

Teaching reform and practice of automobile maintenance major under the guidance of skills competition

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Abstract: under the background of the reform of in-service education, how to play the leading role of vocational skills competition and formulate professional talent training objectives closer to the industry and market demand has become an important issue for teachers to promote professional construction and development. The major of automobile maintenance has the characteristics of practicality and comprehensiveness, which requires students to master mature maintenance skills and meet the requirements of automobile maintenance enterprises and positions for talents. By giving full play to the leading role of the skills competition, teachers can connect the job ability needs of enterprises with professional teaching standards, integrate the content of skills competition and competition standards into the theoretical and practical teaching links, provide students with better teaching conditions and case resources, publicize the concept of excellent skills competition, and promote teaching and learning through competition. This paper briefly describes the concept of vocational skills competition, analyzes the leading role of skills competition in the teaching of automobile maintenance major, and discusses the specific reform and practice strategies combined with the current situation of the major.

Key words: skill competition; Vehicle maintenance; Teaching reform

1. Overview of vocational skills competition

In the era of advanced technology development, manufacturing, production and maintenance enterprises' requirements for talent introduction continue to improve, and the role of vocational skills competition is increasingly prominent. Based on the support of major automobile repair enterprises, industry personnel and technical resources, the government, enterprises, industries and schools cooperate to build an automobile repair skills competition platform for schools to display the quality of automobile repair professional talent training, so that students can learn from each other, which can not only promote the professional construction of schools, but also facilitate students to test their own skills. Based on the idea of skill competition, the school can combine all aspects of social subjects to deeply test the professional development and construction, optimize the professional teaching system, clarify the professional development direction and reflect the practical characteristics of professional teaching according to the competition regulations and projects. As an important channel for schools and enterprises to select talents, the vocational skills competition can provide a good opportunity for schools to cooperate with enterprises and industries.

2. The leading role of skill competition in automobile maintenance professional education

1. lead teachers to change their teaching concepts

Whether professional teachers have advanced teaching concepts directly affects students' learning attitude, interest and classroom participation. If teachers are limited to traditional educational ideas, only focus on organizing theoretical learning activities, and do not pay attention to experiments and skill training, it is difficult to improve students' practical ability, let alone make them experience the application value of knowledge. In the era of transformation and development of modern enterprises, the standard of professional posts has been continuously improved, which not only requires students to have sufficient and practical professional knowledge, but also needs them to be familiar with skills, operation steps and practical skills. By giving full play to the leading role of the skills competition, teachers can take the initiative to change their teaching concepts, establish the teaching philosophy of promoting teaching, training and learning through competition, build a teaching mode that meets the job and market demand of enterprises, coordinate the proportion of professional teaching theory and practical training, and cultivate students' practical ability and innovative consciousness. At the same time, teachers can constantly understand the development trends of the auto repair industry and improve the pertinence and practicality of teaching activities.

2. lead the development of professional teachers

In the past, in terms of teachers' professional development, schools usually organized on-campus training and enterprises' temporary activities, but limited by professional teaching programs and class hours, it is difficult for teachers to devote a lot of energy to their own development. By seizing the opportunity of skills competition, teachers can understand the latest competition requirements and regulations, study the latest technical standards, and improve their theoretical knowledge and practical teaching level. From the perspective of content, the content of skills competition is mainly oriented by the development trend and dynamics of the industry. By studying the standards of skills competition, teachers can promote the combination of competition content and professional teaching activities, analyze the development direction of professional courses and training courses, expand their knowledge vision, and improve their professional quality. From the perspective of organization, the skills competition is organized by enterprises and industry personnel, creating a competition platform reflecting advanced automobile repair technology. Teachers can take this opportunity to strengthen the contact with enterprise personnel, find their own shortcomings in the technical level, continuously improve their practical operation ability and professional quality, and actively develop in the direction of double qualification.

3. Current situation of automobile maintenance education in Vocational Schools

1. the level of teaching staff needs to be improved

At present, some professional teachers have certain practical experience and can skillfully detect and repair traditional vehicles, but they often lack sufficient understanding of new energy vehicles and cannot obtain relevant information and technology in time. Some teachers devote their time and energy to teaching, which is difficult to ensure the advancement of knowledge system and practical technology, and is prone to the phenomenon that the teaching content is inconsistent with the development of the times. At the same time, many teachers have formed their own teaching ideas and styles. Different teachers have different teaching contents, which is difficult to help students build a complete knowledge system. In addition, the updating frequency of teaching materials in some schools is slow, and the teaching materials of automobile repair professional courses retain the old technology and knowledge, involving less new technology. Under such circumstances, teachers only organize activities according to the contents of the teaching materials, which is difficult for students to understand the latest technology and improve their technical ability. Therefore, in order to truly improve the effectiveness of professional teaching, professional teachers need to constantly improve their theoretical knowledge and practical teaching level, understand the latest automobile repair technology, master the latest skills, and provide conditions for theoretical and practical teaching activities.

2. the quality of personnel training needs to be improved

In the era of increasing living standards, the purchasing power of Volkswagen has increased. In order to ensure driving safety, many car owners will regularly maintain and repair their cars, discover potential safety hazards in advance, and troubleshoot safety faults. In the current automobile maintenance link, the personnel not only need to accumulate automobile maintenance experience, but also should have the ability to use electronic detection devices to directly use electronic equipment to troubleshoot and repair faults. Under such circumstances, enterprises need talents with strong practical operation ability and excellent theoretical knowledge. At the same time, in the context of the development and promotion of new energy vehicles, both ethanol and electric vehicles need the support of stronger professionals. However, in the teaching activities of automobile repair major, some teachers usually carry out activities around traditional fuel vehicles, and talents lack the practical ability to overhaul new energy vehicles.

3. the training and teaching equipment needs to be updated

The teaching content of automobile repair major has distinctive practical characteristics, and needs the support of a large number of teaching equipment. However, due to the limitations of objective conditions, when carrying out practical teaching activities, teachers often arrange multiple students to share the appearance equipment, which is difficult to mobilize their learning enthusiasm. At the same time, it is difficult for the school to introduce more advanced automotive equipment in time, so it is unable to provide students with good practical teaching conditions. Therefore, without the support of advanced equipment, although students can master practical skills, skills are often difficult to adapt to the needs of the times and affect future development.

4. Teaching reform strategy of automobile maintenance major under the guidance of skills competition

1. based on the guidance of skills competition, optimize the professional curriculum system

In the automobile maintenance competition, the judges adopted the assessment method of “theory + practice” and later changed to the full practice assessment mode to understand the level of students’ knowledge by inspecting their skills and operation. In terms of competition rules, the judges centered on the standard automobile repair process, focused on the assessment of students’ ability in key positions, and fully combined the production practice with the competition content. Based on the guidance of skills competition, teachers should deeply analyze the content, rules and assessment standards of skills competition, optimize the teaching content and standards of the course, and put the competition objectives through the talent training process. In the skills competition of automobile repair, the project of “solving the actual vehicle failure” is involved, and students are required to use the knowledge and skills they have mastered. In this regard, in the course of automobile maintenance, teachers should analyze the faults of classic models in the market, integrate the cases related to the competition into the teaching, and let students learn to use knowledge to solve the faults of various models. By promoting the integration of vocational skills competition and professional course teaching, teachers can quickly update professional course content and cases, guide students to find learning deficiencies, test their learning achievements, and achieve the teaching goal of promoting teaching and learning through competition.

2. innovate the integrated teaching concept around the standards of skills competition

When formulating the scoring standards of skills competition, enterprises and industry experts integrate the production practice standards according to the new technology, equipment and skills of the industry, so as to assess students’ professional practice ability more comprehensively. Based on this, teachers should analyze the current professional teaching reform and development direction according to the standards of the skills competition, and use the various projects of the skills competition to promote the integration of teaching resources, teaching activities and training activities, and combine the post ability training with knowledge teaching and training teaching. First, design an integrated teaching project. Based on students’ learning situation and competition standards, teachers should adhere to the progressive design principle, develop projects, tasks and situations corresponding to the automobile repair work process, so that students can continuously improve their knowledge and skills by completing tasks. Secondly, the integrated teaching mode of “doing, learning, teaching and competition” is adopted. Teachers should adhere to the principle of sufficiency and necessity, highlight practical knowledge and

skills, focus on cultivating students' vocational skills, and replace the traditional teaching mode with the mode of doing, learning, teaching and competition. In addition, the use of multiple teaching methods to promote the integrated teaching process. Based on competition standards and integrated teaching projects, teachers should flexibly use micro lecture teaching, task driven method, case teaching method, project teaching method and hybrid teaching method to create learning and competition projects close to the working environment, so that students can hone their professional operation skills in the fierce competition environment. Finally, according to the competition assessment standards, teachers should comprehensively analyze students' strengths and weaknesses, Better improve the follow-up teaching projects.

3. grasp the opportunity of skill competition and expand the strength of double division team

Based on the talent training goal of vocational education, teachers of automobile repair specialty should not only have the theoretical teaching ability, but also master the special operation and practical skills, so as to become double qualified teachers. First of all, in the era of rapid development of automotive technology and products, teachers should grasp the opportunity of skills competition, constantly understand the cutting-edge trends and the latest technologies in the industry, and enrich their own practical teaching experience. Secondly, the school should actively pay attention to industry and enterprise personnel. For enterprise personnel who have strong practical guidance ability and have been on the front line for a long time, they can be invited to serve as part-time instructors, participate in the future professional curriculum construction and teaching reform, and expand the double teacher team. In this way, part-time teachers can introduce the enterprise's front-line standards and work content into the teaching process, so that students can be familiar with their majors and employment skills in advance. In addition, when guiding students to participate in the competition, we should pay attention to the gap between our students and other students, through discussion and communication with students, reflect on the lack of daily teaching, and improve our professional quality and practical ability.

4. relying on the skills competition platform, upgrade the on campus and off campus training rooms

Based on the skills competition platform, the school should continue to strengthen the construction of training rooms inside and outside the school, and better cultivate vocational skills competition players while meeting the teaching needs of professional courses. First of all, strengthen the construction of school training room. The school should fully carry out the research work, combine the skills competition training process and standards, and create a professional training room that is experiential, informational, professional and modern. The 6S training room management mode should also be introduced, requiring the teachers and students of the skills competition to jointly manage the training room, organize interested students to establish a competition project team, establish a competition echelon of all grades, and improve the utilization rate of training equipment. Secondly, based on the skills competition environment, the school should actively strengthen the contact with local enterprises, build multiple off campus training bases, link the production and operation of enterprises with practical teaching, and let more students enter the enterprise training and service, accept the guidance and assessment of front-line teachers, which can not only improve their practical ability, but also relieve the employment pressure of enterprises. By upgrading and building the training base inside and outside the school, the school can introduce advanced operation, debugging and maintenance equipment, so that students can develop good safety awareness and improve their post innovation ability and equipment management ability under the simulated and real practice conditions.

Concluding remarks

To sum up, promoting the integration of skills competition and automobile repair professional teaching affects the professional teaching objectives, teaching content update and training teaching quality. Therefore, the school should pay attention to the leading role of the skill competition in the teaching reform of automobile repair major, and explore high-quality talent training mode by optimizing the professional curriculum system, innovating the integration concept, expanding the double division team, constructing the normal competition mechanism, upgrading the training rooms inside and outside the school, and combining enterprises and industry personnel, so as to improve the professional students' post practice ability and safety operation awareness, Make it a practical and technical maintenance talent.

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