

## QUALITY MANAGEMENT MODEL OF PUBLIC COLLEGES AND UNIVERSITIES UNDER GUANGDONG PROVINCE

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### ABSTRACT

The objectives of this research were (1) to propose the quality management model of public colleges and universities under Guangdong Province; (2) to verify result of quality management model of public colleges and universities under Guangdong Province with empirical data.

This research was a mixed research method, including quantitative research and qualitative research. The total population was 46,311, and a total of 480 samples were obtained by stratified random sampling technique. The key informants were principals, vice principals and management experts of public universities in Guangdong Province, obtained by purposive sampling technique, a total of 13 experts. Management experts have worked in universities for more than 10 years. The instruments used for data collection were semi-structured interviews and a five-point rating scale. Data analysis was performed by using statistical software, analyzing frequency, percentage, Standard Deviation, and data were tested using Confirmatory Factor Analysis.

The results showed that: (1) the quality management model consisted of nine components: leadership and decision-making, teaching management, logistics management, administrative power and academic power, external resources, school satisfaction, teacher development and talent training, students' professional knowledge and skills. Teaching quality and scientific research results; and (2) the quality management model of public colleges and universities under Guangdong Province was fit well.

**Keywords:** Quality Management Model, Public Colleges and Universities, Guangdong Province

## 1. Introduction

In today's world, China is one of the fastest growing and best growing countries. China's rise as a major country is thanks to institutional innovation and development. The secret of China's development and take-off is the popularization of education and the improvement of the quality of the whole people. Guangdong Province has the best economy and education in China, the forefront of China's reform and opening up, and the center of the Guangdong-Hong Kong-Macao Greater Bay Area. The quality management problem of Guangdong public university is the internal management mechanism problem of the university. Quality comparison, which this research thinks, is mainly reflected by comparing the data of public universities in Guangdong Province. The research on the quality management of universities in Guangdong province can effectively improve the teaching quality and quality management level of Guangdong universities, improve the competitiveness of universities, stimulate the vitality of running schools and improve the efficiency of running schools. Through investigation, analysis and practical research, this paper reveals the problems existing in the quality management of public universities and colleges in Guangdong Province and proposes effective solutions.

## 2. Research Objectives

The research objectives were as follows:

1. To propose the quality management model of public colleges and universities under Guangdong Province.
2. To verify result of quality management model of public colleges and universities under Guangdong Province.

## 3. Research Methodology

The title of this research was " Quality Management Model of Public Colleges and Universities under Guangdong Province". This research operates a mixed methodology of qualitative research and quantitative research. This research mainly discusses the composition of university quality management indicators, secondly discusses the influence of quality management indicators on university management, and finally puts forward the guidance of quality management. This research was mainly divided into three steps:

Step 1: Propose the quality management model of public colleges and universities under Guangdong Province;

Step 2: Establish the quality management model of public universities and colleges in Guangdong Province;

Step 3: Validate the quality model of public universities and colleges in Guangdong Province.

#### 4. Data Analysis

The title of this research was " Quality Management Model of Public Colleges and Universities under Guangdong Province". This research used mixed methodology of qualitative research and quantitative research. The total research population was 46,311 people, and 480 samples were obtained by stratified random sampling. Through semi-structured interviews, 13 university principals or management experts were interviewed, all of whom have worked in the university for more than 10 years. The tools used for data collection were the semi-structured interviews and a five-point rating scale. Analysis was performed using SPSS and AMOS, Test and analysis was performed using the CFA method.

The researchers analyzed the data collected from semi-structured interviews and questionnaires, and divided the results of the data analysis into two parts:

Part 1 The data analysis of the constituent variables of the quality management model of public colleges and universities in Guangdong Province;

Part 2 To verify and analyze the results of the quality management model of public colleges and universities in Guangdong Province.

#### 5. Summary

The research title "Quality Management Model of Public Colleges and Universities under Guangdong Province". Mixed method, both qualitative and quantitative research were employed to operate in this research. The research aims to research the competency variables that important for quality management model indicators, and then to find out the components and indicators that suitable for quality management indicators of Guangdong Province public universities. included verify the competency model, and summarizes the research methodology consisting of 3 steps as follows:

**Step 1: The result was to analyze the components of quality management in public universities in Guangdong Province.**

1. The researcher defined the research conceptual framework. Through understanding the relevant concepts and theories of quality management by reviewing the literature.

2. From the literature review, the index framework of university quality management was preliminarily constructed, and 13 university management experts were interviewed through the semi-structured interview form.

3. The researchers summarized the index variables of quality management from the literature analysis and expert interviews, and created a 5-level meter, which determined the validity of the questionnaire by five experts. The IOC was between 0.60-1.00.

### **Step 2: Proposing a model of quality management in public universities in Guangdong Province.**

1. The researcher according to the actual situation of universities in Guangdong Province, create the quality management model of public universities in Guangdong Province.

2. Test the applicability of the university quality management model in Guangdong Province.

### **Step 3: Verifying the scientificity of the quality management model of universities in Guangdong Province and invite 20 management experts to evaluate.**

1. Use Confirmatory Factor Analysis, to verify the scientificity of the quality management model of public universities in Guangdong Province. This model is suitable for public universities in Guangdong Province.

2. Invite management experts from universities to evaluate the quality management model of Guangdong Province.

## **6. Conclusion**

The quality management model of public colleges and universities in Guangdong Province has been verified and successful. The results of the research were as follows:

### **1. propose the quality management model Index composition**

1.1 The quality management model of public universities in Guangdong Province was divided into driving indicators and outcome indicators, among which the driving indicators account for 57% and the outcome indicators account for 43%.

1.2 There were 5 driving indicators, including: administrative power and academic power, 16%; leadership and strategic decisions, 12%; logistics management, 11%; teaching management, 8%; external resources, 10%.

1.3 In the leadership and strategic decisions index, the component coefficient was between 0.842 and 0.887, of which decision-making ability and Incentive mechanism effectiveness, was the most important variable. In the teaching management index, the component coefficient is between 0.835 and 0.873, where professional course setting and

teaching outline formulation, is the most important variable. In the logistics management index, the component coefficient was between 0.767 and 0.817, with logistics service facilities being the most important variable. In the administrative power and academic power index, the component coefficient was between 0.828 and 0.858, with academic power being the most important variable. In the External resource utilization test analysis index, the component coefficient was between 0.825 and 0.892, with capital introduction being the most important variable.

1.4 There were 4 outcome indicators, including: teaching quality and scientific research results, 14%; teacher development and talent training, 10%; students' professional knowledge and skills training, 10%; school satisfaction, a percentage of 9%.

1.5 In the school satisfaction index, the component coefficient was between 0.790 and 0.810, with student employment being the most important variable. In the teacher development and talent training test analysis index, the component coefficient was between 0.835 and 0.862, with achievements in scientific research being the most important variable. Teacher development and talent training test analysis, In the teaching quality and scientific research results test analysis indicators, the component coefficient was between 0.817 and 0.874, where, self-study ability and scientific research conversion rate was the most important variable.

1.6 Create a quality management model for universities in Guangdong Province. The model includes:

**Driven management index:**

- 1.6.1) leadership and strategic decisions
- 1.6.2) teaching management
- 1.6.3) logistics management
- 1.6.4) administrative power and academic power
- 1.6.5) external resource utilization

**Outcome management indicators:**

- 1.6.6) school satisfaction results
- 1.6.7) teacher development and talent training results
- 1.6.8) students' professional knowledge and skills training results
- 1.6.9) teaching quality and scientific research results

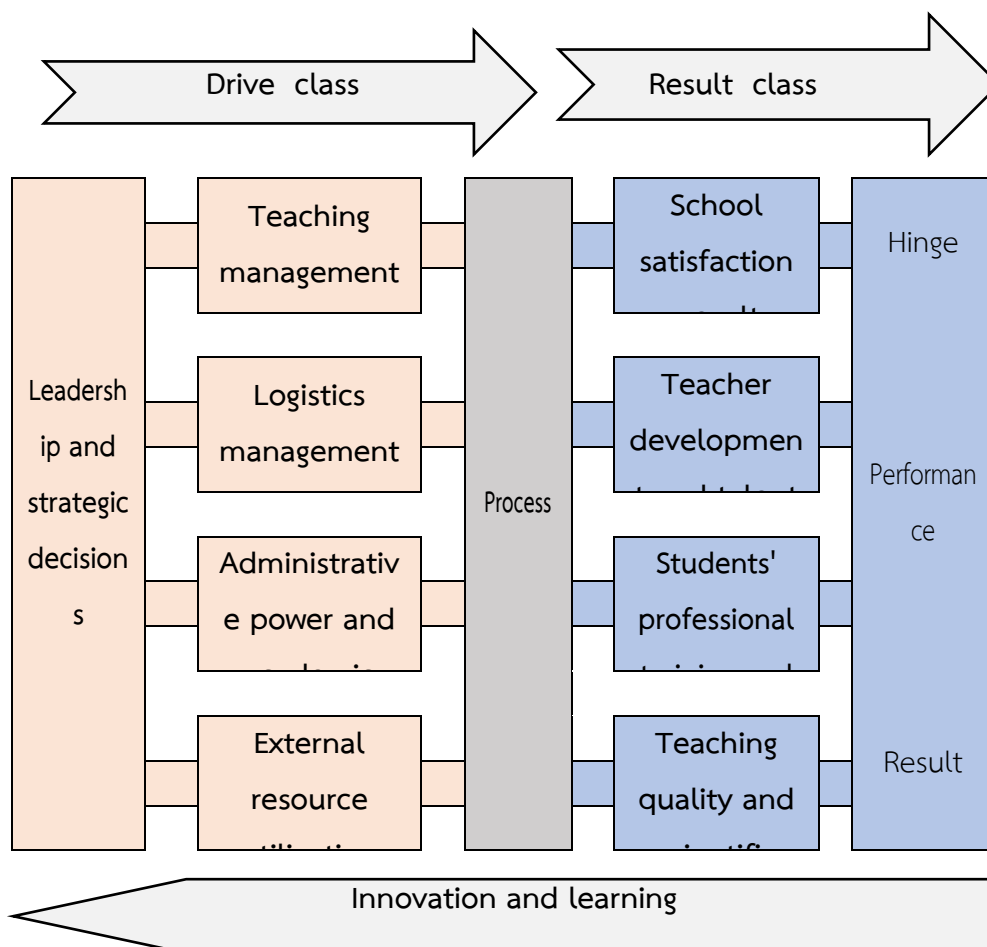
**2. Verification results of the quality management model**

2.1 Quality management model of public universities in Guangdong Province, as shown in the figure below:

2.2 Certified by management experts, this management model was practical, feasible and accurate, and can be used to guide actual work.

## 7. Discussion

Based on the research objectives, the discussion will be presented as follows:



### 7.1 Section 1 Discussion about the components of the Components of the quality management model of public colleges and universities in Guangdong Province

The quality management model of public colleges and universities in Guangdong Province has 2 components and 9 elements in total. Including (1) Drive class indicators; (2) Result class indicators. Among them, the Drive class index includes five items, namely: leadership and strategic decisions, teaching management, logistics management, administrative power and academic power, external resource utilization; the Result class index includes four items, namely: school Satisfaction results, teacher development and talent training results, students' professional knowledge and skills training results, teaching quality and scientific research results. The main findings were revealed, because university management was a part of university career development, and university management was to promote the efficiency

of running a university and improve the innovation ability of management work. This was a creative and systematic work. University management was a complex system engineering. It was necessary to establish an effective management system in the management work. Therefore, on the one hand, an organization with good quality management was required, and on the other hand, managers were required to have higher quality and ability.

The results of this study were consistent with the theoretical results of Guo Xiao (2015). Management content includes teaching management, scientific research management, teacher management, student management, administrative and academic management, etc. The essence of school quality management lies in regulation, coordination and control. (1) Manage according to scientific and practical characteristics and rules. (2) Mainly rely on experienced management experts to fully balance the characteristics of administrative management and academic management. (3) Adopt scientific methods, give full play to the role of quality management, organize management experts in different fields to discuss, choose correct opinions, and provide managers with scientific leadership and decision-making power. (4) In quality management, improving the comprehensive ability and active service awareness of managers was the primary task for the success of quality management, and it was also the key task of quality management. Therefore, the two components and nine elements of the research results were important elements of the quality management of public colleges and universities in Guangdong Province and an important means of quality management. Research on these nine elements can bring more opportunities for quality management of public colleges and universities in Guangdong Province.

## **7.2 Section 2 discusses the determination of the quality management model of public colleges and universities in Guangdong Province.**

The research results confirmed 2 components and 9 elements of the quality management model of public universities in Guangdong Province: (1) the Drive class index includes five items, namely: leadership and strategic decisions, teaching management, logistics management, administrative power and academic power , external resource utilization; (2) the Result class index includes four items, namely: school satisfaction results, teacher development and talent training results, students' professional knowledge and skills training results, teaching quality and scientific research results. Nine elements were established 44 key variables, and model fitting with empirical data was carried out for all indicators. The researchers found that the model has 9 elements and 44 key variables by reviewing a large amount of literature. First, the research method was based on valid data obtained by analytical instruments, with good validation results and good model results. The model data

were analyzed by confirmatory factor analysis to establish a suitable model. Through model analysis, this research has obtained a good model structure on the basis of existing data analysis. In addition to the data conforming to the model, this research has also been further researched and analyzed by experts in the field of management to illustrate the effectiveness of the model. Through confirmatory factor analysis, the components of the quality management model of public colleges and universities in Guangdong Province were nine elements that pass the data inspection, and they were discussed.

The results of this research can provide theoretical support for the quality management of public universities in Guangdong Province. The role of leadership in improving administrative management and building a harmonious management atmosphere has become increasingly prominent, thereby driving the development of local higher education. Put forward the road of development based on the actual situation, and try to provide a valuable reference for the development of higher education academic management. The results of this research were consistent with the theory or research results of Sun Jing (2007). in the research "The Construction of Higher College Quality Management System." Research has found that university leaders and administrators were critical to the quality development of universities. Leadership and decision-making affect the quality management of the university, and improving the quality management of the university was mainly to enhance leadership and coordination, and balance various relationships within the university. The results of this research were consistent with those of He Liying. (2006). in the research "Research on the Quality of Higher Education". Through the analysis of the quality of higher education, it was found that to improve quality management, one was to base itself on social needs, clarify the belief in running schools, and insist on rejuvenating the country through education. The second was to clarify management rights and responsibilities, clarify the role of university managers, and improve the quality management system. The third was to strengthen leadership, scientific decision-making, strict implementation, and improve management charm.

## 8. Recommendation

The construction model of this paper can be applied to the practice of quality management in universities. Researchers have the following suggestions:

### 1. General advice

In practical work, using the university quality management model, school administrators should research the content and details of the model. Contact with the reality, to judge whether it is in line with the actual situation.



## 2. Further research was recommended

2.1 Apply this research model to scientifically train school managers to understand the components of quality management.

2.2 Through the research of quality management mode in universities, further improve the management ability of managers, and improve the development and application of quality management mode.

2.3 According to the actual needs, the manager should further improve the quality management mode.

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