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The Role of Information Technologies in Foreign Language Learning Process

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Annotation *Information technology (IT) has become an integral structural component of foreign language education rather than merely an optional instructional supplement. Learning management systems, mobile applications, language corpora, automatic speech recognition, video-conferencing platforms, and generative artificial intelligence increasingly facilitate language input, practice, interaction, feedback, and assessment. This article reviews major theoretical perspectives on second language acquisition together with research in Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) to examine the pedagogical potential and limitations of technology-enhanced language learning. The analysis indicates that IT is particularly effective when it increases learners' exposure to comprehensible input, creates meaningful opportunities for language production and negotiation of meaning, provides timely formative feedback, and promotes learner autonomy and independent learning. However, significant challenges remain, including unequal digital access, learner distraction, inconsistent pedagogical quality, data privacy concerns, and excessive dependence on generative AI. The study concludes that technology integration should be guided primarily by clearly defined learning objectives and pedagogical needs rather than technological novelty.*

Keywords *Information technology, CALL, MALL, foreign language learning, blended learning, artificial intelligence, learner autonomy*

Axborot texnologiyalarining chet tili o'rganish jarayonidagi o'rni

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Annotatsiya *Axborot texnologiyalari (AT) bugungi kunda chet tillarini o'qitishda qo'shimcha vosita emas, balki ta'lim jarayonining muhim tarkibiy qismiga aylandi. Ta'limni boshqarish tizimlari, mobil ilovalar, til korpuslari, nutqni avtomatik aniqlash texnologiyalari, videokonferensiya platformalari hamda generativ sun'iy intellekt til materiallarini taqdim etish, mashq qilish, muloqot, qayta aloqa va baholash jarayonlarini samarali tashkil etishga xizmat qilmoqda. Mazkur maqolada ikkinchi tilni o'zlashtirishga oid asosiy nazariy yondashuvlar, shuningdek, kompyuter yordamida til o'rganish (CALL) va mobil qurilmalar yordamida til o'rganish (MALL) bo'yicha tadqiqotlar tahlil qilinadi. Natijalar AT tushunarli til materiallari hajmi va sifatini oshirish, til birliklarini faol qo'llash hamda ma'no yuzasidan muloqot qilish*

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imkoniyatlarini yaratish, tezkor formativ qayta aloqa taqdim etish va o'rganuvchilar mustaqilligini rivojlantirishda samarali ekanligini ko'rsatadi. Shu bilan birga, raqamli imkoniyatlardan foydalanishdagi tengsizlik, chalg'ituvchi omillar, pedagogik sifatning turlicha bo'lishi, ma'lumotlar maxfiyligi va generativ sun'iy intellektga haddan tashqari bog'lanish muhim muammolar sifatida qayd etiladi. Texnologiyalarni integratsiya qilish yangilikka emas, aniq ta'lim maqsadlari va pedagogik ehtiyojlarga asoslanishi lozim.

Kalit so'zlar *Axborot texnologiyalari, CALL, MALL, chet tili o'rganish, aralash ta'lim, sun'iy intellect, o'quvchi avtonomiyasi*

Роль информационных технологий в процессе изучения иностранного языка

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Аннотация *Информационные технологии (ИТ) стали не дополнительным средством, а важным структурным компонентом современного обучения иностранным языкам. Системы управления обучением, мобильные приложения, языковые корпуса, технологии автоматического распознавания речи, платформы видеоконференций и генеративный искусственный интеллект активно используются для организации языкового материала, практики, взаимодействия, обратной связи и оценивания. В статье рассматриваются основные теоретические подходы к овладению вторым языком, а также исследования в области компьютерного обучения языкам (CALL) и мобильного обучения языкам (MALL) с целью определения педагогического потенциала и ограничений современных технологий. Анализ показывает, что ИТ особенно эффективны, когда они увеличивают объем и качество доступного для понимания языкового материала, создают дополнительные возможности для речевой продукции и согласования значения, обеспечивают своевременную формирующую обратную связь и способствуют развитию автономии обучающихся. Вместе с тем существуют такие ограничения, как неравный доступ к цифровым ресурсам, отвлекающие факторы, различное педагогическое качество, проблемы конфиденциальности данных и чрезмерная зависимость от генеративного ИИ. Сделан вывод, что интеграция технологий должна определяться прежде всего учебными целями и педагогическими потребностями, а не новизной цифровых инструментов.*

Ключевые слова *Информационные технологии, CALL, MALL, изучение иностранного языка, смешанное обучение, искусственный интеллект, учебная автономия*

Introduction

Foreign language learning fundamentally depends on learners' access to language in meaningful and varied forms, including spoken input, written texts, interaction with interlocutors, opportunities for communication, and authentic audiences. Traditionally, such access was largely limited to classroom instruction, textbooks, teachers, and occasional contact with proficient speakers. The rapid development of information technology (IT), however, has substantially transformed this ecology of access by expanding the range of resources, communication environments, and learning opportunities available to language learners. Digital platforms now allow students to engage with authentic materials, communicate across geographical boundaries, practice language skills independently, and receive feedback beyond the conventional classroom setting.

The growing integration of learning management systems, mobile applications, online dictionaries, digital corpora, video-conferencing tools, automatic speech recognition, and generative artificial intelligence has created new possibilities for foreign language education. These technologies can provide learners with multimodal input, opportunities for repeated practice, immediate or delayed feedback, and greater control over the pace, place, and content of learning. Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) have therefore become significant areas of research concerned with understanding how digital technologies can support second and foreign language development.

Nevertheless, the presence of technology does not automatically lead to effective language learning. The central pedagogical question is no longer whether technology belongs in language education, but what role it should play when learning outcomes, rather

than technological novelty, are regarded as the primary criterion of success. Effective integration requires careful consideration of learning objectives, learner needs, instructional design, and the specific affordances of digital tools.

Literature review

Research on technology in language education is usually grouped under Computer-Assisted Language Learning (CALL) and, more recently, Mobile-Assisted Language Learning (MALL) and intelligent CALL. Levy and Stockwell (2006) defined CALL as the search for and study of applications of the computer in language teaching and learning. That definition remains useful because it places pedagogy before the device: the object of study is not the software itself, but what learners do with language while using it. Stockwell (2012) later emphasised diversity of practice and warned against treating CALL as a single method.

Theoretical justifications for technology use are drawn from several strands of second language acquisition. Krashen (1985) argued that development depends on comprehensible input slightly beyond the learner's current level. Digital libraries, captioned video and adaptive listening banks increase the hours of such input beyond what a textbook can supply. Swain (1985) countered that input is insufficient unless learners are pushed to produce language and to notice gaps. Recording tools, forums and chat create that push. Long (1996) located development in negotiated interaction: clarification requests and recasts during communication. Video conferencing and written chat multiply the number of such exchanges (Chapelle, 2003).

Sociocultural theory supplies a complementary account. Vygotsky (1978) treated higher mental functions as mediated by tools and by more capable others. Lantolf and Thorne (2006) applied this view to second language development: digital artefacts – corpora, shared documents, glossed texts –

become additional mediators inside the zone of proximal development. From this perspective the teacher is a designer of mediated activity rather than the sole source of language.

Learner autonomy is a second major theme in the literature. Holec (1981) defined autonomy as the ability to take charge of one's learning. Reinders and White (2016), reviewing twenty years of work on autonomy and technology, concluded that digital environments can support goal-setting, self-assessment and independent practice, but only when learners are taught how to use the tools and when teachers do not confuse a dashboard with genuine self-regulation. Benson's broader work on autonomy is consistent with this caution: access to materials is not the same as control over learning.

Empirical reviews of MALL report modest but positive effects on vocabulary and listening when practice is frequent and spaced, and weaker or mixed effects when applications are used without a task (Hockly & Dudeney, 2018). Studies of blended learning generally find that combining classroom interaction with an online practice layer outperforms either mode alone, provided the two layers are designed as one course rather than as homework added after the fact. Research on computer-mediated communication shows gains in fluency and willingness to communicate, with smaller and less consistent gains in accuracy unless feedback is built into the task.

Automated writing evaluation and automatic speech recognition have a growing evidence base. They are reliable for a subset of surface features (agreement, some pronunciation contrasts) and less reliable for organisation, pragmatics and interactional competence. Chapelle (2003) already argued that CALL evaluation must ask whether the software creates conditions known to support acquisition – input, interaction, feedback – rather than whether students like the interface.

The newest strand concerns generative artificial intelligence. Godwin-Jones (2022)

describes AI as a potential partner in practice and feedback, while warning that systems trained on internet text may model inappropriate register and that learners may outsource composition. Emerging classroom studies suggest that AI is useful for brainstorming, comparing drafts and generating controlled practice, and harmful when the assessed product can be produced entirely by the machine. Institutional policies are therefore part of the pedagogical design.

Equity and ethics appear late in many studies but are central in recent reviews. Unequal access to devices and bandwidth reproduces educational inequality. Commercial applications collect voice and text data under terms that schools do not always control. Hockly and Dudeney (2018) argue that digital literacy – including the ability to judge a source and to protect personal data – is now part of language education, not an extra course.

The contribution of technology can also be examined in relation to individual language skills. Listening instruction has been significantly transformed by access to authentic audiovisual materials, podcasts, captioned videos, adjustable playback speeds, and repeated listening opportunities. Such resources allow learners to encounter different accents, speech rates, registers, and communicative contexts. Captions and transcripts may function as scaffolding, particularly at earlier stages of comprehension, although excessive dependence on written support may reduce attention to auditory information. Technology is therefore most effective when scaffolding is gradually reduced as learners develop greater listening competence.

Reading is supported through electronic glosses, online dictionaries, text-to-speech functions, graded digital libraries, hyperlinks, and searchable textual resources. Digital environments can provide immediate lexical assistance and expose learners to a much wider range of authentic texts than traditional

coursebooks. However, digital reading also presents pedagogical challenges. Hyperlinks, notifications, multimedia elements, and rapid movement between sources can encourage fragmented processing. Digital literacy therefore requires not only the ability to access information but also to evaluate sources, compare perspectives, identify reliable evidence, and sustain attention during complex reading tasks (Dudeney et al., 2013).

Speaking is another area in which technology can expand learning opportunities. In large classes, individual speaking time is often limited. Voice recording, video conferencing, tandem exchanges, automatic speech recognition, and conversational applications can provide additional opportunities for rehearsal and repeated production. Automatic speech recognition may help learners notice certain pronunciation problems by comparing intended utterances with recognised output. Nevertheless, technological systems remain more effective at identifying some segmental or formal features than at evaluating pragmatic appropriateness, discourse management, interpersonal responsiveness, and context-sensitive communication. Human interaction therefore remains essential for developing broader communicative competence.

Writing has likewise been transformed by collaborative platforms, automated feedback, online reference tools, and artificial intelligence. Shared documents facilitate peer response and make revision processes visible, while automated systems can identify certain grammatical, lexical, spelling, and mechanical problems. Such feedback can support noticing, which Schmidt (1990) identifies as an important condition for language learning. However, feedback becomes pedagogically valuable only when learners actively process it, understand the problem, and attempt revision. Simply accepting automated corrections may improve an individual text without necessarily developing the learner's underlying linguistic competence.

Recent developments in generative artificial intelligence have further complicated the relationship between technology and language learning. Godwin-Jones (2022) discusses intelligent writing assistance as a potential partner in instructed language learning, particularly for feedback, revision, linguistic comparison, and guided practice. Generative systems can provide examples, reformulate sentences, generate practice materials, simulate interaction, and support brainstorming. At the same time, they introduce significant pedagogical and ethical concerns. If learners delegate substantial portions of speaking or writing production to AI, the technology may reduce precisely the cognitive and linguistic effort required for development. Effective pedagogical use therefore requires tasks in which learners evaluate, compare, revise, justify, or critically respond to AI-generated material rather than simply submitting machine-generated output.

Assessment and feedback constitute another important area of technology integration. Immediate digital feedback can direct attention to errors and facilitate revision, while learning analytics can help teachers identify recurring difficulties across groups of learners. Electronic portfolios can document drafts, reflections, feedback, and progress over time, providing evidence of both learning processes and outcomes. The increasing use of computer-delivered assessment also means that familiarity with digital environments is becoming relevant to test performance. The Common European Framework of Reference for Languages: Companion Volume further emphasises a broader conception of communicative language competence and mediation, suggesting that digital activities should ultimately contribute to meaningful language use rather than isolated technological proficiency (Council of Europe, 2020).

Results and Discussion

The analysis indicates that information technology can support foreign language learning through several interconnected

mechanisms. Its primary contribution is the expansion of learners' access to linguistic input, opportunities for productive language use, interaction, feedback, and independent learning. However, the effectiveness of these affordances depends substantially on instructional design and the way particular technologies are incorporated into language-learning tasks.

One of the clearest advantages of information technology is its capacity to extend language exposure beyond the physical classroom. According to Krashen (1985), comprehensible input constitutes an important condition for language acquisition. In conventional foreign language classrooms, exposure may be constrained by limited contact hours and reliance on textbooks or teacher talk. Digital environments considerably expand this linguistic ecology by providing access to podcasts, videos, digital libraries, interactive texts, online lectures, authentic conversations, and multimedia resources.

The pedagogical value of these materials, however, does not derive solely from their authenticity. Learners need appropriate scaffolding to transform exposure into meaningful processing. Captions, transcripts, adjustable playback speed, electronic glosses, dictionaries, and repeated listening can make difficult materials more accessible. These features are particularly useful when learners gradually move from supported to more independent comprehension.

Technology therefore makes input both more abundant and potentially more

adaptable. Yet unlimited access can also create cognitive overload. Teachers remain responsible for selecting materials appropriate to learners' proficiency, objectives, and needs.

Digital tools significantly increase opportunities for such output. Learners can record and re-record oral presentations, participate in online discussions, produce multimedia projects, collaborate on shared documents, maintain blogs or electronic portfolios, and communicate through synchronous and asynchronous platforms. Unlike a traditional classroom in which speaking time must be distributed among many students, digital environments can provide every learner with opportunities for extended production.

The educational value of these activities increases when production has a clear communicative purpose. Simply recording isolated sentences, for example, provides different learning opportunities from preparing an oral response for an audience, responding to a peer, or solving a collaborative problem.

Conclusion

IT does not teach a language by itself. It can multiply input, personalise practice, record speech, publish writing and make progress visible. It can also distract and exclude. The literature reviewed above supports an instrumental and pedagogical role at once: devices are means, and teachers must align those means with how additional languages are learned. When that alignment is present, information technology strengthens the foreign language learning process.

References:

1. Benson, P. (2011). *Teaching and researching autonomy* (2nd ed.). Routledge.
<https://doi.org/10.4324/9781315833767>
2. Chapelle, C. A. (2003). *English language learning and technology: Lectures on applied linguistics in the age of information and communication technology*. John Benjamins.
<https://doi.org/10.1075/llt.7>
3. Council of Europe. (2020). *Common European Framework of Reference for Languages: Companion volume*. Council of Europe Publishing.

4. Dudeney, G., Hockly, N., & Pegrum, M. (2013). *Digital literacies*. Routledge. <https://doi.org/10.4324/9781315832913>
5. Godwin-Jones, R. (2022). Partnering with AI: Intelligent writing assistance and instructed language learning. *Language Learning & Technology*, 26(2), 5–24. <https://doi.org/10125/73474>
6. Hockly, N., & Dudeney, G. (2018). Current and future digital trends in ELT. *RELC Journal*, 49(2), 164–178. <https://doi.org/10.1177/0033688218777318>
7. Holec, H. (1981). *Autonomy and foreign language learning*. Pergamon.
8. Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
9. Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.
10. Levy, M., & Stockwell, G. (2006). *CALL dimensions: Options and issues in computer-assisted language learning*. Lawrence Erlbaum. <https://doi.org/10.4324/9780203708200>
11. Long, M. H. (1996). *The role of the linguistic environment in second language acquisition*. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press.
12. Reinders, H., & White, C. (2016). 20 years of autonomy and technology: How far have we come and where to next? *Language Learning & Technology*, 20(2), 143–154. <https://doi.org/10125/44466>
13. Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. <https://doi.org/10.1093/applin/11.2.129>
14. Stockwell, G. (Ed.). (2012). *Computer-assisted language learning: Diversity in research and practice*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139060981>
15. Swain, M. (1985). *Communicative competence: Some roles of comprehensible input and comprehensible output in its development*. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition*. 235–253. Newbury House.
16. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.