The Teaching Mode of Combining Theory with Practice in Automobile Inspection and Maintenance Specialty

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Abstract: With the continuous development of society, the auto industry has also been rapid rise, as the leader of auto repair professional vocational colleges, the principle of real integration teaching is an effective teaching mode, is a kind of teaching concept of sublimation, mechanics professional real integration teaching of "rationality" is a task that around the maintenance enterprise, under the guidance of teachers, students as the leading factor, the organic combination of theory teaching and practice teaching, teaching theory, in practice the use of technical secondary school, solve the problem of theory teaching and practice teaching, help to improve the quality of teaching and the cultivation of high-quality talents

Keywords: Teaching integrating theory and practice, "Double teacher" teacher, Teaching evaluation, List of students test

1. Introduction

"Professional" mechanics of real integration teaching is around a particular task, maintenance enterprise under the guidance of teachers, students as the leading factor, the edge to teach, learn, do the teaching method, the organic combination of theory teaching and practice teaching, teaching theory, in practice the use of technical secondary school, the integrated teaching model can well solve the problem of theory teaching and practice teaching, reduce theory between the repetition and knowledge between theory and practice class, enhance teaching intuitive, fully embodies the student main body participation effect, will help to improve the students' theory and skill levels

2. Necessity of Integrating Theory and Practice Teaching in Automobile Repair Specialty

Vocational students present situation and social demand for secondary vocational graduates must be employed to determine the real integration of teaching management, school students now have the following features: the low level of education, more is ordinary examination score is lower than the other 300 students, different cultural level, age difference is big, study enthusiasm is not high, bad learning habits, passively accept learning ability is poor, steam car principle, rote learning and understanding; Learning "Troubleshooting", lack of thinking, head scratching, boredom. The requirements for secondary vocational graduates are higher. Students should not only have certain theoretical knowledge and strong practical ability, but also have the ability to solve practical production problems and technological innovation.

However, the mechanics teaching in most secondary vocational schools still adopts the traditional teaching methods. The classroom teachers teach a single theoretical knowledge, and then the student teachers practice the class after the theory, which disconnects the theory with the practice. Therefore, in order to meet the needs of social employment and enterprises, putting forward an integrated teaching model will become the focus of the teaching reform of automobile technical secondary school.

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3. The Implementation of the Integration of Theory and Practice in Automobile Repair

To implement the integration of theory and practice teaching mode, involves a wide range of aspects, is not a few people in a short time to complete, must go through the joint efforts of all teachers and students in the school, full cooperation, in order to the integration of theory and practice teaching into practice.

3.1. To Raise the Integration of Teaching, First Condition is "Double Type" Teachers

"Double type" teachers is the key to carry out integrated teaching. Schools to set up a set of the long-term mechanism of cultivating "double type" teachers, enhancing university-enterprise cooperation, take "please come in", in the way of "going out", on the one hand, from social recruitment can satisfy the automobile specialized practice teaching talents, especially senior technical personnel, as a practical guide to the school teachers, arrange course teachers under the maintenance enterprise field practice, make its master automobile service industry development, is familiar with the mechanics of professional theory also familiar with three-dimensional garage actual operation, the organic integration of theory and practice, and only with high quality "double division type" professional teachers team, to provide reliable technology to raise the integration teaching Guarantee. In the process of integration of teaching, classroom and training room, workshop fusion as a whole, teachers, teaching theory and guide the practice. Asked the teacher should not only have solid professional theoretical knowledge, but also have good practical skills, good professional post composite skills, and to master repair work at the forefront of knowledge and technology, this kind of teacher shortage at present. So, on the one hand, we must strengthen the existing number of professional practice (including teachers) business training, improve the existing professional teachers' professional quality, as a kind of transitional way, teachers can adopt professional skill wood theory and practice guidance teachers' cooperative teaching form, learning from each other, complement each other, improve together.

3.2. Integrating the Theory Classroom

Raise the integration of the classroom is to implement the principle of real integration teaching hardware conditions, it embodies the principle of real integration teaching atmosphere. It should not only meet the needs of theory teaching, and to have the requirement of field teaching, to finish teaching task in the same field at the same time, the requirements of teaching place should have enough training equipment, different teaching modules for different equipment and the environment, from hardware to software should be set up as soon as possible in line with production and service the actual place, which in the real and comprehensive professional environment, undertake to the student actual operation training and the cultivation of comprehensive quality, and constantly improve the students' proficiency in developing professional skills, techniques and the technical application ability, therefore, to strengthen the construction of practice bases, and increase the investment of equipment is an important measure to ensure teaching, Higher vocational colleges in the existing engine running test, tear open outfit run the test equipment, automobile chassis, chassis equipment dismantling, car electrical equipment, etc, on the basis of training rooms, improve the real integration of the classroom and practice base construction, the new training workshop, in plant height, area size, lighting and ventilation scheme, power equipment, high pressure air supply, etc., all need to be configured according to the actual production, training site is divided into two regions, namely the assembly area and the area. Assembly is divided into automotive efi engine, electrical equipment, automobile chassis, auto vehicle circuit such as location, mainly to the major automobile assembly, dismantling, check and adjustment, the real vehicle is divided into the front desk reception, sales and service, maintenance, diagnosis, maintenance and sheet metal oil station. The vehicle location is on the basis of the assembly class location, for the production of real vehicle training. Real vehicle training based on the work of the secondary maintenance, training students' ability of using have mastered the knowledge, to the assembly location of the integration of knowledge and skills.

3.3. The General Outline, Plan and School-Based Teaching Materials of Teaching and Learning

Principle of mechanics major students in vocational higher education institutions is modular teaching methods used by real integration teaching, break the original structure of the specialized course combining the latest technology development of automobile service market, all the professional class back into the engine overhaul module, engine performance testing module, automatic transmission and drive axle, manual transmission and drive axle, steering and suspension systems,

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braking systems, automotive electronics, air conditioning and heater system, vehicle maintenance, mechanical foundation module, automobile English module and other modules. According to the requirements of the market and the orientation of talent training, the suitable syllabus and teaching materials should be compiled according to the method of "teaching materials first, teaching materials second, mature one course, write one course", which is based on ability and task.

3.4. Organization of Teaching and Learning

In terms of teaching organization, the open mode of practical training teaching which is mainly characterized by the combination of industry and learning, such as the practical training skill module, the practical training management and the practical training service. The traditional class-based organizational mode of practical training teaching will be transformed into an open organizational mode of practical training teaching based on skill training modules. It fully reflects the integration of theory teaching and practice teaching places, theory teachers and practical training teachers, teaching content and production tasks, students and apprentices, teaching and research, training and identification. In terms of teaching arrangement, class teaching is adopted, and professional courses are all carried out in the integrated classroom of theory and practice. The teaching is class-based and carried out by teaching rotation, and the teacher undertakes the practical teaching of a small class. Explanation and demonstration in the whole class, divided into groups to learn and train. In this way, the teachers will have more energy to carry out the needle to the teaching management, and the content of the explanation will be increased, and more detailed; When the group is scattered, the teacher can have enough time to give individual guidance to the students, which truly reflects the teaching in accordance with their aptitude and achieves targeted teaching. Students are more likely to understand, accept and master what they have learned, so that they can better complete the learning tasks at each level.

3.5. Teaching Evaluation and Student Examination

In order to achieve the ideal effect, it is far from enough to rely only on advanced equipment and teachers' enthusiasm. In the process of implementing integrated teaching, it is particularly important to implement the evaluation of classroom teaching. Because the curriculum reform, curriculum development, need to be implemented through classroom teaching. Therefore, to grasp the quality of classroom teaching is the key link to ensure the effectiveness of teaching.

For the examination of students, it breaks the traditional way of study examination and implements the diversified examination close to production. One is the individual assessment, the main assessment of the students on the basic knowledge of the mastery of the process, such as the emphasis on the recognition of parts, assembly structure and working principle, the main technical parameters and production form filling, etc. The second is the double assessment, which mainly examines the cooperation and cooperation of students. For example, for the whole vehicle's second-level maintenance assessment, we will take two students as a team to complete the assessment together. The third is the class and group assessment, taking the group as the unit, to examine the students' ability of skill application and technology expansion.

Integrating theory and practice teaching is an effective teaching mode and the sublimation of teaching idea. To explore how to implement the teaching mode of "the integration of theory and practice" well, it is necessary to summarize and improve the teaching mode in the actual teaching, combine with the practical application of our school, and form a set of effective localized teaching mode.

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