Exploration on the Construction of Teaching Quality Assurance System in Higher Vocational Colleges

Xiaofang Yuan
Quality Assurance Center, Shenzhen Polytechnic, People’s Republic of China

Abstract: The construction and implementation principles, implementation paths and guarantee measures of teaching quality assurance system in higher vocational colleges were expounded in this paper. The model of START teaching quality assurance system was proposed, which provided an example for higher vocational colleges to build a comprehensive and diversified internal quality assurance system centered on student development. The establishment of quality assurance system could effectively promote the continuous improvement of internal management level and talent training quality in higher vocational colleges.

Keywords: Higher vocational colleges, Quality, Model, Assurance system.

1. Introduction
Teaching quality is the lifeline of a school, and the teaching quality assurance system is a purposeful, organized and planned management activity and mode, such as the organizational framework, programmatic document, conditional support and working measures established by a school to ensure teaching quality. Vocational colleges have attached great importance to teaching quality, and scholars have paid much attention to vocational teaching quality. Ethel E. Idialu proposed that vocational education quality covers teaching, learning, infrastructure, student behavior and other activities in vocational education [1]. M E Galvao discussed the importance of awakening the consciousness of vocational colleges to improve the quality of vocational education [2]. Cory Ross et al. pointed out that George Brown College is a leader in the combination of work and study among community colleges, but it is still committed to excellent teaching and learning, actively carries out quality assurance activities, provides high-quality experiential learning for all students, and ensures that students become graduates suitable for the workplace [3]. Huang qiuming and Sun baiming respectively studied the curriculum and specialty quality assurance system of higher vocational colleges [4,5], and Gan huayin pointed out the dilemma of high-quality development of higher vocational colleges and the strategies to break out of the encircling [6]. Therefore, according to the quality concept of "student-centered, results-oriented, multiple evaluation, data-driven, continuous improvement", it is very important for higher vocational colleges to build a comprehensive and reliable teaching quality assurance system.

2. Construction and Implementation Principles of Quality Assurance System

2.1. Principles of construction
2.1.1. System principle
The teaching quality assurance system is a diversified network composed of schools, teaching departments and administrative departments, which involves each link of the whole process of teaching activities, teaching management and teaching support. Therefore, we must carry out systematic principle in order to give full play to the overall benefits of the system.

2.1.2. Principle of purpose
Construct the teaching quality assurance system covering "administration-teaching", "teacher-supervision" and "evaluation of teaching-evaluation of learning", to provide quality assurance for realizing the goal of talent cultivation.

2.1.3. Guiding principle
The construction of teaching quality assurance system should play a direct role in safeguarding, supervising and promoting school teaching work, and guide the teaching quality objectives, teaching process, teaching resources and teaching behavior of teachers and students.

2.1.4. Dynamic principle
Teaching quality is formed in the process of teaching activities according to the talent training plan, and must be adjusted and improved constantly according to the changes of internal and external factors and conditions. The teaching quality assurance system must also follow the dynamic principle.

2.2. Principles of implementation

2.2.1. The principle of combining standards with characteristics
According to strategic vision and development stage of the school, in adherence to standards of relevant state departments to formulate, the school independently conduct in conformity with the practical, embodies the educational characteristics of school education teaching management specification, the quality assurance system for the construction of the work. Through continuous improvement, the school continuously improves the effectiveness of quality assurance work, and forms an effective support for the quality of talent training through refining and summarizing.

2.2.2. The principle of combining comprehensiveness with focus
The key factors and key links that affect teaching quality should be comprehensively controlled. Meanwhile, regular supervision, diagnosis and improvement should be carried out by focusing on specialty and curriculum construction, aiming at specialty positioning, training scheme, curriculum system,
faculty, teaching conditions, talent training effect and other aspects.

2.2.3. The principle of combining accessibility and testability

According to the SMART principle (specific, measurable, attainable, relevant, time-based), determine the quality requirements of teaching quality objectives, teaching resource management, training process management, quality management and other specific links. Based on process method, identify and manage various activities and resources as processes, determine the input and output processes of each process and the interface of related processes, set up quality monitoring points, and establish a quality system integrating target responsibility, quality standards, work system and performance assessment.

2.2.4. The principle of combining data analysis with practical research

Adhere to the principle of seeking truth from facts in all work. For most jobs, big data surveys are used. For special work or general and conclusive work, experts shall participate in research and investigation. The combination of the above two ways forms the basic working method to ensure the teaching quality.

3. Implementation Path of Quality Assurance System

3.1. Build a comprehensive and diversified teaching quality assurance system

The teaching quality assurance system should not only consider the appeal of stakeholders and the influence of other external environments, but also consider the functions, characteristics and operation mechanism of each part of the system. All teaching units, functional departments, teachers and students should be organized to form a quality management system with clear rights and responsibilities, which can coordinate and promote each other.

Figure 1. Model diagram of START teaching quality assurance system

3.1.1. START teaching quality assurance system model

The construction of this quality assurance system is centered on Student development, uses two Theories, promote All-in-one management and focuses on four system modules Related to Teaching quality, so it is also called START teaching quality assurance system model. “Centered
on students' development" refers to the construction of cultivation system that combines general education, professional training and diversified development. Starting from the two aspects of general education and professional training, it lays a solid foundation for personal development. At the same time, based on the personalized growth needs of students, it provides multi-direction development paths such as professional advancement, innovation and entrepreneurship, so as to create diversified development space for students, create more connotation for students, and choose more free learning and development opportunities. It focuses on the cultivation and improvement of students' professional skills and quality, the ability to discover and solve problems, teamwork, lifelong learning ability, humanistic quality and vision. "Two theories" refers to the use of total quality management theory and system theory to construct the quality assurance system which including many elements and links. "All-in-one management" refers to promoting all staff, all processes, all aspects, that is, organizing the joint participation of every employee at every level and in every department to carry out quality management in all aspects of teaching quality assurance throughout the whole process of quality formation. "Focus on four teaching quality-related system modules", namely focus on teaching quality objective system, teaching resource management system, training process management system, quality management system, all teaching related modules for overall management, to ensure teaching quality. These four system modules cover all aspects of teaching quality assurance and complement each other. See Figure 1 for the specific model.

3.1.2. Organization and mechanism guarantee

Based on the theory of total quality management, the teaching quality assurance system looks at the whole teaching quality assurance system from a systematic and scientific perspective, and integrates all elements that may affect the teaching quality into the teaching quality assurance system. The teaching quality assurance work of the school is taken charge of by the school Teaching Steering Committee under the leadership of the principal. The teaching steering Committee is the leading institution to guarantee the teaching quality of the school. It uniformly leads the formulation and implementation of the teaching quality assurance system, and guides and supervises the implementation of the quality assurance work of each working institution. The Quality Assurance Center under the leadership of the School's Teaching Steering Committee is responsible for organizing and implementing teaching quality management, ensuring the normal operation of the system, and is the management organization of teaching quality assurance. The teaching quality assurance framework of relevant functional departments and teaching departments shall be constructed according to the college-level framework, and the work shall be led by the teaching steering committee at the academy level of each functional department and teaching department, and the specific work shall be organized and divided according to the actual situation of each department.

3.1.3. Information resource support

To carry out the construction and development of hardware and software resources of modern information technology platform and the construction of operating resources of quality management work, build a comprehensive, multi-functional and efficient information platform, in order to improve the informatization level of school teaching operation management, timely grasp and analyze the status and core data of talent training. It is convenient for teachers' courses, professional self-diagnosis, process teaching materials management, teaching evaluation, etc., to generate all kinds of reports, providing an important guarantee for quality diagnosis and management. At the same time, integrating educational management system, scientific research management system, personnel management system, teaching quality management system and other seamlessly. The school-based data center will be built to provide data sharing for business informatization, management digitization and closed-loop quality management. Real-time data collection, dynamic monitoring of all kinds of data, regular analysis and release of information, timely warning, a comprehensive grasp of the quality of the school's talent training to provide a basis for the school's development decisions. Give full play to the role of cloud computing, big data and other technologies in the construction of internal quality assurance system, strive to realize the docking of information needs, eliminate data information islands, strengthen the application of data in education and teaching management, improve the early warning function, and improve the informatization level of school education and teaching operation management.

3.1.4. Operation of quality assurance system

Teaching quality objective system, teaching resource management system, training process management system and quality management system constitute a closed cycle system, which is the main content of the quality assurance system. Firstly, the teaching quality objectives should be established according to the requirements of external quality assurance system such as industry, economic and social demands and the expectations of relevant stakeholders, as well as the orientation and philosophy of the school itself. Secondly, the teaching resources are organized and designed scientifically, integrating relevant human, financial and material elements, allocating and using reasonably, clarifying the responsibilities and authority of each organization, and ensuring that each part can perform its own duties and coordinate communication. Thirdly, carry out teaching training process management according to the key quality elements of the key process; Finally, establish scientific and perfect teaching achievement quality evaluation, supervision, diagnosis, improvement system.

3.2. Develop comprehensive and diversified modern quality culture

Carry on the top-level design of quality culture, implement all-round, diversified and multi-level education and teaching quality management, create a good quality culture environment, improve the quality consciousness of all staff, standardize the quality behavior of all staff.

By conducting whole-staff-participation, multi-level and multi-angle quality education as well as the discussion and practice activities, improve overall quality management concept, form the correct values and modern quality, make the school education teaching into the virtuous cycle of high quality, with a high level of quality management and high-quality staff team of modern campus culture of quality.

4. Safeguard Measures

4.1. Organizational guarantee

The school should set up the leading, managing and
working organs of the teaching quality assurance system, with clear responsibilities. The school defines the specific work implementation units of the teaching quality supervision system and carries out various supervision work.

4.2. Institutional guarantee

From the actual situation of the school, around the elements of talent training work, to establish and improve the quality assurance system. Such as daily teaching inspection system, supervision and inspection system, teacher teaching quality evaluation system, student evaluation system, specialty & curriculum diagnosis and reform system, graduate tracking investigation system, reward and punishment system, etc.

4.3. Personnel security

A group of college backbone personnel with rich experience in education, teaching and management will be selected, and experts from industrial enterprises, vocational education and quality management will be hired from outside the college. A team of three-level professional quality experts will be established to carry out quality evaluation, supervision, diagnosis and guidance.

4.4. Data security

Strengthen information platform management team, quality management platform team, personnel training work status data collection and management team construction. To analyze the current situation of school personnel training with real-time, accurate and complete platform data and to provide data support for quality diagnosis and improvement, quality assurance work.

4.5. Funds safeguard

Scientifically analyze the resource conditions needed to achieve the target task, and provide necessary human, financial and material support. According to the annual budget of the school, according to the use of funds system, to ensure that the funds are fully invested and used reasonably, to provide resources for the completion of the target task.

5. Conclusion

The internal teaching quality assurance system of school should take "students-centered, meet the needs of industrial, economic and social development and the expectations of stakeholders, and continuously improve the quality and level of talent training" as the goal. Through PDCA (Plan, Do, Check, Act) management, that is, teaching quality objectives, teaching resource management and training process management, quality management, standards and regulations of the four links of the cycle and immediate feedback, to achieve continuous optimization of teaching quality assurance work and continuous improvement of the quality and level of talent training.

References


