

Construction of Quality Monitoring System for Practical Teaching in Private Application-oriented Undergraduate Colleges

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Abstract. Teaching quality was the lifeline of colleges and universities, and the quality of practical teaching was the core competitiveness of private application-oriented undergraduate colleges. The private application-oriented undergraduate colleges should be focused on cultivating the target of applied talents, clarified the content of practical teaching quality monitoring, constructed a practical teaching quality monitoring system that adapted to the development of the school, and established a sustainable and dynamic teaching quality monitoring operation mechanism. Ensure that practical teaching was carried out efficiently and orderly.

1. Introduction

Private undergraduate colleges have become an important part of China's higher education system. According to the data released by the Ministry of Education in August 2018, there were 426 private undergraduate colleges in China [1], accounting for 34.3% of the 1243 undergraduate colleges and universities in the same period. The proportion of private undergraduate colleges in higher education cannot be ignored. The level and the quality of education were very important for the overall development of higher education in china and building a strong country in higher education. Teaching quality was the lifeline of colleges and universities. Establishing a scientific and perfect teaching quality monitoring system with practical operation and further improving the quality of talent training was an inevitable requirement for the survival and development of private undergraduate colleges [2]. For application-oriented undergraduate colleges, the quality of practical teaching was the decisive factor for the quality of applied talents. At present, the practical teaching of private undergraduate colleges has many problems in the monitoring of practical teaching due to the diversification of its teaching modes and methods. In order to effectively guarantee the effective development of practical teaching, it was necessary to construct a set of self-discipline, self-improvement and self-development practical teaching quality assurance and monitoring system.

2. Content for quality monitoring of Practical teaching

The practical teaching quality monitoring was obviously different from the traditional classroom teaching quality monitoring object, so the theoretical teaching monitoring system cannot be completely copied. The subject of practical teaching quality monitoring covered all the practical teaching content throughout the whole personnel training process. It can be divided into three parts: experimental teaching, practical teaching and innovative teaching [3], including in-class experimental courses, separate experimental courses, course design, other practical activities, graduation design (thesis), scientific research ability training, subject competition, innovation and entrepreneurship projects.

Experimental teaching was the longest link in the practical teaching system. Its purpose was to improve students' hands-on experiment ability, master basic experimental methods and skills, promote students' creative thinking and scientific thinking, and absorb and penetrate the professional

knowledge. In order to better cultivate students' active thinking and innovative thinking, the education authorities encouraged application-oriented undergraduate colleges to increase the proportion of comprehensive, open and design experiments, and they advocated combining the multi-project, systematic and high-scoring experiments into a separate course that independent evaluation.

Practical teaching was an important practical link for college students to move from school to society. It mainly included professional internships, graduation internships and other social practice activities. Its purpose was to develop students' ability to use their knowledge to analyze and solve practical problems. At present, Application-oriented undergraduate colleges attached great importance to internship teaching, especially paying attention to the construction of off-campus bases and making full use of off-campus bases to carry out practical teaching activities of "integration of production, study and research".

Innovative teaching included subject competition, innovation and entrepreneurship training program and graduation design (thesis). Its purpose was to cultivate college students' entrepreneurial spirit, practical ability and innovative ability, and guide college students to combine their professional knowledge with social practice, and strengthen students' social awareness and research ability, and improve the professional practice ability of college students. The teaching level of colleges and universities can be reflected by the level of achievement rewards of college students participating in the science and technology innovation subject competition, the number and level of participation in national innovation and entrepreneurship training programs, and the level of graduation design (thesis). Therefore, we should guide and support students to participate in various types of science and technology innovation subject competitions, encourage students to declare innovative entrepreneurship training programs and do a good job in graduation design (thesis), etc., which can improve the number and level of students' awards for subject competitions, the number and quality of innovative entrepreneurship training programs, and the quality of graduation design (thesis). That was all of great significance to improving the quality of education and the level of teaching in schools.

3. Quality monitoring system for Practical teaching

The fundamental purpose of the construction of the quality monitoring system for practical teaching was to ensure the efficient implementation of the above-mentioned practical teaching content. In view of the fact the characteristics for the content of the practical teaching, the process important than the result, more monitoring points, scattered, and the quality standards not uniform etc[4-5]. In the specific implementation process of the quality monitoring for practical teaching, private application-oriented undergraduate colleges should be fully considered the learning situations and teaching situations according to the development orientation and talent training objectives of the school, and built a comprehensive, all-process, all-in-one quality monitoring system for practice teaching that suitable for the school development, while based on the principle of guidance and encouragement[6].

3.1 Practical teaching decision-making and command system

The practical teaching decision-making and command system played a leading role in the quality monitoring system for practice teaching. The school set up a teaching supervision work committee, the college set up a school-level teaching work leading group, with the Academic Affairs Office as the core, the main departments and the experimental training center (professional teaching and research section) as the first-line practice teaching management organization. It Formulated rules and regulations related to practical teaching, organized and implemented the teaching and monitoring of all practical teaching links, and coordinated the implementation and monitoring of practice teaching in the whole school. At the same time, the school set up the teaching quality monitoring and evaluation center what was responsible for the day-to-day management of the school's teaching supervision team; the school supervision and evaluation expert group was set up and responsible for establishing and improving the teaching quality monitoring rules and regulations, organizing the teaching quality monitoring work and the undergraduate teaching evaluation work. The teaching

quality monitoring and evaluation team of the college was the main body of teaching quality monitoring and evaluation. It was responsible for organizing the monitoring, evaluation, supervision, evaluation and evaluation of the teaching quality of the school (department), and jointly supervising and guiding the teaching work of the school.

3.2 Practical teaching information collection and control system

The practical teaching information collection and control system included the practical teaching information collection system, that involved special evaluation mechanism, teacher evaluation mechanism, student evaluation mechanism, etc., and the control system, that involved the Academic Affairs Office, teaching quality monitoring and evaluation center, and various departments. The teaching quality monitoring and evaluation center was responsible for supervising guidance, learning, teaching and management, and also the collection, analysis, research and feedback of teaching quality information. The teaching quality monitoring and evaluation team of every department was responsible for the collection, analysis and research feedback of the teaching quality information of the department. The class teaching information officer was responsible for collecting relevant information about the teaching and learning in the class, and collecting students' opinions and suggestions on the teaching management and teacher's. The school realized the collection and effective regulation of practical teaching information through the implementation of relevant rules and regulations and supervision feedback.

3.3 Practical teaching evaluation and diagnosis system

The practical teaching evaluation and diagnosis system consisted of the school teaching work committee, the teaching work leading group of each college, the teaching supervision expert group, and the director of the experimental training center. By formulating quality standards and practical teaching evaluation programs for all aspects of practical teaching, the school and the department will implement regular practical teaching evaluation and regular practice teaching evaluation, strengthen the two-way communication and evaluation with the off-campus internship training base, and Real-time evaluation and diagnosis of practical teaching work to solve various problems.

3.4 Practical teaching incentive system

Incentives, penalties and arbitrations for the implementation of practical teaching were organized by the Academic Affairs Office and the work leading groups of the colleges. On the one hand, it was necessary to make full use of a number of on-campus practical teaching platforms such as the College Student Pioneer Park, Creative space, and Maker factory, and further exert the important role of science and technology innovation subject competition, invention and innovation, and entrepreneurship training programs in the cultivation of students' hands-on ability. On the other hand, in the talent training program, the scope and proportion of extracurricular practice credits such as innovation and entrepreneurship were increased. Through the establishment of rules and regulations, the practice teaching reward and punishment system was clarified, the practice teaching order was stabilized, and the quality of practical teaching was steadily improved.

3.5 Practical teaching support system

The administrative departments of the school's Academic Affairs Office, Personnel Office, Library, Asset Management Office, and Employment Guidance Center had established effective and high-quality practical teaching guarantee, service and support systems from the aspects of equipment, funds, venues, personnel and practice bases required for practical teaching. The Department Experimental Training Center actively planned and implemented the practical teaching conditions, provided services for teachers and students, and ensured the orderly development of practical teaching and the effective implementation of quality control.

4. The operating mechanism of the quality monitoring system for practice teaching

4.1 Established a scientific, reasonable and perfect practice teaching management rules and regulations

Scientific, reasonable and perfect practical teaching management system was the foundation of implementing practical teaching quality monitoring and the key to improving the quality of practical teaching [7]. The school's "13th Five-Year" development plan clarified the orientation of "building an application-oriented undergraduate university that trains applied and technically skilled talents", and strictly followed the practical teaching services in the system of training (repairing) undergraduate professional talents. we set up practical projects strictly following that the practical teaching services for undergraduate professional talents training while developing or revising the talents training program. The requirements were clarified for the time allocation, project and content of each practical teaching link. The Internship training programs (practical activities) in and out of school were arranged on a four-year continuous line, and launched one after another; It was clearly stipulated that extracurricular practice credits must be completed before graduation. In response to the requirements of all aspects of practical teaching, the school has formulated the "Experimental Teaching Management Regulations", "Laboratory Work Management Regulations", "College Students' Science and Technology Innovation subject competition Recognition and Reward Measures", "College Students' Innovation and Entrepreneurship Training Project Management Measures", and "Internships Management Regulations, "Undergraduate Practice Base Construction and Management Measures", "Undergraduate Graduation Practical Management Regulations", "Undergraduate Graduation Design (Thesis) Management Regulations", "Excellent Undergraduate Graduation Design (Thesis) and Excellent Instructor Selection Methods", "Laboratory staff annual assessment", "teaching accident identification and treatment methods" and other practical teaching work rules and regulations. At the same time, according to the actual situation, each department has formulated corresponding practical teaching quality standards according to the principle of "combination of qualitative evaluation and quantitative evaluation, subjective evaluation and objective evaluation", and compiled the teaching syllabus and teaching guidance Book (experimental instruction book) of each professional practice teaching link. Through the sound practice teaching management rules and regulations, the practice teaching organization management had rules to follow, and the practice teaching quality monitoring can be implemented smoothly.

4.2 Strengthen the implementation of rules and regulations

Good execution was an important factor in the operation of the system and the quality assurance of practical teaching. Through the inspection system combined with routine inspection and special inspection, the operation of practical teaching was monitored in a timely manner. When the school's Academic Affairs Office, Quality Monitoring and Evaluation Center conducted the initial, mid-term and final-term teaching inspections every semester, The practical teaching links were independently examined, and all kinds of practical teaching materials were examined, including plans, outlines, instructions, records, reports, Transcripts, etc. At the same time, special inspections such as laboratory safety and other work inspections, internship base operation inspections, graduation internship inspections, graduation design (thesis) inspections, etc. were carried out irregularly.

4.3 Pay attention to the evaluation of practical teaching quality

The objective evaluation of the quality of practical teaching was the most effective way to monitor the quality of teaching. The department Under the guidance of the school formulated different evaluation systems according to the teaching characteristics of different aspects of practical teaching, attached importance to the selection of practical teaching evaluation subjects, attaches importance to process evaluation, paid attention to results orientation, and evaluated all the elements of practical teaching. The evaluation subject selected students, teachers, experts, and industry personnel etc, and fully considered the opinions and suggestions of different groups of people. Students' skills development and career development projects should paid attention to the evaluation of the practice process and highlight the level of investment in the practice process. Students' comprehensive and innovative

training programs should not only paid attention to process evaluation, but also paid attention to result evaluation and conduct quality evaluation according to the results-oriented thinking. Through the implementation of various practice links quality evaluation activities, teachers and students were motivated to devote themselves to practical teaching.

4.4 Implement the practice teaching quality feedback function

The feedback of practical teaching quality was an important part of constructing the evaluation system of practical teaching quality. The effect of strengthening the feedback of practical teaching quality can greatly improved the effect of quality monitoring of practical teaching. The composition of the teaching quality feedback system should included the teachers, students, teaching supervisors and off-campus internship instructors. The feedback content not only covered the whole process of all aspects of practical teaching, but also introduced follow-up feedback, such as follow-up feedback after students' employment. We collected and feedback the information with diversification Feedback methods and channel, involved various forms such as seminars, questionnaires, inspections, and notifications etc. We introduced the ideas and practices of big data, collected a large amount of data and analyzed and processed it, and that provided data support for the practice teaching quality evaluation system.

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