

Research & practice of digital technology to boost the reform of English teaching in secondary vocational schools in key counties

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Abstract. There are many researches on the education reform of primary and secondary schools and universities in China, but there is almost no research on the reform of English teaching in secondary vocational education of key national minority counties in Guangxi. This paper discusses the introduction of innovative English classroom teaching models and teaching methods in developed areas, promoting the application of digital technology in secondary vocational English teaching, focusing on the reform of student-centered classroom teaching model, and improves the English learning performance and English level of secondary vocational students in key counties supported by the Nation. This article has mainly used data literature summarization, empirical research method, comparative analysis methods. It can get the result that basing on the requirements of secondary vocational talents under the background of digital age, this thesis extracts the core elements of improving the quality and level of English teaching in secondary vocational schools and carries out effective classroom teaching reform. There is practical significance for the new measures to improve the level of minority secondary vocational education and promote educational equity.

1 Introduction

In January 2022, the National Education Work Conference proposed the implementation of the "Strategic Action on Digitization of Education" to vigorously develop vocational education that ADAPTS to the needs of new technologies and industrial changes. This strategic action further indicates that the implementation of digital transformation of teaching, the construction of high-quality courses as the foothold and

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integration point of the "three education" reform, promoting the "teaching revolution" of vocational education "to serve students' learning as the fundamental" in the digital era. *The Key Points of Work of the Ministry of Education in 2022* proposed to promote the innovative development of regional education and implement the strategic actions of education digitization, which provides a clear direction for the implementation of education work in 2022 and has important guiding significance. On November 30, 2022, the Ministry of Education issued the Standards for Digital Literacy for Teachers. On January 28, 2023, the National Conference on Education Work was held and it was clearly pointed out that the digitization of education and the construction of a learning society and a learning country should be coordinated and continued to deepen the comprehensive reform in the field of education. On May 29, 2023, President Xi Jinping stressed "We will accelerate the modernization of education, integrate the promotion of education equity into all aspects of deepening comprehensive reform in the field of education, narrow the gaps in education between urban and rural areas, regions, schools and groups, and strive to ensure that every child can enjoy fair and quality education. We will further promote digital education to provide effective support for personalized learning, lifelong learning, expanding the coverage of educational resources and modernizing education" Our country is paying more and more attention to secondary vocational education, according to the Organization Department of the CPC Central Committee, the Ministry of Education and other eight ministries and commissions issued the "National Rural revitalization Key help county education talent" "Group" work plan "spirit, 2022 the state focus on key help county education talent help work, In the poorest minority counties in Guangxi, "group" education and talent assistance work was carried out.

The "classroom revolution" of vocational education enabled by intelligent technology is considered to be the core driving force to enhance the adaptability of vocational education development. Therefore, how to use intelligent technology to promote the "classroom revolution" to improve the overall efficiency of classroom teaching has become a key factor affecting the high-quality development of vocational education. Digital technology provides a new teaching method, learning method and unprecedented abundant resources for foreign language teaching, and also puts forward new requirements for information literacy of English teachers in secondary vocational schools. Faced with the challenges caused by new technologies such as digitalization, intelligence and big data, how do secondary vocational English teachers adapt to the needs of digital technology to improve teaching quality? How to effectively improve the teaching quality and teaching level of secondary vocational English in key counties is imminent.

2 Research summary at home and abroad of documents

2.1 Research abroad of documents

Aleven^[1](2016) points out that AI can be a tool set to improve the adaptability of educational technology. Ersozlu^[2](2021)indicated that classroom simulation tools are emerging constantly, which can allow teachers to practice their skills in real situations. Molenaar^[3](2022) ponders the challenge of control in blended teaching situations: When should the teacher be in control? What things can be delegated to a computing system? How can teachers monitor AI systems and, if necessary, reverse their decisions or take back control? The report *Artificial Intelligence and the Future of Teaching and Learning*^[4] released by the U.S. Department of Education in May 2023 pointed out that because AI systems and tools do not fully meet the goals of learning, we must design educational

environments that place AI in the right place so that educators and other adults can effectively use these tools for teaching and learning.

2.2 Domestic research review

Li Tao and Zhang Lian^[5] (2022) pointed out that the digital transformation of education in China has brought opportunities and challenges to the deep integration of information technology and curriculum, and it is urgent to continuously strengthen the construction of high-quality teachers. Hu Jiasheng and Qi Yajuan^[6] (2023) believe that teachers should guide and accompany students seamlessly in the face of powerful language intelligence tools and enter the process of intelligent and intelligent foreign language learning and practice. In the interactive question and answer process with the machine, cultivate students' thirst for knowledge, desire to explore and problem awareness, and train students' various abilities. Huang Maoyong and Ye Shan^[7] (2023) believe that the "classroom revolution" enabled by intelligent technology in higher vocational education is considered to be the core driving force for improving the adaptability of vocational education development. Hence, how to use intelligent technology to promote the "classroom revolution" to improve the overall efficiency of classroom teaching has become a key factor affecting the high-quality development of vocational education.

The above research is mainly aimed at undergraduate and higher vocational studies, and there is almost no research on the reform of English teaching in secondary vocational schools. Therefore, it is very necessary to study and practice the reform of English teaching in secondary vocational schools in key counties.

3 The national key support county secondary vocational English teaching reform practice

3.1 Strengthen the construction of digital teaching staff.

Establish a teaching and research team with the teachers of the recipient schools, regularly carry out special lectures and various educational and teaching seminars, and constantly improve the quality of education and teaching in the recipient schools. It is necessary to actively implement the national strategy of digitization of education, rely on the national smart education platform, use high-quality education and teaching resources to improve the quality of education and teaching services for teachers in assisted schools, regularly carry out special lectures and various education and teaching seminars, and constantly improve the quality of education and teaching in assisted schools. President Xi Jinping^[8](2023)points out "A strong teacher is a strong teacher" Wu Yan^[9](2022), Vice Minister of the Ministry of Education, pointed out that teachers are the key to talent training, and the pain point of teaching reform is teachers. At present, the connotation of the construction of teachers in China should especially focus on strengthening the political force, cultural force, drive force, cross-border force and information literacy of members of grassroots teaching organizations. Specifically, it can explore the operation mode of teacher learning community in the era of "intelligence +", organize cloud observation and cloud mill lessons, and also carry out data-driven teacher discourse research or multi-modal teacher classroom teaching behavior research. In consequence, it is crucial to improve the construction of teachers' digital ability. First, we should focus on improving the digital literacy and digital ability of secondary vocational English teachers. Teachers should not only master advanced technologies, but also have the ability to transform them into teaching. Second, we should promote the innovation of teaching methods of English

teachers in secondary vocational schools. On learning situation analysis -- intelligent learning situation analysis based on big data; With the help of digital technology, it breaks through the limitations of teachers' individual experience and time, and on the basis of paying attention to the learning situation of class groups, based on the self-study data before class, the completion of homework, and the mastery of knowledge points, superposes the learning portfolio of students, and accurately grasps each student's learning habits and learning basis. In terms of teaching strategy -- implementing precision teaching based on big data. With the support of digital technology, students' learning process data is comprehensively recorded. Through data mining, students' learning progress is accurately mastered, teaching content is accurately adjusted, teaching guidance is provided, and homework tasks are assigned. In teaching evaluation -- based on big data to carry out multiple evaluation, value-added evaluation. Third, strengthen the construction of digital secondary vocational English digital resources, cultivate teachers' ability to develop digital resources (mainly including professional and curriculum services, textbook resources, virtual simulation training center and teacher service center), explore the role of mathematics technology in resource construction, pay attention to the learner-centered development of digital teaching resources, and accelerate the promotion of the role of digital teaching resources in teaching. Improve teachers' digital teaching ability in practice. Fourth, focus on improving the construction of digital environment for English education in secondary vocational schools. Fifth, focus on promoting digital training and teaching ability competitions for secondary vocational English teachers.

3.2 Promote classroom teaching reform, encourage students to study hard and enjoy learning, and effectively improve classroom teaching.

Innovative classroom teaching model, technology enables to create a modern, efficient, intelligent classroom. Taking the opportunity of matching assistance from the Information Center of Luohu district Education Bureau in Shenzhen and Longlin Vocational School, combined with the powerful function of information data and taking the information network platform as the carrier, we invite the outstanding elite teachers and experts of Luohu district in Shenzhen IT Curriculum Reform Demonstration School to give lectures and demonstrate teaching in vocational school, constantly explore and improve the teaching model suitable for Longlin vocational School, and build a modern and efficient classroom. Give teachers and students new classroom vitality. Enhance the interaction between teachers and students in teaching and activate the vitality of English classroom. Under the background of education informatization, the traditional English classroom teaching mode of "teacher-teacher-student receiving" has been gradually eliminated, and the teaching mode of teacher-student interaction and cooperation has been accepted and favored by teachers and students. In current secondary vocational schools, Siwo integrated computer and multimedia are very common and frequently used information teaching equipment. Therefore, teachers can use this as a starting point when implementing the online and offline mixed teaching mode in the design of secondary vocational English teaching. Combined with a variety of information teaching technologies such as Superstar Learning platform, Wechat, Dingding, Rain classroom, etc., more flexible and diversified interactive English teaching activities for teachers and students are launched. The core link of educational reform is curriculum reform, and the core link of curriculum reform is classroom teaching. Classroom teaching reform leverages the reform of talents training in the orientation of the university, grasping the main battlefield of "45-minute class", comprehensively promotes classroom teaching reform, and realizes six major changes in teaching mode, academic evaluation, and the roles of teachers and students. Taking

classroom teaching reform as a breakthrough, we should seek the quality of classroom teaching, cultivate talents and produce ideas.

3.3 Practice behavior management standard, promote efficient classroom construction, create learner-centered classroom teaching model.

Most secondary vocational students have a strong aversion to learning, and there is still a large room for improvement in self-learning habits and abilities, which makes it easy for secondary vocational students to appear in the actual English teaching, such as not actively participating in learning and deviating learning track. This will not only seriously limit the improvement of the English teaching level in secondary vocational schools, but also bring a negative impact on the development of students' English literacy and comprehensive ability. In order to avoid this kind of situation effectively, secondary vocational English teachers should reasonably apply information teaching methods to carry out "online + offline" comprehensive regulation and control of students' learning behavior. In order to change the teacher-student relationship, we must eliminate the old concepts of "teacher-center" and "teaching material center" and finally realize "student-centered" teaching. Teachers guide students to explore and even cooperate with teachers to explore the learning process, help students build new knowledge, and then inspire students to explore the unknown. Establishing a good relationship between teachers and students is conducive to the optimization of classroom teaching effect, and both teachers and students are happy, which can stimulate the internal motivation of teaching and learning. Establish the co-creation teacher-student relationship based on the equal status of teachers and students required by our society, so that the classroom becomes a school full of vitality and students enjoy. At the same time, comprehensive quality evaluation is implemented, school education and teaching reform under the background of the new college entrance examination is explored, and with the help of cloud computing and big data modern information technology, information management platform for comprehensive quality evaluation of students is established, and electronic files for students' growth and development are established. We will improve the guidance and management mechanism for all teachers in the whole process and in all directions, and effectively guide every student to strengthen their ideals and beliefs, cultivate patriotic feelings, improve moral cultivation, increase knowledge and insight, enhance the spirit of struggle, and improve comprehensive quality, so as to achieve comprehensive and personalized development.

3.4 Strengthen the deep integration of information technology and teaching, improve the construction of secondary vocational English courses, and enrich classroom teaching resources.

Make full use of information technology to build a teaching platform for deep learning. The new teaching environment is more conducive to students' independent learning, conducive to teacher-student interaction, and students can use more fragmented time to learn, thus creating more effective classroom teaching. The abundance of teaching resources is of great significance to the construction of efficient classroom. In the teaching of English courses in secondary vocational schools, teachers can improve English teaching resources based on the actual learning situation of students and rely on super star learning to increase or decrease, so as to effectively improve the pertinence and accuracy of English teaching in secondary vocational schools and provide guarantee for the development and improvement of students' English learning level and core accomplishment.

3.5 The core of talent training turns to the cultivation of students' innovative ability.

It is necessary to arouse and stimulate teachers' teaching innovation concept effectively. For "classroom revolution", teachers' innovation is its driving force. Without teachers' teaching innovation, it is impossible to develop students' innovative ability. It is advocated that teachers and students participate in various kinds of teaching, innovation and entrepreneurship competitions and skill competitions, and enhance teaching and promote learning through competitions, so as to promote the cultivation of students' innovative ability and pioneering thinking. In the teaching process, we should carry on the following aspects of thinking: teaching materials and teaching content innovation - teaching content has been updated, innovation? Innovation of examples and exercises - What updates or innovations have been made in the content of examples, exercises and exercises in the course? Innovation in teaching methods - What methods have been used in the teaching process that have not been used before? Innovation in teaching technology - What previously unused technologies have been introduced into the teaching process? Innovation of Teaching Resources -- What new resources have been developed in teaching? Innovative way of organizing - What are the new ways of organizing teaching activities? Innovation in classroom quality Improvement methods - What are the new approaches to achieving rapid iterative classroom improvement? Innovation in teaching technology - What previously unused technologies have been introduced into the teaching process? Innovation of Teaching Resources -- What new resources have been developed in teaching? Innovative way of organizing - What are the new ways of organizing teaching activities? Innovation in classroom quality Improvement methods - What are the new approaches to achieving rapid iterative classroom improvement?

3.6 The teaching method has changed from imparting to inverting interaction.

Relying on the network platform, let students "move", collect and produce multimedia materials, accumulate or design project cases that meet the teaching objectives, create simulation training rooms, break through the shackles of knowledge imparted teaching through project-driven, simulation scenario creation, role playing and other teaching methods, and truly implement "3P" teaching based on problems, projects and participation. Let students wear equipment, through a more intuitive form to experience the state of life, highlight the value and charm of knowledge acquisition "process", the fundamental lies in the construction of the process, there is a modern vocational education performance of the new classroom teaching.

4 Conclusions

With the deepening of the reform of online and offline hybrid teaching, the focus of online and offline teaching is no longer mixing, but integration, which focuses on the combination of modern educational technology and classroom teaching from the aspects of online resource construction, online class time arrangement, online learning data analysis, etc., and achieves the combination of online and offline teaching from the aspects of form, means and quantity. Integration emphasizes the top-level design of online and offline teaching from the aspects of curriculum teaching objectives, teaching content and activity design, so as to improve the integration of online and offline teaching, progressively achieve the goal of curriculum education, and achieve the integration of online and offline teaching from the aspects of content, purpose and quality.

All in all, compared with ordinary middle schools, the source of students in secondary vocational schools is more diverse and complicated, which to some extent aggravates the difficulty of English teaching in secondary vocational schools. In order to ensure the professional development, sustainable development and lifelong development of secondary vocational students, contemporary secondary vocational English teachers must follow the footsteps of the modernization development of vocational education in China, reasonably introduce and practice the mixed teaching mode of online and offline, and adopt necessary means and technologies to amplify the advantages of both. Thus, while effectively improving the effectiveness and accuracy of English teaching in secondary vocational schools, the English learning level and core quality of secondary vocational students can be further developed and improved.

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