The Educational Management Model of Private Vocational Universities in Jiangxi Province, People's Republic of China

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Abstract

The purpose of this study was to: 1) analyze the current status of education management in private higher vocational colleges in Jiangxi Province; 2) develop an education management model for private higher vocational colleges in Jiangxi Province; and 3) evaluate the education management model for private higher vocational colleges in Jiangxi Province. First, through multistage random sampling, 40 managers and 298 teachers from three private higher vocational schools in Jiangxi Province were selected as samples, and a five-level rating scale was used for mean and standard deviation analysis. Secondly, an interview outline was designed based on the three key questions in the questionnaire, and 8 outstanding education managers were selected for semi-structured interviews to develop an education management model. Finally, two groups of 7 experts evaluated the management model to examine its accuracy, suitability, feasibility, and effectiveness. The results showed that: (1) The current status of education management in private vocational colleges in Jiangxi Province was at a high level overall ($\overline{X} = 3.62$). (2) The education management model was developed through four core dimensions: education operation management; education resource management; student management; and scientific research management. (3) After evaluation, the education management model (SEER) and guidelines reached the highest level in terms of accuracy and suitability ($\overline{X} = 4.78$) and feasibility and practicality ($\overline{X} = 4.63$). According to the implementation guidelines, it provided a scientific and objective basis for evaluating the effectiveness of education management in private higher vocational colleges, accurately measuring the results of reforms, and clarifying the direction of improvement.

Keywords: Educational Management Model; Private Vocational Universities; Jiangxi Province; People's Republic of China.

Introduction

Whether it is a traditional university or a new university, managers face the same task: How to manage better, allocate and utilize educational resources. However, in practice, we are still faced with problems such as unbalanced resource allocation, single management, low level of informatization, backward concepts, and improper management models (Chen, 2023). Analyzing management problems and making corresponding suggestions is both a challenge in current educational resource management and a direction worthy of future attention.

Against the background of insufficient investment in public education and the difficulty of public education resources to fully meet the diverse educational needs of the audience, my country's private higher education uses market mechanisms to raise funds and independently run schools, changing the school-running pattern that has been formed for a long time since the founding of New China, and has cultivated millions of qualified application-oriented and skilled talents for the construction of socialist economy and culture, promoting the popularization of higher education in my country. In addition, the development of private higher education in China has made far-reaching historical contributions to my country's education system reform and school-running system innovation, social order stability, the solution of educational equity issues, and the promotion of public higher education reform (Wei, 2013).

In Jiangxi Province, my country, the development of private higher vocational colleges not only provides a strong impetus for the construction and development of the local economy, but also provides more students with the opportunity to receive higher education and provides society with more abundant educational resources (Li, 2014).

However, private vocational colleges have not been established for a long time and are in a critical period of development and exploration. Through in-depth research and promoting innovation in private vocational colleges, it will help cultivate more talents that meet social needs, meet the diversified needs of future social development, and provide impetus for the high-quality development of my country's economy and society.

Research Objectives

- 1. Analyze the current status of the education management model of private vocational universities in Jiangxi, the People's Republic of China.
- 2. Develop the education management model of private vocational colleges in Jiangxi, the People's Republic of China.
- 3. Evaluate the education management model of private vocational universities in Jiangxi, the People's Republic of China.

Literature Review

Since the reform and opening up, China's higher education system has expanded on a large scale. As an important part, private vocational universities play a key role. Many scholars have conducted multi-faceted research on private vocational universities in Jiangxi, providing rich theoretical references for in-depth understanding of their education management model.

Cao (2013) pointed out that the educational achievements of private universities in Jiangxi have gradually become prominent, but there are problems such as vague school-running concepts, lack of prominent characteristics, excessive emphasis on enrollment, and imperfect teacher team building. It is necessary to establish correct concepts, focus on characteristics, improve teachers, and prosper culture to promote development.

Song and Jiang (2015) proposed that under the background of economic development and industrial transformation, private universities' innovation and entrepreneurship education should explore optimization paths from multiple aspects such as school-running concepts, training goals, and curriculum teaching models, change concepts, reform courses, and promote interaction with the government and society.

Cai (2020) Discusses the education management model of private vocational universities in Jiangxi, and believes that it should accurately position and serve the social and economic development of Jiangxi, shift from extension to connotation-oriented construction, give full play to the main role of industry and enterprises in the integration of production and education, and take the road of characteristic vocational education brand development strategy.

Huang and Ke (2021) Detailed description of the contributions and challenges faced by private vocational universities in meeting the needs of social technical and skilled talents, pointing out that their management and operation system is special and their social recognition is not high.

It is necessary to strictly regulate the system, adhere to the "people-oriented" concept, build a harmonious campus, and cultivate all-round talents.

Li (2021) Pointed out that the quality of school education depends on the development of students, and the management methods of private universities need to show their own characteristics, carry out management, teaching and other reforms based on student needs, and establish a complete education management system. Although it faces challenges, it must be innovative.

Zhen (2021) This paper analyzes the education management model of private vocational universities from multiple perspectives, and believes that campus informatization construction is an important means to improve the quality of education. Private universities should use high-tech means to improve the quality and level of management.

Guo (2021) A systematic theoretical study of the education management model of private vocational universities is conducted, and reform strategies are proposed, including clarifying talent training goals and reasonably setting up curriculum systems, in order to improve the level of undergraduate vocational education and promote the development of private universities.

Scholars have conducted in-depth discussions on the education management of private vocational universities from different perspectives such as structure, policy, system, and culture, revealing its characteristics and trends, and providing a new perspective for higher education management. In particular, the study of private vocational universities in Jiangxi Province shows the influence of local characteristics and needs in education management, which lays a solid foundation for the deepening and expansion of this study.

Conceptual Framework

- 1. Education operation management involves the management and optimization of internal operations, administrative processes, policy formulation and implementation of educational institutions to ensure that the organization achieves its goals stably and efficiently. This study focuses on the optimization of administrative strategies, structures and processes of private vocational universities in Jiangxi to meet their school-running goals.
- 2. Education resource management includes the planning, allocation, utilization and evaluation of human, material and financial resources of educational institutions to ensure the maximum benefit of resources. The study focuses on the resource situation of private vocational universities in Jiangxi and explores the rational allocation and optimal use of resources to improve

teaching effectiveness.

- 3. Student management covers enrollment, training, behavior, evaluation, guidance and graduation, aiming to provide students with a good learning environment and development opportunities. This study focuses on the actual needs of students in private vocational universities, as well as career planning and development.
- 4. Scientific research management involves the planning, implementation, supervision and promotion of scientific research activities, projects, funds and results of educational institutions to improve the quality and influence of research. The study starts with the selection of fields closely related to practical applications and the cooperation with enterprises for applied research.

The framework of this study is shown in Figure 1.

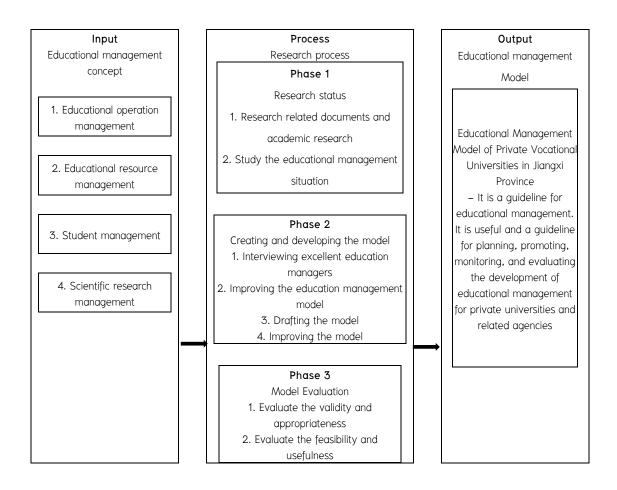


Figure 1 Conceptual Framework

Research Methodology

Phase I: Analyze the current status of the education management model of private vocational universities in Jiangxi, the People's Republic of China.

1. Population and sample

Population: For administrators and teachers, Nanchang Vocational University includes 143 administrators and 1,067 teachers, Jiangxi Pioneer Software Vocational University includes 99 administrators and 677 teachers, and Jingdezhen Art Vocational University includes 82 administrators and 675 teachers. The total number of administrators is 324 and the total number of teachers is 2,419.

Sample: The sample size used in the study was determined from the ready-made table by Krejcie and Morgan. The sample size was 40 administrators, 298 teachers, and 338 people in total.

2. Research Tools

The research tool was questionnaire survey, which was divided into two parts.

Part 1: General information of the respondents, data collected through a checklist questionnaire.

Part 2: To study the current situation of educational management of private vocational college in Jiangxi vocational university, People's Republic of China, using five-level scale questionnaire to collect data. Cronbach Alpha test and item objective congruence index (IOC) were used to test the reliability of the questionnaire. The results showed that the Cronbach α coefficient of the questionnaire showed a high internal consistency of 0.947, and the item objective consistency index was 0.60 – 1.00. Therefore, it is considered a reliable tool.

3. Data Analysis

According to the mean and standard deviation analysis (Srisa-ard, 2002), and the classification of the data as presented, define the average.

Phase II: Develop the education management model of private vocational colleges in Jiangxi, the People's Republic of China.

Based on the data analysis of the first phase, it serves as the basis for optimizing the education management model of private vocational universities in Jiangxi, the People's Republic of China.

The qualified target group of sample schools, 8 outstanding educational administrators from 3 private vocational universities were selected as interview subjects. They are: 2 principals, 2 vice principals, 2 deans of academic affairs, 1 dean of scientific research, and 1 dean of personnel.

The research tool for this stage is the semi-structured interview created by the researcher. The interview script is created by combining the data from the first stage, and the

interview outline is created by taking the 3 questionnaire questions that the respondents answered the most.

Phase III: Evaluate the education management model of private vocational universities in Jiangxi, the People's Republic of China.

The researchers applied the Madaus Scriven and Stufflebeam concept (Madaus, Scriven & Stufflebeam, 2000) to evaluate the education management model and management guidelines of private vocational universities in Jiangxi, the People's Republic of China.

The data collection tool is an opinion questionnaire. Two groups of experts evaluate the model, each with 7 experts. The first group of experts are education management experts and vocational education management experts; the second group of experts are education research experts and private college education research experts. The accuracy, suitability, feasibility and effectiveness of the education management model and guidelines for private vocational universities are evaluated respectively. Data are collected through questionnaires and surveyed using a 5-level rating scale. Statistical analysis involves mean and standard deviation.

Research Results

Objective 1. Analyze the current status of the education management model of private vocational universities in Jiangxi, the People's Republic of China.

According to the opinions of administrators and teachers, the current situation of educational management of private vocational college in Jiangxi vocational university, People's Republic of China. For details, see Table 1.

Table 1 The overall and each dimension's average and standard deviation about educational management of private vocational college in Jiangxi Vocational University, People's Republic of China

Educational management	$\overline{\mathbf{X}}$	S.D.	Interpretation	Rank
1. Educational operation management	3.79	0.63	High	2
2. Educational resource management	3.67	0.65	High	3
3. Student management	3.81	0.64	High	1
4. Scientific research management	3.62	0.65	High	4
Average	3.72	0.64	High	

According to Table 1 administrators' and teachers' opinions on the educational management of private vocational colleges are at a relatively high level, with the highest average in student management ($\overline{\mathbf{X}} = 3.81$), followed by education operation management ($\overline{\mathbf{X}} = 3.79$), and the lowest average in scientific research management ($\overline{\mathbf{X}} = 3.62$).

- 1.1 The overall score of educational operation management is relatively high. When considering each item, it is found that the average value of item 6 is the highest: The university has established an academic cooperation network with professional associations. The industry and other higher education institutions are followed by item 10, that is, the university operates systematically according to the plan and has short-term and long-term development goals. The item with the lowest average score is item 3, and the university's projects meet the needs of local economic development.
- 1.2 The overall score of educational resource management is relatively high. When considering each item, the highest average score is item 26: The university provides media materials and equipment sufficient to organize teaching activities. The second is item 15: The university provides opportunities and support for professional development and training seminars for teachers. The item with the lowest average value is item 27, the university cooperates with the business sector or other educational institutions.
- 1.3 The overall score of student management is relatively high. When considering each item, it is found that the average value of item 37 is the highest. The university has academic and professional cooperation with the public and private sectors to increase students' practical training opportunities. Next is item 29. The university has a systematic promotion and development of students. The items with the lowest mean scores were item 34: The university has a strategy for planning professional development to meet the needs of students, and item 36: The university provides opportunities for students to provide feedback to the university.
- 1.4 Research management is generally high. When considering each item, item 43 was found to have the highest mean. The university disseminates research results for educational purposes, followed by item 52, which stipulates that the university supports the generation of scientific research results and innovations that benefit local development, communities and society. The item with the lowest mean was item 48, which states that the university promotes networking with industry, government agencies and other educational institutions for collaborative research.

Objective 2. Develop the education management model of private vocational colleges in Jiangxi, the People's Republic of China.

The three questions with the highest average values in the first stage were used to set up an interview outline for expert interviews, and the data were analyzed. An education management model covering four dimensions was constructed using the total quality management theory, as shown in Figure 2.

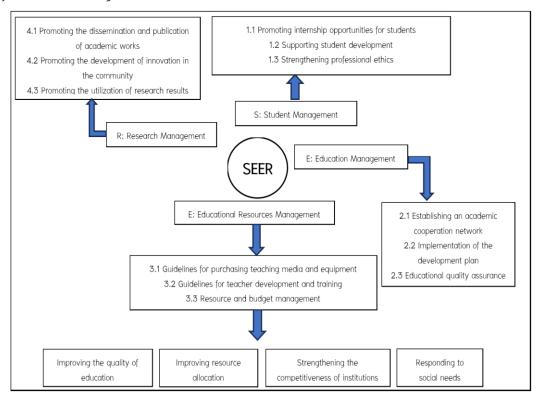


Figure 2 Educational Management Model of Private Vocational Universities in Jiangxi Province, People's Republic of China (SEER) Model.

Objective 3. Evaluate the education management model of private vocational universities in Jiangxi, the People's Republic of China.

The research results show that the education management model (SEER) and guidelines for private vocational colleges in Jiangxi province of the People's Republic of China have reached the highest level in terms of accuracy, appropriateness, feasibility and practicality, as shown in Table 2–3.

Table 2 Results of the validity and appropriateness examination of the guidelines for the use of the model of educational management of private vocational universities in Jiangxi province, People's Republic of China by experts

Point no.	Format User Guide	$\overline{\mathbf{X}}$	S.D.	level	Rating
1	Introduction	4.57	0.53	Highest	13
2	Description	4.86	0.38	Highest	4
3	Background and importance	5.00	0.00	Highest	1
4	Objectives	4.71	0.49	Highest	9
5	Principles	5.00	0.00	Highest	1
6	Expected benefits	4.86	0.38	Highest	4
7	Student management	4.86	0.38	Highest	4
8	Education management	4.71	0.49	Highest	9
9	Educational resources management	4.43	0.53	Highest	15
10	Research Management	4.57	0.53	Highest	13
11	Role of administrators	4.86	0.38	Highest	4
12	Role of teachers	4.71	0.49	Highest	9
13	Creating a quality management standard system	5.00	0.00	Highest	1
14	Total quality management	4.71	0.49	Highest	9
15	Work improvement plan	4.86	0.38	Highest	4
	Total average	4.78	0.21	Highest	-

From Table 2, it was found that the results of the examination of the accuracy and appropriateness of the guidelines for the use of the educational management model of private vocational universities in Jiangxi Province by experts showed that the guidelines for the use of the model had the highest level of overall accuracy and appropriateness ($\overline{X} = 4.78$). When considering each item, it was found that most of them had the highest level of accuracy and appropriateness. The item with the highest mean value was Item 3: Background and importance, Item 5: Principles, and Item 13: Establishment of a quality management standard system ($\overline{X} = 5.00$). The second highest mean value was Item 2: Explanation, Item 6: Expected benefits, Item 7: Student management, Item 11: Role of administrators, and Item 15: Work improvement plan ($\overline{X} = 4.86$). The item with the lowest mean value was Item 9: Educational resources management ($\overline{X} = 4.43$).

Table 3 Results of the feasibility and usefulness examination of the guidelines for the use of the model of educational management of private vocational universities in Jiangxi province, People's Republic of China by Experts

Point no.	Format User Guide	$\overline{\mathbf{X}}$	S.D.	level	Rating
1	Introduction	4.57	0.53	Highest	7
2	Description	4.57	0.53	Highest	7
3	Background and importance	4.71	0.49	Highest	3
4	Objectives	4.57	0.53	Highest	7
5	Principles	4.86	0.38	Highest	1
6	Expected benefits	4.57	0.53	Highest	7
7	Student management	4.71	0.49	Highest	3
8	Education management	4.57	0.53	Highest	7
9	Educational resources management	4.43	0.53	Highest	13
10	Research Management	4.71	0.49	Highest	3
11	Role of administrators	4.71	0.49	Highest	4
12	Role of teachers	4.57	0.53	Highest	9
13	Creating a quality management standard system	4.86	0.38	Highest	1
14	Total quality management	4.57	0.53	Highest	9
15	Work improvement plan	4.43	0.53	Highest	4
	Total average	4.63	0.25	Highest	-

From Table 3, it was found that the results of the examination of the feasibility and usefulness of the guidelines for the use of the educational management model of private vocational universities in Jiangxi Province by experts showed that the guidelines for the use of the model were at the highest level of feasibility and usefulness overall ($\overline{X}=4.63$). When considering each item, it was found that most of them were at the highest level of feasibility and usefulness. The items with the highest mean values were Item 5, Principles, and Item 13, Establishment of Quality Management Standards System ($\overline{X}=4.86$), followed by Item 3, Background and Importance, Item 7, Student Management, Item 10, Research Management, and Item 11, Role of Administrators ($\overline{X}=4.71$). The items with the lowest mean values were Item 9, Educational Resource Management, and Item 15, Work Improvement Plan ($\overline{X}=4.43$).

Discussion

This study focuses on the education management model of private vocational universities in Jiangxi, the People's Republic of China. Based on the research data, the research results are discussed as follows:

1. Analysis of the current status of education management model of private vocational colleges in Jiangxi Province, the People's Republic of China. The overall education management of private vocational colleges in Jiangxi Province is at a high level. Through the analysis of various links, it is found that the average level of student management is the highest, followed by education operation management.

Specifically, the student management dimension scores the highest, which may be because the management mechanism of private vocational colleges is flexible, not overly constrained by the traditional administrative management system, and can quickly formulate and adjust management strategies according to market demand and student characteristics; the survival and development of private vocational colleges depends on the choice and reputation of students, and they will pay more attention to listening to students' needs. The results of this study are consistent with the research results of (Li, 2021). The study found that private vocational colleges have achieved humanization, scientificization and diversification in management. Humanization is reflected in paying attention to student needs and considering individual differences; scientificization is reflected in adjusting strategies according to market and student characteristics, optimizing resource allocation, and improving students' employability; diversified management supports students' growth in all aspects through career planning and practical training.

2. Through the analysis of interview data, this study explores the optimization path of the education management model of private vocational universities in Jiangxi Province, the People's Republic of China. The research results show that the management model mainly covers four core dimensions, namely: (1) education operation management (2) education resource management (3) student management (4) scientific research management.

The above research results may be due to the needs of the school's own development. If private higher vocational colleges in Jiangxi want to gain a foothold in the fierce competition in the education market, they must ensure the efficient operation of education and teaching activities, reasonably allocate limited resources, improve the quality of student training, and enhance scientific research capabilities. The results of this study are also consistent with the research results of (Cai, 2020). This paper conducts an in-depth study on the education management model of private vocational colleges in Jiangxi, emphasizing that it should serve the regional social and economic development and realize the transformation from scale expansion to quality improvement. Private vocational colleges should take industry-education integration as a

breakthrough point to promote the implementation of national strategies, and industry enterprises should become the main body of transformation. Private vocational colleges in Jiangxi need to develop a vocational education brand strategy with the characteristics of industry-education integration. This study is also consistent with the research conclusions of (Guo, 2021). He conducted an in-depth study on the education management model of private vocational colleges and proposed reform strategies. The main development measures discussed include: clarifying training objectives, setting up a curriculum system, improving the college entrance examination system, and strengthening school-enterprise cooperation, so as to improve the level of undergraduate vocational education, meet the needs of high-level talent training, and promote the rapid development of private higher vocational colleges.

3. The Education Management Model (SEER) and Guidelines for Private Vocational Universities in Jiangxi, the People's Republic of China, have reached the highest level in terms of accuracy, appropriateness, feasibility and practicality.

The above research results were achieved thanks to the in-depth study of the characteristics and market demand of private vocational education during the model construction process, the active pursuit of optimization and innovation of education management models, and the formulation of detailed and forward-looking plans based on the laws of education and teaching and the development trends of vocational education, which refined the combination of qualitative and quantitative indicators and conformed to the actual situation of private vocational colleges. The results of this study are consistent with those of (Song & Jiang, 2015). In the context of economic and industrial transformation, the innovation and entrepreneurship education of private colleges and universities needs to be continuously improved, the school-running concept needs to be changed, talents that adapt to the national economic and industrial upgrading need to be cultivated, the teaching model needs to be reformed, the government and society need to be interacted with, and the educational environment needs to be optimized. The results of this study are also consistent with the conclusions of (Gao, 2013), who emphasized that although private higher vocational colleges in Jiangxi have achieved certain results, there are still problems such as unclear school-running concepts, unclear characteristics, excessive enrollment scale, and imperfect faculty. To promote the development of higher education institutions, it is necessary to establish a correct school-running concept, strengthen characteristics, strengthen faculty construction, and enrich campus culture.

Conclusion

This study focuses on the education management model of private vocational universities in Jiangxi, and draws the following conclusions:

- 1. Current status of education management model: The education management of private higher vocational colleges in Jiangxi is generally at a high level, among which the average level of student management is the highest. This shows that policy support provides guarantees for the development of private higher vocational colleges. Flexible management mechanisms and attention to student needs have improved the level of student management.
- 2. Optimization path: The management model covers four core dimensions: education operation management, education resource management, student management, and scientific research management. From the perspective of school development needs, each dimension is interrelated and coordinated to ensure school teaching, improve resource utilization, promote student development, and enhance scientific research strength.
- 3. Education management model (SEER) and guidelines: It has reached the highest level in terms of accuracy, applicability, feasibility and practicality. The construction of the model combines the characteristics and market demand of private vocational education, follows the laws of education, combines indicators with reality, and measures in each link enhance the effectiveness of the model.

Knowledge from Research

The education management model of private higher vocational colleges in Jiangxi Province highlights the "deep integration of industry and education". In terms of education operation, Deepen school-enterprise cooperation, promote the integration of "job-course-competition-certificate" education and curriculum ideological and political education; development planning is closely connected with regional industries and national strategies. In terms of resource management, equipment procurement accurately matches teaching, and teacher development implements stratified training and guarantees funding. Student management focuses on internship practice and all-round development, and integrates professional ethics into multiple links. Scientific research management emphasizes the dissemination of results, community service and transformation, establishes special funds and incentive mechanisms, improves the utilization rate of results through industry-university-research cooperation, and forms a comprehensive and distinctive private vocational university education management system.

Suggestions

1. Application suggestions

- 1.1 Comprehensive promotion and implementation. Jiangxi private vocational universities should comprehensively promote the constructed education management model to all teaching units and management departments of the school to ensure that all measures and requirements can be effectively implemented. Through training, seminars and other means, all faculty and staff can deeply understand the connotation and operation points of the model, and improve the accuracy and efficiency of implementation.
- 1.2 Continuously optimize resource allocation. In terms of education resource management, strictly follow the established standards and guidelines to purchase media equipment, manage funds, and dynamically adjust resource allocation plans according to actual teaching and scientific research needs and evaluation results. Further expand resource acquisition channels, attract more social resources to invest, and ensure high-quality education and teaching activities.

2. Future research suggestions

- 2.1 Model implementation effect tracking research. Establish a long-term tracking and evaluation mechanism to continuously monitor and analyze the effects of teaching quality, student development, and scientific research results transformation after the implementation of the education management model. By collecting data and conducting surveys, timely discover problems and deficiencies in the operation of the model to provide a basis for further optimization.
- 2.2 In-depth research on industry-education integration. Focus on the field of industry-education integration, and study how to further deepen school-enterprise cooperation and innovate cooperation models and mechanisms. Explore the establishment of new forms of cooperation such as industrial colleges and modern apprenticeships, strengthen the practical research of enterprises' in-depth participation in the entire process of talent training, and improve the fit between talent training and industry needs.

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