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“GRADUATE SCHOOL CONFERENCE 2022 iHappiness: ความสุขและคุณภาพชีวิตที่ดีอย่างยั่งยืนในยุคสังคมดิจิทัล”

PDCA Cycle: Case Analysis of Teaching Quality in Universities

Lingxuan Wang¹, Assoc. Prof. Dr. Nuntiya Noichun²

Email:1551514507@qq.com

Educational Administration, Suan Sunandha Rajabhat University

Abstract

Modern education needs more and more. Colleges and universities need to understand the quality of teaching and promote the development of education levels. This research through the understanding of PDCA management model and teaching quality in colleges and universities, research methods using case analysis, the analysis of the teaching quality, according to the characteristics of the PDCA and the characteristics of college teaching quality management system, promote the teaching management level enhances unceasingly, points out that the significance of construction of the teaching quality, improve the quality of teaching in colleges and universities.

Keywords: PDCA Cycle, University Teaching Quality, Case Analysis Method

Introduction

At present, the research and application of PDCA management system has not yet formed a perfect program and program, which makes the presentation results of higher education teaching quality become the focus of attention from all walks of life. Nowadays, PDCA mode is commonly introduced in most enterprises to improve the competitiveness between them. In terms of education and teaching quality management, the particularity of college education increases the difficulty of this process. (Braganca, R.,2016) In this regard, colleges and universities should improve quality management tools to ensure the improvement of teaching quality and establish educational teaching objectives and standards. (Chen, S. H. ,2012) Only by firmly establishing the quality of teaching is the lifeline of the effective development of colleges and universities that can ensure their own sustainable development.



1. PDCA cycle

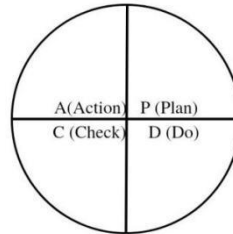


Figure 1: PDCA cycle diagram

The PDCA cycle, also called Deming cycle, was initially proposed by the famous American scholar Hugh Hart, and afterwards promoted by Deming to apply to the quality management system, primarily involving four levels: P (Plan), D (Do, execution), C (Check, inspection), A (action, therapy). PDCA cycle is the meaning of the four stages according to the order cycle, back and forth in a loop regularly discover problems, then resolve the problem, then find out the unsolved problems following these four levels loop, mainly has the following characteristics in the process of circulation is not immutable, but a ladder shaped to rise (Figure 2). PDCA cycle is a continuous problem solving and the next step of the reciprocating program, can effectively, timely, fully execute a command and program, with manual analysis and supervision, put forward standardized programs.

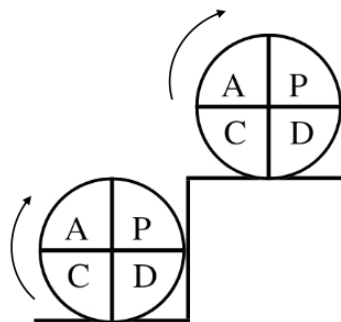


Figure 2: PDCA cycle working diagram

The PDCA theoretical basis involves TQM (Total Quality management theory) and ISO9000 quality management system. In TQM, the concept of quality is related to the realization of all management objectives. The theory of total quality management emphasizes comprehensive, whole-process and whole-staff involvement in quality management. ISO900 brings forward eight management principles for quality management. (Li Bo,2010) Customer focus, leadership, full participation, process approach, system management approach,



continuous improvement, fact-based decision-making, mutually beneficial relationship with suppliers. In colleges and universities, teaching quality is a comprehensive reflection of all aspects, departments and links of the school.

2. University teaching quality

After years of in-depth research in the academic circle and strong support from national policies, the construction of college education quality assurance system demonstrates a trend of steadily changing from pursuing external guarantee to looking inward to stabilize the root and clear the source. Teaching quality assurance and its system have become the focus of research, which can be divided into the following two categories according to the research focus:

First, research on the construction of a teaching quality assurance system. This part of the research scope is somewhat comprehensive, some scholars for different levels of institutions, the construction of their quality assurance system research. Based on research universities, Li Fei sorted out the internal meaning and external extension of their teaching quality assurance system, and put in the construction principles of "integrity, educators and students' joint participation, internationalization, legitimacy, scientific nature". (Li Fei, 2014). Some other scholars have studied the construction of a teaching quality assurance system in ordinary colleges and universities. Xu Shuo believes that the teaching quality assurance system in colleges and universities should have such elements as objectives, motivation, process and results, and build a structure of "leadership, basic guarantee, control and improvement". (Xu Shuo, Hou Lijun, 2019) Xu Dongbo believes that the teaching quality guarantee system should be built from four aspects: quality standards, quality management, teaching support and guarantee culture. (Xu Dongbo, 2020)

Second, research on improving the teaching quality assurance system. In recent years, the nationwide teaching evaluation system has been gradually improved, and it has become a popular research direction to promote teaching quality through evaluation and monitoring. Xiao Wenxing proposed to further strengthen the construction of teaching quality management in colleges and universities from the weak links of quality assurance monitoring system, the lack of awareness of quality assurance, quality evaluation to be improved and other problems. (Xiao Wenxing, 2007) Li Sujun, Wei Lili et al. elaborated the basic working process of the teaching quality assurance and monitoring system from the aspects of objectives, standards, evaluation and feedback adjustment, and suggested strengthening the role of evaluation in the teaching quality assurance and monitoring system in colleges and universities. (Li Sujun, Wei Lili, Wu Liyan, 2018) From the perspective of students' teaching assessment, Professor Bie Dunrong pointed out that there were some problems in the quality



assurance of colleges and universities, such as non-standard, formalization and unfair system design, and proposed to perfect the teaching quality assurance system of colleges and universities from the aspects of standardizing students' teaching evaluation behavior, constructing reasonable students' teaching evaluation system and referring to the advanced teaching evaluation experience at home and abroad. (Bie, D. R., & Meng, F., 2007).

3. "Unresolved" and "emerging" problems

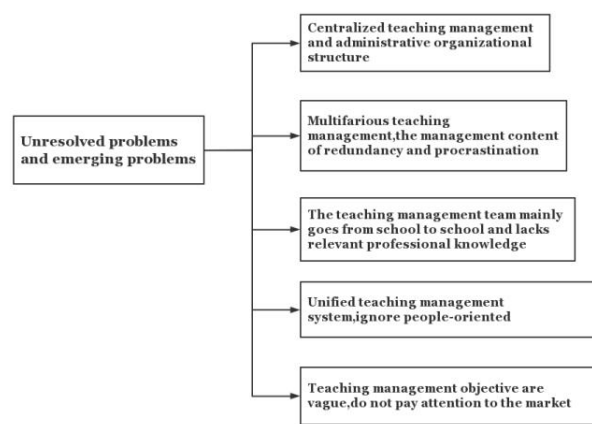


Figure 3: Problems in teaching management

Research Objectives

The main purpose of this research is to take the "teaching quality" of colleges and universities as the main line, and use PDCA to examine and reflect on the existing teaching quality of colleges and universities and the perspectives of different scholars, so as to successfully improve the teaching quality under the PDCA management mode.

Research Object and scope

This paper mainly analyzes the PDCA mode of teaching management in Guilin Tourism College.

Research methods

1. The literature method: The author has a systematic knowledge of the research process and results of previous experts and scholars. Through reading and learning literature, the author further analyzes and summarizes the advanced management ideas of PDCA cycle theory and the methods submitted by other experts and scholars.

2. Case analysis method: Case analysis method refers to a teaching method that takes



the problems into practical work as cases and gives them to the educators or the educates to study, evaluate and cultivate the analytical ability, judgment ability, problem solving and business execution ability of teachers and students. Case analysis is a teaching method with high participation of educators. The interpretation, analysis and evaluation of the case will reflect the different points of view, thinking, way of understanding theoretical knowledge, and psychological characteristics of each educator.

Research results

1. PDCA analysis of teaching quality in Guilin Tourism College

1.1 Status quo of teaching quality management

Table 1: Current situation of teaching quality management in Guilin Tourism College

(1) Clear educational objectives and distinctive professional system	(2) Multi-subject teaching quality monitoring system
(3) Reasonable curriculum system construction	(4) Strengthen the construction of education and teaching quality with high-level training base



1.2 PDCA analysis of teaching quality

Plan:	Do:
Identify projects requiring PDCA cycle improvement	Identify improvement measures and implement improvement plans
Actions:	Check:
Improve the quality of teaching constantly	Check the results of improvement

Figure 4: Application of PDCA in teaching quality monitoring

1) Identify the projects requiring PDCA cycle improvement –P

At present, most teachers cope with initial teaching inspections and attend classes without virtually recognizing how to improve the quality of teaching. In terms of practical teaching, training conditions are limited, teachers are free in class, and students feel that they have not learned knowledge. The following reasons were found through the investigation: First, the teaching quality monitoring mechanism lacks a full participation mechanism and only carries out regular teaching evaluation. Second, teaching supervision is also a simple collection of teaching inspection materials, lack of scientific analysis and information processing methods. Third, although the school has issued teaching regulations, teaching quality standards. However, in practical teaching activities, we usually face problems such as insufficient funds and a lack of qualified teachers.

2) Identify improvement measures and implement improvement plan –D

In view of the problems, the teaching supervision office of the school, together with the teaching affairs Office and various departments, issued improvement plans, primarily through three levels, four stages, four combination of several aspects to enforce. "Three levels" is to adopt three levels of expert evaluation, peer evaluation and student evaluation to assess teachers' teaching and monitor practical teaching from different perspectives. "Four stages" is to use the planning stage, teaching beginning stage, teaching process stage, teaching assessment stage comprehensive monitoring. The "four combinations" are the combination of supervision assessment and peer evaluation, the combination of



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teaching affairs office and educators' self-examination, the combination of school monitoring and each department monitoring, and the combination of spot check monitoring and stage monitoring.

3) Check the improved results—C

In terms of educators, mainly youthful teachers, took the initiative to participate in teaching quality monitoring, actively confronted the existing problems, and made attempts to rectify them, so that the teaching level was greatly improved. The second is the student aspect. The student learning atmosphere further upgrades, from the inactive "want me to learn" to the dynamic "I want to learn" transformation, the learning impact is getting better and better; finally, in terms of curriculum, new achievements have been made in curriculum construction, both theoretical and practical teaching quality have been achieved.

4) Use PDCA cycle to continuously improve teaching quality –©

The PDCA cycle was used to summarize the experience and lessons in the improvement process, successfully completed the new teaching quality monitoring standards, and compiled into the Teaching Management Documents compilation in the form of college documents. At the same time, the existing problems should be summarized and sorted, and the records should be recorded to avoid repeating the same errors. Opportunities for continuous improvement of teaching quality monitoring stem from: first, the needs of school teachers, students and employers who expect further improvement in teaching quality; second, the improvement of college funding, all the funds are in place, and now it is fully equipped with the conditions for improvement; third, new problems that remain from the last PDCA cycle improvement process need to be resolved.

Conclusion

Analysis of Guilin tourism college teaching quality, found that in the process of Deming circle PDCA cycle, highlighting the education teaching facilities need to upgrade, the teaching staff to participate in the content of the single system of teaching quality evaluation mechanism, it is necessary to specify the project of teaching quality to be improved, determined to improve the quality of teaching measures, enforce the improvement plan, Then the results of teaching quality improvement are checked and analyzed.

Using the PDCA cycle to improve the teaching quality of colleges and universities is conducive to the formation of a comprehensive, comprehensive and sustainable total quality management system. Colleges and universities should assign great importance to bringing each teaching activity, each educational reform project and each group of professional personnel training into the PDCA cycle of different levels, forming a three-dimensional cycle pattern, comprehensively promoting the overall cycle of teaching quality improvement in colleges and



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universities, and steadily strengthening the quality of teaching.

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