

Study on the Problems and Optimization Path of Teaching Evaluation System in Universities under the Background of New Engineering

Ranran Xu*, Yue Li, Jingjing Wang

School of Foreign Languages, Qilu University of Technology (Shandong Academy of Sciences), Jinan, China

qlwvxrr@163.com

**Corresponding author*

Abstract: *This paper first analyzes the connotation of teaching evaluation and discusses the current situation of teaching evaluation system in universities. Then it analyzes the problems of the existing teaching evaluation system in universities in detail from the following four aspects which include the value understanding of teaching evaluation, the main position of students, evaluation methods and the teaching management, and puts forward the optimization path of the teaching evaluation system in universities that can adapt to the construction of new engineering.*

Keywords: *The New Engineering, Universities, Teaching Evaluation, Problems and Countermeasures*

1. Introduction

At the beginning of 2017, the Ministry of Education of China puts forward the concept of new engineering for the first time, which comprehensively contributes to the construction of a powerful higher education country. The construction of new engineering combined the open, innovative, strategic and systematic characteristics together. At the same time, it also pays attention to the practicability of disciplines and the intersections and comprehensiveness between disciplines. Therefore, in order to accelerate the construction and development of new engineering, it is necessary for colleges and universities to take the initiative to lay out a new talent training mode in advance, face to the future, and cultivate high-quality, inter-disciplinary, application-oriented and innovative new engineering talents with international competitiveness.

The construction of new engineering requires universities to transfer more high-quality talents to the society and urges universities to constantly rethink the status quo of their teaching quality evaluation system. The teaching quality of colleges and universities seriously affects the quality of training talents, and is related to the survival and development of colleges and universities. Only a good and effective teaching evaluation system can regulate, control and guide teachers' teaching activities and students' learning activities. Only in this way can we ensure that universities can cultivate high-quality talents and meet the requirements of new engineering construction.

2. The Connotation of Teaching Evaluation

Li Kedong (2009) believed that evaluation refers to measure the function, quality and attribute of the object and making value judgment on the object by scientific methods based on clear goals and certain standards^[1]. Teaching evaluation is based on the clear teaching objectives, according to certain teaching standards, using scientific methods to evaluate the teaching process and teaching results and serve the teaching activities. Teaching evaluation mainly studies the teaching activities of teachers and students. It is the value evaluation of the teaching process of teachers and the learning effect of students.

Different from other general evaluation activities, teaching evaluation has the following three basic characteristics. First of all, teaching evaluation is the value evaluation process of teaching process and its results. Teaching is a bilateral activity between teachers and students, which takes teaching content as the medium for teaching and finally realizes the educational purpose of the school. Secondly, the value measurement of teaching evaluation is teaching objective. Education serves the society by educating people. The society has various needs for talents, so it is necessary for colleges and universities to set

objectives at different levels, which reflect the needs of the society. Teaching objective is the embodiment of training objective in teaching activities and the concrete value measure of teaching evaluation. Finally, teaching evaluation helps to regulate the teaching system. Teaching evaluation is a technical means to achieve teaching objectives. Through the regulation of teaching evaluation, teachers constantly carry out reform, determining effective teaching methods and appropriate teaching content, and finally make the teaching system in the best state.

3. Current Situation of Teaching Evaluation System in Universities

In August 2016, the Ministry of Education made it clear in *Guidance on deepening the reform of the evaluation system for college teachers* that schools should carry out comprehensive evaluation of teaching quality which combines teacher self-evaluation, student evaluation, peer review, supervisory evaluation and other forms. Many colleges and universities actively respond to the call of the Ministry of Education and implement the multi-subject teaching evaluation according to their real situation. The details are as follows:

3.1. Student Evaluation

Student evaluations to teaching are mostly conducted online. It is usually organized by the teaching evaluation center of the school, and all students are required to grade all their teachers online in secret according to various indicators set by the school at the end of each semester. After that, the school will make a statistical summary according to the scores of the students and collect the teaching scores of each teacher.

3.2. Peer Review

Mutually listening to class is an effective way for teachers to learn from each other. The school requires teachers to listen to the classes of fellow teachers at least several times each semester, and fill in the pros and cons and give grades according to the regulations. Peer teachers need to maintain a good mentality of fairness, mutual encouragement and sincerity in order to give full play to peer evaluation.

3.3. Supervisory Evaluation

The supervision group is usually formed by rehiring teachers after their retirement from the school. Those teachers generally have rich teaching experience, so it is believed that the evaluation results of them are relatively authoritative. However, due to the continuous development of the society, the curriculum content of colleges and universities is updated and changed yearly. Therefore, from the perspective of the supervising teachers, they are in urgent need of timely knowledge update and encouraged to absorb new teaching methods.

3.4. Evaluating by the Professional Leaders

Professional leaders refer to deans, department heads or the directors of the teaching and research, who have certain specialties in major. Their evaluation results are more valuable. However, due to the busy business of them, sometimes they need to leave before one class finishing, so the evaluation would be one-sided.

4. Problems in the Current Teaching Evaluation System

According to a document from the Ministry of Education, most universities have realized the need to diversify the main body of teaching evaluation. Many of them seem to have realized the diversification of evaluation subjects, but the impact of evaluation results of each subject on teaching quality has not changed significantly, and the substantive role of each evaluation subject has not been really brought into play. There are still serious problems in the teaching evaluation system, which are manifested in the following aspects.

4.1. Teachers and Students' Vague Understanding of the Function of Teaching Evaluation

The ultimate purpose of teaching evaluation is to serve teaching, motivate and promote teaching to

develop in the best direction. Teaching evaluation is a means, not the end. Through evaluation of the results of continuous feedback to promote the development of both teachers and students^[2]. However, for the most Chinese colleges and universities, the function of teaching evaluation is still fuzzy. According to the investigation, most of the teaching evaluation work arranged by colleges and universities only focuses on the first class and the mid-term teaching inspection week. Except for the student evaluators, other evaluators mainly focus on these two periods of time. The teacher handed in the completed record form and completed the task of attending the class, but received no response from the evaluating side. Teachers are not likely to know their final teaching score until the final annual assessment.

Based on that, we can see the situation that teaching evaluation form is greater than essence in Chinese universities. We simply regard teaching evaluation as the end of teaching process and fail to recognize the real function of teaching evaluation. For the fact that unable to timely feedback the evaluation results in place, it is difficult for teachers to correct the existing problems in the specific teaching process immediately. In addition, because teaching evaluation is only concentrated in a fixed period of time, it is easy to cause the evaluation results to be one-sided.

4.2. Inadequate Manifestation of Students' Dominant Position

The teaching evaluation system set up in Chinese universities is basically the top-down teaching evaluation system constructed by the administrators. With the deepening of the "student-centered" teaching concept, most colleges and universities have realized that students should be the main body of teaching activities and teaching evaluation^[3]. So the school began asking students to rate their teachers online at the end of each semester. Apparently, students participate in the teaching evaluation, which reflects the principal position of students' evaluation, but in fact, the principal position of students is seriously inadequate.

First of all, the times of evaluations is not too much. Only one teaching evaluation is allowed at the end of each semester or after the end of the course, and it only reflects the final evaluation results. The problems feedbacks from students are not timely improved in teaching. Secondly, students' evaluation results are not public, and students' voices are not paid enough attention to, which would unable to provide practical suggestions for other students to choose courses. In addition, students are not serious enough in teaching evaluation. Many colleges and universities have not set up relevant supervision mechanism and do not realize the importance of teaching evaluation. As a result, teachers' scores come by the student evaluation are very similar, which lacks authenticity and effectiveness.

4.3. The Deficiency of Evaluation Methods

Teaching evaluation method refers to the working method used by the subject of teaching evaluation to complete the evaluation task. Evaluation methods affect the learning process. In the evaluation of students, only fair and reasonable evaluation methods can have a positive incentive effect on students. However, most courses in colleges and universities still adopt the traditional "one final examination" assessment method. This will lead to the lack of substantive progress in teachers' evaluation of students' usual performance, unable to truly reflect the learning process of students, and excessive emphasis on the final result evaluation, leading to the widespread phenomenon of students' low participation in class.

In addition, the final assessment results of almost all courses are mainly based on the final paper test scores. Here, the author does not deny the test paper test, but a lot of knowledge and ability can hardly be reflected through the form of paper test paper such as computer use, laboratory operation and so on. The evaluation method using paper papers will indeed bring convenience to teachers' marking, and it is easier to deal with the school inspection. However, this simple paper-based test will lead to the decline of students' practical ability and knowledge application ability, which is not conducive to the improvement of students' overall quality.

4.4. Relatively Rigid Teaching Evaluation Management System

The high-level management in colleges and universities ensures the smooth development of teaching order, which is the guarantee condition for cultivating outstanding talents. However, the changes of the time and the continuous reform of modern education have not eliminated the deep-rooted traditional management idea of university administrators -- the emphasis of teaching management is just on the surface of the phrase -- "to manage". Although it promotes the smooth progress of the whole teaching order to a certain extent, it seriously restricts the thinking and the teaching management system is

relatively rigid.

In teaching evaluation, the organization way of teaching evaluation is invariable. For example, students are required to evaluate the teaching online only at the end of each semester, and other evaluation subjects are required to attend classes during the mid-term teaching inspection week. The teaching management required the evaluation results to be submitted upward, but did not timely feed the results of each evaluation back to the evaluated-side^[4]. In addition, teachers' enthusiasm of teaching evaluation method innovation is inhibited. Every semester, the teaching management personnel of the school will randomly check the examination papers of the last semester. In order to pass the examination successfully, the course examination is basically carried out by paper examination papers, which to some extent inhibits the enthusiasm of teachers to innovate teaching evaluation methods.

5. The Optimization of College Teaching Evaluation System

At present, the construction and development of new engineering urgently require universities to cultivate the high quality, international competitive compound talents. In order to adapt to the development of the times and fulfill its own fundamental mission, colleges and universities must improve the teaching quality and establish a complete and effective teaching evaluation system. Aiming at the above four problems, this paper puts forward the following way for the optimization of our university teaching evaluation system.

5.1. Clarifying the Teaching Evaluation Function and Improving the Relevant Processes

Teaching evaluation is the value judgment of teaching process and its result. It has the function of testing teaching effect, diagnosing teaching problems, providing feedback information, guiding teaching direction and regulating teaching process. In order to give full play to the function of teaching evaluation, all teachers and students in colleges and universities need to correctly understand the connotation and functional value of teaching evaluation. American evaluation expert Stavelbeem once said, "The most important purpose of evaluation is not to prove, but to improve." Evaluation is not the end of the teaching process, but a means to promote teaching, through the feedback of teaching evaluation can timely improve the shortcomings of teachers in teaching^[5]. Teaching evaluation is an intermediary, connecting the past and the future. The original linear process of "school running -- evaluation" is further transformed into the teaching quality loop of "school running -- evaluation -- feedback -- improve the school running -- re-evaluation" through institutionalized and normalized methods.

In short, colleges and universities should constantly improve their teaching evaluation process, accept the evaluation and inspection of multiple subjects, timely feedback the evaluation results of each evaluation subject to the evaluated-side, and abandon formalism. To organize seminars in time, and focus on listening to the opinions and suggestions of the teachers. Where there is disagreement, discussion should be carried out, and problems should be found and improved without delay, so as to improve the quality of teaching.

5.2. Highlighting the Dominant Position of Students

Students are the direct beneficiaries of higher education and the subjects of teaching activities and teaching evaluation. In order to highlight the main position of students in teaching evaluation, it is necessary to further improve the students' online teaching evaluation activities. First of all, colleges and universities need to strengthen the organization and education of students' online teaching evaluation, emphasize the important value of students' teaching evaluation, make it more objective and serious, and ensure students' full participation in teaching evaluation. Moreover, in order to realize the normalization of student evaluation, the port of online anonymous evaluation of students can be open all the time, and the results of evaluation can be timely feedback to the teacher, rather than just a one-time evaluation at the end of the semester. On this basis, teachers can improve the teaching process timely according to the feedback of students.

In addition, the school can organize the graduated students to conduct online anonymous teaching evaluation. Students who have graduated from college will relatively be more mature in thinking. And to some extent, they can be more able to objectively evaluate teaching. In the process of students' online teaching evaluation, schools should pay attention to protecting students' privacy, and try their best to create an environment for them to freely express their true thoughts, so as to truly do everything for students. Universities should always adhere to the student-centered academic philosophy to promote the

harmonious and healthy development of students.

5.3. To Accelerate the Diversification of Evaluation Methods

Diversified evaluation methods can stimulate students' enthusiasm in learning, enable students to actively learn knowledge and train their ability, and teachers can also improve teaching efficiency^[6]. First of all, we should adhere to the integration of process evaluation and result evaluation, quantitative evaluation and qualitative evaluation, and break the traditional backward evaluation method of "one final examination" and "one final examination determines the life". Process evaluation is the evaluation of students' performance in the teaching process, the quantitative analysis and qualitative description of students' usual classroom and after-class performance. Teachers should timely feedback the results of the process evaluation to students. Those who fail to meet the specified requirements will not be able to obtain credits of this course, which will have a warning effect on students, so that they will be more active to participate in class and eliminate the phenomenon of phubbing in class.

At the same time, in the aspect of teaching achievement assessment, adhere to the combination of text and non-text assessment. Using paper to conduct closed book examination is the most primitive and common way in teaching evaluation. In addition, teachers should actively explore other assessment methods suitable for the curriculum requirements, such as PPT performance, video recording, making reports and other forms, so as to make the learning content more flexible. And it can also increase the opportunity to exercise students' various abilities.

5.4. To Promote the Innovation of Teaching Management Ideas

Constantly pushing forward the innovation of teaching idea is conducive to colleges and universities advancing with the time to promote teaching reform, constantly improve the teaching evaluation system, and promote the improvement of teaching quality. Schools should strengthen the leadership of teaching evaluation, further improve and modify teaching evaluation standards, so that teaching evaluation can be carried out in a more reasonable situation. Schools should also properly and openly handle teaching evaluation results^[7]. At present, most colleges and universities deal with the evaluation results in a non-public form, which not only affects the enthusiasm of students and colleges in teaching evaluation, but also may make the teaching evaluation work become a mere formality, only focus on the quantity not the quality. Timely disclosure of teaching evaluation results can arouse teachers' reflection and attention on teaching, which is conducive to improving teaching work and solving teaching problems.

In addition, schools should implement follow-up check and evaluation system to ensure that existing problems in teaching are dealt with to ensure the effectiveness of evaluation results. Administrators of colleges and universities should encourage teachers to actively explore the assessment methods that are suitable for the new concepts and teaching models, and formulate the evaluation standards. College administrators should emancipate their minds, promote the innovation of teaching management ideas based on the fact of schools, and avoid teaching management falling into dogmatic situation.

6. Conclusions

At present, with the advance of the construction of new engineering, colleges and universities need to layout new talents training model in advance. The requirements of new engineering urge colleges and universities to constantly rethink the status quo of teaching quality evaluation system. There are some problems in the teaching evaluation system of Chinese universities. For example, the function of teaching evaluation is fuzzy; the main body status of students is insufficient; the evaluation method is still single; and the teaching management is relatively rigid. Based on these problems, university educators should clarify the function of teaching evaluation, improve the process of teaching evaluation, further highlight the main position of students, realize the diversification of evaluation methods. At the same time, colleges and universities should also promote the innovation of teaching management concept, realize the continuous optimization of the teaching evaluation system, improve the quality of teaching, and cultivate high-quality inter-disciplinary, application-oriented and innovative new engineering talents to meet the needs of social development.

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