Improving Teaching Quality in Technical and Vocational Education to Eradicate Prejudice and Stereotypes

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Abstract: China has established the world's largest technical and vocational education (TVE) system, which has significantly contributed to the country's economic development. However, survey data indicates that there is still widespread discrimination against technical and vocational education in Chinese society, especially towards Vocational Junior Secondary Schools, which often carry the label of being 'inferior.' As we address the challenge of improving the recognition of vocational education, the quality of teaching becomes a crucial focal point. The primary aim of this study is to examine the limitations of the current vocational education teaching quality system and propose a Stereoscopic feedback model for assessing teaching quality.

1. Introduction

Policymakers and educators emphasize that Technical and Vocational Education (TVE) beneficially impacts economic development and holds a prominent role in industrial construction. TVE has nurtured hundreds of millions of high-quality industrial talents in China, contributing significantly to the construction of China as an industrial powerhouse [1]. According to the "Report on the Development of Vocational Education in China," there are 1,518 higher vocational schools in China, including 32 vocational undergraduate schools, with an enrollment of 5.5672 million students and a current student population of 16.0303 million [2]. As a matter of fact, China has established the world's largest TVE system, which has trained hundreds of millions of high-quality workforces to develop China as an industrial powerhouse. However, the progress of TVE in China has been constrained by various factors, with one of the most pressing issues being the improvement of teaching quality. In recent years, the Chinese Ministry of Education has introduced a series of reforms and developments in TVE, emphasizing the urgency of improving the quality of technical and vocational education in China [3]. In addition, due to various factors, such as the teaching quality of vocational schools, there is a widespread perception of discrimination against technical and vocational education students in Chinese society [4].

In general, vocational junior secondary school students in China usually perform poorly in journey high school and cannot enroll in academic high school [5]. Academically underperforming students often face discrimination, which further aggravates the challenges faced by vocational education students [6].

Currently, the majority of secondary vocational schools in China still employ traditional methods for evaluating teaching quality, often relying solely on summative assessments based on mid-term and final exam results. While this assessment approach may, to some extent, reflect students' learning outcomes, it needs to be sufficiently scientific and genuinely and objectively portray students' performance and growth throughout the learning process [7]. Over time, this approach may hinder students' holistic development. To enhance the current status of TVE, it is essential to bolster the quality of education, rendering it more precise and impactful, eradicate stereotypes, and elevate the overall value of education. Moreover, as socio-economic development progresses, there is a growing demand for improved education quality, making it an inevitable choice to enhance the quality of

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higher vocational institutions in the current economic development context. This study aims to conduct an in-depth analysis of the deficiencies in the present teaching quality evaluation system within the Chinese vocational junior secondary schools and propose systematic improvement recommendations.

2. The Current Shortcomings of the Teaching Quality Evaluation System in Vocational Junior Secondary Schools

With the continuous development of China's economy, there is a growing demand for technical and skilled talents in society, and the China government is increasingly emphasizing vocational education [3]. China's Vocational schools have implemented educational and teaching reforms and achieved significant results. However, there are still some shortcomings in the current educational quality assessment system.

The educational evaluation system needs to include more emphasis on multi-dimensional assessment. When evaluating the teaching quality in vocational junior secondary schools, most administrators believe it is sufficient to objectively and accurately assess instruction quality without introducing diversity, process-oriented, or visual methods [8]. Yet, teachers perceive that the responsibility for teaching quality evaluation lies with the education management department and is not closely related to their duties. They need to fully grasp the necessity and importance of implementing diverse, process-oriented, and visual teaching quality evaluation from an ideological perspective. Consequently, this directly results in an adequate assessment of teaching quality in vocational schools, impeding the smooth execution of teaching activities within these institutions.

The main actors and methods of teaching quality assessment are relatively singular (Figure 1). In the current context of evaluating teaching quality in Chinese vocational schools, the school remains the primary entity for evaluation, and stakeholders such as businesses, parents, and students are not extensively involved in the evaluation process [9]. Even though some vocational schools have established collaborations with companies to conduct teaching quality assessments, they often need to sufficiently consider the input of students, parents, and other stakeholders in their work. This has prevented the seamless integration of perspectives from schools, businesses, parents, and students to implement diverse, process-oriented visual assessments. The singular focus of the evaluation process can result in less objective and comprehensive teaching quality assessments. Additionally, vocational schools still need to fully harness modern information technology for continuous, thorough, and real-time monitoring of students' learning, leading to a need for more dynamic reflection of students' learning and development progress [10].

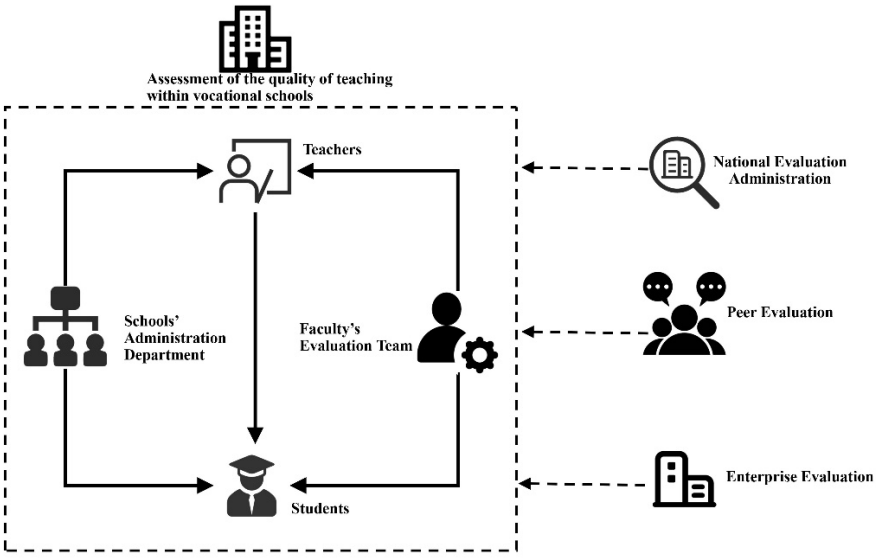

Figure 1 Vocational Education Teaching Quality Evaluation System

The design of teaching quality evaluation content needs to be sufficiently scientific. When

formulating teaching quality evaluation content for vocational schools, there needed to be more comprehensiveness and scientific basis. Evaluation was often primarily based on students' performance in class, homework completion, and exam results at various stages. This approach needed to consider students' learning situations and needs thoroughly. It did not consider factors like students' family learning environments, participation in business internships, daily classroom performance, and engagement in practical training. This leads to the limitation of teaching quality assessment, which can only depict certain aspects or a few facets of students' learning rather than a comprehensive portrayal of their overall growth. This limitation has the potential to dampen students' motivation for learning.

3. Idea for Enhancing the Teaching Quality Evaluation System

3.1 Diversification of Teaching Evaluation Object

The educational quality assessment system should involve multiple evaluation entities. These entities typically include students, teachers, peer educators, faculty evaluation teams, school administration departments, enterprises, and national evaluation administration. Students receive education throughout the teaching process, and their opinions should be noticed and addressed. The teachers themselves are the implementers of teaching, so self-evaluation by teachers is also a part of the assessment system. Peer educators are evaluation entities at the same level as the teaching teachers, and their assessment can provide objective analysis at various stages of the teaching process. Faculty evaluation teams possess a more profound comprehension of educators, thus rendering their evaluation outcomes fair and impartial. School administration departments are responsible for evaluating the teaching of the entire school's faculty, and they can provide a higher-level evaluation of education as a whole process with stricter standards. Students who have entered the job market serve as the evaluators when conducting enterprise assessments. They possess objectivity and can provide in-depth evaluations of students' competencies, thus offering valuable feedback to the school. This feedback mechanism helps ensure that the school's teaching quality aligns with the ever-evolving demands of the job market, enabling the institution to better adapt to changes in employment trends. Finally, the National Evaluation Administration has the authority to oversee all parties involved to ensure the teaching quality of vocational schools.

3.2 Diversification of Teaching Evaluation Standards

Following diverse evaluation objects, the evaluation criteria should exhibit distinctiveness and diversity. These criteria should revolve around four dimensions: knowledge, competencies, proficiency, and quality. Through judiciously structured evaluation content, they should reflect more accurate indicators of learning outcomes and teaching quality. Ultimately, this feedback loop aids instructors in enhancing their pedagogical skills and catalyzes the elevation of teaching quality.

Evaluation standard refers to the standard by which the subject judges whether the object of evaluation has value or not and the size of the value from the point of view of their interests [11]. Different evaluation standards should be tailored to various evaluation entities. For instance, when students provide feedback, the evaluation should primarily focus on aspects such as the instructor's knowledge, behavior and language, teaching discipline, care for and commitment to students, and teaching methods, among other factors, to provide meaningful feedback. When peer instructors evaluate, they should emphasize assessing and giving feedback on the depth and breadth of the curriculum, the selection of teaching methods, and interactions with students, among other considerations. Faculty supervisory experts should pay special attention to whether the teaching staff holds advanced educational and instructional philosophies, whether their classroom teaching methods are scientifically sound and well-organized, and whether they possess a strong sense of educating and nurturing students. School departments responsible for monitoring teaching quality can offer more comprehensive and objective evaluations and guidance for teaching instructors, continually enhancing their abilities and improving classroom teaching quality. Businesses, taking an objective approach, assess interns' and employees' performance and practical skills and provide data support.

This helps schools and educational administrators better understand how graduates perform in the job market, facilitating necessary teaching improvements and adjustments to ensure that graduates remain competitive in the highly competitive job market. Enterprises provide constructive feedback on the abilities of employed students as a means to enhance the quality of education in schools. This feedback mechanism bridges the gap between academic learning and real-world demands, ensuring that the educational process remains relevant and students are better prepared for the challenges of their future careers. National authorities, through various means including financial oversight, curriculum review, the teaching staff, school assessments, and student rights, comprehensively ensure the teaching quality of schools. These measures drive schools to provide high-quality education, cultivate more competitive graduates, and promote the continuous improvement and development of the vocational education system.

3.3 Determining the Weightage of Teaching Evaluation

In evaluating teaching quality for instructors, a comprehensive evaluation conclusion is reached, and rankings are provided based on various evaluation activities by different evaluation entities. The use of weighting coefficients is essential in this evaluation process, and the reasonableness of these weighting coefficients is one of the critical prerequisites for the validity of the evaluation results [11]. Currently, there are mainly two methods for determining weights: subjective weighting and objective weighting.

3.4 The Evaluation Time

Effective teaching quality evaluation results provide valuable insights into teaching. Based on this feedback, they assist instructors in understanding students' learning needs and identifying shortcomings and weaknesses in their teaching processes [12]. Educators can work towards self-improvement, refinement, and enhancement in subsequent teaching. Therefore, choosing the appropriate evaluation timing is a prerequisite for obtaining meaningful evaluation outcomes. The timing for teaching quality evaluation should be set for the mid-term of instruction, allowing for improvements and enhancements in the later stages of teaching.

3.5 The Feedback Mechanism for Teaching Evaluation

Effective teaching feedback is influenced by the choice of the evaluation timing and the selection of the feedback model. There are three teaching quality evaluation feedback models: direct feedback model, brief feedback model, and comprehensive feedback model. Each of these models has its advantages and disadvantages. Vocational education institutions should use the complete feedback model (Figure 2). In this model, the submission pathways for feedback from students, peers, and enterprises are more flexible and expansive. This means instructors can gather direct and indirect feedback from multiple channels. However, to effectively incorporate teaching opinions and suggestions from different perspectives, instructors must compare and analyze them. This approach ensures the timeliness, authenticity, and relevance of the comprehensive feedback transmission model.

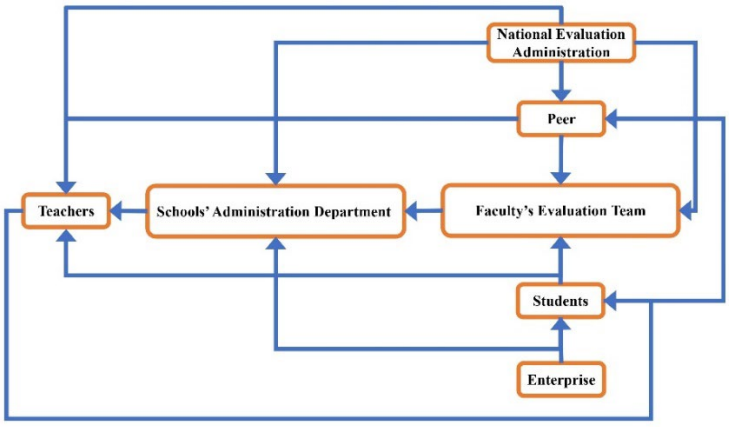

Figure 2 Stereoscopic feedback model

4. Establishment of effective incentives

Establishing a teaching quality evaluation system is aimed at urging teachers to teach diligently, deliver high-quality classes, and enhance teaching standards and levels. However, if evaluation is conducted without feedback, teachers remain unaware of their shortcomings, and improving teaching quality becomes elusive. Therefore, a teaching quality evaluation system should be combined with an incentive mechanism to achieve the supervisory function. After completing the evaluation in vocational education institutions, the evaluation results should be promptly provided as feedback to the teaching staff. Secondly, teachers who receive positive evaluations from all sides should be encouraged to maintain their excellent teaching qualities and be included in the list of annual commendations. For teachers with significant teaching issues, their eligibility for yearly awards should be revoked, and a mentorship training system should be implemented. They should be placed under the guidance of teaching experts, or teachers with higher standards engage in regular class observations and evaluations until their teaching abilities and measures are improved and recognized by students; at this point, their mentorship training can be concluded. Finally, a harmonious and enduring cycle should be established between teaching quality evaluation, feedback, and incentive mechanisms.

5. Conclusion

Teaching quality is the lifeline of vocational education institutions. Establishing a comprehensive teaching quality evaluation system is the foundation for ensuring teaching excellence. The teaching quality evaluation system should reflect the diversity of evaluators, the variety of evaluation criteria, and the reasonableness of evaluation weights. Furthermore, the evaluation results should be timely and effectively communicated to the teaching staff. These results should be complemented by appropriate incentive mechanisms, transforming teaching quality evaluation from a mere formality into a genuine means of helping teachers enhance their teaching standards and assisting schools in improving their reputation.

References

[1] Maslak, M. A. (2022). Vocational Education in China: The Case of the People's Republic of China (PRC). In: Working Adolescents: Rethinking Education for and On the Job. Global Perspectives on Adolescence and Education, vol 2. Springer, Cham. https://doi.org/10.1007/978-3-030-79046-2_3

[2] Ministry of Education of the People's Republic of China. (2022a). Report on the Development of Vocational Education in China (pp. 23, 1-47).

https://shaolinkungfu.edu.cn/ueditor/php/upload/file/20220822/1661128301404059.pdf

[3] Ministry of Education of the People's Republic of China. (2022b, February 23). The press conference of the Ministry of Education introduced the work on promoting the high-quality development of modern vocational education. News Release_Gov.cn. Www.gov.cn. https://www.gov.cn/xinwen/2022-02/23/content_5675242.htm

[4] Yang, Y., & Chia, Y.-T. (2023). Reflection on China's higher vocational education entrance examination: lessons from the imperial examination in modern China. Asia Pacific Education Review. https://doi.org/10.1007/s12564-023-09881-x

[5] Zhu, C. (2022). Exploration of the Motivation of Secondary Vocational Education Under the Background of "Diversion"—Based on a Case Study of Impoverished Junior High School Students in Northwest Rural Areas of China. Asian Social Science, 18(9), 42. https://doi.org/10.5539/ass.v18n9p42

[6] Wang, A., & Guo, D. (2018). Technical and vocational education in China: enrolment and socioeconomic status. Journal of Vocational Education & Training, 71(4), 1–18. https://doi.org/10.1080/13636820.2018.1535519

[7] Guo, D., & Wang, A. (2020). Is vocational education a good alternative to low-performing students in China. International Journal of Educational Development, 75(102187), 102187. https://doi.org/10.1016/j.ijedudev.2020.102187

[8] Liu, L., Zhou, Z., & Jiang, J. (2023). Construction and Empirical Research of Evaluation Index System of Classroom Teaching Quality in Secondary Vocational Schools. Journal of Education and Educational Research, 2(2), 90–93. https://doi.org/10.54097/jeer.v2i2.6532

[9] Wei, Y. (2018). Reflections on Perfecting Teaching Quality Monitoring System in Secondary Medical Vocational Colleges. Journal of Advances in Medicine Science, 1(2), 61. https://doi.org/10.30564/jams.v1i2.40

[10] Hansen, M. H., & Woronov, T. E. (2013). Demanding and resisting vocational education: a comparative study of schools in rural and urban China. Comparative Education, 49(2), 242–259. https://doi.org/10.1080/03050068.2012.733848

[11] Julnes, G. (2019). Supporting Transitions to Sustainability: Evaluation for Managing Processes in the Public Interest. New Directions for Evaluation, 2019(162), 119–154. https://doi.org/10.1002/ev.20366

[12] Friedland, D. L., & Michael, W. B. (1987). The Reliability of a Promotional Job Knowledge Examination Scored by Numberof Items Right and by Four Confidence Weighting Procedures and its Corresponding Concurrent Validity Estimates Relative to Performance Criterion Ratings. Educational and Psychological Measurement, 47(1), 179–188. https://doi.org/10. 1177/001316 4487471026