Research on the Construction and Application of Teaching Quality Evaluation Indicator in Vocational Undergraduate Colleges

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Abstract: Teaching quality evaluation is of great significance for improving the quality of running a vocational undergraduate college. This paper adopts the empirical research method to carry out the empirical research on the teaching quality evaluation of vocational undergraduate colleges. It is found that there are certain problems such as inadequate cognition and insufficient facilities. By constructing the teaching quality evaluation index system and applying it in the actual teaching, this paper provides a high-quality management models and broaden the evaluation perspectives for the optimization of the teaching quality evaluation system in vocational education. It also enriches the connotation of the teaching quality evaluation management model in terms of methods and practices. The goal is to improve the educational quality of a specific vocational undergraduate college.

Keywords: Vocational Undergraduate Colleges; Teaching Quality Evaluation Indicator; Problem; Application

1. Analysis of the Problems Existing in the Evaluation of Teaching Quality in Vocational Undergraduate Colleges

1.1 Lack of Adequate Recognition of Practical Teaching Value

Firstly, it is reflected in the process of formulating the teaching plan and key aspects such as the scheduling of the curriculum, where the integrity of the theoretical knowledge system and the systematic nature of theoretical teaching are given priority [1]; in the process of setting the curriculum, the Academic Affairs Office always prioritizes the arrangement of the theoretical courses, while practical teaching courses are arranged by the Practical Teaching Department as supplementary slots after the theoretical courses have been properly scheduled.

Secondly, both in terms of personnel systems and distribution policies, vocational undergraduate colleges exhibit an obvious preference to theory teaching [2]. In the recruitment process of theory lecturers, strict requirements are put forward in terms of education background or ability. However, when recruiting lecturers who combine theory with practice, the focus is often only on testing their theoretical knowledge through trial lectures.

1.2 Teaching Quality of Practical Teaching Affected by Insufficient Hardware Facilities

For vocational undergraduate colleges, the tuition fees paid by students are their primary source of funding, which can easily lead to financial bottlenecks in their development. They may not have sufficient funds to ensure the construction of practical training facilities and the purchase of practical teaching equipment. A certain vocational undergraduate college has been continuously increasing its investment in the construction of practical training facilities and the purchase of practical equipment in recent years based on its own development needs. Private vocational undergraduate colleges mainly rely on scale for survival, but the growth rate of funding for practical teaching hardware facilities is far behind the expansion of enrollment scale [3]. Under this circumstance, the hardware facilities applied to practice teaching cannot

guarantee a high average occupancy rate of students, making it difficult for students to receive adequate practical training during practical teaching sessions. For instance, according to the teaching plan, after a certain part of the theoretical teaching content of a professional course is completed, the students must go to the training base or laboratory for experimental training. However, it takes a long time for the students of the same class to complete the experimental training due to the limitation of the site and equipment; on the one hand, the experimental training takes a long time, and on the other hand, the theoretical teaching progress cannot be delayed. This is not only detrimental to students' practical learning but also affects the quality of practical teaching and delays the overall teaching progress.

1.3 Lack of Adequate Strength in Practical Teaching

Firstly, vocational undergraduate colleges undervalue practical courses when calculating teaching workload, and lecturers who teach practical courses lack motivation for learning and further study because of low class remuneration. Secondly, some young lecturers have poor endurance and consider enterprise training as a burden and they are perfunctory during their training process, resulting in poor outcomes. In school-enterprise cooperation, enterprises, for their own considerations, rarely arrange production tasks for lecturers who are training in enterprises, depriving lecturers of the opportunity to directly participate in the production process and to operate equipment. For young lecturers, practice learning is only equivalent to apprenticeship, they lack independent operation ability, and naturally cannot better impart practical knowledge to students. Fourthly, from the point of view of the school itself, there is no supervision or inspection of lecturers who are training in enterprises, nor is there a scientific evaluation and acceptance of their training outcomes, leading to a negative attitude of lecturers during the practical training process [4].

1.4 Lack of Sound Quality Management and Monitoring System in Practice Teaching

Firstly, there is a lack of qualification certification for professional course lecturers and full-time internship and training lecturers, especially for those professional course lecturers, schools generally allow them to engage in practical teaching directly based on their theoretical teaching abilities. Secondly, schools mainly hire retired professors from general colleges to serve as deans of secondary colleges, and then mainly rely on the deans to form a teaching supervision group. These retired lecturers from general colleges have rich theoretical teaching experience, but they generally lack the practical teaching ability and guidance ability, they mainly listen to and evaluate the theoretical teaching. The Academic Affairs Office mainly carries out teaching inspections during the middle and end of the term, focusing on teaching plans and lesson preparation, and the teaching quality evaluation indicators set are mainly aimed at theoretical teaching, with little involvement in practical aspects [5].

2 Analysis on the Construction of Teaching Quality Evaluation in Vocational Undergraduate Colleges

2.1 Initial Construction of Teaching Quality Evaluation System

A vocational undergraduate college has completed the construction of teaching quality evaluation system, including classroom management, inspirational education, captivating degree of teaching and case teaching into the first-level indicators. Standards for evaluating the captivating degree of lectures include the lecturer's eloquence, passion in delivering lectures, humor in language, the amount of teacher-student interaction in the classroom, and the ability to create a good classroom atmosphere, with a score of 40 points.

Whether to emphasize the education, whether to integrate the inspirational content into the teaching content, and whether to cultivate the students' honest and responsible attitude and the tenacious spirit are the indicators for evaluating the inspirational education, with a score of 20 points;

Whether the teaching content matches the job requirements of students, whether the teaching can be carried out in the form of cases,

whether the cases are practical or not, and whether the students' employment ability can be improved is the evaluation standard of case teaching quality, with a score of 20 points.

Classroom management, which also accounts for 20 points, is evaluated based on whether classroom discipline is strictly managed, whether classroom management is skillful, and whether it is effective.

2.2 Analysis of Current Situation

There is a trend of younger lecturers in a vocational undergraduate college. Among 184 full-time lecturers, lecturers aged 30, 30 to 40 and over 40 accounted for 63.59%, 28.8% and 7.61%, respectively. These figures are enough to suggest a serious lack of backbone in schools. Although the young lecturers who are high among the school lecturers have unique advantages in the aspects of professionalism, mentality, work enthusiasm, energy and communication with students, they lack practical teaching experience, and their teaching philosophy and methods are immature. Young lecturers have little teaching experience and lack of depth and breadth in understanding and applying professional theories, all of which make it difficult for them to improve their teaching level quickly in a short time [6].

The lecturer community generally faces the issue of having a short teaching tenure. Only 1.09% of the faculty possess more than five years of teaching experience, while 76.63% have two years or less of experience. With short teaching tenures and limited experience, lecturers have an urgent need to accumulate experience. Moreover, the vast majority of the faculty are graduates from non-teacher education programs and have transitioned from the corporate sector, necessitating the accumulation of rich teaching experience. Another primary reason for the generally short teaching tenure among the school's lecturers is the relatively short establishment time of the school, which will be resolved as the school continues to develop.

Young lecturers commonly face the issue of having lower academic qualifications and professional titles. The proportion of lecturers with master's degree, undergraduate degree and associate degree is 10.33%, 85.33% and 4.35% respectively. The proportion of lecturers with high degree is very low, and the lecturers with associate degree have the rigid demand for improving their degree. In terms of professional titles, only 46.2% have obtained teaching series titles, with only one holding a senior secondary title, and the vast majority are at the primary level; additionally, the proportion of dual-qualified lecturers is also low, at only 36.41%.

From the analysis of age structure, it can be found that most of the lecturers in a vocational undergraduate college have just stepped out of campus and returned in a different role. Although they have taken to the lectern, they lack accumulation in both theoretical and practical aspects and must gradually accumulate practical experience and improve teaching levels through teaching practice.

Lecturers at a certain vocational undergraduate college have a high turnover rate. Young lecturers in marriageable age will soon face marriage and have children. The college is located in a remote suburb, and many young lecturers choose to transfer out for family care considerations, leading to frequent turnover among young lecturers. Some outstanding young lecturers may also choose to take civil service exams or pursue positions in public institutions during their tenure, and they will not hesitate to switch jobs if better opportunities arise. Therefore, for schools, enhancing school cohesion and lecturers' sense of belonging is essential to retain outstanding talents [7,8].

The channels for lecturers to improve themselves through continuing education are extremely limited. In order to encourage employees to actively improve their educational level, schools has introduced some measures. However, due to narrow channels, insufficient professional coverage, and lack of training goals and plans, relying solely on the autonomous growth of lecturers has not been effective. Schools can carry out directional cooperation with "985" and "211" colleges and universities, which has a positive effect on adjusting and optimizing the talent structure. Schools should also implement various incentives to provide lecturers with more choices in learning and training [9,10].

3 Application Analysis of Teaching Quality Evaluation in Vocational Undergraduate Colleges

3.1 Preparation for Teaching Quality

Evaluation

3.1.1 Prepare for Organization

Check the class schedule, and design the teaching evaluation time for different classes respectively; randomly select the list of teaching evaluation students according to the class roster; contact the logistics department and the experimental training center in advance to ensure that the computer can be used normally in the teaching evaluation process.

3.1.2 Develop a Guarantee Plan

3.1.2.1 Specific steps for students to evaluate teaching.

Enter the evaluation website through the browser and enter the user name and password. The student's personal student number is used as the initial value of the user name and password, and the password can be modified after the student enters the teaching evaluation website.

Click "Satisfaction Survey" and "Lecturer Satisfaction Survey" in turn to evaluate the lecturers of a certain course one by one (the eleventh option is not mandatory). After clicking "Save", the system will automatically display the list of lecturers of the next course. The student will evaluate the lecturers on the evaluation page. Click Submit only after the evaluation of lecturers of different courses is completed.

3.1.2.2 Analysis of specific requirements for student evaluation of teaching.

Students must complete the evaluation independently, ensuring objectivity, fairness, and impartiality during the evaluation process. Discussions are prohibited, and proxy evaluations are strictly forbidden. If any of the above requirements are violated and confirmed, the student will be seriously dealt with, and the evaluation results will be invalidated.

Students selected for the evaluation must wear the school badge and bring their valid identification documents, arriving at the designated computer room 10 minutes before the evaluation starts to wait in line outside. The class committee is responsible for the maintenance of the on-site order. After all the students are present, they will sign in with the computer room teacher and sit at the designated computer position to wait.

3.1.2.3 Formulate design scheme.

(1) The analysis on the purpose and significance of students' evaluation of teaching.

Based on student evaluation, the college has a comprehensive understanding of lecturers' teaching attitude, level and effect reflected in the teaching process; colleges use student evaluations as an important basis for self-improvement of teaching behavior, thereby improving teaching quality; relying on student evaluations can cultivate students' subject consciousness and help colleges form a good teaching style, a positive learning style, and a fine school spirit. For students, student evaluation is both a right and an obligation. Through evaluation, students' observational abilities, problem analysis, and discernment abilities will be improved, and their good qualities of being fair and impartial in life will be prominently reflected in the evaluation process [11].

(2) Task distribution. The heads of different student departments are responsible for supervising and checking the implementation of the counselors in the implementation of various tasks.

The Teaching Supervision Center is responsible for drawing up a teaching evaluation student list, and sending the teaching evaluation student list to counselors after the teaching evaluation student list is successfully extracted and prepared; if the teaching evaluation students in the list cannot participate in teaching evaluation on time due to time conflict or emergent situations, the Teaching Supervision Center will select the top five students from the list of remaining students to replace them; before teaching evaluation, a sign-in form will be timely distributed to each counselor; and the counselors will submit the sign-in form to the relevant responsible lecturers of the Teaching Supervision Center after the teaching evaluation is finished.

The counselors of each class shall be responsible f for promoting and mobilizing students based on the requirements of student teaching evaluation before the evaluation. They should participating students to arrive on time and maintain order.

Counselors from the Student Affairs Office should carefully verify the evaluation time and contact the Teaching Supervision Center in advance if there are temporary events or time conflicts, facilitating the adjustment of the student evaluation schedule by the Teaching Supervision Center.

3.2 Evaluation and Implementation Stage

3.2.1 Collect Evaluation Information

The process of collecting student evaluation information: Students enter the evaluation system on the computer and evaluate the lecturers from both subjective and objective aspects. The personnel of the experimental training center will import the evaluation data from the back-end, and the evaluation information from the students will be statistically collected by the personnel of the Supervision Center.

The process of collecting supervision and teaching evaluation information: Supervision officers randomly select lecturers for class observation based on the class schedule and score the teaching and student participation based on the supervision scoring rules. Evaluation is implemented based on the summary of data.

3.2.2 Monitor the Evaluation Process

To successfully complete the evaluation work, it is essential to monitor the entire evaluation process. Before teaching evaluation, the Discipline Inspection and Audit Office shall supervise and review the teaching evaluation scheme in the OA process to ensure its fairness and rationality; during the teaching evaluation, all members of the Discipline Inspection and Audit Office shall be invited to the teaching evaluation site, and the Discipline Inspection and Audit Office shall conduct real-time inspection during the teaching evaluation process, so as to timely find and punish the disciplinary violations occurring on the students and lecturers during the teaching evaluation process; after the teaching evaluation, the Discipline Inspection and Audit Office shall conduct spot check on the original data and report data to avoid the loss of fairness and authenticity of the teaching evaluation data due to faults or errors in the processing process.

3.3 Summarize Teaching Quality Evaluation

3.3.1 Process the Evaluation Data

The answers are converted on a 5-point scale. That is, convert the five answers of A, B, C, D and E into 5, 4, 3, 2 and 1 points respectively.

On the basis of the teaching evaluation data of the students, the weighted average value can be worked out, and the result of the five-point system can be obtained smoothly.

The data is arranged in descending order based on the data, and the full college ranking can be successfully obtained;

The scores of students and supervisors accounted for 60% and 40% respectively.

Rank the second-level college averages in descending order;

The lecturers who are in the bottom three in the score are selected, and the reasons are analyzed.

3.3.2 Carry out Analysis on Evaluation Results

On May 16, 2023(12: 30-16: 50), the Teaching Supervision Center of a certain vocational undergraduate college organized the first student teaching evaluation of this semester. In conjunction with the relevant regulations and requirements of the college for student evaluation work, the x vocational undergraduate college, with the Teaching Supervision Center as the core, successfully completed the first teaching satisfaction survey with the strong support of the counselors of each college and the school's practical training center.

The students participating in the evaluation were selected from 191 classes in Grade 2021 and 2022, with the sampling ratio of 42%. A total of 4,167 students were selected for the evaluation. The college has 178 full-time and part-time lecturers participating in the evaluation, involving 149 courses. A total of 15 computer rooms were used, and 31 class counselors were used for student teaching evaluation, with a total of 26,470 valid data generated from the evaluation.

3.3.3 Aspects for Lecturers to Develop from the Students

From the perspective of teaching attitude, lecturers can be patient enough to students, serious and responsible, considerate, have strong affinity and have strong appeal; lecturers should seriously attend classes, impart knowledge to students, and take the classroom and students seriously; lecturers can have professionalism, treat all students fairly, help students overcome practical difficulties, and help students to complete their studies.

From the perspective of teaching content, lecturers can teach with emotion and passion, highlight key and difficult points while being easy for students to understand; they can make teaching content lifelike and practical; introduce case teaching to achieve a combination of theory and practice.

From the perspective of teaching methods, lecturers can use teaching methods with personal style to attract students' interest; the classroom is lively and interesting, which can stimulate students' interest; in the teaching process, lecturers are good at communicating with students and dealing with problems quickly.

3.3.4 Student Suggestions and Opinions for Lecturers

From the perspective of teaching attitude, there is a lack of fairness in treating students who arrive late; there is an absence of patience when responding to students' questions during class; student-related matters are not given due importance; lecturers bring emotion into the class and vent anger to the students; when educating students, the words are inappropriate, sensitive, and intense, making it hard for students to accept.

From the perspective of teaching content, the teaching of the lecturers lacks professionalism there is a disconnect between teaching and the textbook, and theory and practice are not well integrated; complex topics are explained too quickly, making them difficult for students to understand.

From the perspective of teaching methods, lecturers merely read from the textbook without innovation; there is a significant leap in teaching content that students cannot follow; lecturers dominate the class with little interaction with students; and the pace at which lecturers speak during class is too fast, preventing students from providing timely feedback

3.3.5 Feedback from Teaching Supervision

It is suggested that the teaching rhythm should be adjusted according to the overall situation of students and the degree of difficulty of knowledge.

It is suggested that lecturers should strengthen the effective management and control of the classroom, and receive training in classroom management skills.

It is suggested that lecturers should adjust their personal emotion before class to avoid bringing negative influences into the classroom.

It is suggested that lecturers check the volume when playing videos to prevent loud volumes from affecting other classes;

It is suggested that lecturers effectively stop and educate students when they bring food into the teaching area.

3.3.6 Summary of Evaluation Feedback

The lecturers deviate from the teaching materials, lack of a clear central point in the lectures, and the content they teach does not match the major or is impractical; lecturers are very easy to bring their own bad emotions into the classroom, negatively affecting students' learning; they can't handle the students' problems fairly and take different punishment measures for different students; there are too many words irrelevant to the classroom contents in the teaching process; and the lecture disregards the students' condition, with a pace that is too fast for students to keep up with.

At the same time, there are lecturers speaking too fast, making it difficult for students to follow their thinking; the lectures are dull and lack thorough explanations of details; there is little interaction in the classroom, resulting in a weak learning atmosphere; and lecturers lack affability and patience when dealing with students.

4. Conclusion

Based on the investigation and research on the teaching quality evaluation system used by a certain vocational undergraduate college, this paper systematically combs the current situation and the existing disadvantages of the current teaching quality evaluation system in the vocational undergraduate college. It is suggested that while retaining its basic framework, the model should be optimized, and its application process should be refined to effectively enhance its application effectiveness.

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