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## On the Influence of Artificial Intelligence on Foreign Language Learning and Suggested Learning Strategies

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### Abstract

In recent years, the integration of artificial intelligence (AI) technologies in education, particularly in foreign language acquisition, has seen significant growth, leading to notable improvements. This paper explores the potential of AI to enhance the efficiency of foreign language learning through personalized learning, interactive practice, real-time feedback, diagnostic evaluation, flexible learning paths, cultural immersion, and efficient learning strategies. Additionally, it addresses concerns regarding over-reliance on technology, potential negative impacts on self-learning abilities, diminished interpersonal communication and cultural understanding, limitations of personalized education, technical challenges and reliability issues, as well as ethical considerations such as data privacy. Furthermore, the paper highlights the risk of marginalizing the role of human teachers in the learning process. Drawing on both positive and negative impacts of AI in foreign language learning, the paper concludes by offering suggestions for effective language learning strategies.

**Keywords:** *Artificial Intelligence, Foreign Language Learning Strategy, Influence*

### A. Introduction

Over the past few years, AI technology is profoundly changing the way of foreign language learning. Through the deep integration of AI and foreign language education, it effectively fills the limitations of traditional teaching methods and provides learners with a more scientific and efficient path. AI has made outstanding contributions in providing flexible, anytime and anywhere learning experience and improving learning efficiency, which has effectively promoted the development of foreign language education in a more personalized, situational and inclusive direction. The application of AI technology in efficient learning path and resource allocation, through accurate personalized teaching and intelligent resource matching, not only significantly improves the efficiency and quality of foreign language learning, but also fully embodies the concept of people-oriented and individualized teaching in modern education, which is an important breakthrough in current educational technology innovation.

In the rapidly evolving era of globalization, proficiency in foreign languages has become increasingly crucial. This necessity extends not only to professional contexts but also to intercultural and personal relationships. Amidst these dynamics, technology, particularly artificial intelligence (AI), has played an increasingly dominant role in various aspects of human life. One area where the impact of this technology is particularly pronounced is in the realm of foreign language learning. The study on the influence of artificial intelligence on foreign language learning is becoming more relevant given the rapid advancements in this technology. In this article, we will explore various aspects related to the use of artificial intelligence in foreign

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language learning, as well as suggested learning strategies to optimize the utilization of this technology.

First and foremost, let us examine the primary issue that this research focuses on. Despite the innovative solutions offered by artificial intelligence in many fields, foreign language learning remains a challenge for many individuals. Obstacles such as lack of motivation, difficulty in grasping foreign language structures, and insufficient time for intensive practice often hinder the attainment of desired language proficiency. Thus, the fundamental question we aim to address in this article is the extent to which artificial intelligence can influence the foreign language learning process. Can this technology provide solutions to overcome the common hurdles faced by language learners? How can artificial intelligence be leveraged to enhance the efficiency and effectiveness of foreign language learning?

In the context outlined above, the main objectives of this study are fourfold. Firstly, it aims to examine various aspects of the influence of artificial intelligence on foreign language learning, encompassing the utilization of learning applications, speech recognition technology, automatic translation, and other relevant technologies. Secondly, the study seeks to analyze the effectiveness of diverse learning strategies facilitated by artificial intelligence in augmenting foreign language proficiency among learners. Thirdly, it endeavors to identify both the challenges and opportunities inherent in the implementation of artificial intelligence technology within the framework of foreign language learning. Lastly, the research endeavors to propose practical recommendations tailored for learners, educators, and technology developers, with the overarching goal of enhancing the efficiency and effectiveness of foreign language learning through the strategic utilization of artificial intelligence.

The importance of this study cannot be overstated. With the rapid development of artificial intelligence technology, we now have access to tools that can significantly enhance the foreign language learning process. However, to fully harness the potential of this technology, we need to understand how to integrate it into existing teaching methods and identify the most effective strategies. Moreover, amidst the dynamic changes in the global work landscape, proficiency in foreign languages is becoming an increasingly pressing need. Thus, this research is not only academically relevant but also holds significant practical implications for individuals, organizations, and society as a whole. Therefore, through this research, we hope to make a meaningful contribution to our understanding of the influence of artificial intelligence on foreign language learning and to provide valuable guidance for those involved in the language learning and teaching process.

## **B. Methods**

The research approach for this study will employ a mixed-methods approach to thoroughly examine the influence of artificial intelligence on foreign language learning and to propose effective learning strategies. By combining both qualitative and quantitative data collection and analysis methods, a comprehensive understanding of the research problem can be attained. In the quantitative phase of the research, surveys and standardized tests will be administered to gather numerical data regarding participants' language learning experiences, perceptions of AI technology, and language proficiency levels. Statistical methods such as descriptive statistics, correlation analysis, and regression analysis will then be utilized to analyze the collected data and identify patterns, relationships, and predictors.

Concurrently, the qualitative phase will involve conducting semi-structured interviews and focus group discussions with language learners, educators, and AI technology developers. These qualitative methods will facilitate an in-depth exploration of participants' experiences, attitudes, and opinions regarding the use of AI in language learning, as well as their perceptions of effective learning strategies. Thematic analysis will be employed to identify recurring themes and patterns within the qualitative data. For sampling, a combination of purposive and snowball sampling techniques will be employed to select participants who represent diverse language learning backgrounds, age groups, and proficiency levels. Data collection will be conducted through online or in-person administration of surveys and standardized tests for quantitative data, while semi-structured interviews and focus group discussions will be conducted either face-to-face or via video conferencing platforms for qualitative data.

Ethical considerations will be paramount throughout the research process, with informed consent, confidentiality, and participant well-being being prioritized. Any limitations, such as potential bias in participant responses and the cross-sectional nature of the study, will be acknowledged to ensure the integrity of the research findings. Through this rigorous research design, a comprehensive understanding of the influence of artificial intelligence on foreign language learning and effective learning strategies will be achieved.

## **C. Findings and Discussion**

### ***1. The Positive Impact of AI on Foreign Language Learning***

#### *Personalized Learning Experience*

Personalized learning experience, as one of the core driving forces of contemporary educational technology innovation, has made remarkable progress through AI technology, especially in the field of foreign language learning and often implemented in ways of intelligent tutoring systems. ITSs are computer systems designed to provide personalised and interactive instruction to students without intervention from a human teacher (Son et al., 2023). They have been the most common role of AI in language education (Liang et al., 2021). When used in an EFL context, they aim to support FL learning effectively and efficiently (e.g., Choi, 2016). They can be used as supplements to traditional approaches to education or as standalone applications for self-study. They can be used in any educational context with learners of any age (e.g., Xu et al., 2019). They leverage human obsession with digital technology to provide encapsulated learning experiences (Mohamed & Lamia, 2018). There are various types of ITSs (e.g., Bibauw et al., 2019) and some use AI and machine learning algorithms to adapt to the needs of users (Jiang, 2022). The research of Son et al. (2023) pointed out that foreign language learning platforms driven by advanced AI can successfully match each learner's ability level and learning speed by using complex adaptive algorithms, and then tailor the course content. Through continuous monitoring and in-depth analysis of learners' behavior data and performance indicators, these algorithms can adjust the teaching plan in real time to ensure that the teaching content can not only meet the needs of learners at the current stage, but also pose just the right challenge to them, thus effectively promoting learning progress. Personalized customization of AI system is embodied in meticulous management of learning process, including but not limited to vocabulary acquisition order, explanation of grammatical structure, selection of reading material difficulty and setting of task type. Take Duolingo as an example, it uses large-scale data mining technology and machine learning model to predict learners' learning path, so that the

teaching content will gradually deepen with the progress of learners, and this dynamic adaptability improves the effectiveness and durability of learning. Besides, this kind of platform will dynamically recommend relevant supplementary exercises or review tasks according to the learners' mastery of a certain knowledge point to ensure the complete construction of the knowledge system.

#### *Interactive Practice and Voice Feedback*

Simulate real conversation environment and enhance language skills. AI also shows great potential in pronunciation practice and instant feedback. Essel et al. (2022) in their study demonstrated that the students who interacted with the chatbot performed better academically comparing to those who interacted with the course instructor. Besides, the focus group data garnered from the experimental cohort illustrated that they were confident about the chatbot's integration into the course. A chatbot can simulate human-like dialogue-based interactive communications to assist students in revisiting learning resources. By simulating real social communication situations, these tools enable students to practice dialogues many times in a low-pressure environment, and gradually become familiar with and master the daily expression and special usage of the target language. In particular, AI teaching assistants can capture and analyze learners' phonetic features in real time, and provide specific feedback on pronunciation accuracy, intonation fluctuation and fluency, so that learners can immediately correct their mistakes and steadily improve their language expression. The field of computer-assisted language learning (CALL) has developed massively in recent decades, and interest specifically in computer-assisted pronunciation training (CAPT) has grown similarly, with a recent proliferation of web-based and mobile apps and resources. The infinite source of a wide range of speaker input in terms of accent, L1 background, and speech style is far beyond what is available in a normal classroom. Technology offers the learner limitless choice of what, when, and how to learn. Continuous technological advances are increasingly enhancing the scope of learner output, so that rather than simply recording individual sounds or words, learners can interact in meaningful dialogues or participate in real-world games which test their ability to produce intelligible speech. (Rogerson-Revell et al., 2021). Among them Google translator is a typical representative. The system can recognize the user's voice input, convert it into text, and quickly give high-quality translation results. At the same time, users can also compare and imitate the voice characteristics of the target language by listening to the voice output generated by the system, which is undoubtedly an extremely practical function for foreign language learners in non-native language environment. With the rapid development of deep learning technology in the last few years, the accuracy of speech recognition and synthesis has been continuously improved, making AI tools more accurate and reliable in providing speech feedback. At the meanwhile, the emerging voice emotion recognition technology also adds a new dimension to foreign language learning with the help of AI, enabling learners not only to get feedback at the language level, but also to gain insight into whether the emotional expression contained in their own voice is close to the habits of the target culture, thus comprehensively improving their language communication ability.

#### *In-Depth Diagnostic Evaluation and Targeted Teaching*

This is a bright spot of AI in the field of education, especially in language learning, and the research in this direction is deepening and achieving remarkable results. Xi (2023) reviewed five studies and four commentaries and discussed the key validity issues around the AI applications

covered. He stressed the importance of developing best practices guiding ethical and responsible use of AI and improving users' AI literacy skills. In light of users' increasing access to AI tools in real-world communication, he raised the need for redefining the constructs of language tests to be in sync with what is happening in the real world. For example, in a study on second language acquisition, the AI-driven platform can design highly targeted correction exercises according to the types and frequencies of errors that learners show when completing specific tasks, so as to ensure that learners can concentrate on the weakest knowledge points, thus achieving effective and efficient improvement.

#### *Learning Motivation Stimulating and Participation Maintenance*

The latest development of AI technology enables learners to focus on how to use AI technology to stimulate their intrinsic motivation and maintain their participation. Welbers et al. (2019) pointed out that careful consideration of game properties may impact sustaining and encouraging play via a gamified application. By building a challenging and attractive task system, clear and traceable learning goals are set, and visual and inspiring feedback is given in time to enhance learners' sense of accomplishment and engagement. Moreover, the frontier research in the field of Affective Computing is also changing the educational experience. Feidakis (2016) in his research showed that the integration of emotion awareness can greatly advance the frontiers of educational technologies and provide an added value to enhance and improve the overall distance learning experience, as well as deliver cost-effective training programs. Thus, AI system embedded with emotion perception module can monitor learners' emotional reactions in real time, such as fatigue, confusion or excitement, so as to adaptively adjust the teaching rhythm, content difficulty or interactive form, and achieve the purpose of encouraging and supporting learners in a timely manner. In this way, it not only improves learning efficiency, but also cultivates learners' emotional wisdom and self-adjustment ability, which is very important for forming lasting learning interest and internal motivation.

#### *Flexibility and Accessibility*

Rebolledo Font de la Vall et al. (2023) pointed out that AI tools for learning languages could improve in many ways, like by combining VR and AR technologies, improving NLP algorithms, and making more advanced algorithms for personalized learning. By employing AI tools in language learning, the flexibility and accessibility of foreign language learning can be fully developed and learners' efficiency can be improved. To be specific, through mobile devices such as smart phones and tablets, learners can easily access all kinds of foreign language learning resources at any time and anywhere, and they can make full use of fragmented time to learn whether they are on their way to work. This flexibility, which is not limited by geographical space, not only breaks the time and space barriers of traditional classroom education, but also helps to create an all-weather and all-round learning environment, so that learners can immerse themselves in the language learning process without interruption, thus accelerating the acquisition and consolidation of skills. The application of this technology not only makes learners all over the world have access to high-quality foreign language education resources, but also reduces learning costs and promotes educational equity.

#### *Cultural Immersion and Diversity Understanding*

In terms of cultural immersion and diversity understanding, AI tools have played an important role in integrating various cultural materials and simulating realistic situations. A

study by Kim(2020) pointed out that when we teach language, we should be helping people participate in ways of life. This goes beyond knowledge of subject matter, and it goes beyond any simple type of well-being. Language learning can immerse students in others' worlds, and it can foster empathy and understanding across social and political divides. But it can do so only if we base our research and pedagogy on an adequate account of language and culture. With the aid of AI tools, this task can be simplified. For instance, AI-driven virtual reality (VR) and augmented reality (AR) applications can make learners feel as if they are in the native environment of the target language, experience and participate in local life scenes and social activities, thus enhancing their sensitivity and understanding of the cultural connotation behind the language.

Not only that, AI technology can also customize personalized cultural learning content according to learners' cultural background and interest preferences through big data analysis and machine learning algorithms, so that every learner can broaden their international horizons and enhance their cross-cultural communication ability while maintaining their original cultural identity. In this process, AI not only plays the role of knowledge disseminator, but also becomes a bridge to connect multiculturalism, helping language learners around the world to better understand and accept the world's multiculturalism.

#### *Efficient Learning Path and Resource Allocation*

Efficient learning path and resource allocation, as the key links of AI to improve the efficiency of foreign language learning, are fundamentally changing the way and effect of foreign language learning through the deep integration of NLP and machine learning technology. For instance, Lee et al. (2022).described an AI Book Club as an innovative 20-hour professional development (PD) model designed to prepare teachers with AI content knowledge and an understanding of the ethical issues posed by bias in AI that are foundational to developing AI-literate citizens. Based on their research, it can be concluded that AI-driven personalized learning path design, based on NLP technology, can deeply analyze learners' language acquisition behavior and knowledge structure. Through real-time analysis and modeling of massive learning data, AI system can accurately identify learners' strengths and weaknesses in vocabulary, grammar, semantics and pragmatics. In this way, the system can dynamically adjust the learning content and pace according to each learner's unique needs and abilities, and tailor a highly personalized and challenging learning path for them. Gruzdeva et al (2024) are convinced that when teaching a foreign language, the greatest pedagogical effect is achieved through the use of certain AI algorithms, which in turn allows students to speed up the study of a particular language. Learners have the opportunity to learn the language by repeating phrase patterns that show relationships between words. For example, when the system detects that a learner has difficulties in the usage of adjectives, it will give priority to the teaching content that is connected with his existing knowledge structure and aims to solve the problem in adjectives, thus avoiding ineffective repeated learning and improving learning efficiency.

Meanwhile, with the help of machine learning algorithms, AI can optimize the allocation and management of educational resources. Research shows that AI system can predict which resources are most suitable for learners' current learning stage by analyzing their interactive performance on different teaching resources, and intelligently recommend corresponding exercises, video tutorials, online classes or other external learning resources. This means that learners no longer need to spend a lot of time looking for suitable learning materials, but can concentrate on their own learning process and maximize the input-output ratio of learning. Such

learning analytics objectives and personalised learning goals can enhance learning experience, providing personal recommendations and satisfying personal learning needs (Wong et al., 2023).

This dynamic adaptability enables the AI teaching system to provide timely support to learners when they encounter difficulties, and introduce new learning content in time after they master a certain skill skillfully, thus keeping the learning process challenging and fresh. It is worth noting that AI-assisted efficient learning paths and resource allocation do not replace teachers' roles, but strengthen teachers' teaching efficiency through technical means, reduce their burden on personalized teaching design and resource screening, and enable them to devote more to higher-level teaching activities such as emotional care for students, deep thinking guidance and value shaping.

## ***2. The Negative Impact of AI on Foreign Language Learning***

### *Excessive Dependence and The Degradation of Autonomous Learning Ability*

The convenience of AI translation tools and learning platforms may lead to learners' excessive dependence on technology to some extent. These tools and platforms can quickly answer language problems and provide ready-made solutions. On the surface, they seem to enhance learning efficiency, but in practice, they may weaken learners' ability to solve problems independently and learn deeply. Graves (2023) cautioned about the potential risks associated with the normative standards of language and performance in AI-assisted learning environments. Emphasizing the importance of maintaining strong teacher-student relationships and advocating for the use of AI as a supplement to traditional teaching methods, Mohamed (2023) recommended that teachers should continue to play a vital role in the language learning process and exercise caution in their integration of AI technology. For example, when faced with simple language structure problems, learners may prefer to use translation tools directly instead of solving the problems through their own reasoning and exploration. This way deprives learners of the deep learning experience formed in trying, failing, reflecting and trying again, which may further hinder the normal development of foreign language thinking ability. The foreign language thinking ability covers the deep understanding of language structure, the mastery of language logic and the creative application of language, which are difficult to obtain by relying solely on AI tools.

### *Lack of Interpersonal Communication and Cultural Understanding*

Although AI technology can provide translation and communication assistance in real time, it is relatively weak to convey the subtle differences of culture and emotion behind the language. This concern is mentioned by Sampson et al (2020), who highlighted the significance of considering the emotional and psychological aspects of language learning facilitated by technology. For example, AI translation can only be faithful to the literal meaning, but it is often impossible to accurately restore the non-literal expressions such as metaphors, slang, dialects and idioms and the situational speech acts, which means that students who rely too much on AI for communication and learning may miss much key information related to culture. Hoelscher's study (2023) mentioned that while helping learners develop reflective and critical thinking, this situation may impede the development of critical thinking skills and learner autonomy. He found it difficult for learners who lack personal experience to truly understand and accept the diversity and complexity of the target culture. This is because cultural understanding and acceptance is not limited to the language level, but also involves deep-seated cultural elements such as social

customs, values and ways of thinking. Although AI can provide some information, it cannot replace the deep cultural experience and understanding brought by personal experience and direct interaction.

Therefore, although the application of AI in the field of foreign language learning greatly facilitates the learning process, it also faces problems such as the degradation of autonomous learning ability and the lack of interpersonal communication and cultural understanding due to excessive dependence. Therefore, educators and researchers should be cautious about the role of AI in teaching. On the one hand, they should actively use its advantages, on the other hand, they should pay attention to how to find a balance between technology-assisted and autonomous learning, so as to ensure that learners can cultivate sustainable autonomous learning ability and in-depth cultural understanding while enjoying the technology dividend.

#### *The Limitations of Personalized Education*

In foreign language learning, personalized education is regarded as the key way to improve the learning effect. However, although the current AI system has made remarkable progress in personalized learning path planning, there are still some limitations. Although these systems can design personalized learning plans based on learners' historical data, learning progress and test scores, they are still unable to fully understand and satisfy learners' psychological needs, emotional state and diversified learning strategies. Their research emphasized that the challenge of AI in implementing personalized education is that it may not capture the deep-seated psychological needs of learners, such as learners' self-confidence, anxiety, motivation level, interest and attitude towards learning content and other subjective factors. These factors play a vital role in the learning process, directly affecting learners' participation, persistence and final learning results. In addition, AI systems are often difficult to flexibly adapt to different learning strategies that learners may adopt at different stages, which may lead to inaccurate recommendation of learning resources and teaching methods, thus failing to maximize the potential of each learner.

#### *Technical Failures and Reliability Issues*

Although AI has obvious potential and advantages in foreign language learning, its limitations in implementing personalized education and technical failures and reliability problems remind us that while promoting the application of technology, we should also pay attention to its potential risks and challenges. Taking translation tools as an example, although they show high accuracy in daily communication and general text translation, learners indicated a few occasional technical problems such as connection issues. This finding is supported by the previous studies highlighting technical drawbacks of using chatbots (Crawford et al., 2023; Huang et al., 2022). Once learners become overly dependent on this kind of technology, the defects and mistakes of technology itself may become the potential source of misleading students to understand language knowledge, which is not conducive to them to establish a correct language concept and systematic language knowledge framework. For example, Asscher et al. (2023) pointed out in their research that even the most advanced neural machine translation system may lead to the decline of translation quality due to the lack of sufficient context understanding and cultural sensitivity when dealing with texts containing cultural background information or industry-specific terms. This situation is particularly prominent in language learning, because language learners need to contact and understand the target language while



gradually cultivating their understanding of the target culture and cross-cultural communication skills.

#### *Data Privacy and Ethical Issues*

Focusing on data privacy and ethical issues, AI collects and analyzes learners' data in the process of helping foreign language learning to optimize teaching effect. Mohammad et al. (2023) also emphasized ChatGPT's, generation of incorrect information, biases, potential to undermine critical thinking skills, ethical concerns such as cheating, and privacy issues. This is also supported by Vaccino-Salvadore (2023) who discussed the ethical dimensions of using ChatGPT in language learning, including privacy, bias, reliability, accessibility, authenticity, and academic integrity concerns. The research of Nguyen et al. (2022) showed that these data not only include the basic information of learners, such as age, gender and language level, but also extend to many sensitive information such as learners' learning habits, cognitive styles, attention distribution and emotional state. Through deep learning and big data analysis technology, AI system deeply digs and utilizes these data to realize accurate teaching and personalized learning path planning. However, this has also led to deep thinking about data security, privacy protection and data ethics. How to fully tap the value of data to optimize teaching, while effectively protecting learners' personal information security and privacy rights, and preventing data from being illegally obtained, abused or leaked has become a key challenge to be solved urgently in education and science and technology. Governments and educational institutions in various countries have issued relevant policies and regulations, requiring educational AI products and service providers to strictly abide by the principle of data protection and establish and improve the data security system.

#### *Marginalization of The Role of Human Teachers*

In the era of AI, teaching becomes more learner-centred, since learners are expected to be able to make their own decisions and become responsible for their work more independently. The teacher, on the other hand, abandons his/her previous position of the only authority and decision-maker, to become rather a facilitator and supporter of learners (Pokrivcakova, 2019). He emphasized that although AI can effectively make up for the shortcomings of traditional teaching in terms of resource personalization and accuracy, it has obvious limitations in face-to-face communication, emotional resonance, value guidance and coping with unexpected problems. AI can not be as keen as human teachers to detect the emotional changes of learners and give timely psychological support; It is also impossible to stimulate learners' interest and lasting motivation through nonverbal behavior and situational teaching. Over-reliance on AI may reduce the interpersonal interaction between teachers and students, affect the establishment and maintenance of teacher-student relationship, and thus reduce the teaching quality to some extent.

### **3. Suggested Learning Strategies**

#### *From the perspective of specific applications*

Since AI emerged in the global education field, especially in foreign language learning, AI technology are increasingly reshaping the learning methods and efficiency of learners. Specifically, AI assistive tools, with their powerful computing power and intelligent adaptation mechanisms, have significantly improved the means of self-improvement for foreign language learners and gradually filled some gaps in traditional education models.

Intelligent language learning applications, such as Duolingo and Rosetta Stone, are typical representatives of this technological innovation. These applications use cutting-edge AI algorithms that can track and analyze learners' learning trajectories, understanding levels, reaction rates, and other multivariate data indicators in real-time. With their deep learning capabilities, they can dynamically generate personalized learning road-maps based on individual differences and learning preferences of users. This dynamic adjustment function ensures that the learning content is always in the learner's ability comfort zone, neither too simple to cause a lack of learning motivation nor too complex to cause frustration, thereby maximizing the learner's learning motivation and persistence. Real time translation and speech recognition technologies also play a crucial role in promoting foreign language learning. Taking Google Translate as an example, this translation software, with its latest neural network translation technology (GNMT), not only provides accurate bilingual translation in real-time, but also integrates voice input and output functions, allowing learners to access and imitate the pronunciation characteristics of the target language anytime and anywhere. This not only helps to enhance learners' perception and recognition of foreign language phonetic features, but also helps them gradually improve the accuracy of speech imitation in practice, thereby shortening the distance from beginners to fluent users.

It is also worth noting that some AI platforms have begun to provide deep personalized tutoring services, which combine interdisciplinary theoretical achievements such as NLP, machine learning, and educational psychology. They can analyze learners' performance in the four core language skills of listening, speaking, reading, and writing in detail, and provide precise guidance and automated error detection and correction based on this. This intelligent teaching intervention method aims to reduce ineffective learning, focus on learning difficulties, and enable each learning stage to closely revolve around individual needs and development bottlenecks, greatly improving the pertinence and efficiency of foreign language learning. Not only that, recent studies have shown that AI technology is also attempting to simulate the role of human teachers, paying attention to the emotional state of learners through emotional computing technology and adaptive teaching strategies, providing timely encouragement and support, thereby creating a more humane and warm learning atmosphere. This means that future AI assistive tools will not only improve teaching quality at the technical level, but also strive to promote learners' intrinsic motivation and confidence building at the psychological level.

*From the perspective of interactive practice*

In the field of modern foreign language learning, the development of AI technology is enriching and strengthening the learning experience in an unprecedented way, especially the importance of interactive practice is becoming increasingly prominent. In this process, virtual conversation partners supported by AI technology have become a key booster in the process of foreign language acquisition, especially in innovative applications such as AI chatbots. These intelligent systems rely on advanced NLP technology to carefully construct highly simulated and contextualized language practice platforms, enabling learners to practice the target language in frequent interactions with virtual conversation partners, thereby comprehensively improving their language proficiency and adaptability to various communication scenarios.

The design concept of virtual conversation partners fully draws on communicative approach and task-based teaching theory, providing learners with a large number of meaningful language practice opportunities by simulating dialogue scenarios in the real world. Unlike traditional one-way input learning, AI chatbots can respond in real-time to dialogue requests initiated by

learners, generate responses according to pre-set logic and contextual frameworks, and create a sense of realism in two-way communication. This near real language practice environment helps to stimulate learners' active participation awareness, enabling them to continuously consolidate grammar structures and expand vocabulary reserves in an immersive language environment, while mastering appropriate social contexts and cultural customs.

In interactive practice, speech recognition technology also presents a very good instance, because it can play a crucial supporting role in the aforementioned virtual interaction process. This technology can accurately capture and analyze learners' speech input through high-precision sound signal processing and pattern recognition algorithms, and monitor subtle differences and potential errors in their pronunciation in real time. This feature endows AI systems with the ability to objectively evaluate pronunciation accuracy, thereby providing targeted feedback and correction plans in a timely manner, helping learners calibrate their pronunciation and strive to achieve the level of their mother tongue or standard accent. Recent breakthroughs in deep learning technology have further improved the performance of speech recognition systems, enabling them to maintain high recognition accuracy in the face of complex dialects, accents, and changes in speech speed. Many foreign language learning applications, such as Elsa Speak and Speech, have successfully integrated advanced speech recognition modules, achieving precise evaluation of user pronunciation word by word or even phoneme level, effectively solving the problem of difficult quantitative evaluation of oral practice in previous foreign language learning. In addition, the combination of speech recognition technology and AI driven adaptive learning systems can dynamically adjust the difficulty and frequency of practice based on the progress of learners' pronunciation, ensuring that the learning process is both challenging and avoiding excessive pressure, thereby facilitating the formation of stable and coherent oral expression habits. This "learning by doing" methodology is in line with the communicative interaction theory in second language acquisition research, emphasizing the internalization of language skills through repeated practice and immediate feedback, which greatly improves the interactive practice between foreign language learners and AI tools.

#### *From The Perspective of Blended Learning*

The blended learning model - the organic combination of online and offline learning - has been unprecedentedly expanded and deepened in the era of AI, especially in the field of foreign language learning. The application of AI technology has substantially promoted the innovation of educational models and the improvement of learning effect. With the explosive growth of online educational resources and the maturity of AI technology, teachers and students have begun to widely adopt this "online+offline" hybrid learning model, breaking the constraints of traditional learning space and time.

Online AI assisted courses, with their intelligent and personalized characteristics, make up for the limitations of meeting the individual differences of each student in large-scale physical classrooms, while offline physical classrooms and social activities continue to provide necessary face-to-face interaction and emotional communication. The two complement each other and jointly build a diverse, inclusive, and efficient learning environment. In the online part, AI technology is particularly prominent in the customized push of course content, real-time feedback, and adaptive learning path design. For example, foreign language learning courses launched by platforms such as Coursera and Duolingo fully utilize AI algorithms to accurately analyze the learning behavior and abilities of learners, adjust learning content and progress in real-time, and ensure that each learner can receive effective guidance and exercise in their best

learning area. Especially in the development and utilization of multimedia resources, AI technology has achieved significant results.

Currently, AI automatic subtitle generation has been widely used in various foreign language learning videos, such as Microsoft Azure's automatic subtitle service and YouTube's automatic subtitle function. They achieve real-time transcription and translation of video content through NLP technology and machine translation technology, allowing learners to understand, absorb, and imitate the true expression of the target language in the authentic language environment. However, despite the unprecedented convenience and personalized learning experience brought by AI technology, learners still need to uphold the concepts of self-directed learning and deep learning when enjoying the benefits it brings. This means that learners not only need to complete prescribed online courses and interactive exercises under the guidance of AI, but also need to engage in extensive extracurricular reading, persist in repetitive writing practices, and seek as many opportunities as possible to use the target language in real life. Through continuous language contact and practice, they can enrich their personal language experience and improve their language abilities.

#### **D. Conclusion**

Based on the discussion above, it is clear that blended learning has become an important trend in modern foreign language education, driven by AI technology. It not only greatly broadens the horizons and choices of learners, but also constructs a scientific and warm learning path for foreign language learners by deeply integrating online intelligent teaching with offline humanistic interaction. Although AI has greatly revolutionized the way foreign language learning is conducted, learners must always understand that technology is just a means, and self motivation and practical experience are the fundamental ways to improve language proficiency, especially cross-cultural communication skills.

In the future, we look forward to seeing closer collaboration between AI technology and traditional educational methods, jointly shaping a new pattern of foreign language education. In the context of the AI era, foreign language learners should fully recognize and effectively utilize the advantages brought by AI technology, while adhering to solid basic language skill training, focusing on the cultivation of cross-cultural communication skills, and practical experience in applying language in real-life scenarios. Only in this way can foreign language learning achieve efficient and comprehensive development in the surging wave of intelligence. With the continuous deepening of AI technology in the field of foreign language teaching, we look forward to more innovative applications and research results emerging, jointly promoting the progress and development of global foreign language education.

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