

Engineering Major Development of the "Automobile Service Excellence Engineer Education and Training Program"

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Abstract: The excellent engineer training program is an important step for China to transform from a large-scale engineering education country to a strong engineering education country. This is a solid guarantee for the strength of China's higher education. It aims to cultivate a large number of high-quality engineers and technicians with high innovation ability to meet the needs of economic and social development. The training of automotive service excellence engineers should not only be limited to campuses and classrooms, but also conform to the development concept of quality education, broaden educational channels and promote the construction of the second classroom. This paper mainly expounds the construction focus and significance of the second classroom, and focuses on the important role that the second classroom plays in the training mechanism of excellent engineers, discusses the research reform strategy of the existing training mechanism, and promotes the development of China's machinery industry.

1. Introduction

The Ministry of Education's "Excellent Engineer Training Program" is a major goal of implementing the long-term education reform and development plan of the CPC Central Committee and cultivating outstanding technical talents for the Automobile Service industry. It is also a major measure to transform China into an industrial power. The training plan for automotive industry engineers in the new period focuses on the proportion of practice in the training mechanism, making full use of the educational resources provided by the state and major universities, strengthening the construction of the second classroom, and cultivating a large number of professionals for the Chinese automotive industry^[1].

2. The Position and Significance of the Second Class Construction

The second class was developed for the traditional classroom. Traditional classroom teaching content is limited to textbook knowledge. The teacher completes the course teaching tasks according to the syllabus within the prescribed time, and organizes the corresponding written examinations at the end of the semester. This is called the first teaching class. the second teaching class is not limited to teaching materials in the teaching content, and the form is rich and varied. It

is all aimed at cultivating students' comprehensive ability and Automobile Service technology, and the curriculum development space is very large. Classrooms, laboratories, playgrounds, and homes can all be used as venues for the course. Automobile service engineering is a profession with more practice than theory. So the corresponding educational activities should not be limited to the classroom, but the second classroom construction should be vigorously carried out. Enhancing students' practical ability and service level is the main training goal ^[2].



Figure 1 College Students are doing Car Molds

3. Effective measures for the construction of the second classroom

Automotive service engineering professionals will undertake a number of businesses in the future automotive aftermarket, such as automobile sales, maintenance testing, evaluation, recycling, and play an important role in the improvement of the automotive market. The Automotive Engineers Professional Engineers Education Program can better improve the current status of China's automotive service engineering professionals with low academic qualifications and poor foundations, and provide high-level technical and managerial talents for the automotive aftermarket. The second classroom construction plays an important role in the training of excellent engineers. The following is an analysis of the effective measures of the second classroom construction.

3.1 Formulate a complete second classroom implementation plan for the automotive industry

To improve the training level of outstanding engineers in the automotive industry and improve the level of second classroom construction. The first point is to improve the existing second classroom implementation plan for engineers and establish a sound and high-level training system to promote the comprehensive development of moral, intellectual, and artistic, broaden the knowledge and improve the comprehensive practical ability as the main training objectives. So that students have systematic automobile manufacturing, engineering construction, after-sales maintenance technology and specialized mechanical basic theory, and cultivate high-quality engineering and technical application talents. In view of the current situation of teachers' excessive emphasis on theoretical knowledge in the teaching classrooms of major universities, it is necessary

to innovate the existing education and teaching model, accelerate the construction of innovative classrooms, and provide a complete training program for the cultivation of excellent automotive engineers in China.

3.2 Optimize the construction of the course website in the second classroom of the automotive industry

In the context of the modern information age, in view of the training characteristics of automotive engineering engineers, we should give full play to the characteristics of flexibility and practicability of the second classroom. Optimize the construction of online courses in a targeted manner and make full use of the technology achievements brought by electronic information technology. Make basic vehicle theories such as service engineering, automobile marketing theory, automobile insurance and claims, and modern automobile service management in the automotive service industry into high-quality online courses for all students and teachers to share. In this way, students can not only follow the teacher's lecture rhythm in the classroom, but also can place the courseware on mobile phones or other electronic devices. This makes it easy to view the knowledge points that are not understood at any time after class or in practice, and also enables students not only to deepen their understanding of the basic knowledge, but also to promote the combination with practice. The combination of practice has the effect of getting twice the result with half the effort^[3].

3.3 Promote the practice teaching reform in the second classroom of the automotive industry

The automotive industry is a very practical industry, and practice activities play a vital role in the development of excellence engineers. The excellent engineering training plan should focus on the teaching practice. The practical conditions of each institution should make full use of the existing equipment and resources. The school must increase capital investment, increase the number of equipment, and try to avoid the situation where several people share equipment and practice time is limited. In addition, during the preparation of the course, teachers should arrange the internship time reasonably, increase the proportion of time in practice, optimize the curriculum, and organize the practical teaching links scientifically and reasonably. Each training institution must also increase exchanges and cooperation with enterprises. While providing technical support to enterprises, enterprises provide internship equipment and internship sites for training institutions, and regularly invite training institutions to organize students to conduct internships and promote an organic combination of theory and practice.

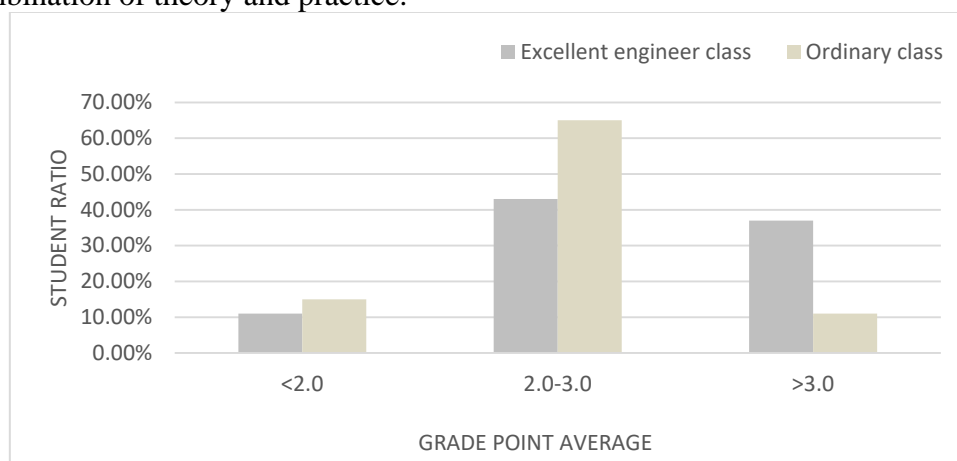


Figure 2 Distribution of students' scores in the first semester of enrollment

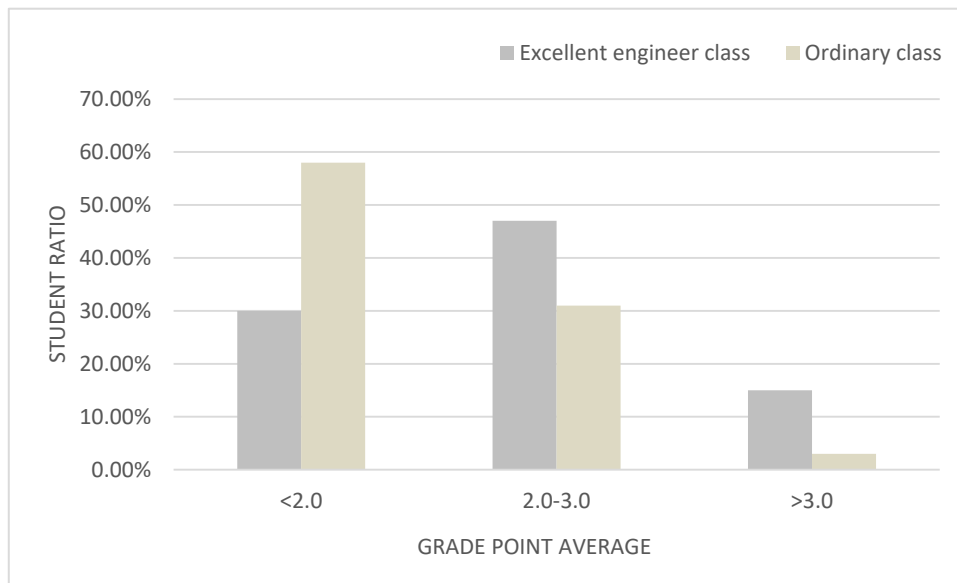


Figure 3 Student's grade distribution in the second semester

3.4 Promote the construction of teachers in the second classroom of the automotive industry

Automobile engineering colleges should regularly organize young and middle-aged teachers to enter the first-line enterprises in accordance with the requirements of the second classroom construction, and participate in the technical development, engineering manufacturing, after-sales service and other aspects of the automotive industry, and strive to improve their own The level of business, and encourage them to obtain the qualification certificate of automotive engineers to enhance the practical ability and teaching ability of engineers. In addition, major training institutions should regularly invite cutting-edge talents, retired professors, and technical backbones in the automotive industry to conduct technical exchanges and conduct technical seminars. This will enable each teacher to understand the development status and prospects of the automotive industry, deepen their understanding of the industry, and effectively improve their theoretical and practical teaching capabilities.

4. Conclusions

In the face of the requirements of the development of the automotive industry for the theory and practice level of the outstanding engineers under the new situation, the relevant education departments should focus on reforming the existing training mechanism for engineers and vigorously developing the second classroom construction. We should take the cultivation of students' practical ability and technical level as the main educational goal, so as to improve the training level of outstanding engineers and provide a large number of professional and technical talents for the economic construction of our country.

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