Research on the Optimization of Postgraduate Education Management Path from the Perspective of Management by Objectives

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Abstract: With the continuous increase of the total number of graduate students in colleges and universities, optimizing the management of graduate education has become an urgent issue for colleges and universities to solve. Based on the theory of management by objectives, this paper discusses the practical application of management by objectives in the management of graduate education in colleges and universities by studying the current situation of the management path of graduate education in colleges and universities, analyzes the hierarchical goal system of the management of graduate education in colleges and universities, and puts forward targeted measures to optimize the management path of graduate education in colleges and universities from the perspective of management by objectives, so as to provide reference for improving the management level of graduate education in colleges and universities.

Keywords: Management by Objectives; Graduate Education Management; Path Optimization.

1. Introduction

Management by objectives (MBO) is a modern management theory based on or guided by objectives. Its management methods have attracted much attention of colleges and universities, and have become the main model of standardized and scientific management of colleges and universities. In the management of postgraduate education in colleges and universities, the application of management by objectives plays an important role in clarifying management objectives, improving management efficiency, and standardizing performance management.

2. Overview and Characteristics of Management by Objectives Theory

In 1954, Peter Drucker, a famous American management scientist, took the lead in clarifying the concept of Management by Objectives (MBO) in his book Management Practice [1]. Management by objectives is a modern management theory based on behavioral science theory. It takes work results as the behavior orientation, advocates that managers and the managed work together to formulate general objectives, formulate sub objectives from top to bottom according to the responsibilities of management at all levels, define the specific affairs, completion standards and operation methods of personnel at all levels, and control and evaluate the implementation process of objectives[2]. The objective management process includes objective setting, objective decomposition, objective implementation, objective evaluation and assessment feedback[3] (as shown in Figure 1).

![Figure 1. Flow Chart of Target Management](image-url)

The core of management by objectives is to guide managers to change from attaching importance to management process, management system, management behavior, etc. to attaching importance to organizational objectives[4]. The advantage of management by objectives is that it can achieve the participation of all staff in the formulation of work objectives, which can not only control the implementation of all work objectives, but also achieve the self control of members, and strive to achieve all objectives. In the 1980s, some enterprises and institutions took the lead in applying management by objectives in their work and achieved good results. After continuous...
development and improvement, their management role and benefits are becoming increasingly prominent. Therefore, the theory of management by objectives also has a good reference and guidance significance for the management and practice of postgraduate education in China.

Management by objectives is futuristic, oriented, motivating and systematic[5].

1) Target management feature 1: future
As far as the actual behavior of people is concerned, the goal is an expectation of the future, which is the result that individuals or organizations want to achieve in a certain period of time. Therefore, one of its characteristics is that it has future directivity. The establishment and implementation of goals are the initiative of the organization and its members, as well as a manifestation of the active pursuit of future achievements.

For future oriented management, management by objectives requires managers to guide the managed to focus their time and energy on the future and work together to seek future innovation results. Therefore, management by objectives can encourage people to actively face the future and go all out to complete the set goals. For the future education management of university graduate students in the new era, their expectations and needs can be more apparent.

2) Target management feature 2: guidance
Management by objectives is guided by clear objectives and focuses on the realization of objective results. Whether the objective results can be achieved directly affects the vital interests of the organization and also affects the degree of contribution to society. Postgraduate education management also needs to comply with and meet the requirements of the unit and society, but it is not fully reflected in two or three conditions, but should be an all-round quality requirement, some of which can only be expressed in abstract concepts, such as good conduct, down-to-earth work, solidarity, etc.

However, it is still necessary to further clarify the conditions to make graduate students' cognition clearer, that is, what kind of person they will become after training and management. Moreover, only when the conditions are clear can the quality assessment be carried out according to the conditions. The key of previous MBO is the formulation and evaluation of learning as the main goal. At present, a scientific, reasonable, comprehensive and objective goal system should be further constructed according to the new characteristics of graduate students. The carefully designed target system can not only point out the development direction of the postgraduate in the future, but also make the postgraduate clear about the training requirements of the school and further clarify what efforts need to be made. As long as postgraduates work hard towards the expected direction, and invest a certain amount of time and energy in clear goals, they are very likely to get their expected goal results.

3) Target management characteristic 3: incentive
A scientific and reasonable goal system can not only enhance the graduate students' sense of identity and belonging to the school, but also enable them to ease their doubts and anxiety, so as to further clarify the goals and tasks to be completed. Unclear goals will result in the lack of motivation and sense of responsibility of graduate students, thus reducing the efficiency of learning and work.

From the perspective of graduate students, the motivation of goals is embodied in the following three aspects:

1) Only when graduate students have a clear goal, can they have a direction of struggle, and then stimulate their potential and maximize their enthusiasm for learning;
2) Only after the graduate students have completed their goals can they generate a sense of satisfaction and achievement;
3) When the goals of the school and those of the graduate students can reach the maximum unity, the learning enthusiasm and innovation ability of the graduate students can be stimulated to the greatest extent.

From the perspective of school requirements, there has not been a good incentive system. Long term goals and short-term goals are the main goal requirements of the university for graduate students, while the requirements for medium or long-term goals are relatively vague. The long-term goal is set according to the education policy. The short-term goal is to complete their studies and obtain academic degrees as an important symbol; Medium term goals are generally not emphasized for graduate students.

From the perspective of incentive theory, medium and long-term goals have a strong incentive effect on people and last for a long time. Although long-term goals play an important role in guiding the direction, too distant goals will make people feel far away; However, goals that are too immediate often lead to a rush to success. Therefore, the implementation of management by objectives in the management of postgraduate education and the further improvement of the goal system that is far, near, complete and in clear order can make up for the defects of the current education management model.

(4) Target management feature 4: systematic
Management by objectives is a systematic management method. First, objectives are the centralized embodiment of the functions of the organization system and the main criteria for evaluating management performance, so objectives are crucial to controlling the whole; Second, mobilize all members to participate in management behavior through the formulation of general objectives and the decomposition of sub objectives; Third, the establishment and decomposition of the goal system not only make all members clear about their common goals and enhance their overall thinking, but also make members clear about their responsibilities and positions to achieve the common goals, so as to achieve the goal of implementing systematic management by using the goal system.

The systematic principle requires that, according to the overall work arrangement of colleges and universities, we should focus on the management objectives of postgraduate education, formulate a systematic education plan around the education objectives, clarify the education management responsibilities of each link, pool the joint efforts of the whole school's education management, and build a full staff, full process, and all-round education system. In fact, the goal of postgraduate education management is to create a common education management mechanism, system and method. Colleges and universities should be alert to the emergence of too many different "postgraduate education management methods", but should form a systematic postgraduate education management system that "has laws to follow, documents to follow, and examples to check".
3. Analysis of the Current Situation of the Postgraduate Education Management Path in Colleges and Universities

Postgraduate education is the highest level of education in China's education system and an important way to cultivate high-level innovative talents [6]. How to create a new situation of postgraduate education management in the new era and improve the level and quality of postgraduate education management has become a key research topic in colleges and universities.

(1) The management path of postgraduate education lacks systematicness

At present, the management system of graduate education in colleges and universities in China is not complete, and there is a lack of scientific and reasonable management target system of graduate education, which has a direct impact on the improvement of the management level of graduate education in China. Only by timely adjusting and improving the postgraduate education management system and supplementing the target system according to the actual problems fed back, can the level and quality of postgraduate education management be improved.

In the process of educational management of postgraduates, colleges and universities also need to fully understand the employment needs of postgraduates after graduation, master their future growth direction, and formulate reasonable educational management goals. However, this problem has not been fully recognized by most colleges and universities, resulting in the lack of timely feedback on the problems existing in the management of postgraduate education, which will not be able to make adjustments and improvements.

(2) The management path of postgraduate education lacks rationality

In recent years, the continuous expansion of graduate enrollment in colleges and universities has led to two phenomena. One is the imbalance between the proportion of graduate students and tutors, and the phenomenon of "one belt with many tutors" is common; Second, the educational management level of some college tutors is not enough, and the tutors' educational management of graduate students is not enough. In addition, some colleges and universities also have unreasonable postgraduate training programs. First of all, there are too many credits in the curriculum, which virtually increases the workload of tutors, making them more powerless to guide postgraduate research, academic, psychological and employment. Too many course credits also aggravate the workload of graduate students, which makes them unable to have enough time to carry out scientific research and practice.

At present, most colleges and universities adopt the management mode of "tutorial system". Tutors provide all-round guidance for graduate students' scientific research and learning, and teach students in accordance with their aptitude through "personalized guidance". However, in the process of daily education management of graduate students, due to the imperfect education management system, some tutors in some colleges and universities are always busy with work affairs or subject research, and there is not much academic communication with graduate students. In addition, some graduate students have weak awareness of active communication with their tutors, resulting in weak relationship between tutors, and even misunderstanding and contradiction between graduate students and tutors.

(3) The management path of postgraduate education lacks integrity

The management of postgraduate education in China emphasizes improving the quality of education, but the degree of emphasis on the discipline field of postgraduate needs to be improved. Ignoring the guidance of professional enrollment also reduces the quality of the management of postgraduate education in colleges and universities, resulting in the imbalance of the management structure of postgraduate education in China.

The continuous expansion of postgraduate enrollment has increased the complexity of its organizational structure, gradually diversified the management of postgraduate education, and put forward higher requirements for the balanced development of postgraduate education management. However, this has not attracted the full attention of some colleges and universities, resulting in frequent imbalances in postgraduate education management. At present, the goal of graduate education management is not really toward the elite development, and there is also a structural imbalance in the management of graduate disciplines.

In addition, some tutors put their time and energy on knowledge education without paying attention to skill education, and the learning focus of postgraduates is more inclined to classroom knowledge. This means that in the process of postgraduate education management, the theory and practice are not fully linked, which hinders the improvement of the efficiency of postgraduate education management and innovative practical ability. Therefore, the management of postgraduate education needs to ensure the balance of the structure, pay attention to the unity of knowledge education and skills education, strengthen the effective training of some practical skills in the process of education management, and also learn some other cross disciplines.

4. The Practical Application of Management by Objectives in the Management of Postgraduate Education in Colleges and Universities

(1) Connotation and formulation of objectives

Management by objectives is a series of management activities carried out around the set objectives and the achievement of objectives. Its management model[7] is shown in Figure 2.

The goal presents a three-level "pyramid" shape, including the primary goal (general goal), secondary goal (sub goal) and specific goal (assessment conditions)[8]. Considering the complexity and particularity of postgraduate education management, the goal formulation should include three aspects:

1) The big goal of social needs;
2) The general objective of education management;
3) Self goal of personal development.

The first step in building the objective management system is to set the general objective, which will directly affect the effectiveness of the objective management. The management of postgraduate education is different from enterprise management. The main goal of enterprises is to make profits. The management of postgraduate education involves both
theoretical research and practical application. It is not only of theoretical significance to practice, but also of theoretical significance. Therefore, in the process of goal formulation, it is necessary to take into account factors such as professional characteristics, research directions of tutors, interests of postgraduates, etc., conform to the direction and requirements of social development, and formulate practical and effective overall planning goals.

In the objective management system, the overall objective is strategic planning, which needs to be divided layer by layer. Specifically, according to the division of labor, it can be divided into social goals, professional goals, tutor goals, and graduate goals; According to time classification, it can be divided into adult goals, quarterly goals, monthly goals and weekly goals. Management by objectives emphasizes personalized management. It is not allowed to divide objectives one-sided. It is necessary to give full play to the initiative and creativity of the next level of objectives on the basis of ensuring the completion of the next level of objectives by referring to the situation of majors, tutors and graduate students. It can not only ensure the achievement of the overall goal, but also enable graduate students to have a high degree of autonomy, so that they can more freely choose the direction of future efforts.

(2) Implementation and supervision of objectives

After the establishment of the goal system, the postgraduate education management staff also needs to discuss with the postgraduate cadres or the goal leader, and ask for suggestions and opinions on the implementation of the goal. For the postgraduate education management workers, management by objectives does not mean to manage all affairs, but to guide, assist and raise questions, and provide necessary information to the person in charge of the objectives, so as to be able to evaluate the work process and make timely and necessary corrections for work mistakes.

The essence of objective management is to strictly check the completion of objectives on schedule or not. After finding out the gap between the completion of objectives and the preset value and the reasons, the objective content should be updated in time to further strengthen the safeguard measures. In the process of organization and implementation of management by objectives, the postgraduate education management staff shall summarize the work of the person in charge of the objectives with the postgraduate on schedule, evaluate the final results according to the objectives, and take the evaluation results as the basis for rewards and punishments.

In the process of implementing the goals, we should not only give play to the educational management ability of schools and tutors, but also consider the wishes of graduate students. Because graduate students are vulnerable groups and lack corresponding professional knowledge and social experience, it is easy to infer from subjective imagination at the initial stage of goal decomposition. At this time, it is necessary to create a good communication environment to ensure timely and effective communication, and make appropriate adjustments to the target system at critical moments.

(3) Evaluation and improvement of objectives

The evaluation of objectives is the key link to play an incentive role. It requires to evaluate and test the completion of the goals within the predetermined time, and evaluate the completion of the goals of the postgraduate education management from three aspects: the manager's evaluation, the managed's evaluation (mainly refers to the postgraduate), and the social evaluation (mainly refers to the employer). The evaluation results will be used as the basis for incentives to give full play to the incentive role.

Target evaluation is also an important step in target management. Conduct regular inspection and evaluation according to the evaluation indicators, urge graduate students to improve self-management, and evaluate the phased achievements and final achievements, such as whether the professional quality, scientific research ability and practice level of graduate students meet the target requirements. However, due to the constraints of cognitive level, management ability and other factors, our management objectives and evaluation indicators have some shortcomings. For example, the management objectives and evaluation indicators are too complex and abstract, which increases the difficulty of quantitative implementation; Some specific goals and some evaluation indicators are not targeted and do not conform to the actual situation; The assignment of some qualitative and quantitative indicators is inaccurate, and the requirements are high or low. However, target evaluation is only a way and not the ultimate goal. The evaluation results should be announced to the graduate students in a timely manner, urging them to mediate self-management based on the evaluation results, so as to promote the growth of the graduate students.

After a stage (usually a year) of implementing management by objectives, the overall situation of the implementation of
management by objectives should be summarized and analyzed, and improved one by one to ensure accurate target direction, while strengthening the pertinence and operability, and strengthening the guidance, forward-looking and rationality of the evaluation.

5. The Hierarchical Target System of Graduate Education Management in Colleges and Universities

The hierarchical objective system of graduate education management in colleges and universities includes four hierarchical objectives: academic breakthrough, discipline characteristics, standardized management and quality monitoring [12], as shown in Table 1.

<table>
<thead>
<tr>
<th>Level 1 Objectives</th>
<th>Academic breakthrough</th>
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<tr>
<td>Level 2 Objectives</td>
<td>Disciplines with characteristics</td>
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<tr>
<td>Level 3 Objectives</td>
<td>Standardized management</td>
</tr>
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<td>Level 4 Objectives</td>
<td>Quality is monitored</td>
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</tbody>
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(1)The first level goal - academic breakthrough
This kind of university has two distinctive characteristics: first, its teachers and researchers are the highest authority in the domestic academic field, and others cannot tell them what to teach and how to teach, what to study and how to study; Second, its activities will not all be implemented according to the established plan. Therefore, the spontaneous pursuit of academic reputation is the basis of his behavior choice.

The management goal of such colleges and universities should pursue a major breakthrough in academic research or practical application, mainly to complete topics of great significance, and focus on goals rather than processes. Therefore, they should enjoy actual autonomy in teaching, scientific research, personnel, funds, etc.; They should have the right to self-generate new majors so as to form cross disciplines. We should give full trust to the cultivation and management of postgraduates.

(2)The second level goal - discipline with characteristics
Such colleges and universities cannot maintain the highest level of teaching and research quality in an all-round way, and usually have certain advantages in some disciplines. Therefore, the formation of characteristics is the main indicator of the development capacity of such colleges and universities.

The management objectives of such colleges and universities should encourage innovation to form characteristics, and the training quality of their graduate students can usually be guaranteed. Therefore, its management mode also emphasizes management by objectives rather than process management. However, the right of such colleges and universities to add new majors, degree programs, and graduate enrollment should be restricted.

(3)The third level objective - standardized management
The main goal of such universities is to graduate students of education management, and applied research is the main direction of their scientific research. It has a certain scale of master students, but only a few doctors or no doctors. Therefore, based on the management objectives of postgraduate students, we should attach importance to standardized management to ensure the quality of education management.

Such colleges and universities mainly have procedural autonomy, rather than substantive autonomy, and need to pay attention to improving the ability to run schools independently and practice projects.

(4)Level 4 objective - quality is monitored
For such universities, it is particularly necessary to monitor the quality of their master's degree awarding. Attention should be paid in various ways, such as organizing well-known experts and professors in academia to visit these universities for guidance, sending visiting scholars to first-class universities at home and abroad, and inviting experts from outside the university to participate in the dissertation defense, so as to ensure that their scientific research level is improved and their educational management ability is strengthened.

6. Measures to Optimize the Management Path of Graduate Education in Colleges and Universities from the Perspective of Management by Objectives.

(1)Optimizing the Construction of the Management Objective System of Postgraduate Education
Optimizing the construction of postgraduate education management target system is a relative guarantee for the quality control of postgraduate education management[13]. First of all, according to the research needs of each postgraduate training unit, establish the discipline development goals, and formulate a supporting postgraduate education management plan. Decompose and implement the specific requirements of the program level by level. Graduate education managers, tutors and graduate students should all participate in the formulation of training objectives[14].

At the beginning of enrollment, each postgraduate will be able to define the development goal and direction of efforts, and take the completion of the goal as the evaluation basis to measure the quality of postgraduate research and learning, so as to ensure that the overall goal of postgraduate education management can be achieved by using the postgraduate education management information system. The construction and improvement of the postgraduate education management information system will help colleges and universities further establish and improve the target management mechanism of postgraduate education from multiple perspectives.

(2)Optimizing the Construction of Quality Monitoring and Evaluation System for Graduates
It is an important goal for graduate students to cultivate high-level innovative talents to adapt to the times and social development. Therefore, it is necessary to establish and improve the quality monitoring and evaluation system for graduate students that combines internal and external evaluation[15].

Timeliness is the advantage of in school evaluation, especially when problems are concentrated, in school evaluation can find and solve problems in a timely manner; Paying attention to the school goals while ignoring the social needs is a disadvantage of the school evaluation, which causes the graduate students to feel "learning is not available" after employment. The out of school evaluation is the social evaluation. Its advantage is that it can find out the shortcomings of the school's graduate education management and make timely adjustments. For example, a third-party organization conducts regular sampling surveys of previous graduate students; The disadvantage is that there is a certain delay. Usually, problems have occurred, and then we can find a way to solve them. Therefore, only by combining the in school assessment with the out of school assessment can the goal formulation be scientific and accurate.

3. Establish and improve the new multi tutor hierarchical management system

The mission of postgraduate tutors is to educate people for the Party and the country, playing a very important role in the management of postgraduate education. In order to ensure the training quality of graduate students, especially the interdisciplinary high-end talents, the tutor joint training system has replaced the single tutor system. In the goal management of postgraduate education management, the multi tutor hierarchical management system is integrated to broaden the academic knowledge of postgraduate[16].

First of all, the rights and responsibilities of the tutors are divided and reasonably distributed according to the rights and responsibilities of the tutors. The first tutor of the graduate students assumes the responsibility of overall guidance, and guides the graduate students to formulate scientific research and learning programs according to the training program; The second mentor should have relevant professional background or be a foreign expert, so as to provide graduate students with opportunities for interdisciplinary research or cooperation with foreign research institutions; The third tutor mainly assists the first tutor in dealing with the problems encountered in the daily life and study of postgraduates, and finds and fills in some professional knowledge. The third tutor needs to hold regular interviews with the graduate students, check and guide the research and learning of the graduate students, and report to the first tutor in a timely manner. According to the actual situation, the first tutor guides the graduate students to deal with the problems encountered in scientific research study.

The construction principle of tutor system in China needs to conform to the trend of education development, and establish and improve the tutor guidance mode of multi tutor hierarchical management by employing foreign teachers, enterprise executives and visiting scholars. Through the intersection and penetration of different disciplines, it guides and enlightens the scientific research thinking of graduate students, and changes the previous teaching mode of "teacher leading apprentice", combines the growth laws of high-level talents and the characteristics of disciplines and majors to innovate, and carries out more flexible and diverse guidance modes such as academic lectures, special seminars, practical events, etc.

4) Optimizing the Construction of the Assessment Mechanism for the Objectives of Postgraduate Education Management

Target assessment is a key link in the management of postgraduate education in colleges and universities, and also a main way to check the implementation effect of target management. The key to target assessment is to establish a diversified, scientific and reasonable assessment mechanism, and adopt unified and standardized assessment methods to carry out multi perspective and all-round assessment.

First, scientifically formulate assessment indicators. The setting of core assessment indicators needs to pay attention to the annual key work; The basic assessment indicators need to focus on the security and stability of graduate students and the promotion of daily work; Personality assessment indicators need to pay attention to characteristics and encourage graduate training units to play a subjective role. At the same time, colleges and universities should also verify whether the assessment indicators can truly reflect the target characteristics of the objects to be assessed and the requirements of the assessment objectives.

Second, gradually improve the assessment subject. The characteristics of the objective assessment of postgraduate education management are multifaceted and multidimensional, and different subjects have different values on the same work. Establish a diversified assessment body including the leading group of university target management, graduate student work department, graduate student training unit and graduate students.

Third, continue to optimize the assessment process. First of all, the postgraduate training unit should carry out self-assessment according to its own situation; Secondly, the postgraduate work department carries out evaluation on postgraduate training units, and conducts mutual evaluation among postgraduate training units to strengthen the transparency of evaluation; Thirdly, the leading group of management by objectives in colleges and universities should follow the principles of fairness, impartiality and openness, go deep into the postgraduate training units to carry out field visits, and listen to the opinions and suggestions of postgraduate students. Finally, the school makes an overall assessment of the assessment of the postgraduate training unit, and rewards and punishments according to the assessment results. The school shall reasonably use the assessment results to strengthen the management of assessment performance, timely feed back the assessment results to the postgraduate training unit and accept doubts and complaints.

7. Conclusion

Postgraduate education management is the main mode of cultivating high-end talents with both ability and integrity, and the key force in building an innovative country. Although the postgraduate education management model based on the theory of management by objectives can improve the pattern of postgraduate education management to a certain extent, it needs to be continuously explored and improved in the process of management practice, and some problems need to be further studied. Only when colleges and universities closely combine their own actual situation with target management, practice constantly in exploration, and dare to innovate in practice, can they give full play to the leading role of graduate education administrators and graduate tutors, improve the management level of graduate education.
management workers, provide beneficial conditions for the growth of graduate students, and create a new pattern of graduate education management.

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