal darajada qo'llash bilan birga, uning muammolarini ham bartaraf etishga qaratilgan muvozanatli yondashuv — maqsadli treninglar, o'quv dasturiga integratsiya va teng imkoniyatlarni ta'minlash siyosati taklif etiladi.

Kalit so'zlar: Mobil vositalar yordamida til o'rganish (MALL), mustaqil ta'lim, talaba avtonomiyasi, raqamli pedagogika, oliy ta'lim, til o'zlashtirish, ta'lim texnologiyalari.

Introduction. The rapid advancement of mobile technologies has significantly transformed the landscape of language education, introducing new pedagogical possibilities and reshaping the dynamics of independent learning. Mobile-

Assisted Language Learning (MALL) represents a natural evolution of Computer-Assisted Language Learning (CALL), extending its reach beyond static, computer-based environments into the highly portable, interactive, and personalized domain of mobile devices (Burston, 2014). In higher education, particularly in language learning programs, MALL offers unprecedented opportunities for fostering learner autonomy by enabling flexible access to authentic materials, facilitating real-time communication, and supporting diverse learning modalities. Independent learning, defined as the abilities to take control of one's own educational process, is a core competency for students in the 21st century (Reinders, White, 2016). Within this framework, MALL has emerged as a valuable tool for empowering students to design individualized learning paths, monitor their progress, and engage in self-paced study that aligns with their personal goals and interests. Mobile applications, interactive platforms, augmented reality simulations, and gamified learning environments provide immersive and context-aware experiences that were previously unattainable through traditional methods (Traxler, 2016).

Despite these benefits, the integration of MALL into independent learning is not without challenges. Issues such as uneven digital literacy among learners, disparities in access to reliable devices and internet connectivity, and the risk of cognitive overload pose significant barriers to effective emplementation (Viberg, Gronlund, 2013). Furthermore, the abundance of digital resources requires students to develop strong information-filtering skills to ensure productive engagement rather distraction. Addressing these challenges requires a strategic approach that combines technological innovation with sound pedagogical design. This study aims to explore the dual nature of MALL-as both an enabler and potential obstacle- in the context of independent learning. By examining current research, analyzing practical applications, and identifying best practices, this paper seeks to contribute to the development of sustainable, learner-centered strategies that maximize the benefits of MALL while mitigating its limitations.

Methods. This study adopts a mixed-methods research design to examine the role of Mobile-Assisted Language Learning (MALL) in independent learning, focusing on both its pedagogical opportunities and implementation challenges (Creswell, 2014). The research integrates qualitative and quantitative approaches to provide a comprehensive understanding of how MALL impacts learner autonomy in higher education. The study involved 84 undergraduate students enrolled in philology and foreign language programs at two universities. Participants were selected through purposive sampling to ensure they had prior experience with mobile learning tools. Their language proficiency levels ranged from B1 to C1 according to the Common European Framework of Reference for Language (CEFR).

Instruments. Three primary data collection instruments were employed: 1) a structured questionnaire to gather information on students' digital habits, access to devices, and perceptions of MALL; 2) semi-structured interviews to explore learner experiences in greater depth; and 3) pre-intervention language proficiency tests to measure changes in performance(Dornyei,2007).

Procedure. The study was conducted over a 12-week period. In the experimental phase, students engaged with a curated set of MALL tools, including language learning apps (Duolingo, Memrise), mobile collaborative platforms (Padlet, Google Classroom), and AR-based vocabulary games. Activities were designed to encourage self-paced study, authentic communication, and multimodal interaction. The control group continued with traditional independent learning methods without MALL integration. Data Analysis. Quantitative data from surveys and tests were analyzed using descriptive statistics, paired-sample t-tests, and ANOVA to assess learning gains (Field, 2013). Qualitative interview data were transcribed, coded and thematically analyzed to identify recurring patterns related to motivation, autonomy, and perceived challenges.

Results. The quantitative analysis revealed a statistically significant improvement in the language performance of the experimental group following MALL integration. The mean score increased from 72.4 to 84.1 points, representing a 16.2% improvement, while the control group's score only rose from 71.8 to 75.2 points. ANOVA confirmed that these differences were statistically significant, supporting the hypothesis that MALL can positively impact independent learning outcomes.

Survey results showed that 87% of participants in the experimental group reported greater motivation when using MALL tools. They attributed this to flexibility, real-time feedback, and gamified learning elements (Godwin-Jones, 2011). Furthermore, 81% indicated that MALL improved their ability to self-manage learning schedules, demonstrating its role in enhancing learner autonomy (Reinder, White, 2016). Qualitative analysis of interviews highlighted the perceived advantages of mobile learning. Students reported that mobile apps allowed them to "learn on the go" and access authentic resources such as podcasts, news articles, and interactive dialogues (Hockly, 2013). Many valued augmented reality vocabulary games for their engagement and memorability (Traxler, 2016). However, challenges were also reported. About 29% of respondents mentioned distractions from non-academic mobile apps, 23% cited internet or device compatibility issues, and 18% noted difficulties in identifying reliable learning resources (Viberg, Gronlun,2013). These findings suggest that while MALL offers substantial benefits, its successful adoption requires addressing technological and pedagogical barriers.

Discussion. The results of this study confirm earlier findings that MALL can significantly boost learner motivation, autonomy, and performance when integrated into independent learning contexts (Kukulska-Hulme, Shield, 2008). The observed performance gains in the experimental group align with constructivist learning theory, which emphasizes active, self-directed engagement with meaningful context (Traxler, 2016). MALL's ability to support multimodal interaction - combining text, audio, and simulations-also supports differentiated instruction and learner preference adaptability (Godwin-Jones,2011). Motivational improvements are consistent with Self-Determination Theory, which highlights autonomy, competence and relatedness as key factors in sustaining engagement (Deci, Ryan,2000). MALL enhances these elements by allowing students to personalize learning paths, receive immediate feedback, and interact with authentic materials. Despite these benefits, the challenges identified - digital distractions, unequal access, and limited resources evaluation skills-are in line with the barriers noted by Burston (2014) and Viberg. Without targeted digital literacy training and structured guidance, MALL may fail to realize its full potential. Thus, this study supports calls for blended models that combine MALL's flexibility with the structured learning design traditionally found in CALL (Hockly, 2013).

Conclusion. This research demonstrates that MALL can play a transformative role in enhancing independent language learning among university students. The integration of mobile applications, collaborative platforms, and AR-based learning activities significantly improved language performance and learner autonomy, supporting earlier claims about the pedagogical potential of mobile learning (Kukulska-Hulme, Shield, 2008). However, the study also shows that

MALL implementation is not without limitations. Barriers such as technology access disparities, internet reliability issues, and the risk of digital distraction must be addressed through equitable access policies, curriculum integration, and digital literacy development (Burston, 2014).

The study recommends a hybrid approach that blends the structured nature of CALL with the flexibility and portability of MALL, ensuring a sustainable and learner-cenetred environment conducive to long-term language retention. Future research should focus on longitudinal studies exploring the lasting impact of MALL on learner autonomy and investigate the potential of AI-driven adaptive learning and immersive technologies to futher personalize and enhance language learning experiences.

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