Construction of Teaching Quality Monitoring System in Applied University under Information Technology Environment

Chunbo Zuo
Jilin Teachers'Institute of Engineering and Technology, Changchun, Jilin, China
414388426@qq.com

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Abstract. In response to the national call, some local colleges and universities have turned into application-oriented universities, that is from research-oriented universities to application-oriented universities, and the monitoring of their teaching quality is the common concern of application-oriented universities after the transformation. Based on information technology, this paper establishes a set of systematic, scientific and effective teaching quality monitoring system, and introduces PDCA cycle mode in the process of constructing teaching quality monitoring mechanism in applied universities. It is not only feasible but also realistic to perfect the teaching quality monitoring system and improve the teaching quality, realize the orientation of running a school of applied undergraduate colleges and universities, and ensure the quality of education and teaching and the sustainable development of applied undergraduate colleges and universities.

The necessity of constructing teaching quality monitoring system supported by information technology
As a new type of education, applied colleges and universities face many new problems and challenges. In order to improve the quality of talents training in applied universities, it is necessary to take the development of connotation as the core of improving the quality, the monitoring and evaluation as the necessary means to improve the quality, to formulate and perfect the quality standards of personnel training, and to perfect the monitoring and guaranteeing system of teaching quality. At present, the construction and implementation of the teaching quality monitoring system in applied undergraduate colleges are in an exploratory stage, and they are faced with many problems, such as "imitating the evaluation system blindly, inheriting academic colleges and universities, attaching importance to the monitoring of theoretical teaching," Lack of quality standard of practical teaching; weak effectiveness of supervision and guarantee, etc. The teaching quality monitoring system is a closed-loop system for real-time inspection of teaching process and real-time feedback control of teaching effect. It involves all departments and work links of the school. Traditional manual method is difficult to achieve scientific and comprehensive management and real-time and efficient teaching quality monitoring. In the information society, the teaching management should conform to the change of the times, how to establish a systematic, scientific and effective teaching quality monitoring system to realize the orientation of running a school and the goal of specialty training in applied undergraduate colleges and universities. It is one of the problems that need to be solved urgently in applied undergraduate colleges and universities at present.

The overall Framework of Teaching quality Monitoring system in Applied Universities from the Perspective of Information Technology
According to the content of teaching quality monitoring in applied universities and referring to its evaluation index, a framework of teaching quality monitoring system of applied universities is constructed by using total quality management, as shown in figure 1.
Application-oriented university teaching quality monitoring system is divided into internal monitoring system and external monitoring system. In the internal monitoring system, it consists of three aspects: teaching preparation monitoring, teaching process monitoring and teaching result monitoring. It is propitious to monitor the teaching process of the teaching organizer and the object under the supervision of the teaching manager. In the external monitoring system, it consists of two parts: government education supervision and social supervision.

With the development of modern information technology, network technology and multimedia technology are more and more used in practical teaching and teaching management. The application of these information technologies greatly improves the level of teacher education and teaching, facilitates teaching management, realizes teaching information management, and provides a technical platform for the monitoring of teaching quality in applied universities. The application university teaching quality monitoring system based on campus network is supported by the following information technology means: educational administration management system, online teaching evaluation system, and teaching information feedback system based on Web. Under the information technology environment, the teaching rules and regulations are more perfect, the teaching link quality standard is clearer, the teaching The monitoring of learning quality is more strict and effective, the evaluation of teaching is more scientific and reasonable, the feedback channel of teaching information is more unblocked and the forms are more diverse.

The Monitoring process of Teaching quality in Applied Universities from the Perspective of Information Technology

Teaching quality control in applied universities is a set of methods and systems for all-round teaching work, the whole process and the whole staff to participate in management. It is an effective mechanism for strengthening self-restraint and ensuring the continuous improvement of teaching quality. The process organizes activities according to the PDCA cycle pattern, and each activity ends with a new goal, as shown in Figure 2.
Figure 2. Schematic diagram of teaching quality monitoring in Applied Universities

**Applied Analysis of the Plan and goal setting of Teaching quality Monitoring system in Applied Universities (P stage).** Applying the principle of PDCA cycle to improve the teaching quality monitoring system of applied university, the first step is to set the plan and goal, that is, to formulate the teaching goal and system standard.

The teaching goal is the foundation of teaching quality control in applied universities, and the teaching objectives of each school are formulated around the center of talent training. The talents trained in applied universities can not only master all kinds of advanced skills in production, construction and service, but also have the ability to transform high and new technology into productive forces, that is, the ability of design and development. In accordance with the needs of the times, the applied colleges and universities adjust the teaching objectives in time and follow up the talent training plan.

In order to realize scientific regulation, any management must avoid "rule by man" and go to "legal system", that is, to realize the restriction and management of system. The establishment of perfect teaching system in applied undergraduate colleges and universities is the criterion of standardizing daily teaching activities and plays an important role in the realization of the goal of talent training. The teaching system consists of three parts: daily teaching document, teaching management method and teaching quality standard. In order to ensure the smooth development of teaching quality monitoring, it is necessary to establish a standard system of teaching system.

**Applied Analysis of guidance and reinforcement of Teaching quality Monitoring system in Applied Universities (stage D).** The second stage D of the PDCA cycle is execution. In the teaching quality monitoring system, the monitoring of the whole process of teaching activities is quite the execution stage of the cycle. The teaching activities of applied universities include the management of talent resources and the process of talent cultivation. There are the following parts: the management of human resources includes the management of teaching funds, the construction of teaching facilities, the reform and research of teaching and so on; There are professional system construction, teaching plan formulation, guarantee and management of teaching process. (the whole diagram is shown in figure 3. the PDCA cycle is used to monitor the operation of the entire teaching system, teachers, students, teaching Academic administrators have become the main body and affect the quality of teaching.)
Applied Analysis on Assessment and return of Teaching quality Monitoring system in Applied Universities (stage C).

In the teaching quality monitoring system, after the implementation of various planned measures, the teaching inspection team will check the implementation of the plan, evaluate whether the teaching activities have achieved the expected results, sum up the experience and problems. In each stage of teaching quality monitoring, each link is organized and implemented jointly by the teaching supervision office and the teaching office. The information collection channels are divided into three different levels: school level, department level, teaching and research department level.

Applied Analysis on diagnosis and improvement of Teaching quality Monitoring system in Applied Universities (stage A). The final stage of the cycle A is diagnosis and improvement, which is the summary of the results of the implementation of the analysis plan. If it is successful, the successful experience will be affirmed, and the norms and achievements that can be used for reference in the monitoring of teaching quality in the future will be formed; lessons must be learned to overcome shortcomings; and monitoring of the whole teaching activity will be carried out in such a way that it can be continuously improved. Improve the quality of teaching.

Application of Information Technology in Teaching quality Control of Applied Universities

Educational administration system is the main form of teaching quality control in applied universities with technical support. With the development of higher education information, some colleges and universities have developed a network teaching quality management system, and based on the campus network, the basic data of the main teaching management links are transferred and managed through the network. All this also applies to applied universities. The whole process of teaching quality management is modernized, networked and real-time.

With the support of information technology, it realizes the connection between classroom and society, the synchronization and sharing of information between individual and group, and even the teachers and students can observe and monitor every move in microclassroom in real time. Technical support is quietly changing the way we live and work.

Summary

The teaching quality of applied university is the core of talent training. Teaching quality monitoring
is very important in the cultivation of talents. This paper constructs the framework of teaching quality monitoring in applied university supported by information technology, and introduces PDCA theory into teaching quality monitoring. It explores the effective ways of teaching quality management and the continuous improvement of teaching quality.

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Reference