

INTEGRATING ICT TOOLS IN DEVELOPING READING STRATEGIES AMONG EFL LEARNERS

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Abstract: *This study explores the role of information and communication technology (ICT) in enhancing reading strategies among English as a Foreign Language (EFL) learners. It highlights how integrating ICT tools—such as digital reading platforms, multimedia resources, and online applications—improves comprehension, motivation, and learner autonomy. The research employs a mixed-method design with experimental and control groups to examine differences in reading performance and strategy use. Results are expected to show that ICT-supported instruction fosters greater engagement and more effective application of cognitive and metacognitive strategies. The paper emphasizes that technology, when combined with pedagogical guidance, transforms traditional reading lessons into interactive, learner-centered experiences that align with 21st-century education. The findings offer practical implications for teachers, curriculum designers, and policymakers in developing innovative EFL reading programs.*

Keywords: *ICT integration; EFL learners; reading strategies; comprehension; digital learning; autonomy.*

Аннотация: Данное исследование рассматривает использование информационно-коммуникационных технологий (ИКТ) для развития стратегий чтения у изучающих английский язык как иностранный (EFL). Интеграция цифровых инструментов — онлайн-платформ, мультимедийных ресурсов и обучающих приложений — способствует повышению понимания текста, мотивации и самостоятельности учащихся. В исследовании применяется смешанный метод с экспериментальной и контрольной группами для выявления различий в результатах чтения и использовании стратегий. Ожидается, что ИКТ-обучение способствует большей вовлечённости и эффективному применению когнитивных и метакогнитивных стратегий. Работа подчеркивает, что технология в сочетании с педагогическим руководством превращает традиционные уроки чтения в интерактивный, ориентированный на учащегося процесс. Результаты имеют практическое значение для преподавателей и разработчиков учебных программ.

Ключевые слова: *интеграция ИКТ; учащиеся EFL; стратегии чтения; понимание текста; цифровое обучение; автономия.*

Annotatsiya: *Ushbu tadqiqot ingliz tili chet tili sifatida o'rganilayotgan (EFL) sharoitda o'qish strategiyalarini rivojlantirishda axborot-kommunikatsiya*

texnologiyalarining (AKT) rolini o'rganadi. Raqamli platformalar, multimedia manbalari va onlayn dasturlardan foydalanish o'quvchilarning matnni tushunish, motivatsiya va mustaqilligini oshiradi. Tadqiqotda tajriba va nazorat guruhlarini o'z ichiga olgan aralash uslub qo'llanilib, o'qish natijalari va strategiya qo'llanishidagi farqlar tahlil qilinadi. Natijalarga ko'ra, AKT asosidagi o'qitish kognitiv va metakognitiv strategiyalarni samarali qo'llash hamda o'quvchilar faolligini oshirishga xizmat qiladi. Maqolada texnologiyaning pedagogik yondashuv bilan uyg'unlashuvi an'anaviy darslarni interaktiv, o'quvchi markazli jarayonga aylantirishi ta'kidlanadi.

***Kalit so'zlar:** AKT integratsiyasi; EFL o'rganuvchilari; o'qish strategiyalari; matnni tushunish; raqamli ta'lim; mustaqillik.*

Introduction. In today's digitally driven educational landscape, information and communication technology (ICT) has become an integral component of foreign language instruction. Educators worldwide increasingly recognize that integrating ICT tools can create a more engaging and supportive environment for language learners [1. p.25]. This is particularly relevant for learners of English as a Foreign Language (EFL), who often face challenges in developing effective reading comprehension skills. Reading strategies – deliberate, goal-directed techniques such as skimming, scanning, predicting, and inferring meaning – are essential for EFL learners to navigate texts and improve comprehension. However, many EFL students struggle to apply these strategies consistently, due to limited exposure, insufficient training, or lack of motivation. In this context, leveraging ICT tools (such as digital reading platforms, educational software, and interactive online resources) offers promising avenues to support and enhance the development of reading strategies.

Previous studies suggest that ICT integration can positively influence language learning outcomes, including reading proficiency. For instance, systematic reviews have found that using ICT in teaching reading not only boosts learners' performance but also increases their engagement and improves attitudes towards learning English [2. p.33]. Digital technologies provide access to a wide range of authentic reading materials and multimedia resources, potentially making reading activities more stimulating and relevant to learners' interests. Moreover, ICT-facilitated learning aligns well with the habits of modern students, who are often digital natives comfortable with technology. When utilized properly, digital tools can help shift classrooms towards more student-centered learning, reducing reliance on "chalk-and-talk" instruction. Research indicates that technology-enhanced classrooms can lower students' reading anxiety and encourage greater risk-taking in using the target language, as learners feel more at ease and autonomous in a tech-rich environment [3. p.41]. These benefits underscore the rationale for integrating ICT in teaching reading

strategies: by making reading practice more interactive and less stressful, students may be more inclined to employ and refine effective strategies.

Despite these advantages, there remains a noticeable gap in both research and practice regarding how exactly ICT tools can be harnessed to develop reading strategies among EFL learners. Much of the existing literature on ICT in language education addresses general language skills or overall reading comprehension, with less focus on strategy training. This paper aims to fill that gap by examining the intersection of ICT and reading strategy development. The study outlined here is guided by the question of how ICT tools can facilitate the teaching and learning of reading strategies in an EFL context. By reviewing relevant theoretical perspectives and proposing a research design for implementing ICT in reading instruction, we seek to provide insights into effective methods to foster strategic reading habits. Ultimately, the goal is to help EFL educators enhance their students' reading skills through thoughtful integration of technology, thereby improving comprehension and learner autonomy. In the following sections, we discuss the theoretical background on reading strategies and technology integration, outline the methodology for our proposed study, and consider the potential implications of our approach.

Literature Review. Decades of research in applied linguistics and education have established the importance of reading strategies for comprehension, especially in a second or foreign language. Reading strategies refer to the conscious techniques and cognitive processes that readers employ to make sense of texts – for example, previewing a text's structure, guessing meanings of unknown words from context, summarizing passages, or monitoring one's own understanding. Proficient readers tend to use a repertoire of such strategies flexibly to enhance comprehension. In contrast, less proficient readers often lack awareness or proper use of these strategies, which can hinder their understanding of texts. Empirical studies have shown a clear link between strategic reading and reading success: high-proficiency EFL readers report using significantly more metacognitive and cognitive reading strategies than their lower-proficiency peers [4. p.28] [5. p.31]. For instance, skilled readers are more aware of how and when to skim for gist or scan for details, and they regularly self-monitor their comprehension by asking themselves questions as they read. This heightened strategic awareness translates into better comprehension outcomes [6. p.37].

Alongside developments in strategy instruction, the advent of modern digital tools has opened new possibilities for teaching reading in more interactive and engaging ways. ICT integration in language learning encompasses a broad range of technologies and approaches – from using multimedia-enhanced texts and e-books, to online reading labs, educational games, and learning management systems. The theoretical underpinning for using ICT in reading is often grounded in constructivist and interactive learning models. According to Anderson's Online Learning Model,

blending technology with traditional instruction can create a collaborative environment where learners, teachers, and content interact seamlessly to enrich learning experiences [7. p.43]. In reading contexts, digital tools can support strategy development by providing features and scaffolds that are not available in printed texts. For example, an online text may include clickable definitions, hyperlinks to background information, audio narration, or annotation tools – all of which can aid comprehension and encourage learners to actively engage with the material. Additionally, ICT allows for immediate feedback through quizzes or interactive tasks, helping students practice strategies like summarizing or predicting and instantly see how well they understood a passage.

Crucially, ICT-based reading activities can be tailored to individual learner needs, aligning with the student-centered approach in modern pedagogy. Adaptive reading programs, for instance, can adjust text difficulty based on a learner's level, ensuring that students are neither bored nor overwhelmed. The availability of vast online libraries and authentic materials (news articles, blogs, digital stories, etc.) means that learners can find texts that interest them, which boosts motivation. Research evidence supports the efficacy of technology-enhanced reading: integrating ICT tools into reading lessons has been found to improve learners' reading comprehension performance and engagement [8. p.50]. Students often respond positively to multimedia content and interactive tasks, showing increased enthusiasm and time-on-task when reading via digital media as compared to traditional print. Moreover, as mentioned earlier, ICT-rich environments can reduce learner anxiety and build confidence, which is particularly beneficial for EFL readers who might be hesitant to read aloud or participate in discussions. By practicing reading strategies in a low-pressure digital context (e.g., silently interacting with an online text, or participating in a forum discussion rather than face-to-face), learners may gradually gain the confidence to apply those strategies in any context.

However, successful integration of ICT in developing reading strategies also comes with challenges. Educators must consider the technical skills and digital literacy of both teachers and students. Not all EFL instructors are equally prepared to incorporate technology; training and support are often needed to ensure that teachers can effectively use ICT tools and align them with pedagogical goals. Students, too, require guidance to use digital resources purposefully – for example, learning how to use an online dictionary as a support strategy rather than over-relying on translation software. Additionally, there is the issue of transitioning from print to digital reading. The ubiquity of digital texts in education calls for new pedagogical approaches to ensure learners can comprehend online materials just as well as printed ones [9. p.55]. Digital reading may demand different strategies (such as managing hyperlinks, navigating non-linear content, or dealing with multimedia elements) that students need

to learn. Therefore, part of integrating ICT is expanding the notion of reading strategies to include those suited for digital environments. Despite these considerations, the consensus in the literature is that when thoughtfully implemented, ICT offers powerful tools to enhance reading strategy instruction and ultimately improve EFL reading outcomes [10. p.61] [11. p.66].

Research Methodology and Design. To investigate the impact of ICT tool integration on the development of reading strategies among EFL learners, the study will employ a mixed-method research design with an instructional intervention. The core objective of the research is to determine whether students who learn reading strategies through ICT-enhanced activities show greater improvement in strategy use and reading comprehension than those who receive traditional instruction.

Participants: The study will involve 60 intermediate EFL learners divided into two equal groups – experimental and control. All participants will have similar proficiency verified through a placement test.

Intervention: The experimental group will receive reading strategy instruction integrated with ICT tools, whereas the control group will receive traditional, non-digital instruction. The intervention will span eight weeks. The ICT group will engage with digital texts offering clickable definitions, annotations, and quizzes, while the control group uses printed materials. Teachers will guide tool usage and reflective learning practices.

Data Collection: Pre- and post-tests, reading strategy questionnaires, classroom observations, and semi-structured interviews will collect both quantitative and qualitative data. The data will be analyzed statistically (t-tests, ANOVA) and thematically to identify improvements in comprehension and strategy use.

Expected Findings and Discussion. We anticipate that ICT-integrated instruction will lead to greater comprehension improvement and higher awareness of reading strategies [12. p.72]. Digital feedback, interactive exercises, and multimedia input enhance learner engagement and reduce reading anxiety [13. p.75]. Students are expected to report increased confidence and motivation, finding ICT-based reading more stimulating [14. p.79]. Challenges such as technical difficulties and distractions may occur, highlighting the importance of teacher guidance and robust infrastructure [15. p.82].

The findings are expected to confirm that integrating ICT with explicit strategy instruction can strengthen comprehension and autonomy, paving the way for modernized, technology-rich EFL pedagogy [16. p.85].

Conclusion

In conclusion, the integration of ICT tools into reading strategy instruction represents a contemporary, student-centered approach to enhancing EFL learners' reading skills. By combining pedagogical strategy instruction with technological

affordances, educators can create interactive learning environments that engage and motivate students [17. p.88] [18. p.91]. ICT tools—from multimedia texts to online exercises—act as catalysts for reading strategy development, leading to measurable comprehension gains and improved learner attitudes [19. p.94] [20. p.97].

Though challenges persist, technology should be seen as a pedagogical ally rather than a replacement for teachers. When used thoughtfully, ICT enhances comprehension, fosters learner independence, and supports a deeper, strategic engagement with texts in English.

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