

An Exploration of the Apprenticeship-Based Professional Training Model for Portrait Photography

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Abstract

Higher vocational education nurtures high-quality technical talents, skilled craftsmen, and great national artisans, necessitating a return to the apprenticeship system. Modern apprenticeships not only teach apprentices practical skills, but they also exemplify the advantages of nurturing individuals with a focus on both ethics and skills and a human-centric approach. Against the backdrop of the rapid development of vocational education, portrait photography professional talent cultivation is suitable for constructing a modern apprenticeship model. It is advisable to establish talent cultivation bases in cooperation with schools, industries, and associations, integrate resources, complement advantages, build a team of masters who combine theory and practice, conduct studio project practical teaching, and form a "four-in-one" talent cultivation model integrating production and education.

Keywords

Portrait Photography; Talent Cultivation; Modern Apprenticeship; Integration of Industry and Education; Project Teaching; Ethics and Skills; Dual Teachers.

1. Introduction

As a critical branch of photography, portrait photography forms the basic business of traditional photo studios and is a "signature technique" that professional photographers should master. In the era of traditional photo studios, apprenticeship was the basic model for training professional talent in portrait photography. New employees were trained by appointed masters with high skills. Masters with rich photography experience provided powerful technical guidance, professional norms guidance, and social psychology guidance for newcomers. [1] After 2 to 3 years of apprenticeship, companies would assess their skills and determine the apprentice's skill level, with those failing to meet the requirements having to delay their debut. Apprenticeship was an extremely effective traditional model for transmitting skills, widely used in all walks of life for centuries. However, over the past 30 years, due to economic transition, enterprise restructuring, and the development of education and training methods, companies have gradually abandoned the apprenticeship system, and the requirements and methods for recruiting and training newcomers in various industries are also changing. The most common requirement is that newcomers must have relevant professional skills or corresponding work experience before starting the job. Therefore, with the rapid development and popularization of higher education and digital technology, photographers, like talents in other fields, have to rely on schools and their professional mechanisms for training. Higher vocational education has become the main way to train and cultivate various high-quality technical and skilled professionals. Xi Jinping, General Secretary, emphasized in his important instructions on vocational education that we should "adhere to moral education, optimize the positioning of vocational education types, deepen the integration of industry and education, school-enterprise cooperation, and vigorously promote the reform of education methods, school running models, management systems, and safeguard mechanisms", in order to "cultivate more high-quality technical and skilled talents, skilled craftsmen, and great national artisans". [2]

Practice-oriented higher vocational education, revolving around the cultivation of high-quality technical and skilled talents, has been explored and practiced in our country for more than 20 years, achieving a series of eye-catching achievements. But reviewing many years of educational practice, there are also many problems. For example, although the goal of technical skills cultivation has been emphasized, it is difficult to effectively connect and fully achieve the expected results in practical teaching, and there is not enough attention and research on the cultivation of professional ethics and social capabilities. It can be said that it has achieved certain results as technical skills education, but as "human education" and vocational ability cultivation, there are still obvious shortcomings. These include biases in educational concepts, lagging management systems, and the difficulty of fundamentally breaking through in talent cultivation models and methods. Under the teaching model of large classes, the content, manner, time, breadth, and depth of teacher-student interaction are limited. The industry has clearly also recognized these issues. Some institutions have earlier launched teaching reform projects for small classes and specialty student training. Later, based on integrating theory and practice and the unification of practical training rooms with classrooms, studio teaching was introduced. Various models, methods, and platforms have emerged endlessly. In recent years, master studios and modern apprenticeships have been one of the hot spots of exploratory practice.

For instance, Wenzhou Polytechnic, as a national demonstration higher vocational college, a key vocational college in Zhejiang Province, and a high-level vocational college with Chinese characteristics, aims to establish a Wenzhou model for vocational education. It strives to become a top domestically and internationally influential vocational college, standing at the forefront of higher vocational talent training model reform and exploration. The school has explored "wall-breaking" movements (the integration of classrooms and practical training rooms), specialty classes (small class sizes), order classes, studio projectization, and apprenticeship training, etc. Returning to and enhancing the apprenticeship model is an echo to the "great national artisans" national strategy and the goal and mission of vocational education. Since portrait photography is primarily based in a studio, it is suitable for small class sizes and practical teaching, thus especially suited for constructing a modern apprenticeship model. For example, Master Ye Junfen, a photography skills master in Zhejiang Province, began collaborating with Wenzhou Polytechnic in 2009 to participate in the cultivation of talent in professional photography. He was awarded the individual contribution award for school-enterprise collaboration by the Hangzhou-Ningbo-Wenzhou tri-college alliance. Starting from 2018, he collaborated with the school again, taking the lead in establishing the Zhejiang Province Photography Skills Master Studio in the Wenzhou Vocational Education Experimental Area, pioneering the exploratory practice of modern apprenticeship talent training.

2. Modern Apprenticeship Construction in Portrait Photography

Modern apprenticeship is a crucial model for artisan training and skill inheritance, exhibiting several unique characteristics and advantages compared to traditional classroom education.

First, apprenticeship embodies true practical-oriented education. As practice precedes theory, it is conducive to the development of hands-on abilities in apprentices. Modern apprenticeship established on the basis of small-class teaching facilitates individualized instruction and personalized guidance. In Germany, even the cultivation of doctoral students employs modern apprenticeship. Under this system, mentors design individualized training programs based on the characteristics of each doctoral student. [3] Thus, for the training and development of non-assembly line operation skills such as photography, modern apprenticeship is particularly vital. Second, modern apprenticeship implements project-based teaching, facilitating the integration of industry and education. The mentor, drawn from core corporate positions and the front lines of production, possesses rich practical experience and professional capabilities. They can utilize

production or research and development projects for teaching, realizing the integration of production, study, and research, effectively enhancing the technical and professional level of the apprentices.

Third, modern apprenticeship can achieve holistic education objectives. Modern apprenticeship borrows the emotional effects from traditional apprenticeship. Through daily interaction, the mentor's teachings and charismatic personality profoundly, and potentially lifelong, impact the apprentice. [4] Therefore, modern apprenticeship can transcend the various limitations of traditional classroom teaching models, achieve extensive and in-depth interactions between teachers and students, overcome the shortcomings of one-sided technical education, and achieve the educational objective of "integrating moral and technical education."

Fourth, modern apprenticeship embodies student-centric education. We call it "modern apprenticeship" because it does differ from traditional apprenticeship. Modern mentor-apprentice relationships are established based on the spirit of contract. [5] The mentor operates the workshop, recruits apprentices, and the apprentices willingly join, indicating their conscious acceptance of the workshop system and modern apprenticeship model. The workshop conducts project-based teaching, allowing apprentices to gain academic credits from project participation, and if the project yields economic benefits, apprentices can also receive corresponding labor remuneration. Upon graduation, the mentor also helps arrange employment or entrepreneurship matters for the apprentice. Therefore, modern apprenticeship thoroughly embodies humanistic education. [6]

The above features of modern apprenticeship require a high standard for mentor selection. To be a competent mentor, one must be a master of both morality and artistic skills. Without superior skills or profound understanding of the art, one cannot provide guidance and solve puzzles for apprentices. Without a high morality or great empathy with others, it is challenging to achieve the integration of moral and technical education and prioritize students. Taking the example of Master Ye Junfen, she was born into a photography family and dedicated her entire life to photography. Hence, she has a profound passion and commitment to photography and its talent cultivation. Simultaneously, she never forgets to enrich the energy of her artistic life, maintain an active creative passion, and never stop her footsteps of exploration and practice. Only by doing so can she live up to the responsibility and commitment of being a mentor.

3. Establishing an Integrated Industry-Education Base for Talent Cultivation in Portrait Photography

Given the rapid development of the digital creative industry and vigorous advancement of the digital economy strategies, there is a considerable talent gap in the field of digital creativity. The portrait photography industry faces a similar issue. From the perspective of revitalizing the portrait photography industry and cultivating professional talents, individual and scattered efforts are limited. To meet the demand for highly skilled new media creativity and image transmission talents in the new era, inherit and develop portrait photography skills, it is necessary to further expand and deepen industry-academic cooperation based on the foundation of the master-student system in the master's studio, thereby establishing a photography talent cultivation base.

To advance the reform of the talent training model of industry-education integration, improve the talent cultivation chain, and provide technical and talent support for the development of the digital media industry, thereby serving regional economic transformation and development, Wenzhou Polytechnic began a partnership with Phoenix Digital Media Group (Beijing) in 2019. Together, they submitted a proposal to build an "Innovation Application Demonstration Base for National Higher Education Digital Media Industry-Education Integration" under the Ministry of Education. They set up practical training rooms such as the 4K Video Creation Studio,

Industrial-level Post-production Center, and Virtual Studio. The base has also become a demonstration project for the "Five Batches" of industry-education integration in Zhejiang Province. The college collaborated with the Government of Ouha District to establish Wenzhou Design College in a mixed-ownership model. The local government provided the venue space. They set up new cultural creative studios, short video studios, and photography master studios that are linked with communication majors, trying to fully integrate the modern apprenticeship system into studio project teaching, thereby innovating talent cultivation models.

Firstly, the base is relied upon to further expand and enrich cooperation in industry-academia associations. The newly revised "Vocational Education Law" clearly stipulates that the state should play an essential role in promoting deep enterprise involvement in vocational education, encouraging the establishment of high-quality vocational education, guiding, and supporting enterprises and other social forces to legally establish vocational schools and vocational training institutions. Governments at the county level and above should strengthen the construction of vocational education practice and training bases, organize industry regulatory departments, trade unions, industry organizations, enterprises, and others to build high-level, specialized, open and shared industry-education integrated practice and training bases according to the needs of regional or industry vocational education. These would provide conditions and support for vocational schools and vocational training institutions to carry out internships and training, and enterprises to conduct training. The country implements a Chinese-style apprenticeship system, guides enterprises to set up apprentice posts according to a certain proportion of the total number of positions, encourages and supports enterprises, especially those with the ability to cultivate technical talents, to cooperate with vocational schools and vocational training institutions to provide apprentice training for newly recruited workers, in-service workers, and transferred workers, or jointly recruit students with vocational schools for apprenticeship training. Relevant enterprises can enjoy subsidies, rewards, relevant policy preferences, and tax reductions according to regulations. [7] During the construction of the practice base in cooperation with the Phoenix Digital Media Group, Wenzhou Polytechnic signed contracts with several top companies such as the Wenzhou Photography Industry Association and Wenzhou "Love Dedicated" Cultural Industry Group to establish practice bases, "dual teachers" cultivation bases, and cooperative research and development platforms, and stipulated that teachers should regularly practice in enterprises, implementing two-way interaction.

Secondly, integrating resources from industries and enterprises to create a team of famous masters. The school and the major have invited a group of famous masters and front-line technical backbones such as Ye Junfen, Lin Qimian, Huang Xinle, Chen Qin as guest or part-time professors. They regard the construction of master studios and the involvement of industry masters in school activities and teaching as professional construction assessment indicators. As stated in the "Vocational Education Law", industry organizations, enterprises, and others are encouraged to participate in the development of vocational education professional textbooks, incorporating new technologies, new processes, and new concepts into vocational school textbooks, and can dynamically update through loose-leaf textbooks. [7] Therefore, through multi-dimensional and multi-level cooperation, complementary advantages are formed, forming a team of masters that combines professional and part-time roles, injecting core strength into the construction of the integrated industry-education talent cultivation base for photography. As successful people in society, industry masters often have a strong sense of social responsibility, willing to cultivate the backbone of the industry, and train high-quality technical talents for enterprises. This is an effective guarantee for the operation of the modern apprenticeship system in the photography industry. [8]

Thirdly, projects are leveraged to deepen the integration of industry and academia, and to implement modern apprenticeship training. The most basic and crucial form and method of

modern apprenticeship training based on the base and the studio is project-based teaching. Through enterprises and masters, real projects are introduced into the studio, combining industry and academia, integrating industry and education, and allowing apprentices to experience a realistic working process according to enterprise standards. The project-based teaching of the modern apprenticeship system implements a quality assurance mechanism guided by project results, and is also an effective method for organizing comprehensive graduation practice (graduation design) and competition project guidance—by organizing activities such as vocational skills competitions, the state provides a platform for technical talents to showcase skills and learn from each other, continuously cultivating more high-quality technical talents, skilled craftsmen, and great national artisans. [9]

In summary, using a practical training base as a platform, cooperating with real enterprises, introducing actual projects, with the master leading and guiding apprentices in actual operations, a "four-in-one" industry-education integrated talent training model and professional complex are formed. [10] In the context of vigorously developing vocational education, deepening school-enterprise cooperation, and industry-education integration, the apprenticeship that needs to be returned and improved in the cultivation of professional talents in portrait photography is undoubtedly the modern apprenticeship system that integrates the above model elements.

4. Case Study of Project Teaching in the Integration of Production and Education Through a Modern Apprenticeship Program

Project-based teaching typically consists of project docking, case study, project design, division of labor, feedback, and revision. Let's take the case of "Development of Traditional Chinese Style Portrait Photography Sample" as an example. This case is a cooperative project between the master's studio of the aforementioned demonstration base and Wenzhou "Love Dedicated" Cultural Industry Group, guided by both the studio and company mentors, following a "dual mentorship" model within the modern apprenticeship system. [11]

Initially, under the school-enterprise cooperation mechanism, the company's mentors, who have rich market experience and adept in client photography and production, guide the apprentices in project docking, market research, and customer group analysis, specifying the project tasks and requirements.

The second step involves case study. Although the apprentices have learned basic photography and received some painting training, integrating Chinese painting methods and connotations into portrait photography is a novel topic. To this end, apprentices need to collect relevant sample paintings, discuss and analyze their historical backgrounds, character clothing, posture modeling, and scene setup, understanding and mastering the features of Chinese paintings. The base platform is equipped with abundant teaching resources, allowing apprentices to gather more related cases and data through the resource library and the internet. Studying classics and cases provides students resources for project creativity and opens up thinking.

The third step is project design. Proposals should be made from the perspectives of character makeup, costumes, hair styles, as well as lighting for shooting, scenes, and equipment, based on the project requirements. It is advisable to form multiple solutions in various groups and discuss them under the mentor's supervision. Each group reports their design schemes, exchanges opinions and suggestions, optimizes the scheme, and finally forms several templates.

In terms of character makeup, hairstyles, and costumes, apprentices can be guided to extract elements from classic character paintings from the Tang, Song, Yuan, Ming, and Qing dynasties and integrate them into contemporary popular styles, nurturing their innovative consciousness and ability.

Chinese painting emphasizes the use of blank space, not focusing on light and shadow effects, while photography shapes images through light and shadow. Therefore, it is necessary to make innovative combinations of Chinese and Western styles based on project requirements and market environment. The goal is to express the spatial artistic conception of Chinese painting and use light to create a sense of volume in character images. By combining these elements, we aim to create portraits in the style of neoclassicism.

Scenes include indoor and outdoor shots. Traditional Chinese character paintings usually depict trees, rocks, streams, bridges, pavilions, and towers outdoors, and Chinese-style furniture and screens indoors. These scenes can be shot separately and composed later. Mentors can also leverage school-enterprise resources, lead apprentices to the front line of the company, and complete the setup and shooting on site.

The choice of shooting equipment and gear is also crucial. Front-line photographers often use the Canon 5D series with the "big three" lenses: 16-23mm, 24-70mm, and 70-200mm, with a maximum aperture of 2.8. This camera and lens configuration can meet most on-site shooting needs, but it's inadequate for high-end portrait photography. The base provides more advanced Canon 5D1 series bodies and red circle series prime lenses for photography projects, achieving strong resolution in image quality and color, which results in better representation of skin and clothing textures and color reproduction.

The fourth step involves implementing the shooting and production phase. Each team collaborates, dividing work roles such as shooting, lighting, modeling, and assisting. In a studio-based apprenticeship education, the number of apprentices should be controlled within 15, and it is appropriate to divide them into 2 to 3 groups for efficient use of space and on-site guidance and management by the mentor. Although preliminary preparations are made, various situations can still arise on the shooting site that require immediate response. Shooting is a high-intensity labor combining mental and physical effort, posing a great challenge to both mentors and apprentices, as well as the models. The patience, perseverance, and striving for perfection of the mentor, the persistence and cooperation of the model, are all embodied teachings for the apprentices. These often deeply affect the apprentices and enhance their vocational quality, thereby increasing their confidence and achieving good results from the perspective of ethical and moral education. [12]

Apprentices initially learned the operation and simple application of post-production software such as Photoshop (PS), Adobe Illustrator (AI), Maya, and Virtual Reality (VR), while the modern apprenticeship project-based teaching demands apprentices to apply the effects and methods learned in post-production in an integrated and selective way to specific project tasks, aiming to achieve or even surpass the expected results. In the post-processing of portraits in the style of Chinese painting, it is necessary to further unleash creativity based on the actual shoot, to extract subjects, props, and backgrounds, and to combine them with new images, achieving a richer visual conception and a surrealistic style, and refining deep themes to elevate the main idea.

The final stage of project-based teaching is feedback and modification. Since the project originates from a corporation and is oriented towards clients, the project outcomes need to withstand the scrutiny of the corporation and the clients. This particular project case was developed and produced according to corporate needs, and sample examples were customized based on the target customer group. Therefore, during the design and production stages, it is essential to take onboard the advice and suggestions from corporate mentors, and the finished work must be submitted to the corporation for acceptance. Necessary revisions are then made based on the acceptance results. The final sample is acknowledged by the corporation and the target clients. This form of assessment is a distinctive feature of the modern apprenticeship, enhancing the practical effectiveness of this education method through evaluation. [13]

5. Conclusion

In summary, taking portrait photography vocational talent cultivation as an example, apprentices have strengthened core technical skills and their application ability from planning, designing to shooting and production through master studio project-based teaching. They have also enhanced their sense of teamwork and innovation integration, and elevated their enduring perseverance, meticulous craftsmanship, and professional qualities. At the same time, under the direct guidance of their mentors, the apprentices witness their own progress, filled with trust and gratitude towards their mentors. Through interaction with their mentors, they foster deep emotional bonds and learn valuable life lessons. In communication with corporations and clients, their public relations skills in their respective professions are improved. Therefore, the modern apprenticeship project-based teaching based on school-corporation collaboration and integration of production and education, is an effective approach to realize the cultivation goal of high-quality technical skills in vocational education while maintaining a moral character. It also encourages students to reflect on the meaning of life and helps them establish lofty humanistic ideals and spirit. [14]

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References

- [1] Li Jinsheng, Zeng Hao, Zhao Shuming. Research on the Influence Mechanism of the Apprenticeship System on the Innovative Performance of Apprentices: The Role of Psychological Availability and Proactive Personality [J]. Business Economics and Management, 2021(03): 19-29.
- [2] Xinhua News Agency. Xi Jinping gives important instructions on vocational education work [EB/OL]. [2021-04-13] (2023.05.28) http://www.moj.gov.cn/pub/sfbgw/gwxw/ttxw/202104/t20210413_354324.html.
- [3] Zhu Jiani, Zhu Junwen, Liu Li. The Transformation of Doctoral Student Training in Germany - A Comparison of the "Apprenticeship System" and "Structured" [J]. Degree and Postgraduate Education, 2013(11): 64-69.
- [4] Guan Jing. The Historical Evolution and Reflections of the Western Apprenticeship System [J]. Journal of East China Normal University (Educational Science Edition), 2010, 28(01): 81-90.
- [5] Chen Yiyuan, Li Cunjin, Li Ye. Research on the Path to Overcome Knowledge Sharing Hostility under the "Apprenticeship" Talent Training Model [J]. Modern Management, 2020, 40(01): 60-63.
- [6] Chen Huayong. Summary and Promotion of Teaching Achievements in Integrated Modern Apprenticeship Mode [J]. Contemporary Education Practice and Teaching Research (E-Journal), 2018(1): 871-872.
- [7] Vocational Education Law of the People's Republic of China (Passed at the 19th meeting of the Standing Committee of the Eighth National People's Congress on May 15, 1996, revised at the 34th meeting of the Standing Committee of the Thirteenth National People's Congress on April 20, 2022) [EB/OL]. [2022-04-21] (2023.05.28) https://www.gov.cn/xinwen/2022-04/21/content_5686375.htm
- [8] Li Xiacong, Li Feng, Zhao Min, et al. Research on the Influencing Factors of the Effectiveness of Tacit Knowledge Transfer in the Apprenticeship System of Technology Enterprises - An Empirical Study with the Master-Apprentice Exchange Relationship as a Moderating Variable [J]. Science and Technology Management Research, 2014, 34(21): 122-126+131.

- [9] Tao Zhuwan, Shen Qian. Construction of the "Four in One" Talent Training Model in Higher Vocational Education - A Case Study of Communication Majors [J]. Economic Research Guide, 2022(09): 118-121.
- [10] Tang Min. Artificial Intelligence and the New Apprenticeship System [J]. Journal of East China Normal University (Educational Science Edition), 2017, 35(5): 19-21.
- [11] Yan Jingmin, Li Deshun. Exploration of the Path of "Digital Photography" Teaching Reform and Ideological and Political Elements [J]. Art and Design (Theory), 2022, 2(12): 144-146.
- [12] Chen Jiayi. Research on the Design Method of Visual Communication in New Media Art Design [J]. Journal of Hubei Open Vocational College, 2022, 35(01): 194-195+198.
- [13] Wang Xiaoshan. Unity of Knowledge and Action, Solid Foundation - Exploration of Humanistic Spirit in Photography Teaching in Art and Design Major [J]. Journal of Shanxi University of Finance and Economics, 2021, 43(S1): 110-111+128.
- [14] Liang Yongyi, Sheng Xin, Wang Shuwei. Exploring the Reform of Management Communication Course Teaching Based on "Integration of Knowledge and Action" [J]. Research and Practice of Innovation and Entrepreneurship Theory, 2021, 4(07): 60-62.