

Research on Electronic Technology Teaching Based on Multiple Intelligence Theory

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Abstract: The teaching of electronic technology requires students to have the basic theory, knowledge and skills of electronic technology. In order to enhance students' interest in learning, improve students' practical ability and achieve better teaching effect, starting from the understanding of multiple intelligence theory and combining with the current situation of teaching of basic courses of electronic technology in Higher Vocational colleges, the goal is to stimulate students' enthusiasm for learning, teachers' enthusiasm for project development and experimental guidance. Design a teaching plan and apply this strategy and program to daily teaching. The research shows that through the analysis and test of the practical results, it is proved that the teaching of multiple intelligence theory can enhance students' intelligence level and academic level. Provide students with a diversified learning environment, and stimulate their multi-intelligence potential to further develop.

1. Introduction

According to the theory of multiple intelligences, the so-called intelligence of human beings refers to the ability of individuals to solve the real problems they encounter or to produce and create effective products under the value standard of a certain social or cultural environment [1]. Intelligence is not a kind of ability, but a group of abilities, that is, there are multiple intelligences, including language, music, mathematical logic, space, physical movement, interpersonal relationship, self-awareness, natural observation and other eight kinds of intelligence. Multicultural education rose in the United States in the second half of the twentieth century, when the racial Revival Movement promoted the emergence of multicultural education [2]. The spirit embodied in the theory of multiple intelligences is consistent with the idea of multicultural education. For the students of electronic technology, there are circuit theory courses and experimental teaching, but for other students. Theoretical knowledge can be learned through reading, reading lessons, online video courseware and other channels, and verification experiments can also be done through simulation experiments [3]. In a passive situation, a vicious circle will gradually form. In the face of this situation, we must change the teaching concept and open up new teaching ideas and methods. Through the study of this course, students will master the basic theories and skills of electronic technology for their follow-up professional courses, graduation design and later engaged in electronic technology work and scientific research to lay a solid theoretical and practical foundation [4].

According to the theory of multiple intelligences, the students facing teachers are a group of individuals from different environments with their own unique intelligence structure [5]. Successful education is to enable every student to achieve maximum learning benefits. In the open electronic technology teaching, students are the main body, and the opening of laboratories is an important condition for the development of personality. Strive to tap the potential of teachers and students, not only to enable students to grasp the basic ability of analysis in electronic technology, but also to integrate knowledge imparting and ability training, to cultivate more students with strong research ability and creativity [6]. Participate in teaching activities consciously and experience the joy of harvest from them. The knowledge acquired actively in the process of participation is easier to remember and understand. In the teaching process, we can select several typical, practical and interesting examples as guidance, which is not only conducive to the opening of design experiments,

but also more effective than before in training students' practical and mental abilities [7]. In addition, some new measuring instruments and metering devices have been purchased, which can well meet the needs of teaching content reform. Comprehensive and advanced with project training as the driving force, in the implementation of the curriculum, students become the initiators of self-learning. Accordingly, the role of teachers should also be transformed from the transfer of knowledge to the facilitators, guides and resource providers of student activities [8].

2. Materials and Methods

Electronic technology course has a rich environment to stimulate students' multiple intelligences. Students can use words, pictures, music and animation to create multimedia works. Explanations should be concise and concise. The teaching contents should focus on orientation, conclusiveness, difficulties and doubts. The inference of some theorems of secondary and easy-to-understand contents should be made for students to think and discuss by themselves. And find students to explain and encourage students to express their opinions in order to strengthen the communication between teachers and students, so as to integrate teaching and learning. In the teaching practice, teachers should broaden their thinking when preparing lessons, try to find various infiltration points, carefully design and colorful teaching activities, encourage students to prepare tools and electronic components, and learn the principles of electronic technology. DIY small work, no need for complicated circuit, but practical, such as controlling a desk lamp or fan. In this way, it not only enhances the interest of students, but also reflects the practicality of electronic technology teaching.

The theory of multiple intelligences advocates a positive student outlook. It holds that everyone has multiple intelligences at the same time. These intelligences have different degrees and combinations in each person, which make each person have its own characteristics in intelligence. Reasonable education and training will make every student's intelligence to a higher level. It emphasizes that intelligence is an individual's ability to solve practical problems and to produce effective products needed by society. It provides a reasonable basis for the current vocational education to respect students' personality development, teach students in accordance with their aptitude and recognize the equality of teaching. Diversified intelligent assisted digital electronic technology teaching has many advantages over traditional teaching in teaching mode, teaching strategy and learning resources. Diversified intelligent assisted instruction will become an indispensable part of the future school. In addition, the experimental content is not explained and demonstrated to the students. It is completely wired by the students on the basis of the experimental contents of the review report until the teacher passes the test. Mandatory exercise of students' reading and hands-on skills. According to Table 1 and Figure 1 of the electronic technology teaching survey based on the level of diversified intelligence.

Table 1 Application of Diversified Intelligence Level in Electronic Technology Teaching

| | Number | Proportion |
|-----------------------------|--------|------------|
| The improvement is obvious. | 19 | 38.78% |
| A certain improvement | 27 | 55.10% |
| No improvement | 3 | 6.12% |

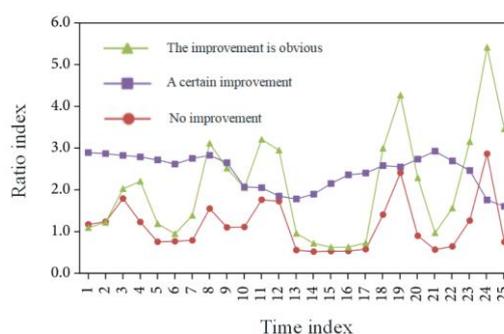


Fig.1. Application of Diversified Intelligence Level in Electronic Technology Teaching

When implementing the teaching of the theory of multiple intelligences, teachers should start from the actual situation of students at all levels, determine the teaching objectives at different levels, give guidance at different levels, organize tests at different levels, so that all kinds of students can get something in their own learning. Teachers only help to analyze and check the correctness of the results, and strict requirements, as long as there is a little imperfection! We have to do it again. In this way, cultivating students' rigorous scientific attitude can also cultivate students' innovative ability. To discover the bright spots on them in real time, we must adopt the appreciation education method, and continue to give encouragement, and then impress the students with heart, we must believe that every student is excellent. This will make students feel that the class teacher is their close friend. Only when you open your heart, can you be more conducive to the growth of students and further enhance students' spatial imagination. Finally, it can run through the isometric drawing of the painted part. In the teaching process, the teacher can also let the students directly judge the projection characteristics of points, lines and surfaces from the isometric drawing.

3. Result Analysis and Discussion

There are many channels for students to acquire knowledge, such as academic reports, books and materials, network materials, friends' exchanges and so on, which are all ways to acquire knowledge of modern electronic technology. Diversified evaluation should not only embody generality, but also concern teachers with students' individuality, teaching effect, but also process, and students' initiative, creativity and enthusiasm in learning. In the process of teaching implementation, students are divided into several groups, each group formulates its own implementation plan, and constantly discusses and analyses in practice, compares and improves, and jointly improves the ability of analysis and problem solving. Even if no experimental results are obtained, students can learn more in the course of practice. When a student encounters a question, the teacher can draw a sketch to visually guide the student's thinking. To enable students to master the rules of graphic thinking step by step, so as to improve their spatial imagination and speed up the problem solving.

In electronic technology evaluation, formative evaluation and summative evaluation are combined, formative evaluation is the main method, qualitative evaluation and quantitative evaluation are combined, and qualitative evaluation is the main method. The combination of self-evaluation and other-evaluation is based on self-evaluation, and the combination of comprehensive evaluation and individual evaluation is based on comprehensive evaluation. It can enhance the students' awareness, especially the latter two types make students become the subject of evaluation, strengthen students' interpersonal cognitive ability, and improve students' interpersonal communication level. Introduce new technologies to students during the teaching process so that students can understand the frontiers of development in this field. Multi-application new means to enable students to reach out and master new tools and methods as early as possible to shorten the gap between society and students. If a student chooses to do a certain project and completes the experiment under the guidance of the teacher, the corresponding instructor will calculate the corresponding workload (the number of people selected should be increased, and the equivalent should be appropriately increased).

The classroom language of electronic technology teaching should be theoretical, abstract, normative and logical. As a teacher, we should excavate the language from the aspects of concept elaboration and content explanation, and use the standard and easy-to-understand language. Let students understand the main points of knowledge. Part of the comprehensive experimental project can come from the traditional experimental project. Because of the rapid development and wide range of electronic technology, it is far from meeting the practical needs of students' thirst for knowledge. A comprehensive evaluation method combining knowledge test and ability test, paper test and homework examination, explicit test and implicit test. The examination results are composed of the usual results, the oral test results, the written test results and the subject specialty scores. The research topics and other forms can examine the quality of students in a wider range, so that students can develop more comprehensively, rather than the knowledge of books, practical

skills, and process methods of operation. It can also be examined from the aspects of students' emotions, attitudes and values. This is also the people-oriented development perspective advocated by the new curriculum standards. While constantly improving their own quality, we use scientific management methods to standardize the behavior of each student, beautify each student's mind, fully mobilize the students' enthusiasm, initiative and creativity, constantly improve the class management, and comprehensively improve the overall quality of students.

4. Conclusion

In this paper, the teaching of electronic technology based on the theory of multiple intelligences is studied. With the rapid development of Electrotechnics and electronics technology, new methods and new technologies are constantly emerging, and the contents of this course need to be adjusted in time and the teaching methods and means should also be constantly improved. Only in this way can we meet the needs of innovative talents in the era of knowledge economy and cultivate more high-quality talents. When applying the theory of multiple intelligences to teaching, we should bear in mind the importance of teaching students in accordance with their aptitude. There are multiple dimensions of intelligence. For each student, the multiple forms of intelligence are different, and there is an effective teaching method for one student. To enhance students' interest in learning and improve students' practical ability, it is necessary to gradually improve the teaching of electronic technology according to the actual situation of students in various teaching professions. It is necessary to expand the proportion of project funding for students and increase the support of research experimental projects; teachers who contribute to open experimental projects need to be encouraged in time to encourage their project development and guide students' enthusiasm for practice.

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