A Study of the Development of Language Communication Ability Facilitated by Technology-Empowered Learning Strategies: Take English Language Learning as an Example

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Abstract

Background and Aim: The application of information technology in English language teaching has greatly influenced language learning, resulting in corresponding changes in learners' language proficiency and significant improvement in communication efficiency and effect. This paper aims to provide some language learning strategies enhanced by technology and explore the measures of cultivating the communication ability of English as a second language.

Materials and Methods: Combined with the learning strategies, the analysis is conducted about the learners' engagement, cross-cultural communication ability, and autonomous learning ability.

Results: Based on the learning strategies, the paper puts forward effective measures to cultivate and train English communication ability.

Conclusion: This paper provides valuable reference for English language learners and optimizes the overall learning effect of language learners.

Keywords: Technology Enhancement; Language Learning; Communication Skills

Introduction

The application of science and technology in English learning can significantly improve learners' self-directed learning effectiveness, enabling them to communicate and train on virtual communication platforms, thereby ensuring their language communication and communication literacy are continuously improved (Langley, 1998). Therefore, in English learning, it is necessary to deeply recognize the importance of using technology to enhance language learning strategies, and explore the application measures of learning strategies from multiple perspectives in combination with the needs of English autonomous learning (Soliman, 2014), ensuring that the advantages of advanced learning strategies can be fully utilized, improve the effectiveness of learners' English autonomous learning and communication training, and systematically improve and comprehensively optimize the communication learning efficiency of English as a second language (Healey, 1999).

Based on the previous research on TikTok short videos used in English teaching, which shows that after using the technique, the learners' language proficiency is improved (Fei & Li, 2024). Learners are satisfied with the teaching method supported by information technology. This paper aims to provide some language learning strategies enhanced by technology and explore the measures of cultivating the communication ability of English as a second language. Based on the learning strategies, the analysis is conducted about the learners' engagement, cross-cultural communication ability, and autonomous learning ability. As a result, the measures are provided to cultivate the learners' communication ability.

Technology-empowered Language Learning Strategies

The use of technology-enhanced language learning strategies is the organic integration of science and technology with learners' language learning, improving comprehensive learning efficiency and effectiveness, which makes learners' language learning and exploration more comprehensive and efficient. The article will provide a systematic interpretation and exploration of language learning strategies enhanced by technology (Buzatu et al., 2020).

Intelligent Teaching System and Personalized Learning Strategies

Intelligent teaching system is a teaching aid tool based on artificial intelligence technology, which can analyze learners' learning habits, ability levels, and learning progress in language learning, and provide customized learning content and feedback for each learner (Magomadov, 2020). In English language learning, intelligent teaching systems can develop personalized learning plans based on learners' vocabulary mastery, grammar proficiency, and oral expression ability, enabling language learners to not only receive targeted exercises but also continuously adjust learning strategies in real-time feedback to improve learning efficiency (Mulyadi et al., 2021). At the same time, the implementation of personalized learning strategies in English language learning relies on the application of big data and machine learning algorithms in intelligent teaching systems. With the support of the system, learners can analyze a large amount of learning data, accurately identify their weak links, and recommend corresponding learning resources (Ouyang & Jiao, 2021).

Multimodal Interaction and Learning Strategies for Virtual Reality Technology

Multimodal interaction refers to the comprehensive use of multiple modalities such as sound, text, images, and actions for information exchange and interaction. In English language learning, multimodal interaction can provide learners with a more realistic and immersive language learning environment, and virtual reality technology is an important tool for constructing multimodal interactive English learning environments (Owoc et al., 2019). By leveraging the role of virtual technology, realistic English usage scenarios can be simulated in English learning, allowing learners to practice language in simulated situations (Garris et al., 2002). Based on the comprehensive application of multimodal interaction and virtual reality technology, learners can learn the English language by living, studying, and working in simulated English-speaking countries, engaging in dialogue and communication with virtual characters, completing various practical tasks, and thereby improving their language application skills and enhancing their cross-cultural communication skills (Mulyadi et al., 2021).

Online Collaborative Learning and Learning Strategies on Social Media Platforms

Online collaborative learning refers to learners collaborating and communicating through online platforms to jointly complete learning tasks (Sarker, 2021). In English language learning, online collaborative learning can promote knowledge sharing and experience exchange among learners, improve their cooperation and problem-solving abilities, and the application of social media platforms can provide convenient tools and vast space for online collaborative learning (Donnelly, 2010). Based on online collaborative learning platforms and social media system development, English learners can join various English learning communities, interact and communicate with English learners from all over the world, share learning experiences, discuss difficult problems, complete tasks together, and even engage in practical activities such as online English corners on the platform. This gradually broadens learners' international horizons, improves their English communication skills, and cross-cultural awareness (Chen & Chen, 2021).

Impact of Technology-empowered Strategies on the Cultivation of English Communication Skills

Using technology to enhance strategies and reform English learning activities, learners can communicate and interact in English during the process of learning a second language (Anthony et al., 2019). Communication skills will receive targeted training, and language communication literacy will also be improved.

Enhance Learners' Learning Motivation and Engagement

The application of technology in language learning, such as intelligent teaching platforms, virtual reality technology, online interactive games, etc., can create a more vivid and interesting learning

environment for learners, form interesting learning methods, not only effectively attract learners' attention, but also stimulate their learning interest and motivation (Sahni, 2019). For example, learners of English as a second language can rationally apply virtual reality technology in the process of learning English communication and communicative knowledge, experiencing the culture and life of English speaking countries, feeling the characteristics and language features of English communication in different living environments, exercising learners' English communication thinking ability, strengthening learners' language sense, and using this immersive learning experience to make language learning more intuitive and interesting (Garris et al., 2002). At the same time, based on the application of intelligent learning platforms, the platform adjusts teaching content and difficulty according to learners' learning progress and feedback, making learning more personalized and efficient, forming a personalized learning service model, and promoting learners to feel their progress and achievements in the process of autonomous learning of English as a second language, effectively exercising their confidence and ability to communicate actively (Bolliger & Halupa, 2018).

Promote the Development of Cross-cultural Communication Skills

Cross-cultural communication competence is one of the important goals of learning English as a second language. In the learning practice of English learners, the application of technology-enhanced language learning strategies provides opportunities for learners to communicate and interact with people from different cultural backgrounds, promoting targeted training of learners' cross-cultural communication competence (Larchenko & Barynikova, 2021). For example, English learners can comprehensively utilize online social platforms in the process of self-directed learning, engage in real-time conversations with native English speakers from all over the world, understand their culture and lifestyle, strengthen their communication experience and common sense through direct communication, and thus help learners better understand and master the language and culture of English (Goh & Sigala, 2020).

Enhance Learners' Self-Learning Ability and Innovative Spirit

The technology-enhanced language learning strategy emphasizes the learner's subject status and the cultivation of autonomous learning ability, which is enhanced through the systematic application of technology (Firat, 2016).

Language learning strategies enable learners to systematically exercise their self-directed learning abilities and appropriately enhance their innovative spirit in English learning. Specifically, technology tools such as intelligent teaching platforms and online learning resources provide learners with the possibility of learning anytime and anywhere, enabling English learners to learn according to their own time and pace, and to overcome learning difficulties at their own pace (Sanchez, 2017). They can independently design communication training to cultivate learners' self-learning and self-management abilities. At the same time, the application of technological tools also encourages learners to explore and innovate (Goh & Sigala, 2020). For example, when learners are writing in English, intelligent writing assistants can provide grammar checks and writing suggestions, allowing learners to find directions for innovative creation and improve their language skills appropriately. This invisibly cultivates their innovative spirit and practical ability, creating conditions for the cultivation of their future communication literacy, effectively improving the effectiveness of English comprehensive teaching guidance, and promoting innovation in English teaching activities (Obiedat et al., 2014).

Measures to Promote the Development of Communication Skills in English through Language Learning Strategies Empowered by Technology

Utilizing technology to enhance language learning strategies and cultivate communication skills among English learners can enable English as a second language learners to take the initiative of learning and thinking about the application of the English language, generating communication training models, and continuously optimizing their communication skills (Pereira et al., 2007).

Deepen the Integration of Technology and Education, Optimize the Design of Intelligent Teaching Systems

The rise of intelligent teaching systems has brought revolutionary changes to English teaching, and learners of English as a second language are learning English through the system (Luckin & Cukurova, 2019).

In the process of language knowledge, advanced technologies such as big data, artificial intelligence, and machine learning are comprehensively utilized to accurately analyze one's language habits, error patterns, and progress speed (Cope et al., 2020). With the support of the system, personalized learning plans can be tailored to optimize the supply of English learning resources, promote the improvement of learning efficiency, improve learning effectiveness under personalized learning support guidance, and exercise learners' English communication skills (Chew & Chua, 2020).

Specifically, intelligent teaching systems can track learners' learning progress in real time, dynamically adjust teaching difficulty and pace, ensure learners are always in the best learning state, and also play an intelligent recommendation function to provide learners with learning resources highly related to their interests and needs, thereby stimulating their learning motivation and interest (Cunningham & Billingsley, 2002). For example, in the process of self-learning Business English knowledge, English learners can integrate online teaching resources based on the application of science and technology, and then choose suitable intelligent teaching systems according to their learning direction and needs (Chatterjee & Bhattacharjee, 2020). They can also input learning directions, learning points, etc. into the intelligent system, and the system intelligently generates teaching designs and learning plans, enabling learners to participate in English learning practice in a targeted manner, master the skills and methods of English communication and interaction in English scenarios, and comprehensively and systematically optimize their comprehensive English communication literacy (Healey, 1999).

Introduce Multimodal Interaction and Virtual Reality Technology to Optimize English Communication Skills Training Scenarios

The introduction of multimodal interaction and virtual reality technology has opened up a new path for the cultivation of English communication skills.

Based on interactive technology and virtual reality technology, it can simulate real language environments and provide learners with immersive learning experiences, enabling them to perceive language through visual and auditory senses, and interact with the virtual world based on touch and action, thus comprehensively understanding and mastering English (Rhienmora, et al., 2010). The application of multimodal interaction technology can support learners to use various methods such as speech, gestures, and expressions to engage in dialogue and communication with virtual characters, making English learning and communication more natural and authentic, and helping to cultivate learners' oral and cross-cultural communication skills (Pratiwi, et al., 2021). At the same time, the generation and utilization of virtual characters can enable English learners to receive immediate feedback and suggestions based on their performance in communication and learning, thereby promptly discovering and correcting language errors (Sanchez, 2017).

In addition, the innovative application of virtual reality technology can create a highly simulated English application scenario for learners, allowing them to be immersed in various practical situations such as shopping in malls, boarding at airports, and seeking medical treatment in hospitals (Rhienmora et al., 2010). Through interaction with virtual characters, learners can practice and apply their learned English knowledge, gradually improving their language proficiency, enhancing their situational adaptation and problem-solving abilities (Soliman, 2014).

Strengthen the Regulatory System for Online Collaborative Learning and Improve the Effectiveness of English Communication Learning

Online collaborative learning has become an important component of modern English teaching, especially in the context of globalization and digitization, which is crucial for cultivating learners' English communication skills (Cecchini et al., 2019). However, to ensure the effectiveness of online collaborative learning, it is necessary to improve the support of the online learning supervision system. Only by exerting

effective supervision can learners' English communication learning outcomes be continuously improved (Wing, 2006).

In the process of strengthening the online learning supervision system, it should be ensured that all participants can actively participate and contribute to the learning process, that is, real-time monitoring of learners' participation, interaction frequency, and quality (Bolliger & Halupa, 2018). Teachers can promptly identify problems and make corresponding adjustments. For learners who show negative or lack motivation in collaboration, teachers can take incentive measures, such as setting reward mechanisms or providing additional guidance and support (Buzatu et al., 2020). At the same time, in online collaborative environments, information transmission and sharing are extremely rapid, but misleading or erroneous information is also prone to occur.

Therefore, teachers in online regulatory systems should regularly check learners' discussion content and outcomes to ensure they are consistent with teaching objectives and requirements, and promptly correct any errors or deviations (Chew & Chua, 2020). In addition, online collaborative learning provides learners with a relatively free language practice environment, but this may also lead to the arbitrariness and irregularity of language use. Teachers need to set clear language use standards, provide language correction and feedback, and guide learners to develop good language habits and enhance the standardization of language use (Means et al., 2010).

Enhance Classroom Teaching Evaluation through Technology and Improve Communication Skills Development Direction

Technology enhances classroom teaching, bringing new opportunities and challenges to the cultivation of English communication skills (Banditvilai, 2016). Therefore, to fully leverage its advantages and continuously improve the direction of cultivation. In the process of using technology to enhance language learning strategies, a good job should be done in evaluating technology-enhanced classroom teaching. On the one hand, evaluation should focus on the matching degree between teaching objectives and actual effects (Burns, 1990). Technology-enhanced classroom teaching often has rich and diverse teaching forms and methods, but whether these forms and methods truly help achieve teaching goals and improve learners' English communication skills is the key to evaluation (Chen & Chen, 2021).

Therefore, in the evaluation process, big data technology should be used to collect learners' feedback, observe their classroom performance, and evaluate their learning outcomes, to judge the actual effect of technology-enhanced classroom teaching and promote the continuous improvement of English learning effectiveness (Sothan, 2019). On the other hand, evaluation should focus on individual differences and the needs of learners. Each learner has different advantages and challenges in developing their English communication skills (Borah et al., 2022). Therefore, technology-enhanced classroom teaching needs to meet their personalized needs; that is, in the evaluation process, attention should be paid to learners' performance, progress, and difficulties in the learning process, to provide them with more accurate and effective guidance and support (Soliman, 2014).

In addition, enhancing classroom teaching with technology is a dynamic development process, and with the advancement of technology and changes in teaching concepts, its form and effectiveness will also constantly change (Pereira et al., 2007). Therefore, in the process of using technology to enhance learning strategies, learners should consciously rely on the support of advanced technology to establish a long-term and continuous evaluation mechanism, to timely identify problems, summarize experiences, and continuously improve the direction and strategies of English communication skills cultivation, enhance English communication literacy, and make learning more efficient (Means, et al., 2010).

Discussion and recommendation

The employment of information technology has had a profound impact on language learning and cultivating communication skills. Information technology has greatly expanded the accessibility of language learning resources. The wide range of resources enables learners to tailor their learning experiences to their specific needs and interests, fostering a more personalized and engaging learning

environment. Technological advancements have also facilitated the development of interactive and immersive language learning tools. For instance, virtual reality (VR) and augmented reality (AR) technologies can create immersive environments where learners can practice their language skills in realistic situations, such as ordering food in a restaurant or navigating a conversation in a foreign country. Beyond language acquisition, information technology has also played a crucial role in cultivating communication skills. Digital communication tools, such as email, instant messaging, and video conferencing, have made it possible for learners to communicate with others across different geographical and cultural boundaries. This exposure to diverse communication styles and practices can help learners develop a more nuanced understanding of communication dynamics and improve their interpersonal skills. The impact of employing information technology in language learning and cultivating communication skills is significant and multifaceted. By providing enhanced access to resources, interactive and immersive learning experiences, facilitated practice and feedback, and adaptability and flexibility, technology has revolutionized the way learners acquire languages and communicate with others. However, it is crucial to approach this integration thoughtfully, balancing the benefits of technology with the importance of traditional language learning practices.

Conclusion

The paper discusses the application of technology in language communication skills, emphasizing how intelligent teaching systems, personalized learning strategies, multimodal interaction, and virtual reality technology collectively contribute to a more efficient and personalized language learning experience. Through technology empowerment, learners can acquire language in a more authentic and immersive environment, while also receiving customized learning content and real-time feedback, thereby enhancing learning efficiency and effectiveness to enhance their communication skills.

In summary, the use of technology-enhanced language learning strategies can create convenience for learners to explore English as a second language independently. Virtual English communication scenarios can be created to facilitate learners ' participation in virtual communication training during the process of learning a second language, thereby systematically exercising their communication skills and continuously improving their English learning efficiency.

Therefore, as Goh and Sigala (2020) presented in their research, the value of using technology should be re-examined to enhance language learning strategies, actively explore improvements and innovations in learning methods and measures, ensure that the efficiency of self-directed learning can be improved with the support of advanced technology, effectively exercise English communication skills and communication abilities, and continuously improve the comprehensive learning efficiency of English learners (.

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