

Changes and Innovations in Teaching Language Programs in the Age of AI

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Abstract

In the era of AI, language course teaching is facing new opportunities and challenges. On the one hand, artificial intelligence technology brings many innovations. For example, natural language processing technology enhances language understanding ability. Intelligent dialogue systems help oral language practice. Personalized learning paths improve learning efficiency and interest. The teaching mode of "foreign language + artificial intelligence" provides support for cultivating compound international talents. On the other hand, there are also challenges such as the difficulty of teachers' role transformation and the importance of cultivating students' autonomy. In response, strategies such as improving students' digital literacy and strengthening parents' participation and guidance are proposed. In short, the reform and development of language course teaching methods in the era of AI is an inevitable trend. We need to actively explore innovative teaching methods and strategies to improve teaching quality and effectiveness and contribute to cultivating talents who can meet the development needs of the times.

Keywords

Era of AI, language course teaching, innovation, challenge, coping strategy.

1. Introduction

1.1. Background

With the advent of the AI era, language course teaching faces new opportunities and challenges, and needs to explore the road of change and development.

In today's era, artificial intelligence (AI) technology is developing at an unprecedented speed, profoundly affecting various fields. Language course teaching is no exception, and AI brings brand new opportunities and challenges to it. On the one hand, innovative applications of AI in language education are constantly emerging. For example, natural language processing technology has improved language comprehension. Machine learning techniques are applied to natural language understanding tasks, such as text categorisation, named entity recognition, etc., with greatly improved accuracy and efficiency. Deep learning models, especially the Transformer architecture, have demonstrated excellent performance in natural language understanding tasks, extracting rich semantic information and contextual relationships. The large-scale language model integrates massive text data and advanced algorithms, making significant breakthroughs in tasks such as text comprehension, summary generation, and Q&A. Meanwhile, the intelligent dialogue system helps speaking practice. Intelligent virtual conversation partners can provide an interactive dialogue environment, customise conversation content for students of different levels, and provide instant feedback and error correction using natural language processing technology. Personalised Learning Path analyses students' language abilities, generates personalised learning plans, tracks learning progress and makes adjustments. Cross-cultural communication features incorporate the linguistic and

cultural backgrounds of different countries or regions to promote students' awareness of the language needs of a globalised world. Emotion and intonation recognition develops students' empathy and effective communication skills. Immersion experience uses virtual reality or augmented reality technology to create realistic language learning environments, improve listening and speaking skills, and enhance the learning experience. On the other hand, AI also brings challenges to teaching language programmes. For example, as automatic translations become more accurate, some people are beginning to wonder if learning a foreign language is a waste of energy. According to the Modern Language Association of America, total enrolment in language courses other than English at US universities declined by 29.3% between 2019 and 2021[1]. The ubiquity of automated translations on the Internet and in social media software has led students to over-rely on machine translations at the expense of developing their own language skills. However, despite the challenges, teaching language courses still has irreplaceable value in the age of AI. Language education is not only the education of translation technology, but also a kind of value education, humanistic education, intercultural education, which is an important form of humanistic communication. Foreign language education focuses on shaping cross-cultural communicative competence, following the intrinsic human scale such as the specificity of human culture, the subtlety of communicative emotion, the differentiation of translation contexts, etc. The change and development of the teaching methods of language courses in the era of AI is imminent, and it is important to fully understand the opportunities and challenges brought by AI, and to actively explore the innovative teaching methods in order to adapt to the needs of the era's development.

1.2. Research Purpose

In the AI era, artificial intelligence has a profound impact on language course teaching. On the one hand, it brings many conveniences and innovations, and on the other hand, it also brings some challenges.

In terms of positive impact, language model-based writing assistance provides a powerful tool for teaching language courses. Large-scale language models trained with massive text corpus can generate high-quality texts with coherence, fluency and logic, provide a variety of functions such as text generation, summarisation, translation, embellishment, personalised writing, etc., which can reduce students' burden of writing and enhance writing efficiency. For example, students can generate customised text based on input prompts, context and style requirements to meet different writing needs. Meanwhile, feedback- and assessment-based writing assistance can provide automated text feedback and assessment functions, analyse the grammar, style, content and logical structure of the text, and give specific suggestions for improvement and scoring to help students improve their writing skills, as well as provide teachers with objective, timely, and visual assessment data of students' writing, to assist in instructional decision-making and differentiated instruction [2].

Language education games also enhance the fun of learning, stimulate students' interest in learning language through interactive game experiences, and allow students to apply language skills in games to enhance language expression and comprehension. Instant feedback and personalised learning paths are provided to help students acquire language knowledge and skills in a timely manner. Incorporating tasks, challenges and rewards into teaching and learning activities makes the learning process more challenging, and using gamification elements to design language learning tasks that allow students to improve their skills in an immersive experience. However, AI also poses some challenges. For example, students may become overly reliant on smart tools, leading to a decline in independent learning and thinking skills. In addition, with the popularity of automatic translation, students may place less emphasis on learning a foreign language, believing that they can meet their communication needs by relying on machine translation.

To address these challenges, the following innovative teaching methods and strategies are proposed. First, students are guided to use AI tools correctly as a means to assist learning rather than relying on them completely. For example, in writing teaching, students are encouraged to think and write independently first, and then use language models to embellish and improve. Secondly, the cultivation of students' intercultural communication skills is strengthened. The teaching of language courses should not only focus on the transmission of language knowledge, but also pay more attention to the cultivation of students' cross-cultural awareness and communicative competence, so as to let students understand the cultural differences of different countries and regions, and to improve their adaptability and communicative competence in cross-cultural exchanges. Thirdly, it focuses on cultivating students' independent learning ability and critical thinking. Through the design of diversified learning tasks and activities, students' interest and initiative in learning will be stimulated, so that they will learn to think independently, analyse problems and solve problems in the learning process. It is necessary to fully understand the impact of AI on the teaching of language courses, and actively explore innovative teaching methods and strategies in order to improve the quality and effect of language course teaching.

2. The theoretical basis of AI-enabled language course teaching

2.1. Principles of Artificial Intelligence Technology Application in Education

2.1.1. Speech Recognition and Speaking Practice

Taking the intelligent dialogue system as an example, speech recognition plays an important role in speaking practice. For example, AI Speaking Practice APP converts the user's spoken input into text by means of speech recognition technology so as to facilitate the assessment of pronunciation and grammar. English speech recognition technology can help learners correct incorrect pronunciation. Learners use a number of speech recognition apps to compare the differences between their pronunciation and standard American pronunciation, and to make adjustments and improvements. For example, if a learner finds that he or she has a problem with the pronunciation of a word, the speech recognition application is used to identify and correct the pronunciation error. This can help learners master the rules of English pronunciation more accurately and improve their voice expression. At the same time, English speech recognition technology can also improve the speed and fluency of speech. Another difficulty in English oral expression is the speed and fluency of speech. Many learners have problems such as pausing or speaking too fast when they express themselves orally, which will affect the audience's understanding and communication effect. English speech recognition technology can help learners identify and improve their speed and fluency. For example, learners can simulate dialogue scenes in speech recognition software and improve their speaking fluency and rhythm through repeated practice. In addition, English speech recognition technology can improve self-confidence. One of the biggest obstacles in English learning is the lack of self-confidence. Many learners may feel unconfident when communicating because of their lack of oral expression. However, by using English speech recognition technology, learners are more intuitive about their oral expression and receive timely feedback. Learners use this feedback to identify and correct their problems, thus improving their expression and self-confidence.

2.1.2. Natural Language Processing and Text Analysis

Natural language processing has a wide range of applications in writing correction and translation. In terms of writing correction, Microsoft's 'Love to Write' web version is based on natural language processing technology, creating four highlights: grammar checking, word substitution, scoring of classified compositions and handwritten picture recognition. The Grammar Check function uses Fluency Boost Learning and Inference, a new learning and

inference mechanism proposed by Microsoft Research Asia, to 'find problems' for users. The Word Replacement function is able to select multiple advanced vocabularies based on context for users to choose from. The classification essay scoring function not only provides general scoring for all essays, but also detects the scores of the same essay in different types of exams [4]. The handwriting picture recognition function converts handwritten essays into electronic documents, which is convenient for grammar checking, essay scoring, word substitution and other essay corrections. In terms of translation, natural language processing technology supports cross-language automatic text generation and machine translation to achieve multilingual output of content and expand the application scope of intelligent writing. For example, the application of natural language generation technology in intelligent writing can realise cross-language writing, help students to obtain a wider range of learning resources and cultural experiences, and enhance their cross-cultural communication ability and language expression ability.

In addition, natural language processing technology can be used for text analysis. Natural language processing can deeply understand the semantic meaning of texts, identify key concepts, emotional tendencies and logical relationships, and help optimise the structure and wording of texts. For example, the application of natural language understanding technology in intelligent writing better grasps the author's writing intention and generates content that is more relevant to the topic through semantic analysis, context awareness and theme recognition.

2.2. Combination of Personalised Learning Theory and AI Technology

The theory of personalised learning emphasises the customisation of learning plans and routes for students according to their personality traits, learning needs and ability levels, in order to meet the individual needs of different students. The development of AI technology provides powerful support for the realisation of personalised learning.

2.2.1. Construction of Student Data Portrait

The construction of student data portrait is the basis for realising personalised learning. By analysing students' learning behaviours through big data, we can get a comprehensive understanding of students' learning characteristics and needs. The source of data can cover students' classroom performance, online learning behaviour, homework completion and test scores. For example, students' learning trajectories can be tracked with the help of online learning platforms [5]. Their learning behaviour data are collected to understand which knowledge points students spend more time on, which knowledge points are better mastered, and which knowledge points are supported by more learning resources. At the same time, data collection methods use a combination of traditional and modern approaches. Traditional data collection methods, such as paper-based exams, collect data on students' performance; modern data collection methods, such as the use of cameras, microphones and other devices, collect data on students' classroom performance. Ethical norms are followed when collecting data, respecting students' privacy and ensuring that their personal information is not misused.

Data preprocessing and feature extraction are also important aspects of building a student data portrait. Data cleansing ensures that there are no missing or outliers in the data and improves data quality. Data normalisation can scale the data to a uniform range and eliminate the effect of magnitude. Feature selection can analyse the correlation between features and target variables, select strong correlation features, remove redundant features and reduce model complexity. Through methods such as text feature extraction and image feature extraction, students' learning behaviour data are transformed into analyzable feature vectors, providing data support for constructing student data portraits.

2.2.2. Personalised Learning Path Formulation

Formulating personalised learning paths for students based on student data portraits can improve students' learning efficiency and interest. First, understand students' interests, abilities and learning goals. This is achieved through interest surveys, ability assessment and learning goal setting. For example, students' learning interests are understood through questionnaires, students' language proficiency levels are assessed through tests, and learning goals are set according to students' future development needs. Then, a personalised learning plan is developed based on the student's data profile and learning goals. The learning plan includes learning content, learning methods, learning progress and other aspects. For example, for students with weaker language skills, more basic language learning resources can be recommended, a step-by-step learning method can be adopted, and a slower learning progress can be arranged; for students with stronger language skills, more challenging learning resources can be recommended, an independent learning method can be adopted, and a faster learning progress can be arranged.

In the process of implementing personalised learning paths, learning outcomes are regularly assessed and adjustments are made. This is achieved through learning effectiveness assessment methods, such as tests, assignments, and classroom performance. Based on the assessment results, the learning plan is adjusted and the learning path is optimised to ensure that each student makes progress in a continuously improving learning environment. Combining the theory of personalised learning with AI technology, it provides students with more personalised and efficient language course teaching by constructing student data profiles and formulating personalised learning paths, meeting the learning needs of different students and improving the quality and effectiveness of language course teaching.

3. Innovative applications of AI in teaching language programmes

3.1. Intelligent Educational Tools Enhance Learning Efficiency

Intelligent educational tools play an important role in language course teaching. It greatly improves students' language learning efficiency and enhances the fun and comprehensiveness of learning through personalised learning paths and gamified learning scenarios.

3.1.1. Personalised Learning Path and Efficiency Improvement

Personalised learning path is a major feature of intelligent education tools. With the help of big data, artificial intelligence, mobile Internet and other technologies, it understands the existing level of students through personalised intelligent assessment. Then, on this basis, it pushes content to thousands of students, allowing them to practice with 'i+1' continuous input and output.

Personalised Learning Pathways are able to push reading materials that match a student's understanding and cognitive ability. For example, for students with a weak language foundation, the system will first push some simple picture books and stories to help them gradually build up their vocabulary and grammar knowledge; for students with strong language ability, the system will push some more challenging literary works and academic articles to meet their needs for further language enhancement.

Personalised learning paths also fit into the native-speaking mindset of language acquisition, making it easy for students to develop an interest in the language. Students will not find the learning process too difficult or too easy, but will be able to maintain an appropriate level of learning challenge at all times. In this way, students' motivation and enthusiasm will be effectively stimulated, thus improving learning efficiency. In addition, the system will constantly adjust the learning content according to the students' learning progress to ensure that they are always making progress.

3.1.2. Game-based Learning Scenarios to Enhance Interests

Intelligent education tools also enhance the fun and comprehensiveness of learning through game-based learning scenarios. Game-based learning scenarios turn the learning process into an interesting experience, allowing students to learn and play while playing.

For example, intelligent educational tools set up a variety of interesting scenes, students can not only in the underwater world and marine life and intimate dialogue, but also come to the Egyptian pyramids to listen to the legends of the ancient animals, and even take the plane to the sky to see the cultural scene of ancient China. These scenarios not only enrich the learning content, but also enable students to learn the language in different contexts and improve the practical use of language [6]. At the same time, the intelligent educational tool also designs various interactive games, such as the 'bubble playing' game. In this game, a number of bubbles with pictures appear on the screen, and students break the corresponding bubbles according to the English voice prompts. This game not only exercises students' quick reaction ability, but also deepens their memory of the words through voice recall.

In addition, game-based learning scenarios can also stimulate students' sense of competition and teamwork. For example, with the leaderboard and reward mechanism set up in the system, students can see their rankings in the class or globally, thus stimulating their desire to compete and strive to improve their learning performance. At the same time, some games require students to work in teams to complete, which develops students' teamwork and communication skills [7].

Intelligent Educational Tool As an intelligent educational tool, it brings innovative applications for teaching language courses through personalised learning paths and gamified learning scenarios. It improves students' learning efficiency, enhances the fun and comprehensiveness of learning, and provides useful reference for language course teaching in the AI era.

3.2. Artificial Intelligence Helps Foreign Language Teaching Innovation

In today's AI era, practical cases of 'foreign language + artificial intelligence' are constantly emerging, bringing many innovative applications to foreign language teaching.

3.2.1. Composite International Talent Training System

'Foreign Language + Artificial Intelligence' provides a new way to cultivate compound international talents. On the one hand, the use of artificial intelligence technologies such as natural language processing and speech recognition in foreign language teaching can bring students a more personalised and efficient learning experience [8][9]. For example, intelligent speech evaluation system can identify and evaluate students' pronunciation in real time, helping students to improve their oral expression level [10]. Adaptive learning system can recommend suitable learning contents for students according to their learning behaviours and effects to meet the learning needs of different students. On the other hand, the teaching mode of 'foreign language + artificial intelligence' focuses on cultivating students' interdisciplinary ability. Students should not only master foreign language knowledge, but also understand the basic principles and application scenarios of AI technology, and have the ability to use AI technology to solve practical problems. For example, some colleges and universities have opened professional courses of 'foreign language + artificial intelligence', combining foreign language teaching with artificial intelligence technology to cultivate students' linguistic intelligence and technical ability. In addition, through practical teaching and project-driven learning, students are involved in actual projects integrating foreign language and artificial intelligence to improve their practical ability and innovation ability. The teaching mode of 'Foreign Language + Artificial Intelligence' provides strong support for the cultivation of composite international talents by integrating foreign language teaching and artificial intelligence technology.

3.2.2. Teaching mode of human-computer collaborative education

In the era of human-computer collaborative education, the roles and functions of teachers have changed significantly. Teachers are no longer the single subject of knowledge transmission, but are transformed into guides, organisers and facilitators of students' learning [11][12]. Firstly, teachers guide students to use AI tools correctly. In the teaching process, teachers should introduce students to the characteristics and use of various AI tools, and help students choose the learning tools that are suitable for them. At the same time, teachers should guide students to establish a correct learning attitude, avoid over-reliance on AI tools, and cultivate students' independent learning ability and critical thinking. Secondly, teachers should organise diversified teaching activities. In the era of human-computer collaborative parenting, teachers use AI technology to organise various forms of teaching activities, such as group discussion, project practice, online learning and so on. These activities can stimulate students' enthusiasm for learning, enhance students' participation, and cultivate students' sense of teamwork and innovative talent [7]. Finally, teachers should promote the overall development of students. Teachers should not only pay attention to students' language learning achievement, but also to the development of students' emotions, attitudes, values and other aspects. In the teaching process, teachers should establish a good teacher-student relationship with students, pay attention to students' learning needs and psychological state, give students timely encouragement and support, and promote students' overall development.

In the era of human-computer collaborative parenting, the roles and functions of teachers are more diversified. Teachers should continuously improve their educational technology ability and comprehensive quality, adapt to the teaching needs of the new era, and contribute to the growth and development of students.

4. Challenges and Responses to Teaching Language Courses in the AI Era

4.1. Analysis of Challenges

4.1.1. Difficulty of Teachers' Role Transformation

In the AI era, teachers face many difficulties in changing from traditional knowledge transmitters to guides. On the one hand, teachers have long been accustomed to dominating the classroom and instilling knowledge into students. Suddenly, teachers have to change into facilitators and readjust their teaching mentality and methods, which is not a quick fix. For example, after getting used to explaining specific knowledge such as grammar rules and vocabulary usage, it is a great challenge for some teachers to learn to guide students to explore the language rules on their own and use the language for practical communication. On the other hand, teachers also acquire new teaching skills and tools [13]. With the application of AI in teaching language courses, teachers understand and become proficient in using various intelligent educational tools, such as intelligent voice assessment systems and adaptive learning systems. This requires teachers to invest a lot of time and energy in learning and training, and some teachers may have difficulties with this because of their busy schedules or lack of motivation to learn.

To cope with these difficulties, teachers can adopt the following strategies. Firstly, teachers should actively change their teaching concepts, recognising that in the AI era, students' independent learning ability and creativity are more important, and the role of teachers should be changed from knowledge transmitters to guides. Secondly, teachers should take the initiative to participate in various training and learning activities to improve their ability to use intelligent educational tools. For example, they can participate in training courses organised by schools or learn relevant knowledge through online learning platforms. Finally, teachers can co-operate with colleagues to explore the application of AI in language course teaching, share experiences and insights, and support and encourage each other.

4.1.2. The Importance of Student Autonomy Cultivation

In the age of AI, the cultivation of student autonomy is crucial. With the continuous emergence of intelligent educational tools, students are able to access more convenient learning resources and arrange their own learning progress and methods [14]. For example, students can study anytime and anywhere through online learning platforms, and practice oral pronunciation independently by using intelligent voice assessment systems.

Cultivating students' autonomy helps to improve students' learning effect. When students can actively participate in the learning process and actively explore knowledge, they will understand and master language knowledge more deeply. At the same time, the cultivation of student autonomy is also beneficial to the development of students' lifelong learning ability [15]. In the fast-evolving AI era, knowledge is updated extremely rapidly, and students need to have the ability to learn independently in order to continuously adapt to new learning needs and challenges [16].

In order to cultivate students' autonomy, the following methods can be adopted. One is to guide students to construct a correct concept of learning, so that they can recognise the great significance of independent learning and stimulate their learning drive [17]. The second is to give students enough space for independent learning, so that they can independently choose the learning content, learning mode and learning progress. For example, in the teaching of language courses, a project-based learning approach can be adopted to allow students to independently choose the projects they are interested in for research and learning. Thirdly, to cultivate students' learning strategies and methods, and to help students learn how to make effective use of intelligent educational tools for learning, how to formulate learning plans and manage their learning time, and so on. Fourth, to establish an effective evaluation mechanism, encourage students to self-evaluate and evaluate each other, provide timely feedback on learning effects, and promote students to continuously improve their learning methods and enhance their learning effects.

4.2. Response Strategies

In the age of AI, language programme teaching faces many challenges, and effective coping strategies are actively explored to ensure the quality and effectiveness of language teaching.

4.2.1. Improve students' digital literacy

In the AI era, it is crucial to improve students' digital literacy. Students improve their digital literacy and become proficient in using learning tools in the following ways. Firstly, students should fully realise the importance of digital literacy. With the development of AI technology, digital literacy has become one of the necessary abilities for students. Students should understand that proficiency in digital tools can not only improve learning efficiency, but also lay a solid foundation for future career development. Secondly, students should be proactive in learning digital skills. Participate in digital literacy training courses organised by the school or learn relevant knowledge through online learning platforms. For example, learn how to use language learning tools such as intelligent voice assessment systems and adaptive learning systems to improve their oral expression and language comprehension. Furthermore, students should learn to make rational use of digital resources. There are abundant language learning resources on the Internet, such as online courses, learning forums and language learning APPs. Students should learn to filter and make use of these resources to broaden their learning paths and enrich their learning contents [18]. In addition, students should develop their awareness of information security. In the process of using digital tools and resources, they should pay attention to the protection of personal information and avoid leaking privacy. At the same time, they should learn to identify the authenticity of information and avoid being influenced by bad information.

4.2.2. Strengthening Teachers' Participation and Guidance

In the AI era, the role of teachers' participation and guidance in students' language learning cannot be ignored. On the one hand, teachers should pay attention to students' language learning. Understand the students' learning progress in the language course and pay attention to the students' use of intelligent educational tools. Communicate with students to understand the problems and difficulties they encounter in learning, and give timely help and support. On the other hand, teachers should guide students to use intelligent educational tools correctly. Introduce to students the characteristics and usage of various intelligent educational tools, and help students choose the learning tools suitable for themselves. At the same time, students should be guided to establish a correct learning attitude, avoid over-reliance on intelligent educational tools, and cultivate students' independent learning ability and critical thinking. In addition, teachers can learn together with students. Create a good learning atmosphere in the classroom and use intelligent educational tools for language learning with students. For example, watch English films, listen to English songs and read English books together to increase students' interest and motivation in language learning. Teachers can also encourage students to participate in language learning activities. For example, English speech contests, English theatre performances and other activities, so that students can improve their language use in the process of practice [19]. At the same time, teachers should give students full encouragement and support so that they can feel a sense of achievement and self-confidence in learning. In the era of AI, effective coping strategies are adopted to improve students' digital literacy, strengthen teachers' participation and guidance, and jointly promote the development of language course teaching.

5. Conclusion and Outlook

5.1. Summary of Research Conclusions

In the AI era, language course teaching has undergone profound changes and innovations. On the one hand, AI technology has brought many innovations to language course teaching. For example, natural language processing technology improves language comprehension, intelligent dialogue system helps speaking practice, personalized learning path improves students' learning efficiency and interest, and game-based learning scene enhances the fun and comprehensiveness of learning. In addition, the teaching mode of 'Foreign Language + Artificial Intelligence' provides strong support for the cultivation of compound international talents, and the teaching mode of human-computer collaborative education also makes the roles and functions of teachers more diversified. However, the teaching of language courses in the AI era also faces some challenges. Teachers face difficulties in changing from traditional knowledge transmitters to guides, readjusting their teaching mentality and methods, and mastering new teaching skills and tools. At the same time, the cultivation of students' autonomy is crucial, guiding students to establish a correct concept of learning, giving students enough space for independent learning, cultivating students' learning strategies and methods, and establishing an effective evaluation mechanism.

In response to these challenges, corresponding coping strategies are proposed. Improve students' digital literacy, so that they can fully understand the importance of digital literacy, learn digital technology proactively, learn to make rational use of digital resources, and cultivate an awareness of information security. Strengthen teachers' participation and guidance, pay attention to students' language learning, guide students to use intelligent educational tools correctly, learn together with students, and encourage students to participate in language learning activities.

The change and development of teaching methods of language courses in the AI era is an inevitable trend. Fully understand the opportunities and challenges brought by AI, actively

explore innovative teaching methods and strategies in order to improve the quality and effect of language course teaching, and contribute to the cultivation of talents adapted to the development needs of the times.

5.2. Future Research Direction

In the future, the integration of AI and language course teaching has a broad research space and development prospects.

5.2.1. Technical Innovation and Optimisation

Continuously improve natural language processing technology to increase its accuracy and efficiency in language understanding, translation and text analysis. For example, the optimisation of deep learning models is further explored to better handle complex linguistic structures and semantic relationships. By increasing the diversity of training data and improving the design of algorithms, the application of natural language processing technology in the teaching of language courses is continuously improved.

Strengthen the research and development of intelligent dialogue systems so that they can more accurately identify students' speech and semantics and provide more personalised feedback and suggestions. For example, using big data to analyse students' language habits and learning needs, we will customise an exclusive intelligent dialogue partner for each student to improve the relevance and effectiveness of speaking practice.

Explore the application of Virtual Reality (VR) and Augmented Reality (AR) technologies in teaching language programmes. By creating immersive language learning environments, students can be more immersed in different linguistic and cultural contexts to improve the fun and attractiveness of language learning [20]. For example, developing language learning games based on VR/AR technology allows students to communicate and practise language in virtual scenarios to enhance the learning experience.

5.2.2. Teaching Methods and Strategies

In-depth study of the deep integration of personalised learning theory and AI technology to further improve the construction of student data portraits and the formulation of personalised learning paths. For example, by combining students' learning styles, interests and cognitive characteristics, we can provide students with more accurate learning resource recommendations and study plan arrangements. At the same time, the dynamic monitoring and adjustment of students' learning process is strengthened to ensure the effectiveness of personalised learning.

Explore the teaching mode of human-machine collaborative parenting, giving full play to the advantages of teachers and AI. Teachers can play an important role in emotional support, thinking guidance and values cultivation, while AI can provide strong support in knowledge transfer, skills training and learning feedback. Through rational division of labour and collaboration, the teaching effect can be maximized.

Carry out research on innovative teaching methods such as project-based learning and problem-oriented learning to cultivate students' comprehensive language application skills and innovative thinking. For example, AI technology is used to provide students with real language learning projects and problem situations, guiding them to improve their language ability and interdisciplinary literacy in the process of problem solving.

5.2.3. Educational Evaluation and Feedback

Establish an AI-based teaching evaluation system for language courses to achieve comprehensive, objective and accurate evaluation of students' learning process and learning outcomes. For example, automated evaluation of students' oral expression and writing ability is carried out by using intelligent voice evaluation system and text analysis technology, while

personalised feedback and suggestions are provided to students by combining teachers' evaluation and students' self-evaluation.

Research on how to use AI technology to provide teachers with feedback on teaching as well as suggestions for improvement to help teachers improve the quality of teaching [21]. For example, by analysing students' learning data and behaviours, we can provide teachers with suggestions on the adjustment of teaching strategies and the optimisation of teaching resources, so as to promote teachers' professional development.

Focus on students' learning experience and emotional needs in the AI era, and explore how to improve students' learning satisfaction and happiness through educational evaluation and feedback mechanisms. For example, design questionnaires and interviews to understand students' feelings and needs about teaching language courses, so as to provide a basis for teaching improvement.

5.2.4. Intercultural Communication and Global Perspective

Use AI technology to promote the cultivation of cross-cultural communication skills, so that students can better understand the language and cultural differences of different countries and regions. For example, an AI-based intercultural communication learning platform is developed to provide students with rich intercultural learning resources and communication opportunities, and to improve students' intercultural awareness and communication skills.

Cultivate students' global vision and international competitiveness so that they can better use language for communication and cooperation in the context of globalisation. For example, through online courses and international exchange programmes, students can interact and cooperate with students from different countries and regions, so as to broaden their international outlook.

To study how to integrate international education standards and concepts into language course teaching and improve the internationalisation level of language education in China. For example, learn from international advanced language teaching methods and evaluation systems, innovate and apply them in combination with China's actual situation, and promote the reform and development of China's language education.

Future research in the integration of AI and language course teaching continues to innovate and explore to meet the development needs of the times. Through technological innovation, teaching method improvement, educational evaluation improvement and intercultural communication cultivation and other efforts, we can provide students with more high-quality and personalised language course teaching, and cultivate high-quality talents with global vision and innovation ability.

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