Practice of Enterprise Led Construction of Higher Vocational Teaching System under Modern Apprenticeship—Take the New Century Hotel Management School in Ningbo as an Example

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Abstract. Industry-Education Integration and School-Enterprise Cooperation is an important direction in higher vocational education strategic development of our country. Modern Apprenticeship is exactly one of the deepening School-Enterprise Cooperation talent training modes. It strengthened enterprise dominant’s participating in modern apprenticeship, improved applied-type skilled talent training quality, established clear goal to foster professional ability. As an enterprise dominant, Ningbo New Century Hotel constructing scientific and effective education system, is a commendable practice to reaching higher vocational applied-type skilled talent nurture objectives.

Introduction

Suggestions including introducing the corporate into the school-running, strengthening reform on the school-running system and diversifying the main body of school-running and improving education quality were proposed in the Several Opinions on Deepening the Integration of Industry and Education from General Office of the State Council in December, 2017 [1]. A cooperation mechanism, which is led by both school and enterprise, promoted by the government, guided by the industry and operated by two main bodies—school and enterprise, was proposed in the notice of Measures for Vocational School-Enterprise Cooperation and Facilitation released jointly by six departments including Ministry of Education and National Development and Reform Commission in February, 2018; Modern apprenticeship, as a major reform and innovation of vocational education, is the result of deepening the talent training mode of industry-education integration, whose success depends on the factors including the integration between industrial needs and course arrangement, the integration between industrial standard and course content, the integration between production and operation process and teaching process, the integration between occupational qualification and diploma, the integration between lifelong learning and vocational education. Whether the enterprise penetrates into the whole process of talent training, whether it plays a leading role in the school-running and how to measure the standard depend mainly on whether the enterprise plays a key and leading part in construction of teaching system. An effective measure to facilitate the practice of modern apprenticeship is to build a scientific and reasonable teaching system.

Dilemma for Higher Vocational Education System Under the Modern Apprenticeship

Be it mechanism or technology, there will inevitably be dilemmas in its innovation. The birth of the higher vocational education system under the enterprise-led modern apprenticeship has ushered in a new world for the higher vocational education in China. However, there are inevitable confusions after crossing the threshold.

The Idea to Take the Enterprise-led Professional Ability as the Core has not been Fully Implemented.

The idea to center the school-running around employment in most higher vocational schools is just an empty word, with the idea of running professional ability building through the teaching process not fully implemented, the practical training condition lacking behind the industry development, the
course layout separating from the enterprise reality, the faculty lacking industry experience, the teaching method and teaching arrangement still detaching from the enterprise requirement. The student training still focuses on the diploma rather than the cultivation on professional adoptability and skills, with a lack of occupational features on higher vocational education and failure to guarantee the teaching quality.

The Enterprise is not Fully Engaged in the Construction of Higher Vocational Education System.

Modern apprenticeship is an enterprise-oriented vocational education mode with enterprise as the main body of modern apprenticeship training while the school takes it as the reform direction. In the current pilot project of modern apprenticeship, the enterprise has not fully participated in the student training process as it shoulders fewer tasks and spends fewer time. The enterprise has not yet established itself as the main body. Meanwhile, the enterprise has not actively participated in the school-running either, with the course content relatively detached from the professional ability, the teaching process detached from the production process. And the problem of putting more emphasis on the coursebook rather than the practical ability is prominent.

The Enterprise Lacks the Support from the Foundation.

There is a conflict in both time and space between the industry and education, working and learning under the current modern apprenticeship in higher vocational school. While the “working” and “industry” part takes place in the enterprise, the education part is mainly done in the school. Students have to leave the school to do an internship in the enterprise, yet they still have to finish their courses to graduate, forcing them to return to the campus. There is a conflict in both time and space between the “industry” and “working” part of the enterprise and the “teaching” and “learning” part of the higher vocational education, which is prominent and extremely hard to solve, meaning that the teaching and internship has to be conducted in a serial way.

Currently, the country lacks policy support in the design of teaching system of the modern apprenticeship, with enterprises lacking the idea to take the lead. The progress to combine teaching and working has also been slow.

The Construction of Higher Vocational Teaching under the Enterprise-led Modern Apprenticeship

Constructivism believes that learning has to relate to some certain degree of social and cultural background, i.e., the “context”. Learning in reality helps the learner to use his or her related experience based the existing cognitive structure. If the existing experience fails to absorb new knowledge, it would lead to the process of “adaption”, i.e., the transformation and regroup of the existing cognitive structure. The construction of the new knowledge could be achieved by “assimilation” and “adaption” [2]. In the tradition class teaching, the learners would fail to understand the knowledge quickly as the class fails to provide the reality that has rich contents and vivid figures. However, the enterprise-led teaching system could offer rich and vivid teaching contents that would facilitate the absorption of the knowledge.

To Construct the Teaching System Centering around the Professional Ability Needed by the Enterprise

The goal of the higher vocational education is to build related teaching system and train the student to quickly adapt the profession centering around the teaching philosophy to emphasis on the professional ability needed by the enterprise and based on the knowledge, skills and ability as required by the enterprise [3]. The teaching system is a structure composed by the restriction and influence among different factors of teaching activity. It is also a teaching environment that teachers use, based on certain teaching ideas, to impact and evaluate students through courses and measures. Under the modern apprenticeship, the training on the professional ability should take the center stage, including the training on the occupation ability, professional quality and professional
development ability. Its teaching system layout fits the individual characteristics of different students and helps every student achieve the professional ability, fully utilizing the overall function of the talent training in higher vocation education.

Reconstruction of the Enterprise-led Teaching System

The higher vocational education under the modern apprenticeship should not be achieved only by school as the main body, neither should it only demonstrate the education level of the school, but also the education level of the enterprise. The modern apprenticeship in essence is an enterprise-led teaching mode as the enterprise boasts the position and features to act initiatively, freely, progressively and purposefully. On the one hand, the employment standard of the enterprise should be introduced in the teaching system, with an aim to change the training method in the school. On the other hand, state-of-the-art practical training site and technology support should be provided for the teaching by utilizing the enterprises’ resources. In order to reconstruct the enterprise-led teaching system, the fundamental professional ability, fundamental professional quality, employability and professional development ability should be emphasized. Meanwhile, during the implementation of the teaching system, those mentioned abilities should reflect upon the enterprise as the main body.

The Training System of Double-position Double-competence Faculty

The school should provide a favorable condition for the faculty training under the modern apprenticeship, focusing on building a double-position double-competence faculty, which is a key factor determining the success of the modern apprenticeship. In accordance to the idea of Double-position, Double-competence and Part-time and Full-time Teacher Combination and the operating mode of Two-position Switching and Two-main body Training of school and enterprise, a high-quality double-position double-competence faculty should be built. A professional part-time faculty with experts selected from the enterprise focuses mainly on improving the students’ practical skills, complementing the advantages of the school teachers, meeting the professional and technical requirement in the industry, cultivating the knowledge and ability required by a professional post, having a deep connection to the frontline posts in the enterprise and deconstructing and reconstructing the course structure in the enterprise. Based on the teaching philosophy and guided by the course requirement, the experts set the training goal to improve the post adaptability and professional skills, reform the teaching content and method, simulate the real-life post and conduct teaching activity.

The Construction of Teaching Environment that Matches Enterprise Standard

It is required that in the real teaching environment should be the one that integrates teaching, learning and operating with software and hardware facility matching that of the enterprise, featuring standard management, complete facility and practical training. Only a teaching environment like that could provide the students with an all-round and open space to learn and practice, where they can not only improve the effectiveness of the professional skill training by conducting a full-on practice and be fully equipped with the hotel management and service ability; but also promote their interest in the profession and their understanding of the profession by conducting teaching and training in an environment closer to reality. Students are given the opportunity to learn relevant knowledge, master professional skills and form professional quality while they are practicing in a simulated enterprise environment. The teaching effect and learning effect of situational teaching of the real hotel environment are guaranteed by implementing the teaching mode of combing working and learning.

The Enterprise-led Course System that Integrates Industry and Education

The construction of the course system should not purposely seek systematicness and completeness, rather, it should seek to integrate with the requirement of the students’ future job with a fragmented course system. By conducting job analysis, the course should be designed based on the knowledge, skills and attitude required by the position. Teaching and practical training environment and
resources inside and outside the campus should be utilized to integrate the course into the work both in the out of the campus. Only by fully taking advantage of the function of enterprise and expert in the construction of enterprise-led course system that integrates industry and education can the course content better match the actual production activity and meet the requirement of the position. The students could not only learn theoretical knowledge while they are working, but also study major-related professional abilities according to the market needs, allowing them to experience the higher vocational education idea of Combing Working and Teaching.

**The Establishment of the Enterprise-led Evaluation System**

The apprentice quality standard is a key basis to examine the quality of the talent training under the modern apprenticeship. When formulating the assessment standard of the modern apprenticeship, the enterprise should take the leading role along with the participation of the school. First of all, the required knowledge and specific skills for the position as well as its core ability and skill level should be confirmed based on the title and description of the job; secondly, the training standard for the rotational practice should be formulated, with the training time, operation code, technical point and standard and rotation sequence of each position confirmed; thirdly, an evaluation system for teaching quality standard, work ethics and rewards. Should be established. During the specific evaluation process, the situational evaluation should be emphasized, with the training goal of the enterprise professional skills as the basis. The focus of the evaluation should be on the students’ core professional ability, professional quality and positional skills.

**The Practice of Higher Vocational Education System under Modern Apprenticeship Led by New Century Hotel**

Ningbo City College of Vocational Technology and Zhejiang New Century Hotel Management Group signed virtual industry-school cooperation agreement and founded New Century Hotel Management School in Ningbo (hereinafter referred to as New Century School) in 2017, with a joint investment of 3 million RMB to conduct training for the hotel management talents under the modern apprenticeship. New Century Hotel Management School in Ningbo trains mainly the frontline management talents in the hotel industry and gradually explores the enterprise-led higher vocational education system.

**The System and Mechanism Led by New Century Hotel Group**

Relying on the New Century Hotel Management Group and Ningbo City College of Vocational Technology, the New Century School takes advantages of both parties and actively conducts pilot work on modern apprenticeship, forming a long-term mechanism that both school and enterprise cooperate with each other to educate students and develop together. The statement of work under modern apprenticeship is formulated by the council of Ningbo New Century Hotel Management School, with a tripartite agreement signed to implement modern apprenticeship. Together, two parties draw up the training plan for the hotel management talents, develop the course integrates industry and education, train the double-position, double-competence faculty, build the practical training room that stimulates reality and evaluate together, establishing innovatively the training system and mechanism for hotel management talents in higher vocational education led by New Century Group.

**Establishing the “New Century Style” Teaching System led by the Enterprise**

New Century School fully takes advantage of the resources of the New Century Group’s subordinate hotels and puts forward talent training plan for New Century frontline management staff based on the professional ability required by the position, establishing an industry-education integrated teaching system that is founded on value creation and sharing. A “1.5+0.5+1” three-phase talent training mode has been created, with 1.5 years of school education, 0.5 year of enterprise experience intertwined with both learning and practicing and 1 year of “observing internship + hands-on internship”, heavily featuring the students’ professional ability. The teaching system is designed centered around the employability, achieving the modern apprenticeship talent training
mode with both learning and practicing. By perfectly combing the school and enterprise, students could experience the real-life environment in the surrounding New Century hotels. The New Century series industry-education integrated textbook is developed under the guidance of the double-position, double-competence faculty that match the New Century standard that combines practice and learning, which is what the New Century teaching system is after.

**Immersive Learning in the Real-life Environment in New Century Subordinated Hotels**

During the teaching process of modern apprenticeship in Ningbo New Century Hotel Management School, the New Century Grand Dessert was introduced into the campus, resulting into the establishment of New Century Dessert House in cooperation with the existing Shuxiang Café in the school. Funded by both enterprise and school, it has become a real-life teaching site with a business function for students to practice. Its on-site layout and equipment procurement were done in accordance to that of New Century Hotel Dessert House, with its operation process, procurement management, cost control and salary and incentive system also inspired by the staff management mode and employee handbook of New Century Grand Hotel. The geographical advantage of the cooperating enterprise has also been utilized, with the five-star New Century Grand Hotel Ningbo set as the teaching site, breaking the restriction of time and space in the traditional teaching. The teaching time and venue are arranged flexibly with the teaching mode combines teaching and hands-on practice, where the hotel itself is the classroom. In this way, the students could master the knowledge better in the real-life environment. With the first-hand experience of hotel operation, the students could taste the real operating environment, service process and enterprise management system as well as the evaluation standard in the enterprise, in which case their hands-on skills and professional quality could be continuously improved, thus achieving goal of the practical teaching. In this case, the theory and practice, teaching and doing could be highly integrated.

**The Reconstruction and Optimization of the New Century-led Course System**

Through the communication and research conducted with New Century Hotel Management Group, Ningbo New Century Hotel Management School has emphasized the training on the professional ability when developing the course with a reference to the corresponding position in the hotel, thus achieving the reconstruction and optimization of its course. The design of its course gives the full consideration to the development of New Century Hotel Group and the requirement of the students’ future positions. It is composed by several parts, each fitting the requirement of the relevant posts in the hotel. As the core course links directly to the core competitiveness of the position, it focuses on the training on the professional ability. Based on the position requirement in New Century Hotel Management Group, the hotel management major courses reflecting the quality of the future New Century management staff in aspects including verbal delivery, interpersonal communication, professional image. Courses including **Building a Professional Image, Hotel Communication Skills and GRP Management Practice** are highly emphasized to improve the students’ course system and knowledge structure and further optimize the course arrangement; skill course including **Catering Operation Practice, Room Service Operation Practice, Health and Fitness Operation Practice, Hotel Service Design and Profit Management** have been reconstructed, with most of the practical courses set rotationally in the fourth semester; the practical courses have been optimized as the hotel is required to shift the students’ position at least three times during the practical training period so that students could have a deeper and more complete understanding of the hotel industry. The practice session would be included in the 1.5 years of school education, with more real-life operating practice sites added, allowing the student to experience the hotel position even in the school and improving their professional and comprehensive ability. Courses including Hotel Club Practice and Hotel Self-Organized Party Practice are added to provide a better training for the students’ hands-on skills in the real-life practical courses in the school, which prepare them for the next phase to combine learning and working and conduct hands-on internship. A course learning platform has been developed by the Ningbo New Century Hotel Management Group, using the huge platform of the group to enrich the online course resources. The combined teaching mode has been developed to achieve the training both online and offline.
Building a Double-position, Double-competence New Century School Faculty

The qualified faculty are trained by both New Century School and the enterprise, with the *Double-position System in Hotel Management Major* formulated by both parties. The qualification and requirement, selection standard, training measure, evaluation process and reward system for the double-position, double-competence faculty have been established and completed. It is required that the faculty from New Century Hotel Management Group should have at least 5 years of work experience in the group and hold at least a mid-level position. Meanwhile, the requirement for ideology, politics, law and moral has also been highlighted. The faculty are required to receive a 16 school-hour of training in teaching, with standard and selection process set up for the faculty from New Century Group. Their responsibility and pay should also be determined, with a performance assessment system to stimulate their initiatives. The higher vocational teachers are required to take the New Century School training and to have a rather deep and complete understanding of the operation philosophy, corporate culture and the skill requirement for key positions in the New Century Group so that they can keep pace with the development and operation of the group; meanwhile, they are required to conduct frontline observing internship in the New Century Hotel Group and conduct hands-on internship in the group for at least one month every semester so that they could get to know the latest operation and management business in the group and improve their professional ability to be on top of the industry. In the past couple of years, a number of teachers have been selected to conduct practical study in the headquarter and its subordinated hotels of New Century Management Group. Teachers are assigned to hold positions in the group and rotate their positions in a regular basis to enrich their practical experience. The teachers’ practical skills in enterprise are also included in the annual evaluation, serving also as a basis for their promotion to the professional skill title. Ningbo New Century Hotel Management School has managed to build a faculty that suits the modern apprenticeship through measures including the two-way faculty training, evaluation and reward system and the training on the double-position, double-competence faculty.

Establishing an Evaluation System Led by New Century Hotel Management Group

*The Evaluation and Supervision Measure for the Modern Apprenticeship in Ningbo New Century Hotel Management School* is formulated by both the school and enterprise, breaking the traditional evaluation system. It is a system that accommodates the professional development of the student and applies to part-time and full-time teachers, hotels and school. *The Evaluation Measure for Students’ State of Learning and Effectiveness in Ningbo New Century Hotel Management School* has been developed and released to build an integrated evaluation platform for the modern apprenticeship in New Century School. Faculty from both the enterprise and school would use the platform to conduct teaching in class, arrange teaching plan, formulate practices, assignment and exam. Under the guidance of teachers, students would finish the study on knowledge points and conduct practice and exams through the platform after the class learning and hands-on internship. Students are evaluated comprehensively by multiple factors including the state of learning in and after class, the results of the internship, overall quality, innovation activities and results, with the aim to determine the students’ learning object, change learning habit and improve learning quality. The exams are all conducted in with the full-process control as the results interconnected with the teaching content in school and practice projects in enterprise. The students’ results on record objectively reflect their real performance, displaying the whole integration process of the electronic files of the students’ learning, practicing and internship. The qualified apprentice evaluated by the school and enterprise should be awarded with the diploma and professional qualification required as a frontline management staff in New Century Group as well as the access to the enterprise.

Conclusion

The construction of enterprise-led teaching system is the foundation for the success of modern apprenticeship, reflecting the implementation of the teaching philosophy that centers around ability
building and employability. It also drives the coordinated development among students’ knowledge, ability and quality. Indeed, there is still a long ahead in the teaching reform, which should be enterprise-based and enterprise-led. The teaching philosophy that gives the center stage to the professional ability should be promoted. And a deeper and more complete exploration and practice on the teaching environment building, faculty competence building, teaching content, course system, industry-education integrated textbook formulation, teaching method and evaluation system so that the enterprise-led teaching system could provide the solid support for the training on practical and skill-oriented talents.

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