

# The Application of Modern Apprenticeship System in the Training of High-end Skilled Clothing Talents

Jinshan Cheng<sup>1</sup>, Vincent Wee<sup>2</sup>

<sup>1</sup>Universiti Tun Abdul Razak, Kuala Lumpur, Malaysia

<sup>2</sup>Hangzhou Vocational & Technical College, Hangzhou, Zhejiang, China  
chengjs2023@163.com

**Abstract:** Vocational skill education is an important way to cultivate technical and skilled talents. The training of skilled talents is the need to improve students' employment competitiveness and realize their self-worth. The modern apprenticeship system is a talent training mode of deep cooperation between schools and enterprises. Its basic feature is to combine school teaching and enterprise production, take "work-study combination" as the main feature, give full play to the main role of enterprises in professional teaching, take the real production tasks of enterprises as the guidance, work and study alternation, double post education, and cultivate high-quality workers and skilled talents with solid theoretical foundation and strong practical ability. This article takes the clothing specialty as an example to introduce the application of modern apprenticeship education in the training of high-end skilled talents in the clothing specialty.

**Keywords:** Modern apprenticeship; High-end skilled talents in clothing; Talent training; School-enterprise cooperation

## 1. Introduction

With the change of economic development mode, the demand for modern vocational education is higher and higher, and the demand for talents is more diversified. In view of the current situation of structural employment difficulties for garment graduates in higher vocational colleges and "employment difficulties" for skilled talents, training innovative skilled talents is the key to improve the employment rate and employment quality [1]. At present, the teaching of clothing professional skills is mainly characterized by the separation of "teaching", which adopts the way of theory + practice. There is a serious disconnect between teaching and practice. After entering enterprises, students have low interest in learning, poor internship effect and lack of competitive advantage in employment. The modern apprenticeship system is a talent training mode with the cooperation between schools and enterprises as the core, and is an innovative measure for the reform practice of school-enterprise cooperation [2]. This talent training mode means that the school and enterprise take the joint training as the goal, take the cooperation between the school and the enterprise as the basis, and take the joint participation of the government, the school and the enterprise, and make full use of the enterprise's education and training resources to implement education and teaching activities [3]. The key to the implementation of the modern apprenticeship system is to be led by the government, not by the school unilaterally, which is conducive to solving the problems in the training of clothing skilled personnel.

## 2. The application of modern apprenticeship in the training of high-end skilled talents in clothing

### 2.1. Define training objectives

The purpose of college education is to cultivate highly skilled talents needed by society. Colleges and universities should focus on the development plan of the garment industry, in accordance with the requirements of national vocational education reform, combined with their own reality, clarify the school running ideas, formulate training objectives and talent specifications, and achieve in-depth cooperation between schools and enterprises [4]. Combined with its own positioning and industrial demand, deepen the professional construction and curriculum reform; Strengthen the construction of teaching staff; Improve the training base construction and management mechanism, so that the modern

apprenticeship work can be carried out smoothly. It takes professional personnel training as the center, and is oriented to promote employment and enhance post ability. In practical teaching, the education concept of "teaching, learning and doing" is integrated, the knowledge related to modern apprenticeship is integrated into the teaching process, and the improvement of post vocational ability is taken as the teaching focus [5]. Actively build a curriculum system of "school-enterprise co-construction and sharing, combination of education and training, and double tutor training".

In terms of "teaching" and "learning", the training objectives should reflect distinctive characteristics of vocational education. The so-called characteristics of college education is to fully reflect the service as the purpose of professional education, employment-oriented, and the combination of production and learning [6]. The training goal of clothing professionals is oriented at application-oriented senior technical talents. Its talent training mode is a new talent training mode based on school education and combined with the actual production of enterprises. In professional teaching, the curriculum should consider social needs and students' employment needs; The course content should meet the actual requirements of enterprise production; The teaching process must highlight the working process; Practice teaching should be combined with post work. In this regard, we can learn from the experience of modern apprenticeship in Germany. At the beginning of the modern apprenticeship system, it emphasizes that the relationship between students and apprenticeship is "double" rather than "double", and it carries out teaching and management according to the three stages of professional growth of "teacher, master and apprentice" [7]. In the traditional vocational school curriculum system, teachers often treat students as passive objects to receive knowledge, and seldom study how students' learning ability and innovation ability can be improved. Although German vocational education also emphasizes the leading role of teachers, it pays more attention to enterprise mentors guiding students to participate in practical operation. In addition, from the perspective of social needs, the society needs more and more high-quality skilled talents. Only with certain knowledge and skills can college students better meet the needs of society. Modern apprenticeships, on the other hand, allow students to be exposed to the workplace environment and processes earlier, as well as to apply theoretical knowledge to practice, maximizing the combination of theory and practice, so that students can adapt to the needs of the job more quickly.

## ***2.2. Build a curriculum system of "combining work with study", set up courses scientifically and reasonably, and ensure the connection between teaching content and production practice***

In the process of carrying out the apprenticeship teaching mode, it needs to be supported by a relatively complete curriculum system and ensure that the teaching content is connected with the production practice [8]. In this process, it should actively build a "double tutor" teaching team to ensure that the guidance of apprentices is more scientific and professional. In addition, the school should also adjust and optimize the curriculum system according to the actual situation of talent training, such as modularizing the work tasks and practical operations, and embedding them into the skills curriculum. At the same time, we should focus on cultivating students' comprehensive quality and professional ability, so as to make them have certain post adaptability. Finally, we should strictly control the teaching content to ensure that students can apply what they have learned in practice.

The curriculum system of modern apprenticeship should take "combining work with study" as the center, cultivate practical ability as the core, take professional quality education as the goal, integrate relevant knowledge into the teaching process, and make teaching content closely combine with post demand. First of all, we should adhere to the principle of "practical and sufficient" in the course design. In terms of knowledge and ability, knowledge application and vocational ability training are the main aspects [9]. In the aspect of knowledge, we should focus on the cultivation of professional quality and skill training, and strengthen the skill training. In terms of ability, it mainly focuses on practical operation ability, which does not require high basic ability of students. On this basis, students are educated in professional ethics, humanistic quality and professional spirit according to their professional quality. Combined with the training objectives and the demand of the garment industry, the typical work tasks in the garment major are decomposed into several modules corresponding to the core vocational skills in the construction of the modern apprenticeship curriculum system. Specific measures are as follows:

(1) Build the course content according to the work process. The knowledge and skills needed for career development should be integrated into the teaching content.

(2) Build a curriculum system based on work process. Carry out teaching design with typical work tasks as the carrier, decompose the work process into several learning situations and integrate them

with the clothing production process; At the same time, relevant technical personnel and management personnel should be absorbed from the front line of the enterprise to participate in the teaching activities, combining theory with practice; Reorganize the course content and implement the design and development of the course by adopting the project-based teaching mode.

(3) Design the teaching platform and assessment standard of "integration of science and practice". Build virtual simulation training center and training room, garment production line, garment CAD system, etc., according to professional requirements; Invite enterprise technical personnel into campus and classroom for professional training and undertake teaching tasks; Establish a team of teachers (including professional leaders) or technical personnel from enterprises jointly to participate in the construction of the major and the development of teaching materials; Establish a relatively independent training base inside and outside the school, simulate the production environment, and carry out practical training activities by combining "going out" and "inviting in". Establish diversified, open, scientific and effective assessment standards.

(4) Strengthen the construction of teaching materials and revise the talent training program. Curriculum reform is a long-term and complex work, which needs to select relevant teaching materials and content for integrated construction according to the development of the industry and the characteristics of students. On the one hand, new knowledge and skills should be added to supplement the learning content according to the needs of career development; On the other hand, the relevant curriculum system and teaching content should be modified according to the post requirements; The curriculum standards and assessment requirements should also be revised according to the industry and enterprise standards [10]; In addition, it is also necessary to build practice bases, internal and external training bases and other practical conditions according to the existing teaching conditions of the school; On this basis, we will carry out practical research on the teaching reform of "integration of theory and practice."

### ***2.3. Formulate apprenticeship training programs, deepen school-enterprise cooperation, and promote the construction of double-mentor team***

In order to make modern apprenticeship education really play its due role, teachers should first understand the enterprise's demand for talents, the enterprise's training requirements for apprentices and the basic quality. Schools should organize teachers to go into the enterprise to conduct research, to understand the enterprise's requirements for the skills and qualities of apprenticeship positions. Before entering the university, students should also collect information about the garment industry through the Internet, newspapers, magazines and other channels, and further understand the quality requirements of different positions. On this basis, the school leaders take the lead to establish a modern apprenticeship talent training steering committee and work team composed of schools, industries, enterprises and other parties. And according to the characteristics of the students and the requirements of professional skills, to develop a reasonable and feasible apprentice training program. The apprenticeship training program should reflect the training objectives and post ability requirements of clothing professionals. It should have clear task-based curriculum objectives, clear learning items and work tasks. The teaching content of task-based curriculum is based on theory, integrates skill training into it, and implements the "work-study alternation" teaching mode; Work items mainly include core skill training items and post skill development training items. For example, design board making experiment and operation practice in the teaching of board making course; Complete teaching activities such as pattern analysis, pattern making and pattern correction in the pattern course.

School-enterprise cooperation is an important basis for universities to carry out modern apprenticeship practice, and also a key factor to ensure the smooth development of apprenticeship. Colleges and universities can provide students with abundant practical training opportunities by relying on the school-enterprise cooperation platform and the resource advantages of enterprises and garment enterprises themselves when cultivating high-end talents of clothing skills. For example, the enterprise can formulate relevant content according to the professional characteristics and training requirements of the apprentice, and the students can bring the content learned in the enterprise back to the school for consolidation and training, so as to improve their own ability of costume design; At the same time, enterprises can also provide students with training venues and corresponding equipment support, so that students can better grasp the knowledge in practice. Finally, the two models will be combined to form a joint training of talent, training talent new education model.

Implement different training programs for students with different learning abilities. The apprenticeship training program of "one semester a year" is implemented for those who have no basic

and technical ability but lack patience and low interest in learning; Implement the "two semesters" apprenticeship training program for those who do not have basic and technical skills but have strong plasticity; For those with certain foundation and strong plasticity, the "three semesters" apprenticeship training program can be implemented. This is designed according to the needs of the actual job and the learning content.

#### **2.4. Implement teaching management, promote apprenticeship assessment and improve the comprehensive quality of apprentices**

In terms of teaching management, the college has set up a leading group for the training of modern apprenticeship talents to formulate a work plan. Students will be assessed in stages according to the completion of the task. The college has established a teaching quality assurance system that combines "teaching" and "learning", and each major has established 1-2 teaching teams guided by the training objectives of modern apprenticeship. In accordance with the requirements of the modern apprenticeship mode, the college has developed a modern apprenticeship talent training program, offering 9 courses such as Clothing Design and Technology. We have developed professional teaching standards for these courses. Including curriculum standards based on work process orientation, student skill training standards, graduation design assessment standards, etc., on this basis, the teaching standards of five courses such as Clothing Design and Technology are formed. The college also developed characteristic courses such as Garment CAD and Board Making Technology according to the job requirements and professional skills appraisal standards.

In the apprenticeship teaching, schools should strengthen the assessment management of students, according to different majors and levels of the corresponding assessment programs, and the assessment results linked to the graduation of students, to ensure that the assessment system is scientific and effective. Schools can also input relevant information such as technical standards and work performance to be achieved by students after graduation into the skills appraisal examination system, which can be used as an important basis for enterprises to screen, identify and certify apprentices. At the same time, the examination of students' practical skills should be strengthened to ensure that they can fully grasp the professional knowledge.

### **3. Conclusion**

High-end skilled talents in clothing are the demand for the transformation and upgrading of China's clothing industry. However, as far as the current situation is concerned, the channels for China's clothing enterprises to cultivate high-end skilled talents are still not smooth, and modern apprenticeship is an important means to strengthen the cultivation of skilled talents. Under this background, we should actively promote the in-depth development of modern apprenticeship practice. This paper focuses on the effective strategies to carry out apprenticeship practice in this context, with a view to helping the smooth development of modern apprenticeship practice in China.

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