

Research on the Practice of Digital Empowerment of English Teaching in Higher Vocational Colleges

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ABSTRACT

With the rapid development of information science and technology, higher education has gradually moved towards digitalization. This paper mainly studies the role and influence of digital technology on English teaching in higher vocational colleges, elaborates on the problems existing in the actual implementation of digital technology, and finally proposes some methods to deconstruct the problems. The limitations of digital technology in enhancing teaching ability, promoting personalized teaching and broadening horizons were studied, such as inadequate technology and infrastructure, inconsistent qualities of teachers, and gaps in students' information capabilities, etc. Finally, methods such as building digital education platforms, conducting teacher training and integrating digital resources are proposed to provide effective support for English teaching in higher vocational colleges.

KEYWORDS

Digital literacy; College English; Personalized teaching; Digital content

1 The value of digital empowerment in English teaching in higher vocational colleges is reflected

1.1 Multi-dimensional drivers for enhancing teaching quality and learning outcomes

Multiple driving forces stem from digital technology improving the teaching quality and efficiency of English courses in higher vocational colleges. In traditional teaching, teachers usually deal with teaching tasks based on the existing teaching materials, teaching methods and strategies, and it is difficult for them to respond to students' actual learning needs in a timely manner in terms of teaching content and pace. First, digital technology has endowed teachers with more abundant and vivid teaching materials and methods, such as smart classrooms, online examinations, and real-time feedback, which enables teachers to keep track of students' actual learning status at any time and promptly identify and solve problems. Through data statistics, teachers can understand and grasp the learning progress and knowledge shortcomings of each student, and thus make targeted arrangements and formulates of teaching content in class, avoiding the "one-size-fits-all" teaching situation caused by traditional teaching arrangements. Secondly, through the utilization of digital technology, students' enthusiasm and initiative in learning have been enhanced. The interactive communication in the online platform provides students with numerous opportunities for classroom learning and discussion. Whether it is online communication, video communication, or online tasks and tests, students can have a large number of participation opportunities and a high participation rate. Students can make study plans according to their own learning pace and time, and study independently through learning platforms and recorded videos, truly achieving the goal of personalized teaching.

1.2 Promote the precise implementation of personalized learning and differentiated teaching

The advent of the digital age has provided sufficient driving force for educational transformation, bringing about significant changes in educational concepts and models. Under the background of digitalization, the temporal and spatial limitations of traditional teaching have been broken, broadening the boundaries of the classroom. Teachers need to intelligently construct the teaching and learning environment to form an integrated online and offline teaching model. Secondly, digitalization has had a profound impact on education, transforming traditional educational concepts and the roles of educational subjects. Teaching students in accordance with their aptitudes and personalized learning are regarded as important trends in today's educational development, and digital technology supports the realization of this aspect. In a digital environment, customized textbooks and study plans can be provided through technology to meet students' different requirements, interests and learning rates. Traditional classroom teaching is unable to take into account the individualized needs of each student, so the same teaching methods are often used to teach students.

1.3 Break through the limitations of time and space and broaden the global perspective

Computer technology can also broaden students' global perspectives. Students can access educational information resources from their schools and abroad through online platforms. On this basis, they can deeply experience and gain a comprehensive understanding of the richness of relevant knowledge and knowledge by communicating with teachers from other countries, watching online teaching videos of outstanding French educators, or engaging in cross-cultural activities. For instance, on some English learning websites, there are many foreign language learning teaching materials from different countries and regions. By watching English explanation videos of people with different pronunciation habits and cultural backgrounds, students discover that English in the world is not just one language, but a colorful and diverse world. This is conducive to promoting students to achieve the goal of international learning. It not only breaks the limitations of traditional English learning, but also helps students develop cross-cultural cognition and a global perspective, laying a solid foundation for future cross-border life and social work. Therefore, with the help of digital technology, not only has the traditional way of learning English been changed, but it also helps to open up rich global educational resources for students and enable them to understand the world from multiple dimensions.

2 Constraints on English teaching in higher vocational colleges empowered by digital technology

2.1 Backwardness of technical infrastructure and the existence of the digital divide

Although digitalization is beneficial to the teaching of English in higher vocational colleges, the digital divide and insufficient hardware are the main problems restricting its implementation and application. Most vocational colleges, especially small ones, are unable to fully upgrade their technologies. Computers are generally outdated and the network speed cannot support the high-definition playback and online communication of online courses. Moreover, some relatively remote universities, due to tight funds and lagging infrastructure construction, may be unable to be equipped with technical facilities and network cables to support the implementation of modern digital teaching at all. As a result, schools and teachers and students will encounter problems such as a lack of equipment and unstable signals, which directly leads to a low utilization rate. Moreover, the digital divide leads to differences in the access, quality and level of digital educational materials among students and teachers in different regions and schools. For some schools that are relatively remote or have poor economic conditions, some students lack electronic devices and Internet support and cannot conduct online learning, which increases the difficulty of learning. This mismatch in infrastructure not only hinders the implementation of educational informatization, but also widens the gap of educational resources among regions and between urban and rural areas, becoming an important factor restricting the implementation of the flipped classroom model.

2.2 Insufficiency of teaching staff and differences in teachers' adaptability

In higher vocational colleges, due to the insufficiency of teacher resources, especially the absence of some teachers who cannot effectively adapt to digital education, this has also become one of the main factors restricting digital education. Even though digital technology has been widely applied in current school education, many English teachers still have a resistant mentality or lack technical skills, and thus cannot apply digital tools well in traditional teaching. Especially for older teachers, they may not have received any technical training at all, are not familiar with new teaching software and tools, and are worried about how to incorporate online courses into offline classrooms. This seriously affects their digital teaching. Meanwhile, although some universities have made significant investments in digital educational facilities, due to the lack of specialized digital technology assistance and teacher training, some teachers encounter difficulties during the usage process, and even technical malfunctions occur, making digital teaching impossible to carry out.

2.3 The uneven information literacy of students and the lack of autonomous learning ability

Two problems encountered in the digitalization process of English courses in higher vocational colleges are: the differences in students' understanding of digital information and self-learning ability, and these two differences will affect the efficiency and universality of the numbers. Although the application of digital technology does provide students with

the convenience of free choice, in practical use, this right to choose has not fully benefited every student. Therefore, in addition to emphasizing students' operational skills in digital technology, we should also take into account their ability to use digital information, such as screening, analyzing, judging and applying. However, many vocational college students encounter obstacles in finding resources and using digital technologies due to the lack of computer science in basic education during primary and secondary school, or insufficient digital technology support and the Internet at home. For example, they are unable to operate online learning courseware and cannot find the most suitable resources for themselves from the courseware resource library to assist their learning. It may even lead to the predicament of excessive use of the Internet, resulting in reduced self-control, inability to concentrate and effective learning.

3 Practical path of digital empowerment for English teaching in higher vocational colleges

3.1 Build a digital teaching platform and create an intelligent learning environment

To promote the comprehensive application of English teaching in higher vocational education, we can build a network teaching platform integrating functions such as online teaching, communication and exchange, and teaching resource management, including basic functional services and intelligent teaching assistance systems. Each institution can choose the corresponding platform based on its own characteristics and combine the existing teaching resources to form a unique configuration. The platform can have strong interactivity. Through online classes, forums, instant feedback and other forms, it can bring teachers and students closer, enhance students' participation, increase the activity of the classroom, and break through the limitations of time and place when teachers give lessons in the past. In addition, it is necessary to seize the opportunity of establishing an intelligent learning environment, pay attention to the analysis of data and personalized suggestions. For instance, by capturing relevant information such as students' academic progress, learning interactions, and test scores, intelligent learning systems can proactively recommend appropriate learning materials or teaching resources that are suitable for each student, enabling them to have personalized learning experiences. This intelligent learning assistant not only enables students to understand their own learning weaknesses, but also proposes their own learning paths based on their knowledge habits and learning patterns, thereby enhancing their learning outcomes.

3.2 Strengthen teacher training and teaching reform to enhance the digital literacy of education

The professional quality of teachers is a key factor influencing the success of English education in higher vocational colleges promoted by digitalization. Therefore, the cultivation of teachers' informatization ability needs to be emphasized. Higher vocational colleges should conduct regular training to help teachers understand the teaching uses of modern information-based teaching equipment and online platforms, and be able to master how to apply information technology to traditional teaching models. Not only should the operation methods of conventional teaching software and online platforms be imparted to teachers, but also attention should be paid to the transformation of teaching concepts, especially how to utilize information technology to enhance students' learning enthusiasm and learning efficiency. Schools should encourage teachers to explore and apply methods such as flipped classrooms, project-based teaching, and group collaboration to better suit the nature of digital teaching, and to mobilize and stimulate students' learning initiative and creativity.

3.3 Optimize the integration and sharing of digital resources and promote the comprehensive coverage of learning resources

In order to enhance the influence of digitalization on English teaching in higher vocational colleges, when carrying out digitalization construction in colleges and universities, it is necessary to improve the integration and sharing degree of various digital resources, so that teaching resources can reach all students and also provide sufficient teaching support for teachers. Not only the collection and processing of data, but also the integration of numbers should include the effective selection and classification of information, so as to accurately meet the needs of learners and teaching plans. The school needs to build a digital resource pool covering all kinds of academic materials, including teaching materials, audio-visual materials, language learning, question banks, etc. Through this resource library, teachers and students can obtain the

learning materials they need in a timely manner when needed, avoiding the problem of repeated investment and waste. To maximize the utilization of all resources, a university should integrate internal and external high-quality resources to the greatest extent, especially by establishing cooperative relationships with other universities or university networks and sharing resources.

4 Conclusion

In conclusion, digital and information education in higher vocational colleges has played a significant role, not only enhancing the educational level but also bringing certain benefits to students' personal development and broadening their international horizons. However, in reality, there are still important issues such as in terms of digital technology equipment, the construction of the teaching staff, and the information literacy of students. Only by solving these problems can we break through the constraints and give full play to the advantages of digital education. In the future development of higher vocational college education, more investment and research in digital education should be made, and the integration of digital technology and English teaching should be enhanced. Based on this, there is a plan to cultivate more world-class outstanding high-end practical talents.

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