Analysis on Talent Training Strategy in Equipment Manufacturing Industry

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Abstract

The equipment manufacturing industry, a fundamental and strategic pillar industry for national economic development, shall follow the new trends, meet the new challenges and requirements, and shift from a great industry to be a powerful industry. About 90\% of employees in China work in the equipment manufacturing industry. The quantity, structure and competency of technicians have become most crucial factors influencing the development of the manufacturing equipment. Training high-tech talents is an urgent problem in the equipment manufacturing industry in China. This paper described the significance of accelerating development of equipment manufacturing industry from many aspects in terms of national development strategy and enterprise competitive advantage formation, pointed out current talent training problems in the industry in terms of technological level and expertise, and put forward a complete talent training system in terms of college environment, government construction and enterprise training.

Keywords


1. Significance of Talent Training in the Equipment Manufacturing Industry

The equipment manufacturing industry is a generic term of enterprises providing technical equipment for the national economic development and national stability. It is an important pillar of national economy and determines the economic development and national progress. According to the Opinions on Speeding up Vitalizing Equipment Manufacturing Industry issued by the State Council on February 13, 2006, and Enforcement Regulations on Adjusting and Vitalizing Equipment Manufacturing Industry issued by the General Office of the State Council on May 12, 2009, it has become an important national development strategy to make great efforts to develop and vitalize the equipment manufacturing industry.

A fundamental and strategic industry in the national economy, the equipment manufacturing industry provides technical equipment for all economic sectors. For a sustainable development and continuous competitive advantages in constantly changing international competitive market, the equipment manufacturing industry in China shall introduce professional design, development and research personnel grasping advanced technologies at home and abroad, shall train a great amount of senior technicians of high quality and level and adaptive to complicated situations, and shall introduce complex high-level operation and management personnel with rich experience and expertise. Only by nurturing and training a batch of highly skilled talents can the equipment manufacturing industry meet challenges in domestic and international markets and realize the historical missions.

2. Problems in Talent Training in Current Equipment Manufacturing Industry

2.1 Few skilled technicians with much basic knowledge and strong application ability

At present, the equipment manufacturing industry in China has earned an important position in international market due to grand market demand and low production cost, which means that, it is still a labor intensive industry. In 2012, the export volume of products of the labor intensive industries in
China contributed for 18.5% of the world total, and 48.5% of the total export volume in the manufacturing industry in China. To change from a great manufacturing nation to a powerful manufacturing nation, China shall establish a stable high-tech technician team to create our own core competitiveness and realize a long-term sustainable development based on scientific strategies.

2.2 Poor education background and low professional competence
Most of technicians in the high-end manufacturing industry in China only have a college degree, and rare ones have a master degree, which means that highly educated technicians are in great shortage. The proportion of employees having a title of a senior professional post is low. The poor education background and comprehensive skills of technicians in the high-end manufacturing industry in China greatly limits the development of the equipment manufacturing industry.

For example, in Liaoning Province, among 1.5 million workers in the equipment manufacturing industry, 1.1 million are on-post staff, among which 46000 workers have a master degree or above, accounting for 1.3% of the total on-post staff, and 10400 workers are senior professional technicians, accounting for 2.6% of the total on-post staff.

2.3 Great proportion of aged technicians in the manufacturing industry
According to a survey by Shanghai Municipal Human Resources and Social Security Bureau in 2010, among about 0.16 million technicians here, the average age of senior technicians and general technicians had reached 48 years, and that of junior technicians and workers with no professional titles had reached 40 years. Young technicians were in a great shortage.

2.4 Unbalanced technician talent structure
Technicians promote national economic and social growth. According to Ministry of Human Resources and Social Security, among 140 workers in urban regions in China, about 70 million are technicians, among which, 4% are senior technicians, 36% are intermediate technicians and 60% are junior technicians. It can be seen that, the technician talent structure in China is greatly unbalance. In developed countries, the proportions of senior and intermediate technicians are 35% and 50% respectively.

2.5 Lacking effective training
The training provided by equipment manufacturers in China for technical talents are not well organized, and the training investment is insufficient. The major causes are: firstly, it takes a long time for equipment manufacturers to nurture technical talents; in particular, except for college education and training, great practice opportunities shall be provided for senior technical talents so that they can gather relevant experience during practice; however, most enterprises just focus on immediate benefits and thus are reluctant to invest in human resource cultivation; secondly, there are certain risks during technical talent cultivation. At present, due to the great shortage of technical talents, senior technical talents in particular, in the equipment manufacturing industry in China, enterprises in the industry will attract technicians from other enterprises with various methods, which will increase competition for technical talents. It is a common case that the technical talents are pirated by competitors before they create values for the enterprise which has made great investment in training them, which greatly discourages the enterprise’ confidence and enthusiasm in training technical skills, and the technical talent development and training chain is broken.

3. Talent Training Measures in Equipment Manufacturing Industry

3.1 Strengthen government guidance on technical talent training
The government plays an important role in technical talent supply and can create a favorable environment for the supply of senior technical talents.

Firstly, by formulating and issuing relevant laws, regulations, systems and policies, the government can help people to set up new ideas and new standards. It can have an accurate knowledge about the industrial pattern and development trend of our country’s equipment manufacturing industry, and
adjust the technical talent development and training policy system based on the distribution and flow of human resources at certain intervals.

Secondly, governments at all levels, local governments in particular, shall establish and improve a job security mechanism and evaluation system for senior technical talents and increase their remuneration.

Thirdly, the government can use government finance to provide material incentives to enterprises and education institutions.

Fourthly, the national education authorities shall reform the teaching system, optimize specialties set-up and promote close cooperation between schools, colleges and enterprises.

3.2 Highlighting the role of higher vocational schools in technical talent training

Higher vocational schools are bases for advance training and continuous study of technical talents and an important source of technical talents. The follow key points shall be observed:

Building an accurate training mode

Higher vocational schools shall emphasize both expertise and skill training, and comprehensive competence improvement. Due to ever increasing employment pressure, many higher vocational schools are adjusting their training modes, so that their students will have sufficient theoretical knowledge and rich practice experience, and can meet the requirements of enterprises.

Strengthening the teachers’ morality and competence building

The comprehensive competence of teachers directly influences the competence of students they teach. Efforts shall be made to improve the morality and competence building of teachers in higher vocational schools. Teachers with poor morality and little professional knowledge and skills shall not be recruited. Teachers shall build a good image, and influence and educate their students with rich knowledge and good morality. They shall make friends with their students, and help them to make a good career planning, which is an obligatory mission of a qualified teacher.

Finding new methods to improve the students’ comprehensive competence

The performances and contests held in higher vocational schools are important ways to improve the students’ comprehensive competence. However, it is not enough. The schools shall carry out a series of well-oriented activities which can be participated in by the students, so as to nurture the students’ confidence and self-reliance abilities based on their major characteristics.

Making use of the positive influence of media

As information transmission carriers, media are playing a more and more important role in social production and life with wide application of technologies. Media have great influence on people’s view of life and values and have a significant influence on students whose view of life and values are not mature yet. Therefore, attentions shall be paid to the network construction in and out of schools, and promote the students to have an accurate view of life and values through new media, such as BBS, WeChat, blog and QQ.

Optimizing education facilities

A strong faculty is the foundation, and good education facilities are essential. Through education facilities, students can practice what they learn on classes and thus be more adaptive to the production of enterprises.

3.3 Improving enterprises’ talent training system

Enterprises are great demanders of high-tech talents, the major high-tech talent training providers and users, and the final client of high-tech talents. Therefore, enterprises are enthusiast in high-tech talent training.

Firstly, the enterprise shall know that it is more important to train talents instead of introducing talents. Further training shall be provided to talents introduced from other enterprises due to enterprises’ difference. Besides, less attention to existing employees is a major reason why they leave the
enterprise. Thus, the enterprise shall know that it has a great economic and practical significance to train its current personnel.

Secondly, the enterprise shall establish and improve an internal talent selection system, practice the open recruitment, formulate employee training plan and system, and carry out a mentoring training mechanism. Only by providing talents with bright career prospect can the enterprise retain the talents. Only by well training the employees can the enterprise shorten their time to adapt to the post.

Thirdly, the enterprise shall improve the employees’ benefits and wage incentive system. The enterprise can set up different wage standards based on different post to retain talents and encourage their work enthusiasm, and link their wage income with the enterprise’ performance. The enterprise shall fund the employees receiving reeducation and provide awards to those receiving relevant qualification certificates.

References