

Research on English Listening Teaching Assisted by Deepseek Technology

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ABSTRACT

With the continuous development of artificial intelligence technology, Deepseek technology is being increasingly applied in the education field. This article focuses on English listening teaching assisted by Deepseek technology, deeply explores its application models, advantages, and challenges faced, reveals how Deepseek technology can improve students' listening skills, learning interest, and autonomous learning ability, provides new ideas and methods for the reform of English listening teaching, and promotes the in - depth integration of education and technology.

1. Introduction

English listening, as an important part of language learning, is crucial for the development of students' comprehensive language abilities. Traditional English listening teaching models are often restricted by factors such as teaching resources, teaching methods, and individual differences among students, making it difficult to meet the diverse learning needs of students. With the rapid development of artificial intelligence technology, Deepseek technology, with its powerful functions such as speech recognition, intelligent analysis, and personalized learning support, brings new opportunities to English listening teaching. Introducing Deepseek technology into English listening teaching can innovate teaching methods, optimize the teaching process, improve teaching effectiveness,

help students improve their listening skills, and meet the requirements of language learning in the new era.

2. Advantages of Deepseek Technology - Assisted English Listening Teaching

2.1 Abundant Teaching Resources

Deepseek technology - assisted English listening teaching has significant advantages in terms of teaching resources. By connecting to a vast database, it opens the door to a large - scale English listening material library that covers various types such as news, movies, speeches, and academic lectures for teachers. News materials enable students to keep up with current affairs, understand global dynamics, and learn practical modern English expressions. Movie materials, with their vivid plots and diverse char-

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acter dialogues, create an immersive language - learning atmosphere for students. Speeches and academic lectures provide students with formal and professional language materials, broadening their knowledge horizons while enhancing their understanding of different styles of English. Moreover, the material library is continuously updated to ensure that the teaching content remains timely and fresh, which greatly stimulates students' learning interest and enables them to be more active and proactive in English listening learning^[1].

2.2 Improved Learning Effect

With the precise speech recognition and intelligent analysis functions of Deepseek technology, students' listening learning effects are effectively enhanced. After completing listening exercises, students can quickly receive detailed feedback, clearly identifying their problems in speech recognition, vocabulary understanding, and sentence - structure comprehension. For example, if students have difficulty recognizing certain liaison and weak - form phenomena, the system can accurately point them out and provide targeted exercises. At the same time, this technology can tailor - make personalized learning content and practice tasks according to each student's learning situation, knowledge mastery level, and learning progress. This means that students with a weak foundation can start with simple conversations to gradually consolidate their foundation, while students with a higher level can challenge more difficult materials. In this way, students can learn at their own pace and level, and their learning effects are significantly improved.

2.3 Cultivation of Autonomous Learning Ability

With the strong support of Deepseek technology, there is a new opportunity for cultivating students' autonomous learning ability. Students can independently select listening learning content and practice methods according to their own interests and learning goals. Students who are interested in pop culture can choose English songs and popular movie clips as learning materials, while those interested in professional knowledge can select relevant academic lectures for study. During the learning process, students adjust their learning strategies based on intelligent feedback. If they find that they have difficulties in understanding listening materials on a specific topic, they can increase relevant practice. Over time, students gradually develop the habit of autonomous learning, no longer relying too much on teachers' supervision and guidance. Their learning initiative and self - awareness continue to increase, laying a solid foundation for lifelong learning^[2].

2.4 Creation of a Real - Life Language Environment

Deepseek technology demonstrates unique advantages in creating a real - life language environment in English teaching. In traditional English teaching, students are often exposed to English limited to textbooks and the fixed pronunciation of teachers, making it difficult for them to adapt to the complex and diverse language environment in the real world. However, Deepseek technology, with its advanced speech synthesis and scene - simulation technology, can simulate a rich and real English language environment. With the help of this technology, students can hear English accents from different countries and regions, covering British English, American English, Australian English, etc., and even English variants from non - English - speaking countries. At the same time, they can also be exposed to English at different speeds, from normal daily speech to fast - paced natural conversations, training their adaptability to various speech speeds. In addition, Deepseek technology can present a variety of expressions, including formal language used in formal occasions, daily slang, and unique expressions in different cultural backgrounds. Through this immersive learning experience, students' listening comprehension ability is effectively trained in real - world communication scenarios, no longer limited to book knowledge. They can capture key information more accurately and understand the speaker's intentions. In the process of continuously being exposed to language expressions from different cultural backgrounds, students' language application ability and cross - cultural communication awareness can also be significantly enhanced, laying a solid foundation for them to cope with real international communication scenarios in the future.

3. Application Strategies of Deepseek Technology - Assisted English Listening Teaching

3.1 Construction of a Listening Practice Platform Based on Deepseek

Schools and teachers should actively introduce or develop an English listening practice platform based on Deepseek technology. The construction of this platform is of great significance for improving the quality of listening teaching. The platform needs to set up a wide variety of listening practice question types. In addition to conventional fill - in - the - blanks, multiple - choice questions, dictation, and retelling, it can also add some more innovative and challenging question types, such as logical reasoning questions based on listening content and creative writing based on listening content, to fully meet different teaching objectives and the diverse learning needs

of students. After students complete listening exercises on the platform, Deepseek technology, with its powerful intelligent analysis capabilities, can quickly and accurately score and conduct in - depth analysis. It can not only give students' exercise scores but also provide detailed feedback on their listening weaknesses in aspects such as speech recognition, vocabulary discrimination, and sentence understanding. Teachers can then, based on these platform data, clearly understand the learning situation of each student, and thus adjust the teaching focus and methods accordingly, truly achieving individualized teaching and making teaching more in line with the actual needs of students^[3].

3.2 Planning of Personalized Listening Learning Paths

With the help of Deepseek technology, teachers can plan personalized listening learning paths for students. Before the start of teaching, teachers first use Deepseek technology to conduct a comprehensive listening level test on students and deeply analyze students' learning styles, including their preferred ways of acquiring knowledge and the length of their attention span. For students with a weak foundation, teachers recommend simple and life - related daily conversation listening materials based on the test results, such as conversations in scenarios like grocery shopping and restaurant ordering, allowing students to focus on training basic speech recognition and vocabulary understanding abilities and helping them gradually build confidence in learning. For students with a higher level, teachers provide more difficult materials such as academic lectures and English movie clips. Academic lectures cover professional knowledge, which helps students expand their knowledge reserve and improve their understanding of complex language structures. English movie clips contain rich spoken expressions and cultural elements, which can cultivate students' listening comprehension ability of professional vocabulary and cross - cultural communication awareness, enabling each student to steadily improve their listening skills on a learning path suitable for them.

3.3 Innovation in Classroom Interactive Teaching

In classroom teaching, teachers can skillfully use Deepseek technology to innovate interactive teaching situations. For example, after playing an English video, the speech recognition function of Deepseek can be used to quickly generate subtitles, which not only facilitates students' understanding of the video content but also provides convenience for subsequent interactive sessions. Teachers organize students to discuss the video content in

groups and encourage students to share their understanding and feelings. During the discussion process, students can not only exercise their oral expression ability but also gain new inspiration from their peers' viewpoints and cultivate critical thinking. After the discussion, teachers use the intelligent analysis function of Deepseek to comprehensively review and summarize the students' discussion situation. Deepseek can analyze whether the vocabulary and grammar used by students in the discussion are accurate and whether their viewpoints are clearly expressed. Teachers, based on these analysis results, guide students to deeply understand the listening content, correct students' language errors, and further explore the cultural connotations and language points in the video. In this way, students' oral expression and teamwork abilities are effectively improved, a positive and active classroom atmosphere is created, and the teaching effect is enhanced.

4. Challenges and Countermeasures in Deepseek Technology - Assisted English Listening Teaching

4.1 Technical Costs and Resource Investment

Introducing Deepseek technology to assist English listening teaching is not a one - step - process. It requires a large amount of support from hardware devices and software platforms. Schools and educational institutions not only need to purchase high - performance computers, servers, and other hardware to ensure the smooth operation of the technology but also need to invest funds in purchasing professional Deepseek software licenses. Moreover, continuous investment is required for system maintenance and updates in the future. In addition, obtaining high - quality teaching resources that are suitable for teaching needs also requires a lot of expenses. In the face of this situation, education departments and schools should give full play to their resource - integration capabilities. On the one hand, increase investment in educational informatization, tilt more financial budgets towards the introduction of Deepseek technology, and equip schools with necessary equipment and software. On the other hand, actively explore cooperation models with technology companies, and through forms such as industry - university - research cooperation and educational public welfare projects, strive for technical support and educational resource donations from enterprises to achieve mutual benefit and win - win results, thereby effectively reducing the cost of technology application^[4].

4.2 Requirements for Teachers' Technical Abilities

The effective application of Deepseek technology in

English listening teaching poses high requirements for teachers' technical abilities. Teachers not only need to be proficient in various functions of Deepseek technology, such as how to use its precise speech recognition and analysis functions for students' listening training, but also need to be able to organically integrate these technologies with traditional teaching methods and seamlessly embed them into daily English listening teaching courses. To help teachers improve their abilities in this regard, schools and education departments should take active actions. Regularly organize training courses on Deepseek technology. The course content should cover technical principles, operation methods, and teaching cases, enabling teachers to deeply understand and proficiently use this technology. At the same time, carry out relevant teaching and research activities, encourage teachers to share their experiences and insights in using Deepseek technology, and jointly explore solutions to problems encountered, so as to improve teachers' information technology literacy and teaching application abilities and promote the effective application of Deepseek technology in teaching.

4.3 Student Information Security and Privacy Protection

In the process of using Deepseek technology to carry out English listening teaching, students' learning data, such as the duration of listening exercises, answering situations, and voice recordings, will be collected and analyzed by the system. There is undoubtedly a potential risk of information security and privacy leakage. Once students' personal information is leaked, it will not only cause psychological distress to students but may also trigger a series of adverse consequences. To eliminate these hidden dangers, schools and technology platforms must attach great importance to data security management. Schools should establish strict data protection systems, clearly define the scope of data collection, usage purposes, and storage periods, and strictly prohibit unauthorized access and use of students' data. Technology platforms should adopt advanced encryption technologies to encrypt the storage and transmission of students' data to prevent data from being stolen or tampered with during the transmission and storage processes. At the same time, clarify data usage rules, fully explain the data usage methods and protection measures to students and parents, ensure the security of

students' personal information, and enable students to use Deepseek technology for learning with peace of mind^[5].

5. Conclusion

As an advanced artificial intelligence technology, Deepseek technology brings new vitality and opportunities to English listening teaching. Through its advantages in enriching teaching resources, improving learning effects, and cultivating autonomous learning abilities, Deepseek technology can effectively assist English listening teaching and improve students' listening skills and comprehensive language literacy. However, in the application process, it also faces challenges such as technical costs, teachers' abilities, and information security. In the future, it requires the joint efforts of education departments, schools, teachers, and technology companies to overcome difficulties, continuously explore and innovate, and integrate Deepseek technology more deeply and effectively into English listening teaching, so as to promote the high - quality development of English education and cultivate high - quality talents who meet the needs of the times.

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