

# Demonstration of the Distinguished Teacher Studio Leads the Exploration and Practice of Teachers' Teaching Innovation Team

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**Abstract:** The work of the distinguished teacher studio is based on activities and has the characteristics of learning, demonstration, and academic. The “double-qualified” distinguished teacher studio is an important way to help the development of vocational education teachers and cultivate outstanding “double-qualified” teachers. It is also an important carrier to improve teachers’ teaching, practice, and scientific research ability, to promote the “three education reform” of vocational education, and to train high-quality technical personnel.

**Keywords:** Distinguished teacher studio; Teacher teaching innovation team; School-enterprise cooperation; Vocational education

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## 1. Introduction

In the context of science and technology development and industrial revolution, transformation, and upgrading have put forward new requirements on the cultivation of outstanding talents in higher vocational education <sup>[1]</sup>. The cultivation of outstanding talents is urgently needed in a team of outstanding teachers with noble morality, high teaching level, and strong scientific research and technical service capabilities. The National Vocational Education Reform Implementation Plan (Guo Fa [2019] No. 4) issued by the State Council of China clearly mentioned that it is important to build a group of high-level vocational college teacher teaching innovation teams, demonstrate and lead the construction of high-quality “double-qualified” teachers, as well as deepen the reform of teachers, teaching materials, and teaching methods in vocational colleges <sup>[2]</sup>. This further points out the development direction and goal for the construction of teaching staff in vocational colleges.

## 2. Research background

Distinguished teacher is an honor for school teachers. The key to the improvement of teaching quality lies in teachers, while the construction of teaching staff is the key to talent training and it is also the foundation of the “three education reform” in the new era, therefore the leadership of distinguished teachers is very important <sup>[3]</sup>. The distinguished teacher studio led by distinguished teachers and masters is categorized according to disciplines and professional categories, bringing together education, teaching, scientific research and industry-learning, and giving full play to its guiding role and service effectiveness. The distinguished teacher studio focuses on curriculum development by integrating theory and practice, project-

oriented teaching practice and drills, teaching and research exchanges and project cooperation, and jointly improve teachers' practical teaching ability, scientific research ability, research cooperation ability, etc. <sup>[4]</sup>

Since the author was awarded as a national distinguished teacher of higher education in 2011 and set up the distinguished teacher studio, the author has conducted continuous research based on the distinguished teacher studio with the core goal of improving the quality of teachers as "double qualified teachers," by taking the teaching innovation team as the carrier, while the synergy theory as the guidance and carried out the exploration and practice of cultivating excellent teachers. In 2016, the "Distinguished Teacher Studio Model Leading Teacher Teaching Innovation Team Implementation Plan" was formed. The construction of teachers' teaching innovation team highlights the functions of demonstration, collaborative innovation, and promoting reform which are focusing on solving the problems of distinguished teachers outshine others, the lack of high-level drive, and the lack of motivation for teachers' teaching reform which is shown as the lack of willingness and ability, the lack of teachers' scientific research back-feeding teaching ability, the disconnection between scientific research, social service and teaching and other teaching problems. Since October 2016, the program has been popularized, applied, and continuously improved and a series of landmark achievements have been achieved which are widely praised.

### **3. The main teaching problems and methods to be solved**

#### **3.1. The main teaching problems to be solved**

Firstly, the distinguished teachers are thriving, while the high-level leadership is insufficient. Secondly, the motivation of teachers' teaching reform is insufficient which is manifested by the problem of weak willingness and ability, and thirdly the teachers' scientific research feedback teaching ability is insufficient, and scientific research, social services, and teaching are out of touch.

#### **3.2. How to solve the problem**

The problems could be solved firstly by establishing a distinguished teacher studio, building a platform, and innovate an organization. By taking the teacher innovation team as a carrier, a Flying Geese Paradigm of team teacher training can be constructed, form an incubation model from point to the surface, provide a mechanism guarantee for teachers' growth, and realize teacher training and professional construction go hand in hand. After analyzing the personal qualities and professional abilities of the team members, the in-charge person of the distinguished teacher studio determines the head geese in each area of expertise, details the growth path of teachers, stimulates teachers' endogenous motivation, guides team building, and leads the way. Through the way of "leading the wild goose," one can form a situation of leading an area by points, improve the quality of the team's "double qualified teachers," and lead other teachers to make progress together. This kind of hierarchical and differentiated training of teachers with different majors and different development paths could promote the rapid growth of cadre teachers and young teachers, stand out from the "flock of geese," and gradually move towards the development of distinguished teachers <sup>[5]</sup>.

Secondly, by giving full play to the value orientation of the cultural construction of distinguished teacher studio, and clarify that teaching reform is an important channel for teachers' self-development and self-improvement, which is also the internal demand of teachers' professional development. The person in charge of the project is the core and soul in the development the distinguished teacher studio, the source of cohesion, inner drive, self-confidence and influence, and the spiritual force that leads the teaching reform based on cultural construction which plays a role as guidance <sup>[6]</sup>. Distinguished teachers have advanced educational ideas and rich in teaching experience. Through taking the lead in setting as an example and leading by demonstration, one can imperceptibly guide the teachers' team to conduct activity of "problem is the subject, while teaching is research." One should constantly practice and explore the process of a subject research, often reflect on their teaching behavior, discuss and study new technologies and methods,

and actively seek countermeasures to solve problems. In teaching designs curriculum thinking, loose-leaf teaching materials, skills competition, and other aspects should continue to reform, in order to achieve the effect of exploring the problems and improving in action, and effectively promote the internal motivation and ability of teachers' teaching reform.

Thirdly, set up a platform for scientific and technological innovation and industrial service, conducting scientific research focusing on applied research and technical services around industrial key technologies, and enhance teachers' ability in scientific research and social service by relying on the platform to realize the industrial transformation and teaching transformation of scientific research and social service achievements, and the proportion of scientific research and social service achievements into teaching resources is more than 90% and help to build a national teaching resource database, and lastly rely on scientific research and social service projects to carry out the teaching reform of "promoting education through research, and creating innovation through research and education." Through teaching reform, we can cultivate innovative and skilled talents, and realize the effective combination of symbiosis and mutual promotion of scientific research, social service, and education.

Fourthly, promoting education through research is the final achievements of scientific research projects which are transformed through two ways: one is to form products to the industry to promote the upgrading of industrial products, and the second is to transform teaching resources, including teaching cases, teaching materials, micro-courses, and practical training programs, which are integrated into new technologies, new standards, and new norms of the industry, in order to further feed the teaching mode, improve the teaching quality, and assist in the cultivation of innovative talents.

Finally, creating innovation through research and education. The scientific research project is integrated into the course of teaching, and the project-based course teaching is performed to carried out the teaching which is organized around the whole process of completing a scientific research project (such as a product research and development), and the teaching team is composed of school and enterprise mentors to guide students throughout the process. The school and enterprise mentors can carry out teaching and research according to the project process and norms. By participating in a complete scientific research project, students can master the product development process, and also learn professional knowledge such as process development, research and development formulation, test evaluation, pollution control, and production management. Meanwhile, in the process of solving technical problems, students can cultivate innovative ability, professional skills, craftsman spirit, and shape innovative personality.

#### **4. Innovation point of achievement**

##### **4.1. Construct a new construction mode in which the head geese leads the way and the geese arrays fly together**

The distinguished teacher studio, with improved quality of "double qualified teachers" as the core goal, taking the teacher innovation team as the carrier based on the new era. Exploring the construction of "wild goose array" for teacher training, focusing on the hot spots and difficulties in vocational education and teaching, and through the common effect of many "wild goose array," with goal-driven, and task-oriented mode of operation to create a high-quality "double-qualified" team of teachers with strong teaching ability and professional and technical expertise. The organic integration of teacher training and professional construction can make teachers' to growing more targeted and successful, and realize that teacher training and professional construction go hand in hand.

#### **4.2. Guided by value and action a new norm for the coordinated development of teachers, and teaching reform is formed**

Guided by the value of both virtue and technology, the distinguished teacher studio gives members demonstration and guidance from the four aspects of morality, talent, teaching, and research based on the growth experience of distinguished teachers, educational and teaching achievements, professional level, and personality charm. The spiritual strength of the continuous education reform should be built in various ways. Through the teaching reform practice as problem is the subject, teaching is research, talent training and professional development can keep up with the trend of the time, and can be iteratively upgraded and developed continuously, thereby we can point out and grasp the direction of teachers' grow, which can help avoid the situation such as being tired to cope with twists and turns, stopping at faults, and forms a new model of coordinated development between teachers and teaching reform.

#### **4.3. A new approach to practice scientific research, social service, and teaching to permeate each other, and to achieve closed-loop symbiosis and growth**

Teaching is the basis of scientific research, which can guide and promote the development of scientific research, and it is an essential way to reserve scientific research<sup>[7]</sup>. Scientific research is a purpose of teaching and has a feedback effect on teaching. Scientific research helps to improve the teaching system, promote teaching reform, cultivate the quality of "double qualified teachers," and improve the quality of teaching. Integrating the new industrial processes and technologies into teaching resources may also solve some problems that are faced by the original teaching connotation, teaching resources, and education standards of majors are out of touch with the demand for talents in industrial development, thus realizing accurate education, innovating, and enriching the theoretical connotation of integration of production and education, eventually, help to expand teachers' functions, breaking traditional teaching concepts, and improving teaching quality and efficiency.

### **5. Main results achieved**

The application of the practice program has comprehensively improved the overall quality of teachers and formed a shared and referential experience in the construction and reform of teachers' teaching innovation team, which may play a leading and exemplary role in other higher vocational colleges and radiate the whole country. The team has been selected as one of the first national teaching innovation teams of vocational education teachers and the national Huang Danian-style teaching team, and has trained the leading talents of the National Ten Thousand People Plan, the Specially Appointed Experts of the State Council, the Pearl River Scholars, the provincial technical experts, the first prize winner of the national teachers' teaching ability competition, and the excellent instructors of the national students' skills competition and the first prize of the Challenge Cup, and the team has been selected as the leading specialty of the national "Double High Plan" of high-level specialties based on the refinement specialty. The Collaborative Innovation Center of the Ministry of Education of China and the Engineering Center of Guangdong Province have been built, and the team has won more than 60 vertical and horizontal technical services, 27 scientific and technological awards such as Guangdong Science and Technology Progress Award, 42 invention patents, and 32 social training projects in the past five years, helping enterprises increase sales of more than 2 billion yuan. The proportion of teaching resources such as the transformation of achievements in science and technology and social services into teaching materials has reached more than 90%. Meanwhile, more than 100 domestic colleges, such as Shenzhen Vocational and Technical College have exchanged and applied the experience of this achievement. Mainstream media such as China Education Daily and China higher Vocational College Network have reported this achievement in the media.

## 6. Conclusion

In short, teachers are the basic elements for vocational schools to do well in education and teaching. Vocational schools should give full play to the role of “distinguished teacher studio,” focus on improving teachers’ quality, and promote teachers’ professional development. It is important to let the distinguished teacher studio to play the role of leading research, exchange and discussion, demonstration and guidance, improve the work norms for the practice of advanced teaching concepts, and make the distinguished teacher studio truly become a platform for promoting teachers’ professional development. The practice of leading the construction of teachers’ teaching innovation team by the demonstration of distinguished teachers’ studio mainly includes three aspects; (1) To set up distinguished teacher studio, that is, to set up a platform to innovate the organization with the teachers’ innovative team as a carrier to construct the “Flying Geese Paradigm” for training the teachers team, to form an incubation model, and to provide a mechanism guarantee for teachers’ growth at the same time. Finally, the situation of teacher training and professional construction goes hand in hand; (2) To give full play to the value orientation of the cultural construction of distinguished teacher studios, and imperceptibly guide the teachers’ team to carry out problem as the subject, teaching as the research by taking the lead in setting an example and leading by demonstration, explore in the problem and promote the action, effectively promote the promotion of the internal power and ability of teachers’ teaching reform; (3) To establish mutual penetration among scientific research, social services, and teaching. The way of closed-loop symbiosis and co-growth has solved some original problems related to the disconnection between teaching connotation, teaching resources and education standards, and the demand for talents in industrial development, and finally realized accurate education, innovated, and enriched the theoretical connotation of integration of production and education, expanded teachers’ functions, broke traditional teaching concepts, and improved teaching quality and efficiency. The practice scheme has extensive universality and application value. If further in-depth research is conducted, it will produce more results and have a broader prospect of popularization and application in the field of higher vocational education.

## Disclosure statement

The authors declare no conflict of interest.

## References

- [1] Guo JL, 2020, Research on the Reform of Talent Training Mode of Higher Vocational Education under Industrial Transformation and Upgrading. Nanning Normal University (Natural Science Edition), 2020(02): 121–127.
- [2] Zhuang XZ, 2019, Innovation, Guide, and Implementation: Interpretation of the Implementation Plan of National Vocational Education Reform. Education and Profession, 2019(7): 5–10.
- [3] Li S, Zheng L, Zhang S, et al., 2020, Teacher Education Teaching Quality Index System and Model Construction. Journal of Southwest University (Social Science Edition), 2020(6): 82–90.
- [4] Yao KP, 2020, Research on the Construction of “Double-Qualified” Master Studio in Higher Vocational Colleges. Journal of Liuzhou Vocational and Technical College, 2020(06): 34–37.
- [5] Qi L, 2020, Practical Research on the Construction of “Flying Geese” Mode by Teachers in Distinguished Teachers’ Studio: A Case Study of Distinguished Architects’ Studio in Qli Secondary Vocational School. Professional, 2020(35): 60–61.
- [6] Wang YF, 2021, An Analysis of the “Four Qualities” Standard for the Construction of Master Studios. Forum on Teacher Education, 2021(08): 82–83.

- [7] Wang YN, 2020, Comprehensively Improving the Overall Contribution of High-Quality Development of Vocational Education Research Services-Based on 2019 China Vocational Education Research Development Report. *China Vocational and Technical Education*, 2020(12): 5–15.

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