Research on the Construction of an English Listening Autonomous Training Model

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Abstract: With the increasing importance of English as an international lingua franca, English listening training has become a core part of language learning. However, the traditional English listening teaching model relies too much on classroom teaching and neglects the importance of students' out-of-class autonomous learning, resulting in obvious deficiencies in students' ability to understand pronunciation, vocabulary, and semantics in complex contexts. For this reason, this paper proposes an autonomous listening training model based on the combination of intensive listening and extensive listening, aiming to help students improve their English listening ability and enhance their comprehensive language proficiency.

Keywords: English Listening; Autonomous Training Model; Intensive Listening; Extensive Listening; Listening Evaluation Standards

1. Introduction

As English is an international lingua franca, the cultivation of listening ability has become a core part of language learning. However, traditional English listening teaching emphasizes classroom teaching and ignores students' out-of-class autonomous training, resulting in generally low listening abilities among students, especially a lack of understanding ability for pronunciation, vocabulary, and semantics in complex contexts. Autonomous listening training can effectively make up for this deficiency, helping students establish a foundation for language input and improve their comprehensive language ability.

In recent years, studies have shown that the key factors affecting students' listening comprehension in English listening training include pronunciation, grammar, vocabulary, and context [1]. Through scientific autonomous training methods, such as combining intensive listening and extensive listening models, students' understanding ability of pronunciation and semantics can be significantly improved. However, there are still relatively few studies on autonomous listening training models at present, especially in combining modern technologies with personalized needs. Therefore, the author attempts to explore how to help students comprehensively improve their listening level through an autonomous training model combining intensive listening and extensive listening and proposes a scientific and efficient autonomous listening training model.

2. Research Background

Scholars at home and abroad have conducted extensive research on English listening teaching and training. Foreign research mainly focuses on the analysis of cognitive models in the listening process, exploring the psychological mechanism of listening comprehension and attempting to assist listening teaching through multimedia technologies. For example, Vandergrift (2007) proposed a metacognitive listening strategy model, emphasizing the importance of prediction, monitoring, and evaluation in the listening process [2].

Domestic research pays more attention to the improvement of listening teaching practice. In recent years, more and more colleges and universities have tried to enrich listening training content through technical means such as corpora and listening resource databases. However, there is still a lack of systematic research and effective practice in how to realize students' out-of-class autonomous training and dynamically track students' listening performance [3]. The research by scholars such as Ge Lingling pointed out that the training mode combining intensive and extensive listening can balance learners'

attention to language details and context and is helpful for comprehensively improving listening levels. Yang Ruiyi's research pointed out that for students at different learning stages, the selection of materials needs to gradually expand from textbook dialogues and news reports to speeches and film and television works to meet students' diverse learning needs. Chai Mingying and others' research showed that intelligent listening platforms can effectively improve students' learning efficiency and provide accurate learning data analysis and feedback at the same time. However, the popularity of such platforms is still limited, and there is still much room for improvement, especially in personalized design and evaluation standards [4].

In recent years, educational scholars have gradually realized the importance of autonomous learning ability in language learning, and autonomous listening training has become one of the hot issues in the academic community. Existing studies have shown that the main factors affecting English listening comprehension include pronunciation, grammar, vocabulary, and context adaptation ability. Through targeted training, students can significantly improve their understanding ability of these key factors. In particular, the combination of intensive listening and extensive listening has been proved to have a significant effect in strengthening the ability to capture listening details and adapting to the overall context. Intensive listening focuses on detail processing and emphasizes the accuracy of language forms, while extensive listening is committed to improving learners' reaction speed and overall grasp ability of language input in real contexts.

However, despite the rich experience accumulated by the academic community in listening training methods, there are still many problems in current English listening autonomous training [5]. Firstly, the training content is single, and the selection of materials lacks pertinence, making it difficult to meet students' diverse learning needs. Secondly, the feedback mechanism in the students' training process is relatively weak, lacking a systematic evaluation standard, and unable to comprehensively reflect students' listening level and learning progress. In addition, the design of personalized training is insufficient, ignoring the individual differences of different students in listening ability, learning habits, and interests. These problems directly limit the improvement of students' listening ability and the effect of long-term language learning.

3. Research Methods and Model Construction

This study aims to construct an effective English listening autonomous training model and adopts a combination of research, experiment, and data analysis methods to ensure that the model is scientific, practical, and promotable. The research is divided into three main stages: data collection and analysis, model design and experiment, and model optimization and evaluation.

In the data collection and analysis stage, the research team collected the listening training needs and characteristics of students at different levels through questionnaires and interviews. The survey content covered students' listening foundation, commonly used learning resources, training frequency, main problems encountered, etc. Meanwhile, by analyzing students' listening error types and weak links, the key factors affecting the improvement of listening ability were extracted. To ensure the comprehensiveness and reliability of the data, the questionnaire design adopted the Likert scale and conducted group research on students of different ages and language levels. In addition, the team also referred to relevant domestic and foreign research and teaching practices to summarize the main advantages and limitations of intensive listening and extensive listening, providing theoretical support for model construction [6].

In the model design and experiment stage, the core of the research is to construct a listening autonomous training model that meets the needs of different students. The model includes the following modules: listening material selection, training path planning, learning progress tracking and feedback, evaluation and adjustment. The material selection module is based on the principles of "authenticity" and "appropriateness", divided into three difficulty levels of basic, intermediate, and advanced according to students' language levels, and combines a variety of contexts (such as daily communication, academic lectures, news reports, etc.) to design a material library combining intensive and extensive listening.

The training path planning module is oriented by students' needs and learning goals, providing multiple training paths, such as word-by-word intensive listening, theme-based extensive listening, and speed adaptation training, helping students flexibly arrange learning plans [7].

To improve the training effect, the model also incorporates artificial intelligence technology and big data analysis. The learning progress tracking module generates personalized learning reports by recording data such as students' training duration, listening accuracy rate, and the number of repeated plays. The feedback module analyzes students' listening performance in real time and gives targeted suggestions, such as recommending materials related to weak links or adjusting training intensity. The evaluation and adjustment module dynamically adjusts the training content and difficulty based on students' performance, thus realizing personalized and efficient learning.

In the model experiment stage, the research team selected students from two grades as experimental objects and conducted autonomous training for three months respectively. The experimental group used the training model constructed in the study, while the control group adopted the traditional listening training method. By comparing the listening test scores, learning data, and questionnaire feedback of the two groups of students, the actual effect of the model was evaluated.

Model optimization and evaluation is the last stage of the research. According to the experimental results, the team optimizes and adjusts the model, such as improving the material recommendation algorithm and perfecting the evaluation index system. Finally, through a comprehensive and multi-angle assessment of English listening levels, the applicability and effectiveness of the model are verified. The evaluation indicators include listening comprehension accuracy rate, speed adaptation ability, training completion degree, and other dimensions to ensure that the model can comprehensively reflect the development of students' listening ability [8].

Through the above research methods and model construction, this study not only provides students with a scientific and effective listening training plan but also provides theoretical support and practical reference for the innovation of English listening teaching models [9]. The dynamic adjustment function of the model and its characteristics combined with artificial intelligence technology make it have strong adaptability and promotion potential, providing a new idea for English listening autonomous learning.

4. Research Results and Analysis

The research results show that through the practical application of the autonomous training model, students' English listening ability has been significantly improved. In the study, the students in the experimental group and the control group adopted different listening training methods respectively. After a three-month experimental comparison, various data showed that the learning effect based on the autonomous training model was better than that of the traditional training method.

Firstly, in terms of listening comprehension ability, the average score of the students in the experimental group in the post-test increased by 18.5% compared with that in the pre-test, while the improvement range of the control group was only 8.2%. This result indicates that the autonomous training model helps students better understand the relationship between pronunciation, grammar, vocabulary, and context through the combination of intensive listening and extensive listening, thus improving the accuracy of listening. Especially when dealing with listening materials in complex contexts or at a fast speed, the students in the experimental group showed stronger adaptability. The questionnaire survey showed that more than 80% of the students in the experimental group believed that the diversity of extensive listening materials significantly improved their understanding ability of real contexts, and intensive listening training helped them master more detailed language details.

Secondly, in terms of learning behaviors and habits, the autonomous learning ability of the students in the experimental group has been enhanced. The research team found through data records that the average effective listening duration of the students in the experimental group increased by 25% compared with that before the experiment, while the increase in the control group was only 12%. Students are

more inclined to use fragmented time for listening training and can adjust their training plans according to their learning progress and feedback. In addition, the number of times that the students in the experimental group repeated playing certain key passages during the training process was significantly reduced, indicating that their pronunciation recognition and semantic understanding abilities had significantly improved.

Thirdly, in terms of listening error analysis, the feedback function of the autonomous training model helped students improve their weak links more targeted. For example, the proportions of grammar errors, vocabulary recognition errors, and pronunciation errors of the students in the experimental group were all reduced compared with those in the pre-test. Especially in vocabulary recognition errors, the decline rate reached 32%. Although the students in the control group also improved during the same period, the improvement range was relatively small. This shows that the autonomous training model can accurately identify students' problems and help them effectively overcome learning obstacles through personalized material recommendations and adjustments.

In addition, the evaluation system of the model has also been highly recognized by students. By regularly generating learning reports, students can clearly understand their learning progress and areas that need improvement. This timely feedback mechanism not only enhances students' learning motivation but also improves the efficiency of training. The interview results showed that most students believed that this data-based dynamic feedback made the training more scientific and targeted, thus avoiding the inefficiency problems of blind learning and repeated training.

However, the study also found some limitations of the model in practical applications. For example, for students with relatively weak language foundations, the initial training difficulty may have a certain impact on their learning interests. Some students have an adaptation period for the application of artificial intelligence technology in listening training, especially in the acceptance of data analysis and feedback suggestions [10]. This suggests that the research team should pay more attention to the adaptability of different learner groups and further refine the operation process and user interface of the model when optimizing the model in the future.

The research results of the autonomous training model show that it has significant advantages in improving students' listening ability, autonomous learning habits, and learning efficiency. The model combines intensive listening and extensive listening, which not only comprehensively covers students' listening needs but also provides students with scientific and personalized learning plans through the introduction of big data and artificial intelligence technology. Future research should further improve the functions of the model, enhance its adaptability and user experience, so as to provide more efficient listening training support for more students.

5. Conclusions and Prospects

This study explored an effective method to improve English listening levels by constructing an autonomous training model combining intensive listening and extensive listening and verified its feasibility and effectiveness through experiments. The research shows that this model can not only significantly improve students' English listening comprehension ability but also cultivate students' autonomous learning ability and enhance their motivation for listening training. By combining modern technologies such as artificial intelligence and big data, the model realizes the design of personalized learning paths and can provide timely feedback according to students' learning progress and listening performance, helping students overcome difficulties in learning. The research results show that the English listening training method based on the autonomous training model has strong practicability and operability and is worthy of being promoted and applied on a larger scale.

This study also has certain limitations. Firstly, the experimental samples are relatively limited, and the students involved are mainly concentrated in a specific school or grade, so its universality still needs to be further verified. Secondly, although the autonomous training model can provide personalized training plans according to students' listening levels and learning progress, in practical applications, different students' adaptability and acceptance

may vary. Some students may feel uncomfortable with technical feedback and personalized adjustments in the initial stage of model application, resulting in limited participation and learning effects. Future research should further improve the adaptability of the model and optimize the user experience to make it more in line with the needs of different learners.

In future research, improvements and expansions can be made from the following aspects. Firstly, the scope of experimental samples can be expanded to cover more students from different schools, grades, and language foundations, so as to further verify the universality and applicability of the autonomous training model. Secondly, more listening comprehension dimensions can be added to the model, such as emotional intonation recognition and the understanding of non-verbal information, to broaden its training content. With the continuous development of technology, the further application of artificial intelligence and machine learning is expected to make the training process of the model more intelligent, be able to more accurately identify students' listening weak points, and provide more efficient training plans according to students' personalized needs. Finally, future research can also consider combining this model with the training of other language skills, such as speaking, writing, and reading, to help students improve their overall language ability through comprehensive training.

This study provides a new idea and method for English listening training, that is, to create a personalized autonomous training model by combining intensive listening and extensive listening and using modern technologies, hoping to achieve better results in students' listening learning. In the future, with the continuous development of technology and the in-depth research, the English listening training model is expected to play a greater role in a wider range of teaching practices, helping more students improve their English listening levels and then enhance their English comprehensive abilities.

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