Practical Thinking and Innovative Strategy of Diagnosing and Improving Teaching Work in Higher Vocational Colleges

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Abstract: Diagnosing and improving teaching work is an important means to enhance the responsibility of the managers in higher vocational colleges and improve the quality of running schools. However, there are difficulties in the process of practical promotion, which further affect the expected results. In this paper, based on the practice and research of teaching quality monitoring for more than ten years, the reality is analyzed from three aspects of concept, management and implementation, and the problem is solved from three aspects of changing concept, comprehensive examination and careful deployment, aiming to open up a new path and provide new thinking for the establishment of a diagnosing and improving system in teaching work.

1. Introduction

Higher vocational education, as a type of higher education, has developed rapidly though it started late, and now it accounts for half of the regular colleges and universities. However, its reliability among the domestic people is lower than that of the undergraduate colleges, which is not only due to the influence of traditional thinking, but also due to its own practical shortcomings. Especially today, with the increasing globalization of education and the basic completion of campus infrastructure construction, quality should be the main theme of all colleges and universities, but it is not always the case in reality. In recent years, the "diagnosing and improving system in teaching work" launched by the Ministry of Education at the level of vocational education plays a leading role, but it has encountered practical difficulties and resistance in the specific promotion. As for the long-term management in colleges and universities, the meaning of the teaching work has been really understood, which promotes a series of researches based on reality. Now, some suggestions are put forward to enhance the effectiveness of work promotion.
2. Current Situation of Diagnosing and Improving Teaching Work

In June 2015, the Department of Vocational and Adult Education of the Ministry of Education issued the Notice on the Establishment of a Diagnosing and Improving System in Teaching Work in Vocational Colleges. In December of the same year, the guidance plan was issued. In May of the following year, the national guiding committee of experts was established, and in June, training courses at the levels of president, expert and management backbone were organized successively. The intensive distribution of documents and the large and wide training area set a new high in the promotion of past special works, which not only created a good working atmosphere nationwide, but also included various schools in the agenda. However, this work has a high load and covers a wide range, which requires not only concept transformation and habit cultivation, but also the stock of problems and the increment of new development. Therefore, it is not easy and realistic to achieve comprehensive results in all colleges and universities in a short period of time.

2.1. Concept level: influence of conventional thinking

Higher vocational colleges are mostly upgraded from secondary vocational schools, with the imprint of secondary vocational school at the beginning and undergraduate college in the process of school running. After more than two decades of hard work, they have explored their own characteristics. However, in this process, they always closely follow the policy guidance from the government who plays a principal role in qualification assessment, teaching level evaluation or demonstration (backbone) inspection and acceptance, in which each school is only the inspected and evaluated object. Moreover, there are also policy dependence and negative factors in the overall promotion of schools. The final evaluation result is difficult to represent the true level of a school because of the countermeasure that each school has taken. In particular, the consciousness as the main body of running a school, which is gradually lost in the process of being checked and evaluated, has gradually led to the role dislocation of each higher vocational college itself who will feel uncomfortable if the government delegates powers. Furthermore, it will take time not only for the whole school to replace the old and new ideas, but also for the idea to be internalized into conscious action.

Looking back on the development process of higher vocational colleges, the government has been guiding the independent management while acting as the main body. Taking the data collection of talent training status as an example, the signal of attaching importance to process management is transmitted through the addition of "teaching supervision". Most of the existing quality management departments are born from this. Therefore, it is found in the intercollegiate communication that many colleges and universities have not really implemented their work, which is mainly due to passive promotion and lack of atmosphere. On the one hand, the work is often pushed forward by the influence of leadership willpower, and also restricted by interpersonal relations. In addition, there are few people who are willing to devote themselves to research, which naturally affects the development of specific work and the effectiveness of work development. On the other hand, quality management is only a self-organizing activity of internal management without explicit consideration from the traditional perspective at the government level. In fact, it is far less valued than academic affairs, scientific research and student management. Additionally, the cooperative research and mutual exchange between colleges and universities are not kept up, which leads to the failure of timely promotion of good experience. Even if it is promoted, it will be hindered everywhere due to different school situations. At present, what is common is that each school has its own practice and is in a different state. There is a general lack of height, width and depth in practical work. When there is a need for a certain amount of early accumulation in the
establishment of a diagnosing and improving system in teaching work, there is a real shortage, and many vocational colleges will feel at a loss. A new round of great changes will be brought in education management by the promotion of this work, and then the emphasis on quality will be pushed to a new height. As an important work in recent years, the Ministry of education listed the pilot results as the selection conditions for the "construction plan of high-level vocational colleges & specialties with Chinese characteristics", all of which show the true weight and value.

2.2. Management level: inappropriateness of practical system

Under the background of national reforms to "streamline administration, delegate powers, and improve regulation and services", the government promotes the separation of government authorities, management and assessment for universities, and guides the establishment of modern university system. Although all universities have generally formulated university constitution, most of the existing systems remain in the state before the formulation of constitutions, which is embodied in three aspects: First, the non reconstruction of original system framework makes the systematic revision and continuous improvement of system difficult to conduct, thus there is still a "blind area" of the system, which leads to the dilemma of no basis for enforcement, and its substantive connotation is not enough to lead the work. Second, the lack of a more forward-looking management vision fails to accurately predict the policy trend and development trend, resulting in the management system lagging behind the actual needs, which is easy to enter the situation that there is system but there is no reference. Third, with the lack of coordination between departments, the system is still relatively thick in departmental concept, which not only causes the embarrassment of one department with one policy, but also makes it difficult to form an integrated power due to the lack of mutual support in the promotion of work. Fourth, the lack of relatively complete operation specifications and operation procedures not only greatly reduces the scientificity, standardization and seriousness of independent management, but also foreshadows the human feelings in real management due to the excessive discretion. All these lacks not only affect the overall height and working process of the university from management to governance, but also make the diagnosis and improvement in teaching work lack the due system guarantee.

At the same time, the lag of system construction also brings realistic influence to the construction of software and hardware. One is about the construction quality of campus management information platform. The platform lacking the involvement of management thinking is only the "ornament" of modern management, which is not only difficult to ensure the systematicness, timeliness and effectiveness of information collection, but also unable to put forward the specific scheme of data mining. The second is about the operation effect of campus equipment and facilities construction. The construction lacking the involvement of ideas is just a simple piling up of equipment and facilities, which is difficult to not only meet the needs of education and teaching reform practice, but also carry out the actual improvement due to the lack of realistic conditions.

2.3. Implementation level: lack of paradigm reference

In order to promote the establishment of a diagnosing and improving system in teaching work, the Ministry of education entrusts relevant colleges and universities to carry out the large-scale training and research discussion with multiple levels and higher frequency, and also selects the leading schools for demonstration, while the local education management departments also respond synchronously. However, at the same time, it is found that the establishment of internal quality assurance system and the construction of campus informatization highlighted in the whole process
are actually to make up for the practical shortcomings in the early stage, so the imprint that based on presenting a large number of daily operation processes and management forms, simple integration is carried out after the design of sub departments sometimes appears, while there is no complete case that the management framework is reconstructed on the basis of university constitution and the management system is formulated (revised) synchronously, and there are also no practical cases that can carry out overall planning, hierarchical design and step-by-step implementation on information system based on the overall work and management demands of the school. Then there is a general lack of in-depth internal relevance between platform construction and system construction, and there are few systems that can perform associated data collaboration and automatic trend analysis. In many cases, the teaching operation and management are the weakest, and there is no diagnosing and improving case that can really touch the real teaching pain point. As far as higher vocational colleges are concerned, what they are most eager for is an effective paradigm that can be integrated into daily work, slightly higher than routine work and can be steadily promoted.

3. Innovative Measures for Diagnosing and Improving Teaching Work

The practical defects found in the process of diagnosing and improving teaching work in higher vocational education are not only in the concept level, but also in the technical level; it is not only necessary to reconstruct the innovative thinking through improving the cognitive pattern, but also to break the bottleneck of restriction through innovative promotion strategies. Therefore, in the practice of the school, we not only face up to the weakness of human nature, but also fully consider the realistic demands, thus forming a more active and stable practice program to ensure the orderly operation of the process.

3.1. Concept transformation to establish new cognitive highland

The new measure for diagnosing and improving teaching work is to explore the new mode of operation and management in the new era of higher vocational education development, which is the practically specific actions included in the innovation action plan of the Ministry of education, rather than the "going through the motions" that people began to expect. The establishment of a diagnosing and improving system in teaching work, first, conforms to the new changes of the development of the times, which helps to play the main responsibility of the school, with accordance to the general trend of international development; second, meets the new requirements of modern management, which is not only conducive to the transformation from the summative evaluation to the process evaluation before, during and after the event, but also conducive to the cultivation of "three wholes" quality culture atmosphere integrating whole staff, whole process and whole party; third, accords with the general trend of information utilization, which not only provides convenience for information broadcast, trend analysis and management decision-making, but also helps the dynamic monitoring on teaching process, thus creating conditions for management early warning and process correction.

Each employee, who is not only the actual participant, supervisor and improver in the process of education and teaching, but also the witness, founder and beneficiary in the process of improving the quality of education and teaching, should establish the senses of overall situation, responsibility and subject in the establishment of a diagnosing and improving system in teaching work. Then not only the consciousness to face up to the problem, the courage to face the internal reform, but also the pattern of "making contributions without asking for the praises" is needed, so as to make diagnosis and improvement consciously become a professional habit, and take the initiative to solve
the defects in the process as a work responsibility.

3.2. Comprehensive review to reconstruct new management system

The establishment of university constitution first shows the basic prototype of establishing modern university system, which marks the emergence of the trend from university management to university governance. What governance needs to form is the conscious action formed by the gradual solidification of system restrictions, while the current management focuses on work coordination and passive drive, so it needs to reconstruct the management framework and institutional system to meet the new needs of management towards governance.

At the level of management framework, we should establish the basic framework with the party committee's leadership, principal's responsibility, professor's academic governance, democratic management, and school governance by law. At the same time, we should carry out the allocation and balance of political power, administrative power, academic power and democratic power, and constantly enhance the cohesion, educational power, creativity and influence of the school by cultivating spiritual culture, institutional culture, academic culture and environmental culture, so as to provide management guarantee for the implementation of the four functions of colleges and universities, namely, talent training, scientific and technological development, social services and cultural heritage.

At the level of institutional system, we should be based on the basic framework of university constitution to establish the organizational structure and operation mechanism suitable for the basic situation of school and campus culture, specifically covering the organizational structure, decision-making mechanism, incentive mechanism, resource allocation mechanism, working mechanism (including scientific research, teaching and social activities, etc.) and system innovation mechanism, etc., thus on the one hand, we should effectively guarantee the executive power of management through the separation of decision-making, implementation and supervision, while on the other hand, we should form a positive interaction with the society with the help of market, academic and government forces.

At the level of system construction, we should stand at the height of the overall development of the school to do a good job in the top-level design of system construction, form a system construction process of "overall planning, sub sector development, collective improvement", and effectively enhance the support and operability between systems, so that management can be vertical to the bottom and horizontal to the side. Taking my school as an example, in the construction of internal teaching quality assurance system (Figure 1), based on the reality of school management, an internal quality assurance system covering decision-making, implementation, supervision and evaluation, and other four major systems is constructed, with its specific functions being divided into five levels: school, major, curriculum, teachers and students, which can integrate quality guarantee into the specific work through the combinations of regularity and periodicity, and focus and wholeness, thus the quality assurance is carried out simultaneously when the work is completed, which puts forward the construction requirements of mutual support, mutual premise and mutual supplement between systems. Another example is the construction of scientific research management system (Figure 2). The system construction based on the three scientific research management cores of project, achievement and institution should not only formulate the nine major professional regulations involving project management, platform management and performance award, but also formulate the basic systems such as the scientific research management regulations, the academic committee constitution and scientific research document management methods. Then a complete scientific research management system is formed, and other systems are formulated in the same way. In the long run, not only a relatively complete system has been formed, but also
system improvement has become a daily action.

![Construction framework for internal teaching quality assurance system](image1)

**Fig. 1 Construction framework for internal teaching quality assurance system**

![Construction framework for scientific research management system](image2)

**Fig. 2 Construction framework for scientific research management system**

### 3.3. Thorough deployment to rationally make a new scheme

The diagnosis and improvement in teaching work proceed under the promotion by policy in a period of conflict and wait-and-see, so we must carry out forward-looking thinking and thorough deployment in the specific promotion. On the one hand, it is necessary to improve stance through research for direction guidance, provide the corresponding work guidance to the greatest extent, and reduce the time and energy consumption of inaction to the greatest extent, thus promoting the process by exchanging stance for popular support; on the other hand, we need to combine the objective reality with realization possibility, classify them according to the order of priority, make proper arrangement according to the principle of "easy first, then difficult", and integrate them into the teaching and management of daily work, so as to continuously reduce the stock of problems, increase the increment of innovation, and then promote the effect by exchanging order for confidence.

Throughout the process of diagnosing and improving teaching work, it can be summed up as three important tasks, namely, the establishment of a high level of internal quality assurance system and the improvement of management system, the construction of modern management information
platform with weak foundation, and the specific development of diagnosis and improvement in teaching work without foundation. The promotion of each work bears the requirements of management height, preliminary preparation and mass foundation.

Taking the school as an example, the leading department not only draws up the main line of work of "establishing target system, improving standard system, improving institutional system, establishing information management platform, establishing quality improvement spiral, establishing normalized diagnosing and improving mechanism, and cultivating modern quality culture", but also systematically sorts out 62 main tasks belonging to 17 categories, and then the completion time varying from half a year to several years is given according to the degree of difficulty and complexity.

Specifically speaking, because the school has carried out more than ten years of effective monitoring practice, and formed a relatively perfect teaching quality monitoring system, the new internal quality assurance system of "seven vertical and five horizontal" has been established only through moderate connotation promotion and extension expansion, which is a good combination of inheritance and innovation. In the system construction, based on the management core of university constitution, a comprehensive review of the existing system not only standardizes the original development planning, but also introduces the establishment of standards for institutions, posts and work for the first time, as well as the improvement of standards for specialty, curriculum, teaching materials, classroom, team and students through the systematic formulation (revision) on organization and management system for leakage detection and defect filling, which not only provides the basis for timely diagnosing, but also points out the direction for process improving. In the construction of modern management information platform, not only the demand collection of department management information is carried out in advance, but also the information demand of government supervision is systematically combed (Figure 3), and special research on information real-time collection, automatic generation of decision-making basis, organic integration with existing management system is organized, and then the overall planning and implementation schemes are formulated, forming a higher construction pattern. In the specific development of diagnosing and improving, we should face up to the objective reality that the information management platform has not yet been built, and take the initiative with the help of past information and real-time information. For example, in the use of classroom assessment and daily patrol information, on the one hand, the teaching assistance for the teacher with temporarily weak teaching effect and the moderate restrictions on weekly class hours are carried out to ensure the quality of teachers from the source; on the other hand, the improvement of teaching resources, the improvement of insufficient management and the integration of training places are carried out to take the initiative for the overall activation of real resources. In the utilization of students' summer internship information, through the systematic analysis and sorting out of the short board of management, not only the choice of students' practice places and practice requirements are more clearly defined, but also the guidance of professional teachers is included in the assessment. In the utilization of graduates' tracking information, the re examination and re improvement of the talent training programs based on information not only make necessary correction or even re positioning of the degree of professional perception with the deviation between some training objectives and students' real destination, but also reconstruct some curriculum systems that are difficult to meet the needs of talent training and make corresponding adjustments to the curriculum (links). In all these ways, teachers and staff really see the practical results from around, thus not only unloading the initial burden of action, and boosting the confidence in work, but also finding a new basis for teaching reform and management innovation.
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