

# Research on the application of Blended Teaching in Secondary Vocational Electronic Technology Course Teaching

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**Abstract:** with the development of the times, China's educational technology is also progressing at a high speed. Especially in today's information technology era, online teaching has become an educational trend, and promotes the development of China's education in the direction of modernization. Hybrid teaching is a new education mode bred under the background of this era. Its core is to carry out teaching in the way of effective combination of online and offline, and use the advantages of information technology to improve the quality of teaching, so as to promote the development of education modernization in China. Therefore, this paper studies the application of Blended Teaching in the teaching of secondary vocational electronic technology course. Its purpose is to find the effective application strategy of Blended Teaching in vocational education, so as to improve the talent training system of Vocational Colleges and cultivate more excellent professional talents for our country.

**Key words:** blended teaching; Secondary vocational electronic technology courses; information technology

Secondary vocational electronic technology course is a highly professional course, which not only requires students to have rich theoretical knowledge, but also need them to be able to master relevant professional technology, so as to truly become an electronic technology talent and find their own professional development path. Especially at present, electronic technology enterprises have become one of the pillar industries in China and have an important impact on the development of China's economy. In this context, China's electronic technology enterprises need a large number of basic talents to maintain the operation and development of enterprises. As the main way to cultivate basic talents in China, secondary vocational colleges naturally shoulder important responsibilities. However, there are some problems in the teaching of electronic technology course in secondary vocational schools in China, and hybrid teaching is an effective way to solve these problems and improve the talent training system in secondary vocational schools. Therefore, how to better apply blended teaching in secondary vocational electronic technology course teaching has become the main task of the professional teachers.

## 1 The concept and significance of Blended Teaching

### 1. The concept of Blended Teaching

Blended teaching is a new education mode in the new era, and its core is to effectively combine online teaching and offline teaching by using information technology. Teachers can use information technology in online teaching to carry out relevant theoretical courses for students and lay the foundation for students' learning, so as to help students better improve their knowledge and enhance their ability. At the same time, teachers can cooperate with offline teaching to strengthen students' learning experience and practical operation, so that students can strengthen theoretical cognition and realize the effective cultivation of practical ability with the help of offline teaching while having rich theoretical knowledge. Moreover, teachers can use the online and offline teaching mode to make a comprehensive and comprehensive evaluation of students' learning, so as to help students better understand themselves and improve their ability, and ultimately achieve the purpose of improving the quality of teaching.

### 2. The significance of Hybrid Teaching in the teaching of Electronic Technology Course

#### (1) enrich teaching resources

In the past teaching of secondary vocational electronic technology course, many teachers did not pay enough attention to the collection of teaching resources, and in most cases, they still carried out teaching around the fixed teaching content in textbooks. Although such a teaching method can spend most of the time and energy on textbook teaching and speed up the teaching process, it limits the students' thinking development and affects their understanding and mastery of knowledge. The effective application of Blended Teaching in the teaching of secondary vocational electronic technology course can break this limitation. Teachers can use the power of information technology to collect more relevant teaching resources related to teaching content, and then through the cooperation of online and offline teaching, so as to expand students' vision and enrich students' theoretical knowledge. Finally, the teaching quality of secondary vocational electronic technology course can be effectively improved, and the effect of hybrid teaching can be played.

#### (2) strengthen students' knowledge understanding

In the past, many secondary vocational electronic technology teachers in the actual teaching process, simply around the textbook knowledge. Some secondary vocational students are rarely exposed to the knowledge of electronic technology, and some students' knowledge understanding ability is poor. Under such circumstances, teachers' blindly indoctrinating knowledge and theory can not achieve good results, and will also affect students' interest in learning. Secondary vocational electronic technology teachers can change this problem by using hybrid teaching. Teachers can use online teaching means to show the relevant teaching content for students before class and lay the foundation for students' learning. Then guide students to explore independently in offline teaching, and finally realize students' understanding and mastery of knowledge. Therefore, the application of Blended Teaching in secondary vocational electronic technology course teaching can strengthen students' understanding and promote the innovation and progress of course teaching.

### (3) improve students' professional ability

Improving students' professional ability is also the main goal of every secondary vocational electronic technology course teacher, which is also related to the effective development of secondary vocational electronic technology courses. But in the past teaching, many students' professional ability is difficult to be effectively improved, and the main reason for this problem is the lack of practical operation. Because many practical operations cannot be completed in the school practice base, or some schools do not have a perfect training system, which also affects the cultivation and improvement of students' professional ability. However, secondary vocational electronic technology teachers can take advantage of the advantages of hybrid teaching, conduct simulation operations online, and then discuss and communicate offline to improve. In this way, students' professional ability can be well improved and pave the way for students' future professional development.

## **2 Application strategy of Hybrid Teaching in Secondary Vocational Electronic Technology Course Teaching**

### 1. Design online preview mode to cultivate students' autonomous learning ability

Pre class preview is related to the course teaching process and teaching quality. Many students can not really effectively understand and master professional knowledge because of their lack of understanding ability in learning course knowledge, thus killing students' interest in learning and ultimately affecting the effective development of secondary vocational electronic technology course teaching. To solve this problem, teachers of secondary vocational electronic technology courses can carry out online preview with the help of blended teaching, so that students can prepare for relevant learning, so as to carry out autonomous learning with a better attitude in the process of course teaching, so that students can effectively understand and master course knowledge, and realize the effective cultivation of students' autonomous learning ability, To achieve the purpose of improving the teaching quality of the course.

Secondary vocational electronic technology course teachers want to use blended teaching to carry out online preview, should be carried out through three aspects. The first aspect is to use the online learning platform to design and publish relevant teaching micro lessons, so that students can form a preliminary understanding and cognition of the knowledge to be learned in the process of learning and watching micro lessons, which is also the foundation for students' autonomous learning in the course. The second aspect is that with the advantage of the learning platform, teachers can design and arrange relevant learning guidance plans, and effectively arrange the teaching objectives and key and difficult points of the next course in the learning guidance plan, so as to enable students to carry out autonomous learning with goals and directions. Combining with micro courses can better strengthen students' knowledge understanding and lay the foundation for students' autonomous learning. The last aspect is the interaction between teachers and students. Because many secondary vocational students lack good self-control ability and self-discipline, they simply publish micro lessons and learning guidance plans on online platforms, and students may not watch the learning carefully, which will lead to the pre class preview link becoming a formalized product and unable to really play the effect of hybrid teaching. Based on this, secondary vocational electronic technology course teachers should use the online learning platform to actively communicate and interact with students, and help students solve the problems they encounter in the preview process. In addition, in order to better enable students to effectively preview before class. Secondary vocational electronic technology course teachers should assign relevant learning tasks when communicating with students on the online platform, and guide and guide students in the process of completing learning tasks. This can not only enable students to quickly master relevant knowledge, but also establish a good teacher-student relationship and stimulate students' interest in learning. After the secondary vocational electronic technology course teachers use the online learning platform to construct the pre class preview link, they can cooperate with each other in combination with offline classroom teaching, so that students can better understand and master professional knowledge, and realize the effective growth of students.

### 2. Enrich classroom teaching forms and improve students' professional ability

After the effective construction of pre class preview mode for secondary vocational electronic technology course teachers, they can then use blended teaching to enrich classroom teaching forms, so as to improve students' professional ability and enable students to better understand theoretical knowledge and master practical skills. There are many kinds of teaching forms that blended teaching can show. As long as teachers can make reasonable choices according to the actual situation, they can play the role of blended teaching and promote the effective development of secondary vocational electronic technology courses.

Creating virtual situations is one of the application methods of Hybrid Teaching in the teaching of secondary vocational electronic technology courses. Its specific performance is to create virtual situations related to teaching content with the help of information technology, and show some knowledge in an intuitive way, so as to prevent students from confusion of knowledge points and misunderstanding. Secondly, teachers can also use the content of virtual situation to carry out offline questioning and discussion, which can better strengthen students' knowledge understanding and improve students' professional ability. Secondary vocational electronic technology teachers can also conduct online and offline practice teaching by creating virtual laboratories. Teachers can combine the popular software of virtual laboratory to show some circuit problems to students, and then let students solve them. This is an excellent way to help students transform theoretical knowledge into practical skills, and it is also an effective application of Blended Teaching in the teaching of secondary vocational electronic technology course, which is very helpful for the progress and growth of students. Therefore, according to the characteristics of blended teaching and the teaching content of electronic technology course, enriching the teaching form is one of the effective application forms of Blended Teaching in secondary vocational electronic technology course teaching, which is helpful to the innovative development of electronic technology course.

### (3) Improve the curriculum evaluation system and guide students' all-round development

Blended teaching can be applied not only in pre class preparation and in class teaching, but also in post class evaluation, so that students can use the advantages of blended teaching to understand their shortcomings, and then correct them according to the evaluation results, so as to guide students' all-round development. Based on this, secondary vocational electronic technology teachers need to combine the characteristics of blended teaching to improve the curriculum evaluation system, so that the advantages of blended teaching can be effectively played in secondary vocational electronic technology teaching.

The application of Blended Teaching in the after-school link of electronic technology course should be divided into two steps to improve the course evaluation system. The first step is to design and carry out relevant practical activities so that students can apply the knowledge they have learned in the course to practice. However, when designing and carrying out practical activities, secondary vocational electronic technology teachers should also use information technology to collect relevant teaching resources, provide rich teaching resources for students, and let students use relevant practical cases to summarize and analyze, so as to better complete the practice, which is also a way to play the effect of practical activities. This step is also the basis for teachers to collect students' professional growth data, and plays a vital role in improving the curriculum evaluation system. The second step is to collect relevant data with the help of information technology, and carry out data analysis for each student as the data support for evaluation, so that students can better understand their shortcomings. After summarizing and analyzing the data, the teachers of secondary vocational electronic technology course can analyze the students' shortcomings in their professional growth, and then put forward suggestions. Such suggestions are more targeted and can be accepted by students and corrected according to the suggestions. It can be seen that improving the curriculum evaluation system is an effective way for the application of Blended Teaching in the after-school link, which is very helpful for guiding students' all-round development and promoting the progress of secondary vocational electronic technology curriculum.

In a word, blended teaching is very helpful for the development of secondary vocational electronic technology courses. As long as teachers can design teaching strategies according to the advantages of blended teaching and professional teaching content, they can effectively apply blended teaching in secondary vocational electronic technology courses and cultivate more excellent electronic technology professionals for China, Help China's electronic technology sector to achieve better progress and development.

## References:

- [1] Juan Song Online and offline hybrid teaching practice of power electronics technology course [j]Electronic technology, 2022,51 (11): 115-117
- [2] Yang Xu Research on the application of Hybrid Teaching Mode in the teaching of secondary vocational electronic technology course [j]The road to success, 2022 (32): 69-72
- [3] Furu Zhong,Zhengyan Deng,Sha Yang Application of Hybrid Teaching Mode in the teaching of "electrical and electronic technology" course [j]Journal of science and education, 2022 (28): 115-117
- [4] Ling Wang,Junping Yan,Hao Zhang,Xiao Huang,Shixin Li Hybrid teaching reform and practice of electronic technology course [j]Journal of Xinyang University of agriculture and forestry, 2022,32 (03): 153-156
- [5] Lidan Cheng,Rui Liu Research on MOOC based hybrid teaching mode in Higher Vocational Colleges -- Taking Electronic Technology course as an example [j]Audio visual education in primary and secondary schools, 2022 (09): 70-73
- [6] Zhu Huang,Yonghong Long,Jianhua Liang,Zhengyun He,Jiusong Hu Exploration and practice of Hybrid Teaching under the background of "double first class" -- Taking analog electronic technology course as an example [j]Journal of higher education, 2022,8 (22): 28-31+37
- [7] Songyang, Wang Xiaofeng, Zhao Lei, Zhang Mian, Xiang Hongbiao, Yang YixinPractice of Hybrid Teaching Mode in digital electronic technology course [j]Electronic technology, 2022,51 (05): 114-115
- [8] Huan Chen Ideological and political research and practice of "digital electronic technology" course based on Hybrid Teaching [j]Industry and information technology education, 2022 (05): 52-56
- [9] Zhenxin Guo,Sanxi Li,Lijuan Wang Research and practice of blended teaching mode in Vocational Education -- Taking the course of fundamentals and skills of electronic technology as an example [j]Science and technology horizon, 2022 (09): 161-164
- [10] Yan Zhang,Changyun Wang,Yong Shi,Zhai Shi,Wei Huang Practice and Reflection on Hybrid Teaching of "electronic technology" course [j]Nanfang agricultural machinery, 2022,53 (06): 149-152
- [11] Dandan Liang,Liqiang Wang,Shuaibao Li Reform and practice of Hybrid Teaching of electrical and electronic technology course [j]Agricultural Engineering and equipment, 2022,49 (01): 47-49
- [12] Shuling Zhao,Dinghua Xiao Research on online and offline Hybrid Teaching Based on SPOC -- Taking electrical and electronic technology course as an example [j]Education Informatization Forum, 2022 (02): 15-17
- [13] Xiaoping Qin,Xiaohui Wei,Ting He Exploration and practice of online and offline Hybrid Teaching Mode -- taking power electronics technology course as an example [j]Journal of Huizhou University, 2021,41 (06): 120-124
- [14] Shuang Liu The exploration and practice of Ideological and political education in the course of electrical and electronic technology under Hybrid Teaching [c]//2021 proceedings of the education science webinar (7), 2021:355-357
- [15] Huimin Lv Research on the application of online and offline Hybrid Teaching in the course of "digital electronic technology" [j]Industry and information technology education, 2021 (11): 37-41