The Construction of “Six-in-one” Teaching Ability Promotion System for College Teachers

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Abstract. Teaching quality is the guarantee of the development of higher education, and curriculum is the main force of teaching quality. Teachers’ teaching ability is the “weapon” to improve teaching quality and it directly determines the quality of teaching effect. Besides, it will have a far-reaching impact on the future development of College students. Based on the development of teachers themselves, a systematic mechanism to improve teachers’ teaching ability is established in this paper. A “Six-in-one” system for improving teachers’ teaching ability in Colleges and universities is proposed and it is composed of “teaching incentive mechanism”, “teacher training system”, “teaching evaluation system”, “teaching assessment system”, “teaching training system” and “teaching development support”. In conclusion, the system may benefit for all teachers in colleges and universities and its application is hopeful to promote the development of higher education in China. To a certain extent, the research results may provide some reference value for the teaching way of 《analytical chemistry experiments》 course in other colleges and universities.

Introduction

The teaching ability of college teachers directly determines the lifeline of college education. Therefore, the teaching ability of teachers has become a research hotspot of experts at home and abroad. According to literature surveys, research in this field is mainly focused on the following aspects. The first one is information-based teaching ability[1]. All major colleges and universities use information-based teaching methods, and apply relevant information technology to different teaching activities. The second one is practice teaching ability. The research in this area focuses on the composition of practical teaching ability, current situation of practical teaching ability and the ways and means of improvement[2]. The third one is the evaluation of teaching ability. The research in this area focuses on the evaluation subject and evaluation index system construction[3]. The final one is the issue of teachers’ comprehensive quality construction. Most research reports focus on emphasizing the positive role of teachers themselves, strengthening individual moral cultivation, and improving teachers’ professional teaching ability and ethics through various means[4]. This paper focuses on the improvement of teachers’ teaching ability and builds a systematic and improved teacher teaching ability improvement system.

Research on the Improvement of Teaching Ability of College Teachers

In recent years, the development of teaching ability of college teachers has begun to enter the vision of policy makers. Improving teachers’ teaching ability is the proper choice for colleges and universities to cope with the challenges of the times, is the fundamental guarantee for improving the quality of teaching in colleges and universities, is the main appeal for the professional development of teachers and is the key to the transformation of higher education from “quantity expansion” to...
“quality improvement”. It has great important practical significance. Therefore, research scholars have explored this issue from different dimensions and degrees.

**Improve the Teaching Ability of College Teachers Based on Macro, Medium and Micro Levels.** Macroscopically, it emphasizes the transformation of teachers’ teaching concepts in Colleges and universities, supplemented by the improvement of the national social system, to create a harmonious social environment for the improvement of teachers’ teaching ability. On the medium level, we should base ourselves on the reality of our school, promote the construction of teacher training system, improve the assessment and promotion mechanism of teachers’ teaching ability, and provide solid material basis and condition guarantee for the improvement of teachers' teaching ability. On the micro level, based on the teachers themselves, it emphasizes teachers’ self-cultivation and self-improvement, promotes their ideological and moral accomplishment and professional ethics, and encourages college teachers to carry out self-education and self-reflection [5].

**Improve the Teaching Ability of College Teachers Through Teaching Reform.** The applied research results of the new teaching theories, such as “student-centered”, “flip classroom” and “critical thinking”, are remarkable. Among these achievements, effectively improving the teaching ability of teachers to ensure the implementation of teaching reform has become an academic consensus[6].

**Promote the Improvement of Teachers’ Teaching Ability from the System Construction.** At present, the construction of the teaching capacity improvement system for college teachers can be summarized into three models. Firstly, establish a continuing education system. Secondly, establish an incentive system. It mainly includes various incentive models such as salary incentives, assessment incentives, and evaluation incentives. Thirdly, establish a teaching guarantee system. The purpose of building a teaching guarantee system is to provide technical support and environmental protection for the teaching and research activities of university teachers[7].

Besides, we can improve the teaching ability of teachers through the construction of teaching faculty. This type of research mainly focuses on the significance and methods of building a team of college teachers[8].

The above studies show that the researchers have different opinions and perspectives on the cultivation and promotion of teaching ability of college teachers. It lays a solid foundation for the theoretical improvement of teachers’ teaching ability. However, various academic views are complicated and have not yet formed a perfect system. Moreover, there are many theoretical analyses, while few combined actual contents. In addition, most of the research is based on the construction of school teaching quality, but few studies are based on the teacher’s self-development.

**The “Six-in-one” College Teachers’ Teaching Ability Improvement System**

**Build Multi-dimensional Teacher Teaching Incentive Mechanism and Build Teacher Growth Platform.** We should create a good teaching culture atmosphere and encourage teachers to further engage in undergraduate teaching through selection of high-quality teaching quality awards and recognition of outstanding teachers. In addition, teachers should be organized to conduct teaching competitions. We should build a platform for teachers to grow up, stimulate teachers’ teaching potential in order to achieve the goal of improving teachers' teaching ability. In colleges and universities, teaching incentives should be intensified. The teaching and research achievements should be treated equally. In the criteria for declaration of promotion of professional titles, the teaching and scientific research achievements of the same grade have the same effect and can be substituted for each other.

**Build a Hierarchical “three-level training system” to Improve Teachers’ Teaching Ability.** In improving the teaching ability of teachers, we should establish a hierarchical training system for teachers of different ages, namely the “three-level training system”, seen in Fig.1. The first level is implementing training program of teaching skills for new teachers to cultivate their basic teaching skills. Regular training courses for new teachers should be held. From the perspective of cultivating teaching cognition, teaching design, classroom teaching organization and educational information
technology application, we should conduct series of comprehensive and systematic trainings on them. The second level is implementing the teaching capacity improvement plan for young and middle-aged teachers, and help them grow into excellent teachers. The promotion channels mainly include special course training, special seminars, online course training, corporate job-based training, off-campus short-term courses, overseas university courses, etc. Teachers choose different training methods according to their professional characteristics and individual needs. The third level is implementing the teaching plan for the growth of famous teachers and giving play to the leading role of famous teachers. Schools should regularly organize the selection of school-level teaching teachers awards, recommend and declare provincial and national teaching teachers. School should reward the award-winning teachers and support the construction of famous teachers’ studios. Through the implementation of teaching teacher growth plan, we will help our teachers to grow into school-level, provincial-level and national-level teaching masters. At the same time, it will play a leading role in demonstrating and helping young teachers to grow and develop better and faster.

Construct a Multi-dimensional Teacher Teaching Quality Evaluation System and Strictly Control the Quality of Teaching. Construct multi-dimensional classroom teaching quality evaluation system, objectively evaluate teachers to strengthen teaching quality monitoring from the whole process of pre-class preparation, teaching process and teaching effect. The evaluation subjects include students, peers, supervisors and cadres, etc., to carry out teaching plan examinations, student evaluation, supervise evaluation, peer evaluation and cadre evaluation. This system may examine the quality of classroom teaching comprehensively, the multi-dimensional system can be seen in Fig. 2.

Establish a Perfect Teacher's Teaching Assessment System and Link the Incentive Mechanism With the Teaching Assessment System. Formulating a reasonable and effective
teacher evaluation and evaluation mechanism is an important guarantee for improving teachers' enthusiasm and initiative and improving teaching quality. At present, most colleges and universities have the following problems in the assessment system. The first one is lack of fairness in the assessment system of teaching workload. The second one is lack of discrimination in assessment indicators. The third one is the lack of incentive mechanisms in assessment. In order to stimulate the enthusiasm and initiative of teachers, schools should use incentives, mainly to give appropriate performance incentives from teaching and research reform projects, teaching achievement awards, teaching and research papers. In accordance with the spirit of the document “Management Regulations for General Colleges and Universities”, the evaluation process of teacher assessment and incentive mechanism is proposed, seen in Fig. 3.

Fig.3 The Teacher's Teaching Assessment System

Besides, school should establish a support system for the teaching development of subsidized teachers' teaching research, curriculum construction, teaching materials construction, and youth teachers' professional growth. Finally, school also should establish a multi-level and three-dimensional teacher teaching ability training system, namely “school-based training–online online training– external expert training–teachers going abroad for training”.

In this paper, a multi-dimensional teacher teaching incentive mechanism is constructed, a hierarchical "three-level training system is established and a multi-dimensional teacher teaching quality evaluation system is found. It fully integrates the incentive mechanism and teaching evaluation system, builds a multi-level, three-dimensional teacher teaching ability training system and establishes a support system for teacher teaching development. A six-in-one teacher development and operation mechanism of “incentive, training, evaluation, assessment, training and support” is formed, which can effectively improve teachers' teaching ability and classroom teaching quality. The “six in one” system is shown in the following Fig.4.
Summary

In order to adapt to the current situation of "Internet +" education, schools should improve the information literacy of teachers in the whole school based on their own development needs, including teachers of different ages. We should eliminate the idea that "information-based teaching is a matter for young teachers and has nothing to do with me" for middle-aged and elderly teachers. In addition, to improve the teaching ability of teachers, it is not only "teachers" can do well unilaterally, but also need the cooperation of students, so it is necessary to improve students’ information literacy. To build a perfect platform for “Internet +” education, we should strengthen the research on the information-based teaching management system, improve the information-based teaching environment and encourage university teachers to enhance their information teaching ability. With excellent teachers, progressive students and the guarantee of schools, schools can surely improve the quality of teaching.

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