

Research on the Improvement of Teaching Ability under the Background of Teaching Ability Competition in Higher Vocational Colleges

Du Li, Jing Zhao

Department of Electronic Information Engineering, Lanzhou Vocational Technical College, Lanzhou, Gansu, 730070, China

Abstract: *The teaching ability competition of the national vocational college skills competition sponsored by the Ministry of Education is the most authoritative competition in which the teaching ability of teachers in vocational colleges is the competition item. The event not only comprehensively inspected the teaching level of teachers, but also paid attention to the construction of teacher teams. By continuously deepening the reform of "three educations" in vocational education, we will strive to explore an education mode combining "on-the-job courses, competition and certificates", implement the requirements of "ideological and political curriculum", and carry out online and offline mixed teaching, in order to ensure the improvement of the ability of participating teachers in teaching design concept, curriculum activity design, teaching team construction and education and teaching innovation.[1] Through the teaching ability competition, we will lead the education quality of vocational colleges, improve the teaching ability of teachers, transform the competition results into standards that can be copied and promoted, so as to reform the current classroom teaching, comprehensively improve the classroom teaching system of vocational colleges, and ensure the completion of the high-quality education goals of Vocational Colleges.*

Keywords: *Teaching Ability Competition, Course Activities, Higher Vocational Colleges*

1. Introduction

The teaching ability competition of the national vocational college skills competition is the highest level competition sponsored by the Ministry of Education, which takes the teaching ability of vocational college teachers as the competition item. After more than ten years of development, the event setting and competition form have been constantly improved, from focusing on information-based teaching to comprehensively investigating the teaching level of teachers and optimizing the construction of teacher teams. The event actively implemented the spirit of the relevant documents of The National Plan for the Reform of Vocational Education and The Action Plan for Improving the Quality of Vocational Education (2020-2023), constantly deepened 20 articles of vocational education, and grasped the correct reform direction, which promoted the high-quality development of higher vocational education, took vocational education teachers, teaching materials and teaching methods as an important part of the "three education reform", and took multiple measures to improve the ability of teachers in vocational colleges, in order to build a "double qualified" teacher team and focus on training high-quality workers and skilled professionals.^[2]

This event has evolved from a simple application of information technology to a comprehensive assessment of teachers' teaching ability. In the guiding ideology, it has always been the general program of "promoting education, research, construction and reform through competition". The competition scheme continues to play the role of "four promotion", and takes moral education as the fundamental task. It actively explores the integrated education mode of "on-the-job courses, competitions and certificates", implements the requirements of "ideological and political curriculum", carries out online and offline mixed teaching, starts the 1 + X certificate system, and explores the formation of high-level and structured teaching innovation teams for teachers. Adhere to the integration of knowledge and practice and the combination of work and learning, we should promote the pilot of modern apprenticeship system and enterprise new apprenticeship system, constantly make teachers adapt to the development needs of "Internet + vocational education", and use modern information technology to improve teaching methods, in order to promote demonstration teaching, constantly improve teachers' ability to practice ethics, professional teaching ability and comprehensive education ability, and promote teachers to

become "double qualified" teachers with outstanding teaching ability and professional skills through teaching competitions.

As a participating team of the public foundation group of the Gansu teachers' teaching ability competition and a member of the "information technology teaching team" of Lanzhou vocational and technical college, I participated in the 2019 teachers' teaching ability competition and won the first prize of the provincial competition. In combination with the competition guidance scheme and participation experience, I will briefly explain the relevant research of the team in the process of preparing for the competition in the aspects of teaching design concept, curriculum activity design, teaching team construction and education and teaching innovation, hoping to promote the improvement of the comprehensive ability of teachers in higher vocational colleges.[3]

2. Teaching design concept leads classroom teaching

The concept of teaching design is the guidance for the whole teaching activity. Participating in the teaching ability competition of the national vocational college skills competition is an understanding and recreation of the teaching concept, and are understanding of the new requirements and new norms for the teaching quality of vocational education. According to The Teaching Ability Competition Plan released by the executive committee of the national vocational college skills competition on the official website of the competition, it is the assessment content to guide the competition, an important carrier to implement the "guiding ideology" of the competition, a weathervane to guide the competition, and a reliable basis for the teaching design concept. The competition plan continues to deepen the connotation of "four guides", emphasizes the teaching design "for the teaching content of the competition", and adds "teaching according to different students' classification and aptitude". When determining the teaching design, the team closely adheres to the talent training plan and curriculum standards, and responds to the different treatment of various specialties in the college, and develops the project task design. The teaching content is designed to improve the students' ability, and the ideological and political education of the course runs through the cultivation of students' labor attitude, craftsmanship spirit and family and country feelings.

During the whole teaching skills competition, the team determined the classroom teaching design concept of "learner centered". The most hardworking role in the classroom should be the learners themselves. How to cultivate the students' enthusiasm and initiative in learning, the teachers create corresponding professional scenes and provide corresponding resources in the teaching process through the effective combination of various teaching methods, so that the students can be placed in the real enterprise environment and actively explore, solve the problem. Based on this educational concept, our team timely transformed the relationship between teachers and students in the classroom, created learner centered classroom teaching, and guided by project tasks, so that students can experience the actual content that meets the needs of the enterprise industry in the classroom. Our project team believes that according to different professional training programs and unified curriculum standards, combined with the actual situation of our college, the teaching content is effectively refined, the learning situation is deeply analyzed, the course implementation process is optimized, and the teaching objectives are clear. [4]We should respond to the national million enrollment expansion, respond to the diversity of students, and implement flexible teaching models; we should also implement the integration of courses and certificates, combine the computer grade examination certificate with the information technology course of our college, implant the content of 1 + X certificate into the professional course, and implement the promotion of 1 + X certificate; By adjusting the curriculum according to the national skills competition of higher vocational colleges and the world skills competition, we can encourage students to participate in various competitions to promote learning through competition. According to the analysis of the actual situation of our college, there is a big gap in the level of informatization among the students. Some students have obtained the corresponding professional certificates, while some students can not even operate the computer normally. This teaching brings great difficulties. It is necessary to ensure that the high-level students can not only learn something, but also ensure the implementation of the teaching progress. The network teaching platform, virtual simulation platform modern information technology, such as classroom evaluation, helps teachers teach according to their aptitude. Through modern teaching means to diagnose and evaluate teaching, we can adjust teaching contents and methods in real time, strengthen the combination of work and learning and the integration of theory and practice, implement situational teaching, project teaching, case teaching and other practical teaching methods, and draw a picture for each student through big data, so as to comprehensively grasp the learning status of students, suit the remedy to the case and improve comprehensively.

3. Curriculum activity design highlights students' autonomy

Under the guidance of the teaching design concept, the implementation of teaching activities mainly focuses on classroom teaching. How to effectively solve the key and difficult points of teaching in classroom teaching, actively build classroom interaction, including the interaction between teachers and students and students, summarize the behavior information of what teachers teach and what students learn, and make good use of big data informatization means, to summarize the problems and adjust the teaching strategies in time according to the obtained data. The "three educations" reform of teachers, teaching materials and teaching methods in higher vocational colleges has always taken the "three complete education" as the starting point of education reform, and the teaching materials are an important carrier in the "three educations" reform. [4]We will deeply study how the standards of The National Vocational Education Reform Implementation Plan are integrated into the teaching material reform, closely linked with the curriculum standards, and implement the implementation methods in the classroom. As for the public course of information technology in our college, we believe that we should regard the training of students' information literacy as the teaching goal, combine the link between the requirements of relevant professional skills and the application of information technology, and develop the teaching materials by formulating the teaching material standards for higher vocational education. We can use the information resources to develop the teaching materials, timely and dynamically update the teaching material contents, and reasonably select the national planned teaching materials and high-quality teaching materials, so as to introduce actual enterprise application project cases into the corresponding training of information technology courses, meet the skills required by social enterprises, and gradually introduce new loose leaf and workbook textbooks and supporting information-based learning resources.

The team divides the teaching activity design into three stages: pre class, in class and after class. Before class, the team pays attention to cultivating students' independent learning ability, and uses intelligent information means to break the monotonous and uncontrollable situation of traditional pre class preview. Before class, the students use cloud class, learning link and other platforms to design and prepare the task resource package in advance. When encountering problems, we can solve them independently according to the solutions and relevant resource links prepared by teachers in advance. We can also communicate with teachers and students in the discussion area of the teaching platform, set up a breakthrough mechanism to improve the desire to explore knowledge, and stimulate students' interest in learning, to lay a good foundation for efficient classroom teaching, and master students' understanding of new knowledge through the big data information platform. Students enter the classroom with problems that have not been solved before class. The teacher confirms the learning difficulties and interests of students through the platform, and timely adjusts the methods and difficulties of knowledge and skills teaching in the class according to the problems, so as to ensure that students always maintain the motivation and desire of active learning, and constantly implement the learner centered classroom teaching concept.^[5]

The course focuses on improving the students' comprehensive ability, leading the ideological and political cases, taking poverty alleviation and agriculture as the entry point of Ideological and political work, and promoting the cultural tourism of native products as the task practice guide. In combination with the characteristics of information technology courses, students are allowed to actively participate in and complete the project tasks, put the learned knowledge and skills into practice in the process of completing the project task. The goal is to solve the problems that arise during the preview of students before class, summarize the thinking of problem-solving, and integrate theory with practice to improve professional ability. In the process of practical training and teaching, through the teacher's demonstration operation, effective guidance, auxiliary teaching video, on-site recording, work order manual, smart classroom, virtual reality and other information technology means, we can improve the students' ability, analyze the problems arising from specific real tasks, and ensure that students can master the ability to solve practical problems in combination with knowledge points and skills in the classroom.

After class, we can improve students' innovation ability, test the implementation effect of teaching activity design through online practice platform, group discussion, team report and case sharing, and give corresponding data to teaching and learning through online evaluation mechanism to conduct teaching reflection through big data analysis results. We can also put the actual development project "hometown helps farmers" into practice together with the innovation and entrepreneurship competition. Through the above process, the quality of teaching ability can be improved.

4. Teaching team construction is a powerful guarantee for teaching quality

The teaching ability competition can not only promote the improvement of individual teaching level of team teachers, but also test the cooperation and coordination ability of team members. Therefore, in the process of preparing for the competition, the active and enterprising team can seize the opportunity. First, the teaching materials are fully prepared and the task allocation is reasonable; Second, they have their own advantages in teaching style, with detailed characteristics and more comprehensive strength; Third, when encountering difficulties and problems, we should be able to face them and actively deal with them in a unified way. Through this preparation, the team members carried forward the professional quality of striving for excellence and the craftsman spirit of pursuing excellence. They repeatedly revised the teaching implementation report and the teaching plan courseware for many times, taking teaching videos repeatedly, summarizing the subtle problems in the teaching implementation process in a timely manner, and carefully improving and polishing the entries. The final work can not be completed without the active cooperation of team members. Therefore, team construction should comprehensively consider the team member structure, individual advantages and specialties, team division of labor and cooperation, and build an excellent team to play a good game.^[6]

In addition, based on the concept of "promoting teaching through competition", teachers are the executors of teaching implementation and the guides of "learner centered" classrooms. The teaching team should conduct in-depth research on the curriculum standards and talent training programs, redesign the teaching contents of the submitted materials, and reflect and improve the teaching objectives. The teaching ability competition not only comprehensively examines the education and teaching level of teachers, but also assesses the professional skills of teachers in vocational colleges. Only when teachers have strong professional skills can they teach professional students with excellent skills. Teachers apply the competition experience to the daily construction of the course, and constantly integrate the competition content with the daily classroom. In recent years, due to the impact of the normalization of epidemic prevention and control on teaching, teaching should also adjust the content to guide schools to face rationally and implement the "no suspension of classes" in place. The plan requires teachers to adjust the teaching strategy, make good use of advanced modern education technology to integrate some teaching resources online, and realize the development of online and offline mixed teaching mode, in order to introduce good experiences and methods to more teachers and students, and better adapt to the innovative education ecology in the "Internet +" era.

5. Education and teaching innovation: iterative teaching design

The content of teaching innovation is extensive. It includes not only the concept level, but also the teaching concept and the ability to apply emerging technologies. The teaching ability competition provides teachers with a platform for innovation, and through this platform, teachers stimulate more educational and teaching potential, thus laying a foundation for improving the teaching quality of vocational education.

The innovation of teaching design is how to stimulate students' interest and enthusiasm in learning. Through the use of the "Internet +" thinking mode and advanced information technology means to reform the classroom and create a personalized, intelligent and digital classroom that students like. It is an effective guarantee for the establishment of the "learner centered" classroom concept. Through the smart terminal, students can see everyone's point of view, and the discussion can be carried out anytime, anywhere, so as to improve the learning effect and train their thinking ability. Based on the traceable learning process, the mixed teaching mode plus smart classroom meets the students' personalized learning and personalized growth needs. Through big data analysis, both macro-control and individual treatment can be achieved. It is the most effective tool for the current "student-oriented" classroom teaching concept.

Combine professional abilities and skills with teaching practice to promote "integration of production and education", we can implement the integration of course and certificate, combine the computer grade examination certificate with the information technology course of our college, implant the content of 1 + X certificate into the professional course, and implement the promotion of 1 + X certificate. The teaching of vocational colleges should always be consistent with the development and needs of enterprises, so as to realize the integration and joint training of schools and enterprises. It is necessary to reflect the needs of enterprises and society for talents through course construction, so that students can experience the real environment of enterprises in advance through course learning. According to the needs of enterprises, posts and abilities, the design is carried out with the case as the carrier, and the

teaching plan is scientifically formulated according to the curriculum standards and talent training programs. Take the "dual teacher system" of teachers and the "dual system" of students as the focus of teaching reform and innovation. In terms of knowledge and skills, professional standards and professional skill level standards should be connected. The design of public basic courses and professional (skill) courses should meet the requirements of corresponding post characteristics, and the teaching arrangement meets the requirements of "combination of work and learning, integration of theory and practice". We should actively explore the attempt of modern apprenticeship mode in higher vocational colleges, bring the real production line of enterprises into the classroom, connect teaching with production, arrange students to exercise under the guidance of high-level masters of enterprises, and organize teaching in combination with artificial intelligence, Internet of things and other new technologies, so as to achieve good results in the classroom revolution.

Through the opportunity to participate in the teaching ability competition, the team introduced excellent education and teaching concepts into our curriculum. During the preparation process, the team mainly focused on the curriculum standards, talent training programs, reform and innovation of teaching implementation, how to ensure that the classroom is "learner centered", how to make use of the integration of teaching concepts and advanced information technology by the team and individuals, and how to combine and compare with our usual teaching methods, find out the differences and carry out teaching innovation suitable for this course, so as to promote the reform of education and teaching and implement "promoting research through competition".

6. Conclusion

The teaching ability competition in higher vocational colleges is an important means and method for teachers to improve their teaching ability. How to effectively improve the classroom teaching ability in higher vocational colleges, and how to embody it in the classroom design, and how to truly implement the "promoting teaching through competition" in the weekday classroom, can not only be placed in the competition, but should become a kind of education and teaching normalization under this background, and always keep the competition level consistent with the daily teaching level. The college should do a good job in ensuring the competition affairs, focus on improving the teaching conditions, strengthening the upgrading of software and hardware facilities, using the mature information-based teaching platform, developing the supporting teaching resource pool, and formulating the teacher training plan, so that teachers can learn the latest information-based teaching technology, serve education and teaching, create a team of teachers with certain abilities, and take the competition as an important part of daily teaching and research. Finally, the daily teaching is the teaching skill competition class. Through the "on-the-job course competition certificate", teaching and actual work posts are combined. We should emphasize the active integration of teaching method reform and information technology, organically integrate teacher competition and student competition, and constantly strengthen education and teaching innovation, the cultivation of students' innovative thinking and independent learning ability, in order to stimulate students' learning potential, introduce new concepts, new technologies and new teaching methods. Finally, we will complete the important entry point of vocational education to improve the quality of running schools and the quality of personnel training, improve the teaching ability of teachers, and thus cultivate high-quality workers and technical skilled personnel with both moral and technical skills.

Acknowledgement

Research on the classroom design under the background of the 2020 school-level project "Teaching Ability of Higher Vocational Colleges Competition" of Lanzhou Vocational and Technical College (Project No.: 2020XY- -24).

References

- [1] Wang Y. Continue to deepen the reform of teaching methods and methods and promote the higher quality development of vocational education -- a review of the teaching ability competition of the national vocational college skills competition in 2020 [J]. *China's vocational and technical education* 2020; (35):5-8.
- [2] Hu H. Effect of teaching ability competition in vocational colleges on the cultivation of teaching ability of young teachers in vocational colleges [J]. *Journal of Wuhan shipbuilding vocational and technical college* 2019; (4):111-113.

[3] Hu W, Hu Y. *Thinking triggered by the national vocational college informatization teaching competition [J]. Vocational and technical education 2018; (24):51-55.*

[4] *Notice of the Ministry of Education on holding the teaching ability competition of the national vocational college skills competition in 2020: JZC [2020] No. 18[A].2020-08-17.*

[5] Zhang K. *Analysis on four key points of teaching ability competition [J]. Journal of Ezhou University 2021; (7):74-76.*

[6] Wang J, Peng B, Zhu L, etc. *Building a good education environment by cultivating morality and cultivating people -- experience from the teaching ability competition of the national vocational college skills competition in 2019 [J]. Health vocational education 2020; (15):23-24.*