The Application of Team Cooperation in the Teaching of Electrical Courses in Higher Vocational Colleges

Qixiang Huang[1, a]

[1]Wenzhou Vocational & Technical College, Zhejiang 325200, China.

[a]E-mail:hqx_wzvtc@163.com

Abstract

Team cooperation refers to the mutually-assisted learning in which students have a clear division of responsibilities in order to accomplish common tasks in a group or team.Teamwork enables students to acquire knowledge and solutions in solving practical problems.Based on the teaching practice, the author probes into the application of "teamwork" method in the teaching of electrical courses in Higher Vocational colleges.

Keywords

Teamwork, electrical courses, teaching reform.

1. Teamwork Research Teaching

Student learning in school is undoubtedly based on classroom teaching as the main channel. However, there are still some deviations from quality-oriented education in the current classroom teaching, such as attaching importance to "teaching" and ignoring "learning", attaching importance to learning outcomes and ignoring the learning process, emphasizing "instilling" knowledge into students while ignoring students' active participation, emphasizing the cultivation of cognitive ability and ignoring students& apos; emotional and value formation, etc. Team cooperation is a learning mode that takes team cooperation group as the basic form, and teachers systematically use the interaction between dynamic factors in teaching to promote students' learning. Team achievement is the evaluation criterion. For a common learning goal, students undertake learning tasks together, which not only cooperate with each other, but also give full play to the enthusiasm, independence and autonomy of each member.

Knowledge is not equal to ability, and the formation of ability needs a process, which is the process of active inquiry of students in the process of practical application of knowledge. Team work can form an equal and cooperative classroom atmosphere between teachers and students. Students can change from passive obedience to active participation, and their potential creativity can be stimulated." Team cooperation" changes the way of teaching and learning. Teachers and students work together to establish an equal, democratic and teaching atmosphere, improve students' ability to ask questions, analyze and solve problems, focus on training students to learn to analyze, summarize and collate relevant information, learn to process feedback information, and pay more attention to the research process.Such a teaching process is of great significance to the cultivation of students' practical ability and innovative spirit, and to the improvement of students& apos; comprehensive quality and ability.By discussing and communicating among students, students who are in an advantageous position can help students who are weak in this respect, so as to cultivate students& apos;sense of group cooperation and competition and improve their ability of communication and cooperation.

Of course, the classroom must have a clear research objective and should be a well-designed teaching process. The teaching process is not to randomly determine the object of study, let alone turn all classes into activity research classes.

2. The Characteristics of Implementing "Team Cooperation" Research Teaching

2.1. Knowledge Application as the Main Line and Ability Training as the Core

Classroom teaching is the main form of basic education. Its basic function should be to promote students& apos; all-round development, not to select and cultivate specialized talents, that is, classroom teaching must face all students. Group learning method better reflects the quality education of "all students get comprehensive development". Firstly, the group learning method attaches great importance to the cultivation of students'comprehensive ability. To develop students' cooperative spirit, inquiry spirit and scientific spirit, and to cultivate students' correct feelings, attitudes and values, without overemphasizing the importance of professional knowledge in the discipline system. Secondly, group learning can enable every student to participate in the teaching process.

Vocational education should be employment-oriented, so learning to apply should be the basic characteristics of Vocational education. Therefore, teamwork teaching focuses on the application of knowledge and skills, rather than excessive emphasis on the amount of theoretical knowledge.There are many practical links in electrical teaching. Teachers can organize various activities of knowledge application and creation of knowledge environment according to students& apos; quality and ability and learning situation, so as to make teaching closer to life practice and social practice, and stimulate students' enthusiasm to discover, explore and solve problems, which is more conducive to cultivating students& apos; practical ability and innovative ability.

2.2. Emphasizing the Development of Creative Thinking and Weakening the Mastery of Knowledge Results

Team cooperation teaching results are not necessarily concrete and visible. It focuses on cultivating students& apos; knowledge application ability and innovation consciousness.The result of teaching may be to put forward an idea, to produce a plan, to design a product, to improve a method, etc.The key point of teachers& apos; examination is whether students can make use of the knowledge they have learned so as to discover and create something.When students use hypothetical problems, have creative ideas and actively explore the application of knowledge, teachers should give timely encouragement; when students encounter problems and think hard and can not solve them, when they fail in activities, teachers should timely affirm the spirit of students& apos; courage to explore, affirm the success factors in their activities, and emphasize that their thinking in activities is different from that of other students. Fang encourages the development of his personality.

2.3. Emphasizing the Development of Creative Thinking and Weakeningthe Mastery

Team cooperation teaching not only attaches great importance to students& apos; mastery of methods and improvement of their abilities, but also attaches great importance to students' perceptual knowledge and personal experience.In the teaching process of electrical courses in Vocational schools, it is self-evident that it is difficult for students to master the theory of pure electronic electrics according to the traditional teaching methods. But if we use "cooperative" teaching to let students grasp some basic knowledge of Electrotechnics and electronics in hands-on operation and various knowledge application activities, students not only feel less difficult, but also can stimulate the love of professional knowledge and learn

happily. At the same time, in the process of jointly participating in learning activities, students also need to understand the personality of different people and learn to communicate and cooperate with each other. This kind of teaching can enable students to gradually form an attitude of mutual respect, understanding and tolerance, learn to express ways and means of listening and persuading others, and greatly cultivate and improve the spirit of cooperation and cooperation ability, so that they can quickly adapt to social life and enterprise work requirements after entering social work.

2.4. Every Student Gains by Participating in the Activities of the Whole Staff

The research teaching activity of teamwork is an activity that all students actively participate in. In classroom teaching, there should not only be one-way transmission from teachers to students, but also multi-dimensional and multi-angle communication and contact between teachers and students, students, teachers and teaching environment, teachers and students and teaching media. Team learning breaks the traditional classroom teaching situation in which teachers speak in a loud voice and broadens the main channel of information dissemination. Every student can improve their creative consciousness and innovative ability through learning. Teachers and students work out appropriate teaching activity plans according to students& apos; own learning foundation and personality characteristics to stimulate students' learning enthusiasm and creativity.As teamwork teaching is a problem-solving teaching method, it needs to rely on the collective wisdom of learning partners and division of labor and cooperation. Cooperation is a means of learning through teamwork and research activities, students can learn from each other& apos;s strengths and weaknesses, brainstorm, and jointly innovate to achieve high-quality results.

3. Teaching Practice of Implementing "Team Cooperation" in Electrical Courses

3.1. Arrange Students to Prepare for Teaching

In order to teach "teamwork", teachers must study some basic characteristics of teamwork. Teachers should first distribute relevant materials in advance according to the content of teaching and students& apos; learning time, including some basic problems, some basic applied knowledge, some information that needs to be solved, and the preliminary plan of research activity design, so as to give students a general guide. To let students creatively supplement and complete the activities according to their own understanding, so as to avoid students not knowing where to start.At the same time, we should pay attention to providing appropriate questions to stimulate students& apos; interest in inquiry.

Secondly, we should arrange the contents of the next class teaching activities in time and distribute relevant learning materials so that students have enough time to complete the relevant knowledge reserve, so that the activities can be completed smoothly.

Finally, random random checks should be made on students& apos; pre-class research so as to promote students' earnest pre-class research, improve students' independent learning ability, save time for classroom research activities, and win initiative for completing the tasks of classroom and subject education and teaching.

3.2. Effective Grouping

Effective grouping can divide students with similar personality into groups. When discussing problems, students communicate more with each other and have higher enthusiasm, but it is not conducive to learning from each other and complementing each other& apos;s strengths and weaknesses.

3.3. In the Process of Classroom Teaching, Teachers Should Guide and Analyze the Students Before They Move on

In the process of teaching, teachers first use modern teaching methods and practical operation to express the main points and teaching objectives of this class. Then according to the students& apos; pre-class "research" situation, combined with the focus of teaching to carry out a variety of activities.If we emphasize students' activities blindly and lack effective guidance from teachers, students can not solve complex problems. In the long run, students may lose the fun of learning. For example, in learning "Daviding& apos;s Theorem", because this method of analyzing complex circuits is more complex, and there are many matters needing attention in the process of solving problems, many students will have such and such problems in their study. I use group learning method to let students discuss with each other, and help each other to analyze the problems, and then let them sum up the matters needing attention in the process of solving problems. This learning method has achieved good teaching effect.

3.4. Assess Students& Apos; Research Activities, Summarize and Encourage Them

For this teaching activity, before carrying out the main content of this teaching research activity, teachers should review and test the last research content or applied knowledge related to this teaching research content, as well as evaluate the students& apos; pre-class research situation by process management, so as to urge students to seriously carry out pre-class research.

Teachers should grasp the planned time of classroom research activities and involve all of them, but not all of them. They should focus on guiding and carrying out innovative activities in accordance with the teaching content and key difficulties, so as to achieve the teaching purpose and control the time so as to have enough time for in-class test evaluation and summary encouragement.

4. Implementing Team Cooperation Teaching Evaluation System

Team cooperation teaching evaluation can be considered from three aspects: the ability to apply knowledge, the ability to master skills, and the attitude to participate in Research-based learning. Specifically, the operation is as follows: every knowledge and skill module in each class is tested after completion, the final comprehensive knowledge and skill test, the combination of individual evaluation and collective evaluation to assist the evaluation score, and the comprehensive evaluation of the above items will be taken as students' academic achievements.

The evaluation focuses on the learning process rather than the results of learning; on the application of knowledge and skills rather than the amount of knowledge; on the perception and experience gained through personal participation in learning practice activities rather than generally accepting the experience imparted by others; and on the participation of the whole staff rather than only focusing on a few students. Special attention is paid to students& apos;self-evaluation and self-improvement in the learning process, so that evaluation becomes a process of students& apos; learning to practice one by one reflection, self-discovery and appreciation of others.Students& apos;bold opinions, innovative spirit has been better cultivated, personality has been publicized, autonomy, cooperation and extracurricular inquiry ability has been developed rapidly. Students& apos; learning style has changed, creating a vibrant and dynamic classroom teaching atmosphere. Students are full of interest, enthusiastic participation and have better solved the problems of learning attitude and learning habits. They have changed from passive acceptance to independent and cooperative inquiry learning style, which is reflected in students& apos; initiative to collect, process and publish information materials and know how to make their own knowledge. Knowing and summarizing, self-

evaluation, active participation in cooperation and exchanges, and dare to perform and show themselves on stage.

"Team cooperation" research teaching is a systematic teaching system, which can stimulate students' learning enthusiasm, improve students& apos; ability to apply knowledge and skills and cultivate students& apos;innovative spirit.

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