



Strategy Analysis on Optimizing Teachers' Performance Evaluation Mechanism in Higher Vocational Colleges Based on PDCA Concept

Lili Song^{1,2(✉)}

¹ Xiamen City University, Xiamen, Fujian, China
songlili@stu.xmu.edu.cn

² Xiamen University, Xiamen, Fujian, China

Abstract. In order to effectively improve the teaching and research level of teachers, some universities have established specialized teachers' performance evaluation mechanism in accordance with their actual conditions. With the implementation of the performance evaluation mechanism, the work efficiency and quality of teachers in various colleges and universities have been improved significantly, but under the influence of some practical factors, the current performance evaluation mechanism of teachers in higher vocational colleges still has many problems in some aspects, affecting the result of the performance evaluation mechanism. Therefore, this paper introduces the PDCA (plan, do, check, action) theoretical model, analyzes the subject and object of the performance evaluation mechanism, discusses the impact of the model on the performance evaluation mechanism, and finally discusses how to introduce PDCA theory to optimize the performance evaluation mechanism.

Keywords: PDCA theory · Higher vocational colleges · Performance evaluation mechanism

1 Introduction

In order to better manage them and stimulate their enthusiasm for work, higher vocational colleges have developed a performance evaluation mechanism for teachers: first,

Fund Project: Fujian Province Educational Science "Key Project of 13th Five-Year Plan in 2019": Serving the "Belt and Road" Construction of Sino-foreign Cooperation in Higher Vocational Colleges IQA Internal Quality Assurance Mechanism Research (Project Approval Number: 2019CG0636); 2021 Industry Vocational Education Teaching Steering Committee, Ministry of Education, vocational education reform and innovation project "Research on the Construction of Higher Vocational Education system with Chinese characteristics" (No. HBKC211002); National Social Science (Education) Science) Fund General Project: Research on the Differential Development of High-level Applied Technology Universities with Chinese Characteristics under the Background of "Double First Class" (Project Approval Number BIA170239); Ministry of Education Humanities and Social Sciences Project: International Development of Higher Vocational Education in China from the Perspective of Stakeholders Research (Project Approval Number: 18YJC880103).

© The Author(s) 2023

A. Volodin and I. Roumbal (Eds.): ICECIDT 2022, ASEHR 677, pp. 537–544, 2023.

https://doi.org/10.2991/978-2-494069-02-2_59

they conduct a series of analyses on teachers' teaching content and scientific research content and then formulate quantitative evaluation. Aiming at teachers' ideological and moral level, professional ethics and other aspects, the performance evaluation method of qualitative analysis is adopted. After formulating the content of performance evaluation, it is necessary to assess the work of teachers, usually within a half-year period, to assess the teaching quality and scientific research level of teachers, and to compare with the content of performance evaluation to judge the completion of teacher performance. In the process of performance evaluation, it may be affected by other factors, so that the content of performance evaluation needs to be adjusted. After the performance evaluation is completed, the results need to be sent to teachers so that teachers can recognize the deficiencies in their work in time, and can also propose reconsiderations for the parts that have objections, and re-evaluate the evaluation results, thus reflecting the fairness and justice of the performance evaluation mechanism.

2 Analysis of the Subject and Object of the Performance Evaluation Mechanism of Teachers in Higher Vocational Colleges

As for the teacher performance evaluation mechanism of higher vocational colleges, it roughly includes two parts: the subject and the object. The subject of the performance evaluation mechanism mainly refers to the relevant personnel who formulate the content and standards of the performance evaluation. Generally speaking, it is the leaders of higher vocational colleges, academic principals of the colleges, other teachers in the scientific research departments, etc. They have the right to evaluate the objects of the performance evaluation mechanism and fully reflect the work performance of the performance evaluation objects. The object of the performance evaluation mechanism usually refers to the object being evaluated. For the discussion in this article, the evaluation object refers to the teachers of higher vocational colleges. Some teachers may undertake the teaching and research work of basic courses, and some teachers may undertake in the teaching of professional courses, different teachers have different roles, so it is necessary to formulate different performance evaluation content for different performance evaluation objects.

Based on case analysis, the conclusion of this paper selects X, a higher vocational college, as a provincial model college, which is typical in higher vocational colleges.

The composition of performance pay: performance pay consists of two parts: basic performance pay and incentive performance pay.

- Basic performance wages mainly reflect factors such as the level of regional economic development, price levels, and job responsibilities, and in principle account for 60% of the total performance wages. The basic performance salary is composed of job and living allowances. The specific standards are uniformly implemented in accordance with the provisions of the superior documents and paid monthly.
- Incentive performance pay mainly reflects factors such as workload and work performance. In principle, it accounts for 40% of the total performance pay. It is used to motivate faculty and staff of various positions to complete or exceed work tasks

with high quality and high level. The total amount of the college's incentivized performance pay is composed of basic and results-based performance pay. The basic and results-based performance pay accounts for about 85% and 15% respectively. The proportion can be adjusted with the development of the college. The specific amount is determined according to the total performance salary level approved by the Municipal People's and Social Security Bureau and the Municipal Finance Bureau every year. Incentive performance pay shall be paid according to the results of performance evaluation. The calculation formula of specific analysis and research is not analyzed here. The following conclusions are from empirical research.

3 Problems and Disadvantages of Teacher Performance Evaluation in Higher Vocational Colleges

Although higher vocational colleges have carried out the performance evaluation mechanism in order to better improve the efficiency of teachers, there are still many problems, mainly reflected in the following aspects.

3.1 The Goal of Performance Evaluation is Not Clear Enough

Many higher vocational colleges have insufficient clear goals when carrying out performance evaluation for teachers, which are mainly reflected in: first, the content of performance evaluation focuses more on quantity and does not pay attention to quality. For example, in the process of evaluation for teachers' scientific research level, the number of papers published by teachers is the main factor, which causes many teachers to pay too much attention to the number of papers, but ignore the improvement of scientific research work level. Many teachers publish papers in obscure journals, which are generally of poor quality. Second, in terms of the evaluation of teachers' teaching ability, the evaluation is only based on students' academic performance, students' passing rate of CET-4 and CET-6, passing rate of NCRE-2, test scores or passing rate of a certain course, etc. In order to obtain better results, many teachers often reveal test questions in advance, or set the focus of the test for students, which cannot reflect the role of the course test [1].

3.2 Subjectivity of the Evaluation Subject

In the process of conducting performance evaluation for teachers, it is necessary to pay attention to the fairness, impartiality and openness of the evaluation. Teachers can better solve the problems existing in the process of teaching or scientific research according to the results of the evaluation. However, according to the investigation and research of this article, the subjectivity of the current performance evaluation of teachers in higher vocational colleges is mainly reflected in the following aspects: first, generally speaking, the main body of the evaluation is composed of the leaders of the college, including some other teachers. These evaluation subjects cannot track the process of teaching and scientific research work of teachers all the time. Some evaluation subjects do not even understand the profession that teachers are engaged in. Therefore, there will be a lot of

problems when assessing the results of teachers' work. The subjectivity of the evaluation results has a certain impact on the fairness and justice of the evaluation results. Second, in the process of performance evaluation, there may be some relationships between the evaluation subject and the object, such as: colleague relationship, kinship, etc. Therefore, sometimes in order to better maintain the friendship between colleagues, or to obtain certain benefits from the evaluation object, the results of the evaluation do not fully reflect the characteristics of fairness, which makes the performance evaluation lose the fairness and authority, teachers are unwilling to accept the evaluation results.

3.3 Feedback and Tracking of Evaluation Results are Not Perfect

Higher vocational colleges carry out performance evaluation for teachers not only to obtain an evaluation result, but to allow teachers to refer to the result of performance evaluation and correct the deficiencies in the teaching or scientific research. However, in the performance evaluation mechanism of most higher vocational colleges, the feedback and tracking mechanism of evaluation results are not perfect, which are mainly reflected in the following aspects: first, it is necessary to have special performance evaluation personnel inform teachers and communicate with teachers about the results of the performance evaluation: commend teachers for their contributions in their work, encourage teachers to continue using their advantages in the follow-up work, and become a role model for other teachers; The deficiencies in teachers' work are discussed so that teachers can fully realize their own problems. If teachers have objections to the evaluation results, they can appeal within a specific period of time. The evaluation subject needs to re-evaluate the results, and then inform teachers. However, with many higher vocational colleges carrying out performance evaluation for teachers, they only publish the results of performance evaluation without considering communicating with teachers, which leads to teachers unable to realize their shortcomings in their work more clearly. Second, there is a lack of feedback mechanism for the results of performance evaluation. Due to the subjectivity of the evaluation subject, there may be unfair evaluation results, which require the establishment of a feedback mechanism for performance evaluation results, giving teachers the right to appeal, and better safeguarding the interests of teachers. However, after the implementation of performance evaluation mechanism in higher vocational colleges, there is often a lack of feedback mechanism and approach, and teachers have to face unfair evaluation results, which may have a negative impact on teachers' work enthusiasm [2].

4 The Effectiveness of the PDCA Theoretical Model for Improving the Performance Evaluation Mechanism

4.1 The Concept of PDCA Theoretical Model

P refers to Plan. Before carrying out performance assessment for teachers in higher vocational colleges, it is necessary to formulate performance assessment plans. For example, different performance assessment contents should be formulated for teachers with different roles, and quantitative and qualitative assessment indicators should be formulated according to the different assessment contents.

D refers to Do. After the content of the performance evaluation is formulated and completed, it is necessary to carry out performance evaluation for teachers. The general evaluation cycle is one semester. During the process of evaluation, if you encounter unexpected problems, you can adjust the evaluation in time, which further reflects the flexibility of the evaluation plan, and is fairer to the object of the performance evaluation mechanism.

C refers to Check, which has two main meanings: on the one hand, teachers can make a report at each stage according to the content of performance evaluation, so that the subject of performance evaluation can know the progress of completion of the content of teacher performance evaluation; On the other hand, when the performance assessment is completed, teachers and performance assessment personnel are required to check the assessment results to ensure the fairness of the assessment results.

A refers to Action. Teachers need to carry out improvements in teaching or scientific research based on their own results of the performance evaluation to further reflect the value of performance evaluation, so that the performance evaluation mechanism of higher vocational colleges forms a virtuous closed loop.

4.2 The Effectiveness of the PDCA Theoretical Model in Improving the Performance Evaluation Mechanism

First, as a complete system, the PDCA theoretical model can present the contents of the performance evaluation process, so that the subjects and objects of the performance evaluation can be added into the system, and the mutual relationship between them can be used to jointly complete the work of teacher performance evaluation.

Second, the PDCA theoretical model can effectively control each link. For example, the completion of the teacher performance evaluation content can be checked regularly, and if unexpected situations are encountered, the performance evaluation content can also be adjusted in real time; In addition, when teachers are dissatisfied with the results of the performance evaluation, they can have a quick feedback channel to ensure the fairness of the results of the performance evaluation.

Third, the PDCA theoretical model can help to spirally improve teachers' working ability. The results of the performance assessment in the previous stage will be reflected in the content of the performance assessment in the next stage, which can continuously improve the teaching level and scientific research ability of teachers.

Fourth, the PDCA theoretical model has a clearer understanding of the subject and object of the performance evaluation, which can help clarify the evaluation objectives, and can better reflect the differences between the evaluation objects, making the evaluation content more perfect and the results fairer and more just [3].

5 The Way to Introduce the PDCA Concept to Optimize the Performance Evaluation Mechanism

5.1 Developing a Clearer Performance Evaluation Plan

Performance evaluation plan reflects the expectation of teachers' teaching ability and scientific research ability, and can help teachers better realize their own responsibilities and guide the direction of teachers' work. Therefore, in the process of optimizing

performance evaluation mechanism with PDCA concept, more specific performance evaluation plan should be formulated: first, in the performance evaluation in the process of planning, not only need professional performance evaluation main body participation, at the same time can also be invited to participate in performance evaluation object, through discussion of performance evaluation program content, allow them to clearly recognize that their focus and direction, and has a more outstanding performance at work; Second, when the evaluation body formulates the performance evaluation content, it needs to combine the current characteristics of higher vocational colleges with the work responsibilities of teachers. It also needs to formulate different performance evaluation plans for different teachers, so as to better reflect the fairness of performance evaluation and give full play to the advantages of the evaluation object.

5.2 Improving the Dynamics of the Implementation Stage of the Performance Evaluation Plan

After the performance evaluation plan is formulated, it is necessary to implement the performance evaluation process according to the plan, but this process is not static and needs to reflect the dynamic characteristics of the stage. For this reason, the following aspects can be referred to: first, the cycle of performance evaluation can be subdivided into smaller stages, allowing teachers to report and summarize the completion of each stage of performance, so that performance appraisers can discover problems in time, and help teachers better plan the follow-up work direction; At the same time, teachers can also communicate problems in teaching or scientific research with performance appraisers, and try to get their support, which is helpful to complete the content of performance evaluation. Second, teachers may be involved in the process of performance evaluation. For various reasons, the original performance evaluation content is no longer applicable. At this time, it is necessary to dynamically adjust the performance evaluation content; during the adjustment process, you can actively communicate with teachers to ensure that teachers understand the changes of performance evaluation content, and familiar with the new performance evaluation content.

5.3 Increasing the Diversity of Evaluation Subjects

In terms of the traditional performance evaluation mechanism of higher vocational colleges, the evaluation object is relatively single, which may cause the phenomenon of unfair performance evaluation results and cannot fully reflect the working level of teachers. Therefore, it is necessary to increase the diversity of evaluation subjects. First, students can be involved in the performance evaluation of teachers when the teaching ability of teachers is assessed. As students are the main participants in teaching, they can personally experience the teaching level of teachers and reflect the teaching ability of teachers in a more objective and comprehensive way. Second, in the process of evaluating teachers' scientific research work, besides teachers and colleagues of the same major, some experts from outside the school can also be invited to make professional evaluation on the quality of teachers' papers, research contents and achievements. By

increasing the diversity of evaluation subjects, the subjective factors of evaluation subjects can be effectively avoided, and the fairness of performance evaluation work can be further reflected [4].

5.4 Establishing Performance Feedback and Tracking Mechanism

After the higher vocational colleges have completed the performance evaluation work for teachers, they also need to establish a performance feedback and tracking mechanism: first, teachers need to fully understand the results of performance evaluation, and repeatedly understand the content, fully realize its own in the shortcomings in the course of teaching and scientific research, and, according to the results of the performance evaluation to improve and revise in the future work in a timely manner; second, the unfinished content in the performance evaluation results should be added in the next time, so that the deficiencies existing in the work of teachers can be continuously improved; At the same time, when correcting the problems existing in the past work, pay attention to avoid introducing new problems; third, increase the communication behavior in the performance evaluation mechanism, strengthen the connection between the evaluation subject and the evaluation object, so that teachers can understand the results of the performance evaluation and analyze the reasons for the inadequacy of the performance evaluation results, so as to make continuous improvement [5].

6 Conclusion

In short, through the above research, schools have a more comprehensive understanding of the current content and operation of the current teacher performance evaluation mechanism in higher vocational colleges. Combined with the analysis of the characteristics of teachers' work in higher vocational colleges, schools also clearly understand the gradual relationship between the subject and object of teacher performance evaluation operation in higher vocational colleges [6]. Although currently affected by various practical factors, the teacher performance evaluation mechanism of higher vocational colleges still has certain problems and drawbacks in some aspects, but the introduction of the PDCA theoretical model and its role will certainly play a very effective role in promoting the perfection of the performance evaluation mechanism of teachers. Therefore, teachers should not waver in their determination of reform, attach importance to the introduction of PDCA concept under the guidance of innovative thinking, and actively build a perfect operation system for the implementation of this concept through resource integration, so as to promote the further improvement and construction of the performance evaluation mechanism of university teachers under the role of PDCA concept. In addition, the author also hopes to arouse researchers' interest in the PDCA concept model by virtue of the research of this paper, so as to encourage more educational staff to widely participate in the discussion of this topic, and provide more scientific opinions and suggestions for the application of PDCA concept in the field of education and teaching, to promote higher vocational education to keep advancing under the guidance of advanced ideas.

Authors' Contributions. This paper is independently completed by Lili Song.

References

1. Song, Jian. (2016). Application of PDCA cycle in performance evaluation index management. *China Management Information Technology* 19 (20): 76–77.
2. Li, Min, and Zhenjiang Wei. (2018). Research on the application of PDCA in the on-the-job exercise of vocational nursing teachers. *Modern Chinese Doctors* 56 (34): 136–138.
3. He, Jun, Meijue Xu, and Wang Wei. 2018. Research on the feedback monitoring system of talent training quality based on PDCA loop nesting. *Computer Knowledge and Technology* 14 (30): 153–155.
4. Song, Jingxiang, Ying Ma, Hong Wang, Wu Nan, Rui Guo, and Tongyu Guo. 2017. The application of PDCA management cycle in differentiated organization performance evaluation. *City Gas* 04: 29–33.
5. Chen, Weizhi. (2016). The application research of PDCA cycle in the performance management of the modern apprenticeship foreign trade talent training model. *Technology and Education* 30(04): 33–37+41.
6. Ying, Guo. 2021. Discussion on the application of performance evaluation results in higher vocational colleges. *Economic Management Digest*. 19: 72–73.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

