

The application and effects of educational technology in English education

Ling LIN

Hainan Vocational University of Science and Technology, Haikou 570100, China

Abstract: In the current information age, people interact with various technologies daily, and education, as a social activity for imparting knowledge and nurturing talents, naturally relies on technological support. The integration of information technology into curriculum and the application of modern educational technology in teaching are gradually changing people's perception and understanding of education. Based on this, the paper examines the application performance, effects, and drawbacks of educational technology in English education. It proposes targeted optimization suggestions with the aim of leveraging the advantages of educational technology to promote reforms in English education and enhance the quality of English education.

Key words: educational technology; English education; application effects

1 Introduction

Modern educational technology is the result of technological progress, injecting new vitality into the new curriculum reform. In English classroom teaching, modern educational technology, with its unique charm, has brought revolutionary changes to educational work. Introducing educational technology into English education can create a dynamic and engaging classroom learning environment, eliminating the constraints of traditional teaching methods on student thinking. The application of educational technology in English education not only enriches the forms of teaching but also optimizes English classroom teaching, comprehensively improving the quality of English education. Current educators should delve into the application pathways of educational technology in education, optimize the structure of English teaching, and elevate the level of English education.

2 Application of educational technology in English education

2.1 Application of multimedia courseware

From the perspective of multimedia courseware, it is a commonly used educational technology in English teaching. It presents English knowledge in a visual and auditory manner, combining sound and animation to intuitively demonstrate learning content for students, taking classroom teaching to a new level. Through abundant information and efficient presentation, it effectively broadens students' perspectives and stimulates their interest in learning. Moreover, students, guided by multimedia courseware, can read text, listen to recordings, appreciate images and animations, and even reinforce their learned knowledge through interactive exercises. Worth mentioning is the interactive questioning approach of multimedia, which can enhance students' language expression skills, further elevating the quality of English classroom teaching [1].

Copyright © 2023 by author(s) and Frontier Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>

2.2 Application of computer media

Regarding the application of computer media, it primarily involves the use of computer language and technology to develop listening teaching software tailored to English education. The use of listening software simulates real language communication environments, emphasises interactivity in the classroom and encourages students to practice language skills through simulated training. Additionally, teachers can guide students to open up learning pathways on network platforms, such as engaging in English conversations with foreign friends using specific software, thus practicing language skills in authentic contexts and enhancing students' language expression abilities [2].

2.3 Application of recording media

In English classrooms, using audio tapes for listening training is a simple and feasible method. Educators can make adjustments to existing materials for use in listening tests. For example, teachers can select a short passage for students to listen to and try to predict the following content based on the context. This practical and enjoyable training format not only enhances students' listening skills but also cultivates their overall abilities and inference capabilities, effectively improving students' listening proficiency.

2.4 Application of online media

Currently, the application of educational technology in the classroom is evident in the use of online media. Teachers and students can interact through computers, guiding students in independent English learning. In the online learning space, teachers serve as guides and facilitators, while students take on the role of learning leaders [3]. Leveraging the connectivity advantages of the international internet, teachers and students can access outstanding libraries, science museums, and other resources worldwide, search for study materials, and listen to knowledge explanations from quality teachers. This learning approach is more efficient and convenient, enabling students to better grasp knowledge and face future challenges.

3 Application effects of educational technology in English education

3.1 Achieving the integration of education and entertainment

For students, interest serves as an excellent guide throughout their learning journey, especially when presented in novel and intuitive ways that stimulate curiosity. Traditional teaching methods may limit the exploration of students' roles as active participants, weakening their desire for autonomous inquiry in mundane and compulsory learning activities. The introduction of educational technology in English education, leveraging students' curiosity and dynamism, stimulates various senses through vivid images, vibrant colors, appropriate explanations, and soothing music. This approach creates captivating learning scenarios using games, stories, and practical activities, fostering students' enthusiasm for participation. Through these applications, students' interest and desire for exploration are activated, achieving a harmonious integration of education and entertainment [4].

3.2 Developing students' language communication skills

English education is committed to cultivating listening, speaking, reading, and writing skills, with classroom teaching as the main battleground for implementing these abilities. By appropriately using animation, audio, video, and film through various media technologies, teachers can present English teaching content in a lively and interesting way, emphasizing the visual and enjoyable aspects of English teaching. Additionally, the roles of students and teachers change in English classrooms, where students become the main actors, and teachers act as guides and directors. The application of educational technology enables teachers to better play their roles as guides and directors, transforming abstract English knowledge into concrete content that is easier for students to understand and master. Moreover, the application of educational technology provides a high-quality language communication environment for teacher-student interactions. Language, as a tool for conveying information and expressing emotions, is essential in learning English for communication

[5]. Therefore, during teaching, it is crucial to ensure a balance between learning language knowledge and developing fundamental skills in listening, speaking, reading, and writing. Various forms of activities, such as free talk, duty reports, pair work, group work, and topic discussions, create a relaxed and enjoyable classroom atmosphere, encouraging students to participate actively and enhancing their language application abilities.

3.3 Enhancing student classroom participation

In English education, the application of educational technology is a crucial means of motivating students to actively participate. Traditional teaching methods, where teachers lecture and students listen, relegate students to supporting roles, resulting in weak student engagement. However, modern educational technology presents the teaching process in a new way, providing not only abundant learning resources but also novel content. It creates immersive learning scenarios close to students' lives, accelerates the pace of classroom teaching, and ensures the orderly progress of classroom activities. Furthermore, the application of educational technology showcases teachers' innovative ideas, changing the passive learning mode of teacher-centric lectures, and mobilizing students' enthusiasm for participation. Additionally, educational technology offers English education professionals new teaching methods, enabling innovation in traditional teaching approaches and content. It presents dynamic learning content in a vivid and engaging manner, guiding students to learn and apply knowledge in visually appealing scenes, facilitating understanding, memory retention, and pronunciation correction, ensuring the effectiveness of classroom teaching.

4 Drawbacks of educational technology application in English education

4.1 Strong dependence on technology

The application of educational technology in English education heavily relies on relevant technology and equipment. Technical malfunctions or equipment damage may interrupt teaching activities, severely affecting students' learning progress and potentially dampening their enthusiasm for learning. Excessive dependence on technology is a potential drawback of applying educational technology in English education.

4.2 Abundance and complexity of information resources

Educational technology provides an abundance of learning resources and tools, exposing students to vast amounts of information. However, excessive information might overwhelm students, causing confusion and bewilderment. When dealing with large amounts of information, students may need to spend more time and effort filtering and understanding, potentially affecting their learning efficiency and outcomes.

4.3 Lack of interpersonal interaction

While educational technology can provide rich online learning resources and simulate real-life scenarios, it cannot replace genuine interpersonal interaction. In English education, interpersonal interaction is crucial as it helps students practice and use language in authentic contexts. The absence of such interaction may lead to less-than-ideal language learning outcomes for students [6].

4.4 Insufficient technology training

The application of educational technology in English education requires teachers to possess certain technological skills. However, many teachers may lack the necessary technology training, limiting their ability to fully leverage the advantages of educational technology or promptly address technical issues. This limitation may hinder the effective application of educational technology in English education.

4.5 Information privacy concerns

The application of educational technology involves a large amount of personal information and data. If not properly managed and protected, this information may be leaked or used for inappropriate purposes, seriously violating students'

privacy rights. Therefore, addressing information privacy issues while utilizing educational technology is a crucial concern in its application in English education.

5 Innovative application strategies of educational technology in English education

5.1 Thoughtful application of educational technology to create diverse teaching scenarios

The application of educational technology in English education can create diverse teaching scenarios, providing students with varied learning environments and different learning experiences to effectively enhance their English proficiency. Therefore, in English education, teachers need to recognize the advantages of applying educational technology and use it judiciously to create diverse teaching scenarios, exercising students' abilities on different levels. Firstly, using images and videos to create scenarios: In the classroom, teachers can use pictures, charts, and videos to introduce new topics or concepts, helping students better understand and memorize [7]. For instance, when teaching units on "Weather" or "Geographical Position", teachers can search for relevant images and videos to show students. Secondly, creating game scenarios: In English classrooms, teachers can use educational technology to design interactive games, allowing students to learn and improve their English abilities in a relaxed and enjoyable atmosphere. For example, designing games that include listening, reading, writing, speaking tasks can comprehensively enhance students' English skills. Lastly, designing simulated scenarios: In English classrooms, teachers can utilize simulation scenario techniques to create scenarios close to students' lives, allowing students to simulate English dialogues in real-life situations. For instance, when teaching business English, teachers can use simulation technology to create scenarios of business negotiations, enabling students to role-play and simulate the negotiation process. Through learning English in diverse scenarios and using English knowledge for communication, students can not only enhance their English communication skills but also address the potential drawback of weak interactivity in the application of educational technology, ultimately improving the quality of English classroom teaching.

5.2 Flexible application of educational technology to optimize English teaching formats

The application of educational technology in English education can provide students with more efficient and personalized learning experiences, offering teachers additional teaching tools and resources to enhance teaching quality. Considering the limitations of educational technology application, educators need to flexibly apply various modern educational technologies to optimize English teaching formats. Firstly, utilizing intelligent teaching systems: Using intelligent teaching systems allows students to learn anytime, anywhere, with the system adjusting teaching content based on students' learning progress and abilities, achieving personalized teaching. Intelligent teaching systems can also track students' learning situations in real-time, providing feedback to teachers. Secondly, adopting online courses: Online courses offer students a more flexible learning approach, allowing them to study English courses at any time and from any location. Online courses may include various interactive elements such as discussion forums and online quizzes to enhance students' learning outcomes [8]. Thirdly, employing virtual reality technology: Virtual reality technology can create an immersive learning environment, helping students better understand and master English knowledge. For example, virtual reality technology can simulate real conversation scenarios, allowing students to interact with virtual characters and improve their oral expression abilities. Fourthly, leveraging artificial intelligence assistance: Artificial intelligence can provide students with a more personalized learning experience. For instance, intelligent speech recognition can help students practice pronunciation, while intelligent text translation can assist students in learning translation skills between different languages. Lastly, adopting mobile learning technology: Mobile learning is an emerging educational technology that enables students to learn through smartphones or tablets. Mobile learning offers a convenient way for students to study, even while on the subway or bus. By flexibly applying various educational technologies during teaching, teachers can activate students'

interest, create a positive classroom atmosphere, and ensure overall teaching quality.

5.3 Utilizing the advantages of educational technology to enrich English teaching resources

In English teaching, educational technology can provide rich teaching resources, broadening students' perspectives. Therefore, in English classrooms, teachers need to explore the advantages of educational technology and use various methods to access abundant teaching resources, enriching classroom teaching content. Firstly, using internet searches to filter resources: Teachers can use internet searches to find and filter resources suitable for English teaching, such as English learning websites, online courses, teaching videos, audio, images, etc. These resources serve as supplements to textbooks, helping students broaden their horizons and enhance their understanding and mastery of English. Secondly, integrating digital resources: Teachers should integrate the found digital resources, such as creating e-books or interactive quiz questions, to facilitate their use in classroom teaching. Multimedia technology, such as using PowerPoint, Flash animations, videos, to create English teaching presentations, helps students better understand English knowledge. These resources can also be shared with students to encourage self-directed learning. Thirdly, utilizing online learning platforms: Teachers can leverage resources from online learning platforms like Duolingo, Shanbay, etc., to provide students with opportunities for online English learning. These platforms often feature gamified learning elements, enhancing students' learning interest and motivation. Lastly, using intelligent teaching software to analyze student performance: Intelligent teaching software can analyze students' learning performance and progress, helping teachers better understand students' learning situations and provide personalized teaching guidance. However, when using educational technology, teachers need to choose appropriate educational technology tools and methods based on teaching content and student needs, enriching teaching resources and enhancing the effectiveness of English education.

5.4 Cultivating teachers' information literacy to improve educational technology application abilities

Considering the application of educational technology in English education, which has both positive effects and certain shortcomings, it is necessary to strengthen the cultivation of information literacy among English teachers and enhance their abilities in applying educational technology. Therefore, schools need to carry out training for English teachers, helping them master the application skills of educational technology and improve their teaching levels. Firstly, understanding educational technology: English teachers need to be guided to understand the basic concepts and scope of educational technology, including various educational software, online learning platforms, digital educational resources, etc. Secondly, improving computer operation skills: Assistance should be provided to help teachers improve basic computer operation skills, including Windows operating system, Office software, email, web browsing, etc. Special training can be provided for older teachers if necessary. Thirdly, learning to create presentations: Schools should invite professionals to guide teachers in learning how to create presentations, understanding how to use elements such as slides, images, videos, and combining them with textbooks to create lively and interesting presentations. At the same time, teachers should be guided on how to use online educational resources effectively, such as audio and video elements. Fourthly, mastering online education platforms: During training, teachers should be guided to understand and master common online education platforms, such as Class In, Rain Classroom, Smart Tree, etc. Teachers should learn how to use these platforms for online teaching, assignment arrangements, and grading. Encouraging teachers to explore digital teaching methods, such as flipped classrooms and blended learning, can help teachers understand the advantages and implementation methods of these teaching approaches. Lastly, regular training and assessment: Schools should regularly organize teachers to participate in educational technology training courses and assess their skills to ensure that they can master and apply the skills they have learned. Encouraging teachers to participate in various educational technology competitions and seminars can help them improve their skills.

6 Conclusion

In conclusion, modern educational technology, as an advanced teaching method and philosophy, shines with its advantages of intuitiveness, flexibility, real-time capabilities, and three-dimensionality. It breaks free from the confines of traditional classrooms, extending teaching into every corner of life through various media and platforms. This innovative teaching approach has naturally garnered enthusiastic support and acclaim from teachers and students alike. Therefore, educators should recognize that modern educational technology is driving the development of education and teaching. Its emergence makes teaching more efficient, dynamic, and diversified. Therefore, in the field of English education, educators should harness the advantages of modern technology to propel the continuous development of English education.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Su JY. 2022. The application of modern information technology in college English education. *Food Research and Development*, 43(22):239-240.
- [2] Wang JX. 2022. The application of new media technology in the high-quality development of college English education. *English Square*, 28:60-62.
- [3] Dang H. 2022. Research on the application of new media technology in college English education. *Overseas English*, 3:22-23.
- [4] Xu L. 2021. Analysis of the application of modern information technology in high school English education. *High School English*, 20:100.
- [5] Sha R. 2021. Research on the application of new media technology in college English education. *New Curriculum Teaching (Electronic Edition)*, 1:152-153.
- [6] Zhang XQ. 2020. Research on the application of new media technology in college English education. *Overseas English*, 1:62-63.
- [7] Cui XZ, Chen J, Liu C. 2019. The application of micro-lesson technology in college English education. *Modern Communication*, 15:196-197.
- [8] Dai M. 2019. A microscopic exploration of the application of new media technology in college English education. *Science and Technology Information*, 17(15):144-145.