

Innovation and Practice of "Design Craftsman +" Fashion Product Design and Manufacturing Composite Talents Training Mode

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Abstract

In order to meet the new requirements of fashion product design and manufacturing composite talents training, and to continuously promote the expansion and application of the national teaching achievement "design craftsman" talent training model, this paper establishes a curriculum system based on "2+1+1" design craftsman training. To build the practice system of integration of production and education as one of "training, research and creation", determine the personalized cultivation mode that is based on the industrial surface, set the direction by the skill line, and set the depth by the post, establish the teaching evaluation system with the evaluation of work quality as the core, and build "Three Teachers" teaching. It is a way to realize the innovation and practice of "Design Craftsman +" fashion product design and manufacturing composite talents training mode, cultivate composite talents in the field of fashion product design and manufacturing, and provide design craftsmen for the fashion industry.

1. Introduction

Design-major graduates of vocational and technical colleges generally have the common problem of being unable to meet the needs of enterprises due to the lack of professional knowledge and weak vocational skills.[1] In order to solve the problem that enterprises can't recruit and graduates can't find jobs [2], the author carries out the innovation and practice of "Design Craftsman +" fashion product design and manufacturing composite talents training mode based on the quality specification of graduates. Through the establishment of a curriculum system that meets the needs of different levels of jobs and progressive ability, the teaching mode and method of personalized training, and the establishment of "Three Teachers" teaching team, we are able to cultivate fashion product design and manufacture composite talents, realize the training of design craftsmen, and deliver design craftsmen for the fashion industry in Wenzhou.

2. Innovation of "Design Craftsman +" Talents Training Mode

In 2014, in view of the individuation and long-term nature of design professional talent cultivation, combined with the demand for design talents in the new period of industrial development, the cultivation of design professional talents in higher vocational colleges and universities must actively integrate the cultivation of core elements such as craftsmanship, moral shaping and handicraft inheritance. The author proposed to take "Design Craftsman" as the new goal of talent cultivation and won the 2018 National Teaching Achievement Award. The so-called "Design Craftsman" is a design talent with high professionalism and the craftsmanship of striving for perfection, who is proficient in design, familiar with structural processes, can operate equipment to make samples, and can independently complete the styling design and process the production of samples.

In order to meet the new requirements of the training of composite talents in fashion product design and manufacture, by continuously promoting the expansion and application of the national teaching achievement "Design Craftsman" talent training mode, the author builds the

"Design Craftsman +" fashion product design and manufacture composite talents training mode on the basis of the original "Design Craftsman" talent training orientation and incorporates the emerging technologies of intelligence, informationization, networking and big data.

Based on the demand for talents in the fashion industry, the curriculum system of "skill promotion line" is constructed, with the platforms of skill inheritance, design masters, and technology research and development institutions as the carrier, adopting "industry surface set as the basis, skill line set as the direction, and job point set as the depth". The program aims to cultivate high-end talents with strong research and innovation capabilities to meet the demand for "high, fine and top-notch" talents for the transformation and upgrading of the regional fashion industry. Aiming at the end products of fashion industry and focusing on the homogeneous job groups such as product design, R&D and manufacturing, the "1+X" certificate system is implemented to alleviate the structural employment contradictions in the fashion industry, to cultivate design craftsmen with design literacy, product knowledge, innovation and intellectual creation and the ability to migrate from one professional job to another.

3. Realization of "Design Craftsman +" Talents Cultivation Mode

3.1. To Establish A Curriculum System based on "2+1+1" Design Craftsmen Training (Establish A Curriculum System for Design Majors Featuring "Skill Advancement Line").

To optimize the school's talent cultivation objectives and the career planning of enterprise employees, dig deep into core skills, and establish a curriculum system for design majors featuring the "skill promotion line". Focusing on fashion industry skills promotion line, core job skills are tapped, common basic skills, common core skills and special skills of professional groups are refined in depth, combined with the existing shared courses of professional groups, basic courses, professional courses, extension courses and professional courses are reconstructed, forming a professional group curriculum system that is closely connected with the skills promotion line and closely linked with core jobs.

So as to break up the original curriculum system of design majors, start from "2", take practical projects as the core, around skills, reconstruct the basic curriculum of design majors and design unit system curriculum; promote with the first "+1", soften the quality of masters, masters or creators. Real-time projects, integrating the project with the course, creating a task-as-unit, project-as-course project-based curriculum where the project facilitator is responsible for the economic factors of the task and for the outcomes of the student's task. Students complete tasks, build knowledge, train skills, achieve outcomes, pass assessments, and pass the course.

3.2. To Build A Practical System of Integration of Production and Education with "Training, Research And Creation"

It integrates skills inheritance, design masters and technology R & D platform set and other new carriers of cultivation, gathers the four chains of efficiency, builds a "training, research and creation" integrated practice system of industry-education fusion, and establishes teaching places with master studios, enterprise R & D studios, hacker spaces and other functional forms. To dovetail deeply with the transformation and development needs of the regional fashion industry, aggregate the efficiency of the four chains of "innovation chain, project chain, talent chain and service chain", effectively make use of the technical inheritance platform set of professional groups (intangible cultural heritage footwear handicraft sample technology inheritance teaching bases, productive training bases and other training bases), and carry out basic practical training teaching. To give full play to the feeding function of the design master's platform (international master's studio, domestic master's studio, skill master's studio, fashion product design and R & D center and other product R & D studios), and implement design R &

D practice teaching; Rational use of technology R & D platform (Zhejiang garment industry science and technology innovation service platform, Wenzhou furniture engineering technology center, national public creation space and other types of R & D). With the real projects as the carrier, it forms a practical teaching system of integration of production and education in the professional group "training, research and creation".

3.3. To Determine the Personalized Training Method That Is based on the Industrial Surface, Set the Direction by the Skill Line, and Set the Depth by the Position

By carrying out project interactive teaching and modern apprenticeship teaching, we have established a personalized training method that is based on the industrial surface, directed by the skill line, and deepened by the job. The one-on-one interactive guidance and fine training between master and student, master and apprentice, and the training of skills and knowledge, as well as the transmission of noble professionalism and the spirit of excellence of craftsmanship to students through the influence of physical action and subtle influence, to achieve the batch of "design craftsman" talent training. This is done as follows.

In the first stage, teachers teach students the basic knowledge and technology of the fashion industry, cultivate students' professional accomplishment and basic skills, and gradually form the differentiated cognition for the professional direction of the group;

In the second stage, which closely follows the line of skill advancement in the vocational field, implements modern apprenticeship training by specialization, with teachers as the principal and masters as the auxiliary, completes the learning of individual and comprehensive skills in the apprentice's specialization and clarifies the direction of students' vocational development;

In the third stage, students will be rooted in core positions, with masters as the main focus, enterprise masters supplemented and teachers supplemented, integrating big data, intelligent and information technology knowledge and skills, leading students to carry out interactive projects and modern apprenticeship mode of teaching in different levels, imparting professional advanced technical knowledge and skills, cultivating innovation and research and development capabilities, shaping craftsmanship, and achieving in-depth. "Design Craftsman+" personalized training. After graduation, some graduates will be selected to enter the +1 hacker platform to receive 1 to 3 years of post-vocational training, where students give full play to their professional expertise and use the platform resources to undertake design and R&D projects, deepen the cultivation of innovation, entrepreneurial awareness and craftsmanship, and realize elite cultivation.

3.4. To Establish A Teaching Evaluation System Focusing on the Evaluation of the Quality of Works

According to the characteristics of design majors, the existing teaching evaluation system should be reformed and the weight of students' works in the teaching evaluation should be highlighted. In the first and second year, on the basis of classroom evaluation, and according to the characteristics of different majors, a multi-participation work quality evaluation standard and work exhibition mechanism will be established, which will combine classroom teaching quality evaluation and student work quality evaluation to assess the quality of teachers' teaching and students' course performance; in the third year, only the quality of the results (works) will be considered as high or low, i.e. whether students pass the course or not, and whether teachers (or masters) are qualified in teaching or not will only be related to the quality of the students' work. Student outcomes are relevant.

To establish a flexible credit system by linking credits to the type of project in order to meet the needs of a teaching and learning evaluation system that focuses on the quality of the work. For real-time projects, the credits are tied to the economics of the project outcomes; for practical

projects, the credits are tied to the quality standards of the task outcomes, thus creating a flexible credit system.

3.5. To Build A Teaching Team of "Three Teachers" to Meet the Teaching Needs at Different Stages (Build A High-Level, International, Service-Oriented Teaching Innovation Team)

In view of the phenomenon of "school to school" that exists among professional teachers in higher vocational colleges and universities, under the leadership of the existing national teaching masters [3], closely connected with the development of the fashion industry, introduced or cultivated through various channels, reforming the structure of the teaching team, and establishing a team with the aim of improving the selection, guarantee and incentive mechanism of "Three Teachers".[4] In the first stage of the basic teaching, the school teachers are the main body, the enterprise masters and industrial masters are the supplement; in the second and third stage of the artisan training, the masters are the main body, the masters and teachers are the supplement, and the teachers are the main body. It is also to meet the rigid demand for the training of design craftsmen and to form a teaching innovation team with the ability to lead the progress of the fashion industry and the quality of double teachers.

4. Conclusion

Based on the original "Design Craftsman" talent training orientation, this paper integrates intelligent, informationized, networked, big data and other emerging technologies to build the "Design Craftsman +" fashion product design and manufacturing composite talent training model. From the curriculum system of design majors featuring "skill promotion line", to the practice system of integration of production and education integrated with "training, research and creation", to the personalized cultivation mode of setting the foundation with industry surface, setting the direction with skill line, setting the depth with position, and taking the quality evaluation of works as the core, this paper aims to establish the training model of "Design Craftsman +" fashion product design and manufacture composite talents. We will explore and practice the "Design Craftsman +" talent cultivation model in many aspects, such as the teaching evaluation system of "three teachers" and the teaching team of "three teachers". To innovate the talent model of senior vocational design majors and provide reference for other domestic design majors in running schools.

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