Modern Apprenticeship in the Automobile Industry Based on IMI Teaching Model

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Abstract. This article focused on the ten central aspects in modern apprenticeship based on IMI model, namely, its enrichment for modern apprenticeship, main current problems, multi-interest guarantee mechanism, localization of tools and scales, reasons for bringing it in, the difference between the traditional apprenticeship, current realistic base of implementation, challenge faced by HR, revision and running of the course, and its connection with the traditional method, which would be particularly important for the modern apprenticeship research.

Introduction

An Apprenticeship is a job, in a skilled occupation, that requires substantial and sustained training, leading to the achievement of an apprenticeship standard and the development of transferable skills to progress careers. The Apprenticeship system has a long history of over 900 years in UK, which is a very important way of vocational education in Britain. It has made great contributions to the vocational training and education.

Modern apprenticeship is based on the co-operation between school and the enterprise, but it is different from the school-enterprise co-operation. The modern apprentices’ interest is protected by the law, and the enterprise plays the main part in apprentice’s cultivation, focuses on the training and practical job on site, pays attention to the comprehensive ability, the industry bares the key responsibility during the process. In the automotive industry, the Institute of the Motor Industry (IMI) provides a wide range of international qualifications to accommodate all aspects of the industry. Meanwhile, the IMI certificate and associated training programs are well recognized for its high quality and international standard.

Why IMI Apprenticeship could Enrich the System in General?

At present, China’s auto vocational education is positively exploring the way of modern apprenticeship. There are few schools that have tried the modern apprenticeship in automobile major. It is a brand-new area. However, Britain has rich experience in running it. Early in 1953, Britain is a participant of world skills competition, hosted twice and won prizes for several times. IMI’s learning system is comparatively complete. Therefore, the IMI modern apprenticeship enriches the system in general.

UK economy has shifted from manufacture to service, which has a leading position in the worldwide after-sales sector. What’s more important, it is also an important global vehicle R&D center for powertrain, transmission, alternative energy vehicles, electric cars and parts supply etc. It could facilitate the progression of the current workforce training system to the international standard in order to meet the requirement of the employer and current industry needs. IMI has good links among government, enterprises and schools.
What are the Current Problems of Apprenticeship in General?

For many enterprises, the students in the apprenticeship system is like cheap labor force and most enterprises don’t care much about the students’ career development. For the students, they purely hope to be given the opportunity to stay in the enterprise. However, a lot of students don’t have the practical ability after two-year study at school. There is a gap between the skill training at schools and the requirements of the enterprises. Unfortunately, over 50% graduates won’t stay in the auto industry. What’s even worse, for the students’ safety, the internship is not long enough, compared to the advanced countries which is 50:50.

How to Protect the Multi-interest Guarantee Mechanism?

There is competition among students when they are doing internship. They just get one-third of the payment compared to the full-time worker. Therefore, only the most competitive interns could get the satisfactory job. At the same time, different companies offer various platforms for the students and the companies are competing intensely with each other as well.

As to the schools, they only help arrange internships for those who have student status. There is also school-enterprise co-operation agreement. If the students have accidents or if they quit, there is interest guarantee mechanism.

Speaking to the students, they don’t have to look for the internship by themselves because they pay the tuition. During the internship, the enterprises can’t quit them without any reason and the students can’t leave freely, either.

How to Localize the British Tools for Apprenticeship?

Basically most auto tools are global in China, but there is still a lot of room for improvement in teaching equipments. For instance, the cars that are purchased can’t be used immediately; When they are used in teaching, many parts are plugged in and out for many times, so it is easy to break. Therefore, special tools are needed to bring the wiring harness out, which could be developed in the future.

The current problem is that many tools are not as frequently used as the enterprises do. They are stored in the warehouse with little maintenance, especially for those developing schools, there are few teachers who have the efforts to maintain the tools due to lack of the teachers. It is important to bring in a third party to help calibrate the tools. Every year, there is fund for buying new equipment but the tool maintenance should be done on regular basis. Therefore, there should be part of the fund used to calibrate the tools and the diagnosis software requires updating as well.

Besides, there are many creative tools in UK, like the four-wheel aligner. In China, it is automatic, while in UK, they use the traditional manual aligner with level gauge, which has quite a few references for the students to learn more. It is also a good way for them to understand why we do it this way. In China, it is difficult for the teacher to explain clearly because the four-wheel aligner is automatic. The students only learn how to use it but don’t understand the reasons. The teachers should not only choose the right teaching equipment but also pay more attention to the teaching design, not just maintain the equipment but try to teach creatively.

Why do We Bring in IMI Apprenticeship?

The IMI apprenticeship is original and creative and it has been carried out for a long time. It enjoys a great reputation with good results. It could compete with the Duel system in Germany. There are few such apprenticeships in the automobile industry in China, why not try it? The framework structure of IMI apprenticeship is considered to be a solid architecture, which will help maintain and develop the high quality of the whole building of modern apprenticeship in the automobile industry in China.

It is a new change in course development. Besides, it improves the training resources, increases the practical experience both for students and teachers and strengthens the link with manufacturers. It will help produce skilled and vocationally competent “Brand aligned” employees as well as support
and add value to existing brand training systems. In the future, it will result in reducing reinvestment on graduates and improve staff retention rate.

**What is the Difference between the IMI and the Traditional Apprenticeship?**

In the traditional apprenticeship, a mentor can teach one or two apprentices for three or five years. The apprentices learn and do the work independently and then they teach new apprentices. In the modern apprenticeship, one mentor may not be enough. The learning process should be more effective as well. Therefore, the enterprise coaches in the IMI modern apprenticeship should have teaching ability with qualified certificates like the teachers at school. That means the job of being the mentors of IMI apprenticeship shall be even more demanding.

**What is the Realistic Basis for Implementing IMI Apprenticeship in China?**

It’s necessary to narrow the gap between the vocational education and the society’s requirements. Technical requirement is the basis. There are problems occurred with the development of the vocational education in China. Some are unable to be solved, so what can be done? Bring in new models. With new ideas, there is hope to find a solution. The government should bear the idea to bring in new models and the schools should make the decision to guarantee the quality of the students. The enterprise should co-operate with the school to carry it out. All the three parties should have the consensus that it is good for all. It is a high-level benefit to reserve talents, which is the long-term objective. There should be polices from the government to support the enterprises, like the tax policy and allowances, so that the enterprise could be able to reserve the talents. The school should choose the right enterprise for co-operation. Education should cultivate talents, which can’t be achieved by schools, but with the enterprises. At presents, the education department is responsible for the schools while the Ministry of industry and commerce is responsible for the enterprises. They are two departments and they should co-operate with each other.

**How to Face the HR Challenge?**

The enterprises should set up the relevant HR system and they should refer to the opinions of schools and the government. There is labor law by the government, and if the modern apprenticeship can be written into the law, the enterprise should obey it. Otherwise, the HR system is for the benefit of the enterprise, not for the schools or enterprises.

**What Can be Revised and Combined with the Current Curriculum?**

There are many aspects to be revised, like the environment and equipment and the idea. For instance, originally, not all the students are fit for the IMI class. They should be selected. However, the idea is outdated now. There are no bad students but they are under-achievers and will catch up later.

When the teachers set the curriculum, they should refer to the IMI system because it is scientifically verified to be effective. Unlike the certificating system in China, IMI is consistent. For instance, the certificate will not change, if one item is outdated, it can be deleted but the rest is retained. It is useless to pursue the advanced equipment blindly. We should follow the law of learning and offer appropriate teaching aids and materials according to different stages.

**What is the Advantage of the Chinese Traditional Apprenticeship System?**

China has a large population. In the past, a teacher teaches 50 or more students, while a teacher may only teach five or six students on average in automobile majors abroad. Therefore, we can’t just adapt the foreign way of teaching. Luckily, the Chinese teachers are quick learners and can be excellent. Besides, we can calculate the working load scientifically. Meanwhile, we should look for ways to ensure the teaching quality, using the right equipment to improve the teaching results. Gradually, a teacher could teach twenty or thirty students and the teaching quality is as good as the foreign teachers with five or six students on average. We hope to just teach five or six students at one time, but it is not the reality of China. Therefore, advanced teaching tools and ideology should be brought in. Refreshing the ideas is the start for reformation.
Summary
China has such a big population with its own characteristics, no model from any other country could be simply copied. IMI apprenticeship has been proved to be effective abroad in automobile industry for many years and it will be effective after being localized in teaching tools and scales in China. Although there are still many realistic problems for implementing it, and there is challenge of the HR policy, it is worth bringing in for its enrichment of the current modern apprenticeship in automobile industry.

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References