

Research on the Construction of PAD Teaching Model for Automobile Majors in College

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Abstract: With the continuous development of modern society, the demand for the market economy has gradually increased, and our country pays more and more attention to the quality of higher education, which means that universities can not just blindly expand the scale of teaching, but also keep up with the pace of reform in a timely manner. In accordance with the actual teaching effectiveness, adopting a more comprehensive and innovative teaching model to promote the further development of higher education. The automotive major in colleges and universities has strong professionalism and applicability, which takes an indispensable talent training position for the entire automotive market. Teachers must not only improve their professional capabilities in real time, but also constantly innovate teaching methods to effectively improve the quality of talent training to meet the demand for social development.

Keywords: Colleges and Universities; Automotive Specialty; PAD Class; Teaching Reform

In recent years, under the vigorous promotion of the modern social economy, the automotive industry is in a stage of rapid development, and the demand for automotive professionals is naturally increasing. As a core force for professional talents, colleges and universities not only need to pay attention to the quantity of talent-training but also constantly improve the quality of talent training. Therefore, to fully cater to higher education teaching reform is an inevitable trend. Colleges and universities should constantly innovate new teaching models, improve the efficiency and quality of professionals in the automotive industry, to better meet the needs of talent training in modern society, and adapt to social development more quickly. This paper presents several practical ways of applying PAD class teaching based on the current teaching status of automobile majors in colleges and universities and the practical significance of adopting the PAD teaching model for future reference.

1. The current teaching status of automobile majors in colleges and universities

Judging from the actual teaching effectiveness of automotive majors in colleges and universities, most of the students' learning foundations are relatively weak, and because the theoretical knowledge of automotive majors is complex and difficult to understand, students generally lack certain enthusiasm for learning, and most teachers are still adopting the traditional indoctrination teaching method and neglecting the teaching concept of taking students as the main body. Due to the lack of professional teaching guidance, students are difficult to have a positive interest in the relevant professional curriculum knowledge, which eventually leads to the failure of mastering the automotive professional curriculum knowledge. Because it is not effectively absorbed by students, it is difficult to achieve the desired effect in improving the practical application ability of

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professional skills.

Secondly, the requirements of modern society for automotive professional technology have risen to another level. It is no longer simply to meet the level of understanding of mechatronics. The automotive industry has already introduced more new technologies within the automotive industry. Quality also poses greater challenges. However, after research, it has been found that colleges and universities have not completed the timely updating of the content of the automotive professional courses at this stage. The choice of theoretical knowledge of the courses obviously cannot keep up with the development rhythm of the modern automotive industry.

In addition, there are certain loopholes in the arrangement of the automotive professional curriculum system in colleges and universities, ignoring the students' overall career training and planning, and only blindly imparting theoretical knowledge and skills, resulting in students' lack of necessary professional qualities. This eventuality makes college students have strong professional application skills, but lack professional comprehensive literacy. Therefore, they still cannot meet the needs of enterprises for the cultivation of automotive professionals.

2. The practical significance of the application of the PAD class in the automotive major in colleges and universities

The core concept of the so-called PAD class is to allocate half of the classroom time for teachers to teach the course content, and the other half of the time is used for students to conduct interactive learning in the form of discussion. This teaching model is an innovative way for students of automobile majors to enhance their enthusiasm and subjective initiative. In the PAD class, students can participate more fully in the learning of daily courses in the automotive profession. Teachers can not only help students better absorb classroom expertise by adopting a group cooperation discussion model, but also be able to cultivate students' good learning habit for discussing and problem-solving. During the discussion of professional problems, students will effectively convert the pressure of achieving the honor group into a motivation to think about problems, which can promote them to participate more actively in classroom learning. Whether it is for students who have a certain foundation in the auto major or those with weak basic skills, it is an opportunity to improve their learning ability to the greatest extent to help students quickly keep up with the teacher's teaching progress and master the course content related to automotive professional knowledge.

In addition, in the PAD class, teachers' lecture time is relatively reduced, and students' independent learning time is effectively used. Not only can it improve students' negative learning status in time, but also help them quickly enter In the exploration of professional knowledge, students are trained to think independently in real time. When they encounter practical problems, they can effectively solve the problems, thereby promoting the realization of the teaching goals of the auto major.

3. The application method of PAD class teaching for automotive majors in universities

3.1 Innovative teaching model to deepen theoretical knowledge understanding and mastery

Teachers should adopt PAD teaching model. When teaching daily courses to automotive students, they can make good course planning in advance, and arrange teachers' lectures, course discussions, and students' independent thinking and homework to make reasonable arrangements in order to facilitate the comprehensive teaching in the actual classroom. Teachers only need to explain the key knowledge structure of the automotive profession. The remaining practice allows students to deepen their understanding and mastery of key professional knowledge through discussion. According to the results of the students' discussions, difficult problems will be comprehensively concentrated, and the teachers will give a detailed explanation and demonstration. This will not only help students to deepen their impression of automotive expertise, but also effectively improve teaching effectiveness.

Secondly, teachers should pay attention to the new trends in the automotive market in real time in the social market. Combining the constantly updated emerging technologies in the automotive market to explain the automotive expertise can more effectively stimulate students' understanding and learning interest of the automotive industry. After the teacher completes the introduction of the relevant teaching content, the students are given sufficient time to discuss the details of the content to complete the digestion of professional theoretical knowledge and further thinking. After the class, the teacher can leave relevant homework targeted and require the students to independently complete the problem. Discussion results should be

given to deepen the understanding and at the same time allow students to enhance their enthusiasm for independent learning in a relaxed learning environment.

In addition, when teachers organize students for group discussions, they should complete the grouping according to the actual learning situation of the students. When each group is composed, it must be reasonably allocated according to the strength of learning ability, in order to better achieve the group learning from each other, help each other, and promote common progress among team members.

3.2 Combining practical teaching to improve skills application ability

Classroom teaching is the basic and primary link in modern curriculum education, and it is also the basic component of the school's overall education. It can be seen from the occupational characteristics of the automotive major that its subject practice is relatively strong. Therefore, most colleges and universities will combine professional theoretical knowledge and practical exploration to a certain extent when setting up the curriculum system. Teachers can make use of the advantages of the PAD teaching model. When conducting practical teaching in the automotive specialty, the whole class of students should be divided into several groups according to the requirements of the activity, and the team leader should be selected according to the practical ability. Explore the completion of missions. For example, when the teacher leads the students in the practical teaching of automobile construction, they can first allow the students to dismantle the relevant parts of the automobile, and then follow the correct operation steps to carry out the simple assembly. In this practice process, teachers can help the students to better understand the structure and application principles of auto parts, which allow students to generate interest in exploration during continuous hand-on works, and then conduct comprehensive discussions and solutions to the problems encountered in small groups. Teachers give relevant guidance opinions, so as to effectively improve students' professional practical application ability.

Secondly, under the PAD teaching model, because students will accumulate a certain amount of homework in the professional course teaching, teachers can also use it as a reference basis for the final evaluation system according to the completion of students' homework. This can more comprehensively help students to strengthen their self-control in professional learning, make timely adjustments and supplements to students' professional knowledge and skills application, fundamentally improve the actual effect of teaching, and more effectively promote the double-way development of students' comprehensive ability and professional qualities.

4. Conclusion

In summary, the reasonable application of the PAD teaching model to the course teaching of automotive majors in colleges and universities not only can better stimulate students' interest in learning, but also can give full play to the initiative of students to learn independently and effectively. It can improve the efficiency and quality of classroom teaching in the automotive specialty, and comprehensively promote the realization of college education goals, so as to meet the modern society's demand for complex talents in the automotive industry.

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