

Analysis on the Innovation Path of Middle School English Classroom Teaching under the Integration of Information Technology

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Keywords: Information Technology; English Teaching in Middle Schools; Teaching Innovation; Current Situation of Integration; Innovation Path

Abstract: This paper focuses on middle school English classroom teaching under the integration of information technology. With the development of information technology, it has become a trend to integrate with English teaching in middle schools, but there are frequent problems in practice. In order to explore the effective teaching innovation path, this paper analyzes the current situation of integration through literature research and other methods, and finds that there are some problems such as teachers' insufficient application ability of information technology and uneven allocation of resources. Based on this, this paper clearly aims at improving students' comprehensive English application ability, autonomous learning ability and cross-cultural communication awareness and ability, and puts forward the teaching innovation principle of student-centered, scientific, innovative and practical. Furthermore, this study explores innovative paths from the aspects of creating situations by using multimedia resources, expanding resources by means of online platforms, and using information technology tools to carry out interactive teaching. This aims to improve the quality of English teaching in middle schools, provide a useful reference for the deep integration of information technology and English teaching in middle schools, and help students improve their comprehensive English literacy.

1. Introduction

With the rapid development of information technology, the field of education is undergoing profound changes. As an important part of basic education, English teaching in middle schools also actively introduces information technology to meet the needs of the times [1]. The integration of information technology has brought new vitality and opportunities to English classes in middle schools. It breaks the limitation of traditional teaching in time and space, and provides students with rich and varied learning resources, so that English learning is no longer limited to textbooks and classrooms [2-3]. Multimedia teaching methods supported by information technology, such as animation, video and audio, can present teaching content in a more vivid way, which greatly stimulates students' interest and enthusiasm in learning.

The integration of information technology and English teaching in middle schools is not smooth. Although many schools vigorously promote the application of information technology in teaching,

there are still some problems to be solved in practice [4]. The application of information technology by some teachers is superficial and fails to give full play to its advantages; The hardware facilities and software resources of the school may not meet the needs of deep integration [5]. How to combine information technology with the teaching objectives and contents of English is also a challenge for educators.

In view of this, it is of great practical significance to deeply analyze the innovative path of middle school English classroom teaching under the integration of information technology [6]. Through the analysis of the existing integration situation, we can find out the problems and put forward targeted innovative strategies, which will help to improve the quality of English teaching in middle schools, cultivate students' comprehensive English literacy and make them better adapt to the development requirements of the globalization era. The purpose of this study is to provide useful reference for the deep integration of information technology and English teaching in middle schools through theoretical discussion and practical experience summary.

2. The status quo of the integration of information technology and English teaching in middle schools

At present, information technology has been applied to English teaching in middle schools to a certain extent. In many classes, multimedia equipment has become a common teaching tool. Teachers use PPT to display teaching content, and by playing audio and video to help explain vocabulary, grammar and texts, abstract knowledge becomes more intuitive [7]. Some schools have also introduced online learning platforms, arranged homework after class and conducted tests, so that teachers can keep abreast of students' learning situation. However, the problems in the process of integration are also more prominent. Some teachers only regard information technology as a tool to present teaching content, such as relying too much on PPT to display text and not making full use of its interactive functions. Teachers' ability to apply information technology is uneven, and some teachers have insufficient knowledge of emerging technologies, such as artificial intelligence-assisted teaching tools [8]. There are also differences in the allocation of school resources. Some schools have outdated hardware facilities and unstable networks, which limit the efficient application of information technology. Moreover, most of the teaching is still dominated by the traditional mode, and the information technology and teaching links have not been deeply integrated, so it is difficult to really play its role in improving students' comprehensive English ability.

3. Goal orientation of innovative teaching

Under the background that information technology is deeply integrated into English teaching in middle schools, it is very important to clarify the goal orientation of innovative teaching. This is not only related to the direction of teaching activities, but also directly affects the improvement of students' comprehensive English literacy. Innovative teaching should focus on cultivating students' comprehensive English application ability, autonomous learning ability and cross-cultural communication awareness and ability.

3.1 Improve the comprehensive ability to use English

English comprehensive application ability covers four key aspects: listening, speaking, reading and writing. Information technology provides rich and diversified ways to improve these capabilities. For example, through the online English learning platform, students can have access to a large number of authentic English listening materials, which cover news, movies, speeches and

other topics. In speaking, with the help of voice interaction software, students can practice oral English and get immediate pronunciation correction and evaluation. In the teaching of reading and writing, e-books, reading articles in English learning APP and writing correction tools all provide students with more opportunities for practice and improvement.

3.2 Cultivate the ability of autonomous learning

The integration of information technology can guide students to gradually develop the habit of autonomous learning and improve their autonomous learning ability. With all kinds of learning software and online courses, students can flexibly arrange their learning time and content according to their own learning progress and actual needs. Some English learning apps have intelligent push function, and recommend suitable learning resources for students according to their learning data. Students can choose and make personalized learning plans independently. Online learning community provides a platform for students to exchange and share their learning experiences, which urges students to continuously strengthen their awareness and ability of autonomous learning in mutual learning and supervision.

3.3 Enhance cross-cultural communication awareness and ability

With the acceleration of globalization, cultivating students' awareness and ability of cross-cultural communication has become an important goal of English teaching in middle schools. Information technology enables students to easily access the rich cultural resources of English-speaking countries, such as watching documentaries and cultural programs of English-speaking countries, and deeply understanding their history, customs and values. The online social platform also creates opportunities for students to communicate directly with native English speakers, so that students can exercise their cross-cultural communication ability and learn to understand and respect the way of thinking and behavior in different cultural backgrounds in real cross-cultural communication scenarios. Through these ways, students can master English language knowledge, use language accurately in cross-cultural communication, and improve their international vision and comprehensive quality.

4. Principles of teaching innovation under the integration of information technology

In the process of the integration of information technology and English teaching in middle schools, following certain principles of teaching innovation is the key to ensure the improvement of teaching effect and quality. These principles are helpful to guide teachers to use information technology rationally, optimize the teaching process and achieve teaching objectives.

(1) Student-centered principle: Students are the main body of learning, and teaching innovation should focus on meeting students' learning needs. Information technology makes it possible for individualized teaching. Teachers can learn about each student's learning characteristics, progress and weak links with the help of learning analysis technology, so as to formulate differentiated teaching strategies. For students with weak hearing, more targeted listening training resources can be pushed; Students who have difficulties in writing can provide special writing guidance courses. In this way, students' interest and initiative in learning can be stimulated, so that every student can be promoted in English learning.

(2) Scientific principle: Teaching innovation must follow the scientific laws of English teaching and ensure that the application of information technology helps students to understand and master knowledge. According to the law of language learning, input is the basis of output. Therefore, when using information technology, we should pay attention to providing students with a lot of authentic

and authentic language input, such as English original movies and radio programs. The choice of teaching methods should also be scientific and reasonable, for example, adopting task-driven teaching method to improve students' comprehensive English application ability in the process of completing specific tasks.

(3) The principle of combining innovation with practicality: Innovation is the driving force to promote the development of teaching, but practicality cannot be ignored while innovating. Teachers should actively explore new applications of information technology in English teaching, such as creating an immersive English learning environment by using virtual reality (VR) and augmented reality (AR) technologies to enhance students' learning experience. However, these innovative applications should be practical and conform to the actual teaching situation and the hardware conditions of the school. Some schools lack VR equipment, and teachers can choose to use online interactive platform to carry out group cooperative learning, which can also achieve good teaching results. The following is the adaptation of different innovative teaching methods to school hardware conditions (Figure 1):

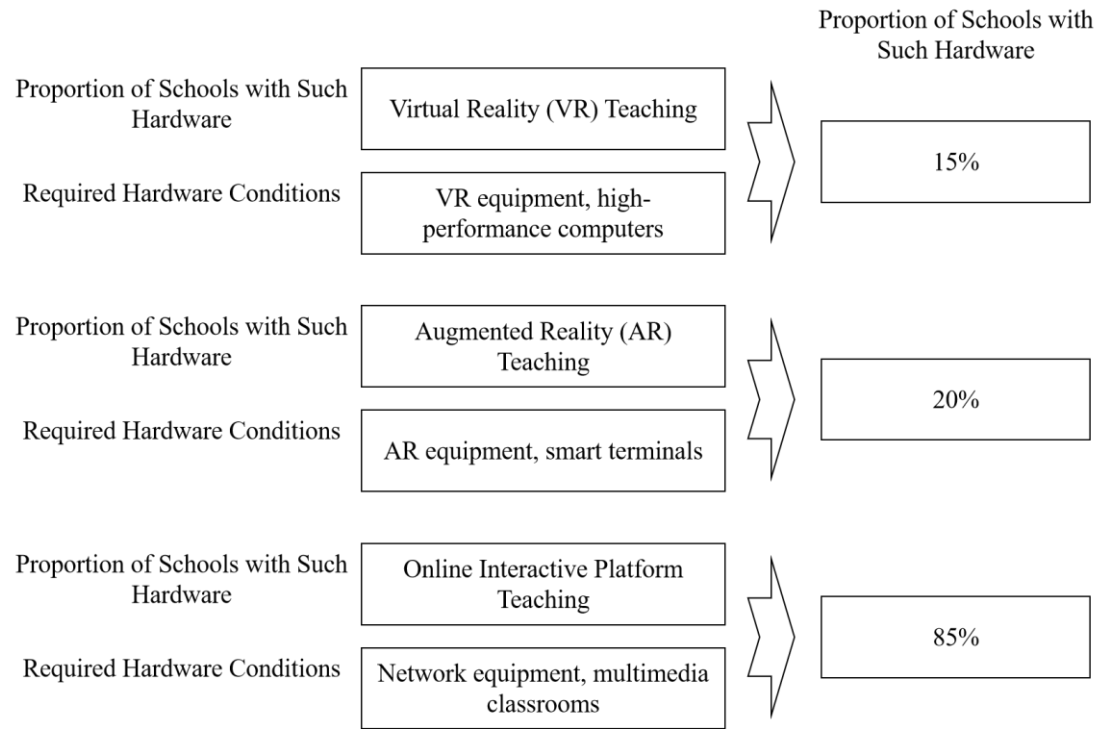


Figure 1 Adapting innovative teaching methods to school hardware conditions

To sum up, the innovation of middle school English teaching under the integration of information technology needs to take into account the principles of student-centered, scientific and the combination of innovation and practicality. Only in this way can we give full play to the advantages of information technology, improve the quality of English teaching and cultivate students' comprehensive English literacy.

5. Middle school English classroom teaching innovation path

5.1 Use multimedia resources to create English learning situations

Multimedia resources can create vivid and realistic English learning situations for students and stimulate their interest in learning. Teachers can use pictures, audio, video and other materials to build a situation closely related to the teaching content. For example, when teaching tourism-related

topics, play videos of famous scenic spots around the world, so that students can communicate and discuss in English naturally as if they were there. By creating situations, students can understand and use the English knowledge they have learned more easily. Different types of multimedia resources have different application effects in English teaching (Figure 2).

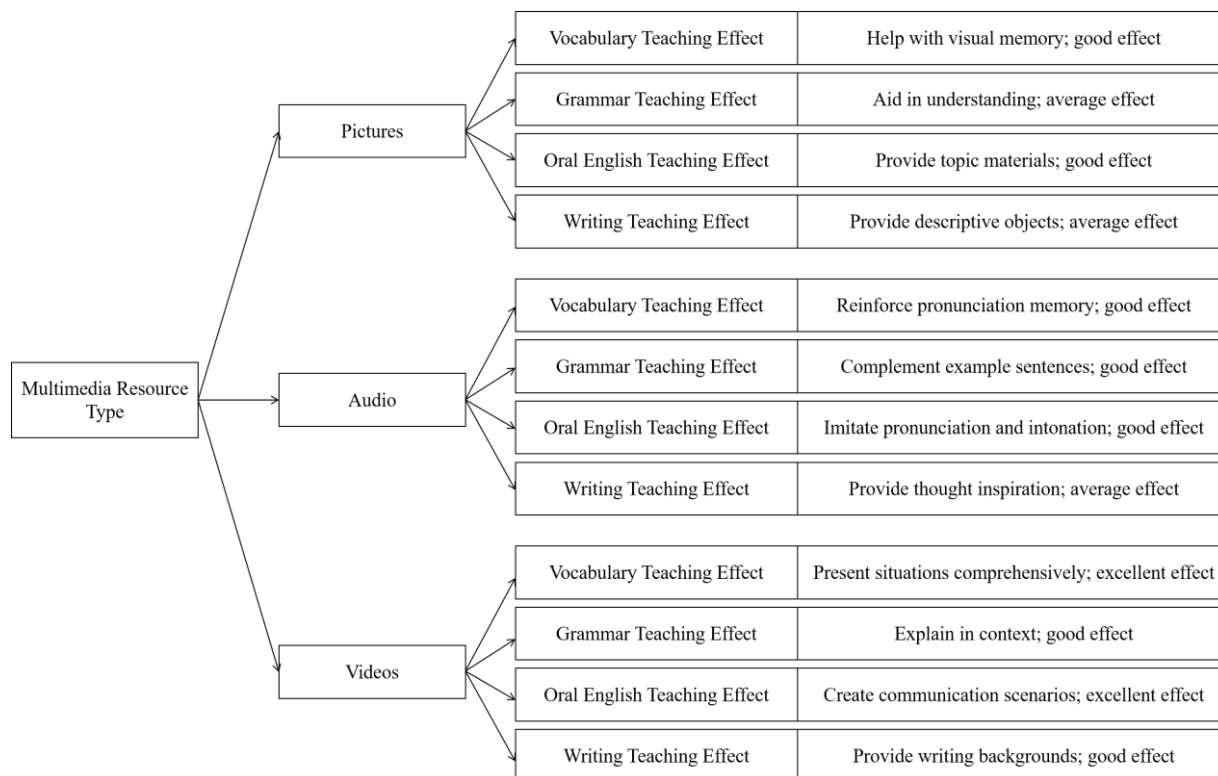


Figure 2 The application effect of multimedia resources in English teaching

5.2 Expanding teaching resources with online platform

Online platform brings together a huge amount of English learning resources, which greatly enriches the teaching content. Teachers can select high-quality online courses and learning materials to recommend to students, and broaden students' learning channels. Teachers can make use of the English courses of well-known universities in massive open online course platform to expose students to more extensive and in-depth English knowledge. The online platform also supports students' autonomous learning and interactive communication, and students can communicate their learning experiences and questions with teachers and classmates at any time. Teachers can also use the data analysis function of the platform to understand students' learning situation and adjust teaching strategies.

5.3 The use of information technology tools to carry out interactive teaching

Information technology tools provide diversified means for interactive teaching. Teachers can interact with students in real time with the help of interactive electronic whiteboard, such as word spelling contest, grammar fill-in and other activities on the whiteboard, so as to enhance the interest and participation in the classroom. In addition, the use of voting software, answering software, etc., organize classroom activities to stimulate students' sense of competition and enthusiasm for learning. Through group online collaboration platform, students can complete English project assignments together, and cultivate teamwork ability and comprehensive English application ability.

For example, when completing the project assignment of English drama performance, students can work together through the online platform, write scripts, rehearse and display the results, and improve their English ability and communication and cooperation ability in an all-round way.

By using multimedia resources to create situations, using online platforms to expand resources and using information technology tools to carry out interactive teaching, we can give full play to the advantages of information technology in middle school English classroom teaching, improve teaching quality and cultivate students' comprehensive English literacy.

6. Conclusions

Information technology brings opportunities and challenges to the innovation of English teaching in middle schools. Through the analysis of the current situation of the integration of information technology and English teaching in middle schools, we clearly realize that there are some problems such as superficial application of information technology, uneven ability of teachers, and different allocation of hardware facilities and resources in schools. But at the same time, the advantages of information technology also point out the direction for teaching innovation.

Guided by the goal of innovative teaching, improving students' comprehensive English application ability, cultivating autonomous learning ability and enhancing cross-cultural communication awareness and ability have become important goals of information technology integration teaching. With the abundant resources and various tools provided by information technology, it is possible to achieve these goals.

Based on the principle of student-centered, scientific, innovative and practical, creating English learning situations by using multimedia resources can effectively stimulate students' interest in learning. With the help of online platform, teaching resources are expanded and students' learning channels are broadened; Using information technology tools to carry out interactive teaching has improved students' participation and cooperation ability in class. These innovative paths are feasible and fruitful, which provide concrete practical direction for the deep integration of information technology and English teaching in middle schools.

With the continuous development of information technology, English teaching in middle schools should be further integrated with information technology. Schools need to strengthen the construction of hardware facilities and the allocation of resources. Teachers should continuously improve the application ability of information technology, give full play to the advantages of information technology, create a better and more efficient English learning environment for students, and comprehensively improve students' comprehensive English literacy to meet the demand for English talents in the era of globalization.

References

- [1] Liu Guobing, Ren Mengnan. *Virtual English Writing Classroom Teaching Guided by Semantic Wave Theory: Concept and Practice*[J]. *China Educational Technology*, 2024(8):126-131.
- [2] Zhao Jing. *Using Information Technology to Enhance Junior High School Students' English Learning Participation*[J]. *Research and Teaching of English in Primary and Secondary Schools*, 2020, (02):27-28.
- [3] Su Jiayu. *Application of Modern Information Technology in College English Education*[J]. *Food Research and Development*, 2022, 43(22):239-240.
- [4] Ding Jiayan. *Strategies for Deep Learning in Junior High School English Writing Teaching Empowered by Information Technology*[J]. *Research and Teaching of English in Primary and Secondary Schools*, 2024(6):43-47.
- [5] Li Tao, Zhang Lian. *The Relationship between College English Teachers' Cognition and Behavior in Information Technology and Curriculum Integration Teaching*[J]. *Foreign Language Audio-Visual Teaching*, 2022(6):39-45.
- [6] Zhu Li. *Research on the Influence of Multicultural Integration in the Information Age on College English Teaching*[J]. *Journal of Hubei Open Vocational College*, 2023, 36(17):163-164+167.
- [7] Fu Yongqing. *Practice of Promoting Deep Learning with Information Technology in High School English Unit*

Whole Teaching[J]. *Research and Teaching of English in Primary and Secondary Schools*, 2024(3):28-32.

[8] Zheng Yuefen. *Strategies for Cultivating Thinking Quality in High School English Teaching Integrated with Information Technology*[J]. *Research and Teaching of English in Primary and Secondary Schools*, 2022(7):16-20.