THE EFFECTIVENESS OF ACADEMIC ADMINISTRATION ON ARCHITECTURAL EDUCATION IN COLLEGES AND UNIVERSITIES UNDER LIAONING PROVINCE

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ABSTRACT

The objectives of this research were: (1) to explore the components of the effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province; and (2) to develop the managerial guidelines for the effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province.

The research was a mixed methodology research, including qualitative and quantitative research. The population of the research consisted of 77 administrators, 576 professional instructors from 10 colleges and universities of architectural education under Liaoning Province, the People's Republic of China with a total number 653. The sample size was determined by Krejcie and Morgan's Table (1970), obtained by a

stratified sampling method, totaling 342 samples. The key informants were nine experts with more than five years' experience in architectural education and educational administration in Liaoning Province. The instruments used for data collection were semi-structured interview form, a five-level rating scale questionnaire, and focus group discussions form. The statistics used for data analysis were frequency, percentage, mean, Standard Deviation (S.D.) and Exploratory Factor Analysis (EFA) as well as content analysis was employed.

The research findings revealed that; (1) there were six components of the effectiveness of academic administration on Architectural Education in colleges and universities under Liaoning Province which consisted of academic evaluation and performance management optimization, innovation management and development strategies of academic organizations, effective framework for academic administration organization, academic leadership and team building, information technology (IT) innovation of academic administration, academic administration philosophy and culture; and (2) there were total 22 managerial guidelines for the effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province.

Keywords: Effectiveness, Academic Administration, Architectural Education

1. Introduction

China, since 1999, has rapidly expanded its higher education enrollment, leading to a 54.4% gross enrollment rate by 2020 and a higher education population of 240 million (Qiao, X. & Yang, G. 2023). However, this "expansion policy" has posed challenges, notably in employment for college graduates and enterprise recruitment. Such challenges highlight the need for reflection on the massification of higher education, structural adjustments, and an emphasis on effective talent supply.

In 2023, Liaoning Province, ranking 14th in GDP growth, faced economic challenges. To boost its economy, the province must focus on quality talent cultivation(Zeng, B & Qiu, H. 2015), especially in the architectural sector, given the rapid

development of China's urban and architectural markets since the late 1990s. Higher education institutions in Liaoning specializing in architecture should prioritize resource optimization and the cultivation of practical-skilled professionals.

However, China's higher education system faces issues. Public universities lack clear positioning, leading to "homogenization" in talent cultivation. This necessitates a higher education restructuring, emphasizing effective talent supply university essence, and academic governance. China's journey in academic administration has been short but significant. Yet, challenges like academic bureaucratization, misconduct, and corruption impede university reforms. Universities, under strong governmental guidance, often reflect an administrative organizational style in their internal management. Despite efforts to bolster governance in academic administration, their capability remains weak. China lags in the field of academic administration, underscoring the need for intensified research on its effectiveness.

For Liaoning Province, focusing on the effectiveness of academic administration in architectural education is crucial. This approach not only strengthens the theoretical foundation of architectural education but also aids in modern university system evolution. Effective academic administration can refine decision-making, protect academic freedom, and elevate governance levels.

In summary, China's higher education trajectory presents numerous challenges. Strategic adjustments, academic governance emphasis, effective talent supply, and quality enhancement are vital. For provinces like Liaoning, the focus should be on the effectiveness of academic administration in specialized fields like architecture.

2. Research Questions

(1) What are the components of the effectiveness of Academic Administration on Architectural Education in colleges and universities under Liaoning Province?

(2) What are the managerial guideline for the effectiveness of Academic Administration on Architectural Education in colleges and universities under Liaoning Province?

3. Research Objectives

(1) To explore the components of the effectiveness of Academic Administration on Architectural Education in colleges and universities under Liaoning Province.

(2) To develop managerial guidelines for the effectiveness of Academic Administration on Architectural Education in colleges and universities under Liaoning Province.

4. Research Method

4.1 Research Design

This study was a mixed method research design, including qualitative and quantitative research.

Above all, through qualitative research, including the content analysis of literature and related research, as well as semi-structured interviews with 9 key informants, the researcher studied variables of effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province. Afterwards, the quantitative data was collected through a survey questionnaire distributed to instructors and leaders of architectural education colleges and universities under Liaoning Province, in order to explore the components for the effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province. Lastly, it was a qualitative research by content analysis to develop the managerial guidelines for the effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province by using focus group discussion.

4.2 Population and Sample

The population included 77 administrators leaders (Director of Architectural Department and Dean of Architectural Education College), 576 professional instructors, educational administrators from 10 colleges and universities of architectural education under Liaoning Province. Sample size is determined by Krejcie and Morgan’s table (1970). Sample was 342 including administrators leaders (Director of Architectural Department and Dean of Architectural Education College), professors, instructors and educational administrators, with stratified sampling technique.

4.3 Research Instruments

The main instruments used in this research was a 5-point Likert's scale (1932) questionnaire that the researcher created from the review of literature and the validity checked by 5 experts. The instrumental items were based on the experts' recommendations as to the results of Item-Object Congruence (IOC). Itemization presented its IOC between "0.60 – 1.00" was relatively expected to be used in the research. As a result, it was found that there were 89 items of questionnaire. Then the researcher has sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. As a result, Cronbach's Alpha value was at 0.975 which can be used to describe the reliability of questionnaire.

4.4 Data Collection

The first phase of the research, the researcher has studied related literatures about the concept, principles, and theories, related research on effectiveness of academic administration on architectural education , as well as in-depth interview from 9 key informants who were were instructors, the director of Architectural Education Program and Dean of Architectural Education College with more than 5 years' experience in Liaoning Province. Purposive sampling method was employed. Content Analysis and the semi-structured interview form was used to collect the data.

In the second phase, the researcher asked Bangkokthonburi University for permission and the letter of data collection was attached in the appendix. Subsequently, the researcher asked permission from sample through contact and the questionnaires were sent to the sample by online questionnaire methods and in person. The software were Wen Juan Xing and WeChat.

The data collected in the third phase was composed of 9 key informants with more than 5 years' experience in architecture education and educational administration in colleges and universities under Liaoning Province by focus group discussion. The researcher was as a facilitator. The findings presented by the experts during the focus group discussions were recorded by the researcher.

4.5 Data Analysis

In this study, content analysis and statistical analysis were used to analyze the collected data. Content analysis was conducted to analyze the collected data from literature reviews, semi-structured interviews, and focus group discussion. Statistical analysis was mainly used to analyze the data collected from the questionnaires. The

researcher used SPSS for analyze the variables. The data of demographic variables were analyzed by descriptive statistics, frequency, and percentage. The variables of effectiveness of Academic Administration on Architectural Education in colleges and universities Under Liaoning Province were analyzed by descriptive statistics: mean, Standard Deviation (S.D.). The components of effectiveness of Academic Administration on Architectural Education in colleges and universities Under Liaoning Province was analyzed by Exploratory Factor Analysis (EFA). The main goal of EFA is to determine the minimum number of common factors required to adequately reproduce the item correlation matrix. Following theoretical previsions, the factors should be justifiably interpreted and labeled, indicating which loading values (usually over 0.4) are considered in the interpretation.

5. Research Results

The research results were presented in 3 sections:

5.1 Section 1 Result of Content Analysis for Variables

From review of literature, the researcher has studied variables from related concepts, principles, theories, and related research concerning with effectiveness for academic administration on architectural education. Then, the research has prepared semi-structured interview from to conduct interview from 9 key informants with more than 5 years' experience in architectural education and educational administration in Liaoning Province, obtained by purposive sampling method.

As result, total 94 variables were found and prepare a research instrument as a five- point rating scale questionnaire. The quality of instruments have been verified by Content Validity and Reliability.

For Content Validity of questionnaire, the researcher has sent questionnaire to five experts for verification. The Item-Objective Congruence (IOC) was used to evaluate the items of the questionnaire based on the score range from -1 to +1. The items that had scores higher than 0.6 were reserved,0.40 < variables ≤ 0.60 Modify, as a result, it was found that there were 89 items of questionnaire. Afterwards, the researcher has sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's Alpha value on or above 0.70 means adequate reliability to determine the internal consistency or average correlation of items in a research instrument

to measure reliability of the questionnaire. As a result, Cronbach's alpha value was at 0.975 which can be used to describe the reliability of questionnaire.

5.2 Section2 Result of Data Analysis for Research Objective 1

The results of the research objective 1 in this part was derived from the results of the questionnaire survey.

The general demographic data of 342 instructors and leaders from 10 colleges and universities in Liaoning Province.

Table1 Frequency and percentage Result of Data Analysis for Questionnaire: Demographic Information

Status		Frequency	Percentage
1.Gender	1.1 Male	195	57
	1.2 Female	147	43
	Total	342	100
2.Age range	2.1 Lower than 30 years old	54	15.8
	2.2 31~40	132	38.6
	2.3 41~50	91	26.6
	2.4 More than 51 years old	65	19
	Total	342	100
3. Education level	3.1 Bachelor's degree or equivalent	85	24.9
	3.2 Master's degree or equivalent	224	65.5
	3.3 Doctoral candidate or equivalent	29	8.5
	3.4 Post-doctoral	4	1.2
	Total	342	100
4.Working Experience in architectural education and management	4.1 1-5 years	74	21.6
	4.2 6-10 years	115	33.6
	4.3 11-15 years	114	33.3
	4.4 More than 15 years	39	11.4
	Total	342	100
5.Position	5.1 Educational Administrator leader	87	25.4
	5.2 Professor	58	17
	5.3 Instructor/Teacher	146	42.7
	5.4 Administrator	51	14.9

Table1 Frequency and percentage Result of Data Analysis for Questionnaire: Demographic Information

Status		Frequency	Percentage
6.Professional attributes	Total	342	100
	6.1 Ministry of Education Key Universities	93	27.2
	6.2 Provincial Department of Education Key Universities	86	25.1
	6.3 National Democratic Commission	54	15.8
	6.4 Liaoning Provincial Education Department (public)	109	31.9
	Total	342	100

The researchers analyzed the arithmetic mean and Standard Deviation (S.D.) by comparing the derived arithmetic mean to the criteria based on Best's concepts (Best, J. W. 1977). It was found that overall, 89 questions the arithmetic mean was between 3.265-4.07, indicating that the respondents has an opinion on the level value of the variable by the arithmetic mean from moderate to high, standard deviation (S.D.) was between 1.002-1.326, indicating that the respondents had different opinions on the variable.

In addition, it was reviewed using test statistics, which hereby used variable statistical monitoring to be related based on KMO and Bartlett's Test values, with the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) between 0-1, and Bartlett's Test of Sphericity, and test statistics testing variables to see if they were related. As shown in Table 2.

Table 2 Data Analysis Result of Questionnaire: Kaiser-Meyer-Olkin and Bartlett's Test

Kaiser-Meyer-Olkin and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	Approx. Chi-Square	24082.683
	df	3916
	Sig.	.000

From Table 2, the KMO result of the data collected from the research was 0.952, and its Bartlett's Test of Sphericity at statistical significance was 0.000. The KMO value >0.9 is very applicable to factor analysis.(Kaiser, H.F., & Rice, J. ,1974) Testing the relationship between variables by statistical values, Bartlett's Test of Sphericity at statistical significance (sig. ≤ 0.05) of the data indicate that there was the correlation coefficient matrix of variables. Therefore, the resulting information was appropriate to conduct further factor analysis.

This phase of analysis used factor extraction by Principal Component Analysis (PCA) with orthogonal rotation et.al and varimax rotation. The used criteria for considering factors were as follows: (1) 0.35 or higher was a practically significant factor loading, (2) eigenvalues greater than 1 according to Kaiser's Criterion, and (3) there were more than 3 variables (Hatcher). When consider the above criteria, the number of components and variance of each variable are shown in Table 3.

Table 3 Data Analysis Result of Questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance （n=342）

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	26.198	29.436	29.436	26.198	29.436	29.436	14.622	16.43	16.43
2	8.641	9.709	39.144	8.641	9.709	39.144	10.2	11.46	27.89
3	6.932	7.788	46.933	6.932	7.788	46.933	9.884	11.106	38.996
4	5.422	6.092	53.024	5.422	6.092	53.024	8.937	10.041	49.037
5	4.621	5.192	58.216	4.621	5.192	58.216	6.944	7.802	56.839
6	3.377	3.794	62.011	3.377	3.794	62.011	4.603	5.172	62.011
7	0.997	1.12	63.131						

6. Extraction Mmethod: Pprincipal Ccomponent Aanalysis

Rotation Method: Varimax with Kaiser Normalization

In the process of factor analysis, principal component analysis method was used, and maximum variance orthogonal rotation method was used for factor rotation, so as to extract 6 components. It is generally believed that the cumulative variance contribution rate of extraction factors is greater than 60%, indicating that enough information has been extracted. This scale has good validity.

Through the factor loading, variables described in each of the main components after rotating the axis, it was summarized that the components of effectiveness of academic administration on architectural education in colleges and universities under Liaoning Province were found to be based on the criteria for selecting components. There were 6 components. The researcher had summarized the components as shown in Table 4.

Table4 Data Analysis Result of Questionnaire: Components of Effectiveness of Academic Administration on Architectural Education in colleges and universities under Liaoning Province

Order	Components	Number of Variables	Factor Loading
1	Component 1	22	0.689~0.813
2	Component 2	16	0.707~0.785
3	Component 3	17	0.628~0.769
4	Component 4	13	0.755~0.883
5	Component 5	13	0.654~0.745
6	Component 6	8	0.696~0.777
Total		89	0.628~0.883

Based on Exploratory Factor Analysis, variables were extracted and the key component variables were analyzed. The researcher then summarized the components as shown in Figure 1.

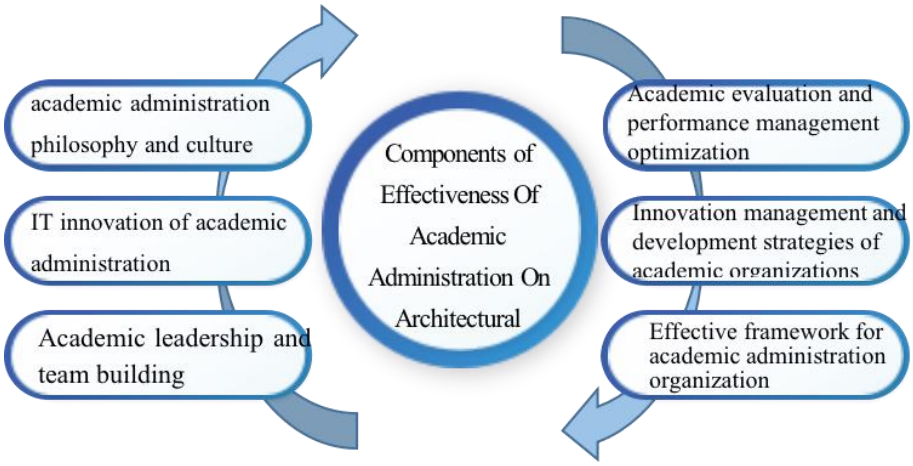

Figure 1 The Components of Effectiveness of Academic Administration on Architectural Education in colleges and universities under Liaoning Province

5.3 Section 3 Result of Data Analysis for Research Objective 2

In order to develop the managerial guideline for effectiveness of Academic Administration on Architectural educational in colleges and universities under Liaoning Province, the researchers moderated a focus group of 9 key informants (Director of Architectural Department, Dean of Architectural Education College and Professor of Architecture Education) from three outstanding colleges and universities under Liaoning Province. The researchers collated and analyzed the discussions of 9 experts and came to the conclusions shown in Figure 2, which consisted of total 22 managerial guidelines for effectiveness of Academic Administration on Architectural Educational in colleges and universities under Liaoning Province.

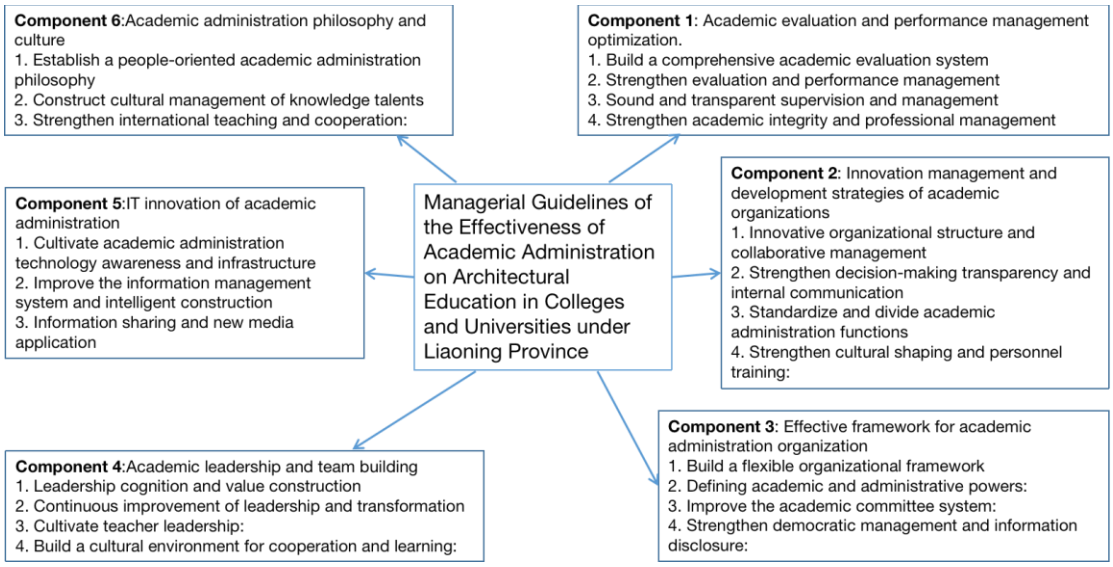

Figure 2 The Managerial Guidelines for Effectiveness of Academic Administration on Architectural Educational in colleges and universities under Liaoning Province.

7. Discussion

The discussion will be presented as follows:

7.1 Discussion about major findings of objective 1

The first objective of the research was to explore the components of effectiveness of Academic Administration on Architectural Educational in colleges and universities under Liaoning Province. There were six components of effectiveness of Academic Administration on Architectural Educational in colleges and universities under Liaoning Province which consisted of Academic Evaluation and Performance Management Optimization, Innovation Management and Development Strategies of Academic Organizations, Effective Framework for Academic Administration Organization, Academic Leadership and Team Building, IT Innovation of Academic Administration, Academic Administration Philosophy and Culture. The main reason for such findings was that, first, the researcher has conducted a series of relatively rigorous and systematic qualitative research and quantitative research on effectiveness of Academic Administration on Architectural Educational in colleges and universities under Liaoning Province , and finally formed these six important components. Secondly, these six components also reveal that Architecture Education under Liaoning Province needs to pay attention to these six aspects in the process of implementing educational management if it wants to ensure or even improve its own educational effect.

The research finding was in accordance with the theories or research of Bao,H.(2009), Nie, Y. (2019) and Bie, D. (2015). In their research, they all agree that academic administration philosophy and culture is the cornerstone of architectural education, which can stimulate the academic enthusiasm of scholars and students and promote in-depth academic research. Academic leadership and team building ensure the direction and quality of architectural education and provide strong guidance and support for academic research. The effective organizational framework of academic management provides a strong organizational guarantee for academic research.

7.2 Discussion about major findings of objective 2

The second objective of the research was to develop the managerial guideline for effectiveness of Academic Administration on Architectural Educational in colleges and universities under Liaoning Province. Based on the opinions of experts through focus group

discussions, the researchers have finally determined 22 guidelines for objective 2. These 22 guidelines have valuable insights and direction for Architectural Education in Liaoning Province, aiding them in elevating the academic administration efficiency of their architecture programs.

For Component 1, the guidelines provided by experts mainly revolve around four aspects: build a comprehensive academic evaluation system, strengthen evaluation and performance management, sound and transparent supervision and management, strengthen academic integrity and professional management. The issues related to Academic evaluation and performance management optimization in the guidelines derived from the results of this study are consistent withLi,J.&Guo,L. (2019), Shen,L. (2021), Zhang,X. (2022) which was found that Administrators pay attention to find analyzed to continuously improve the attention of managers to the academic evaluation mechanism of colleges and universities. An evaluation system combining multiple evaluation, quantitative evaluation and qualitative evaluation is proposed.

For Component 2, the guidelines provided by experts mainly revolve around four aspects: innovative organizational structure and collaborative management, strengthen decision-making transparency and internal communication, standardize and divide academic administration functions, strengthen cultural shaping and personnel training. The guidelines derived from this study suggest that innovative organization management， academic committee in universities is necessary, it can play a role in promoting academic exchanges, which is consistent with the attention paid to organizational goals by Chen, H., & Chen, B. (2003)， Li, Z. (2018)， Liu, Q. (2021)and others in their research.

The guidelines in Component 3 focus on Effective framework for academic administration organization: build a flexible organizational framework, defining academic and administrative powers, improve the academic committee system, strengthen democratic management and information disclosure.

The guidelines in the results of this study focus on the issue of framework for organization， and this research finding is similar to Bie, D. (2015)， Wang, Z. (2019)， Xu, H. (2017) and others are consistent, they must focus to framework of academic administration efficiency. Wang, Z. (2019) also pointed out in his research that a flat network structure includes reduced hierarchy, increased efficiency, and enhanced innovation.

Component 4 provides four guidelines for leadership cognition and value construction, continuous improvement of leadership and transformation, cultivate teacher leadership, build a cultural environment for cooperation and learning. The findings of this study are similar to those of Nie, Y. (2019)， Pan, J., & Hou, J. (2014) pay attention to academic leadership and team building.

In their research, they all believe that awaken the inner consciousness of "academic leadership" and create a good atmosphere of "academic cooperation", which is helpful to improve the quality of education. But Rowan, B. (1985), and Davis, G. A. & Thomas, M. A. (1989) all mentioned the content of strong leadership. However, the guidelines obtained in this study pay more attention to the ability of educational leaders to communicate, coordinate and make decisions in the organization, which is the difference between this study and the research results obtained by the above researchers.

The guideline of Component 5 gives three suggestions around IT innovation of academic administration: cultivate academic administration technology awareness and infrastructure, improve the information management system and intelligent construction, information sharing and new media application. The guidelines for IT innovation of academic administration from this study are consistent with those of Zhang, T. (2023)， Liu, P. (2018), who pointed out that the school should strengthen the organic combination of new media technology and traditional educational management means, give full play to the advantages of new media technology, and improve the efficiency and quality of educational management. The implementation of these strategies will contribute to the modernization of university education management and improve the quality of personnel training.

The guideline of Component 6 gives three suggestions academic administration philosophy and culture: establish a people-oriented academic administration philosophy, construct cultural management of knowledge talents, strengthen international teaching and cooperation. This guidelines from the study are consistent with those of Zhao, X. (2022),Cao, W. (2011).Through the academic administration philosophy and culture , the construction of the effectiveness of academic administration in higher education needs to be a comprehensive system project based on correct management goal positioning, These study provides the methods and ideas for the construction of university management effectiveness from the perspective of people-oriented.

8. Recommendations

Based on the research findings, the following recommendations are proposed in three key aspects:

8.1 Recommendation for Policies Formulation

(1) Improve the fair, comprehensive and people-oriented academic evaluation system, and improve the overall level of architectural education

It is very important to improve the effectiveness of architectural education and perfect the academic evaluation mechanism. A scientific and reasonable academic evaluation system can promote the cultivation of academic ethics, academic norms and the establishment of excellent style of study. Academic evaluation should be combined with quantitative evaluation and qualitative evaluation, strengthen the quality awareness of academic evaluation, quality-oriented and core evaluation system.

(2) Optimize the academic organization and management and promote the management innovation and strategy upgrading of architectural education.

To adapt to changes in architectural education, academic organizations employ innovative management strategies to ensure quality services for stakeholders. Promote the innovation of architectural academic organization and management mode, and establish a multi-center collaborative governance organization mechanism. Standardize inter-organizational relations, establish effective communication channels and cooperation processes, promote cross-organizational cooperation, and strengthen team coordination and meeting management.

(3) Coordinate the academic administration process and build a solid organizational framework for architectural education.

Establish a scientific and reasonable academic organization framework, improve the working mechanism of the academic committee, the core organizational structure of academic activities, and formulate clear work processes. Standardize administrative power to serve academic power, and form a power operation mode in which the professor committee exercises decision-making power and the administrative system exercises executive power. Actively promote the establishment and improvement of regulations and rules of procedure related to the operation of the Professor committee.

(4) Strengthen the collaboration of academic leadership, optimize the construction of team cooperation

Teamwork and interdisciplinary research have become the new normal of academic development. In order to promote academic progress, collaboration between academic leaders and teams needs to be strengthened. The formation of effective academic leadership in universities requires the joint participation of multiple subjects, creating a cultural atmosphere of exchange and cooperation, establishing and deepening academic cooperation relationships, forming positive interactions, paying attention to the cultivation of teachers 'leadership ability, forming a common vision and shared values, so as to improve the academic leadership of universities.

（5）Comprehensively deepen the modernization reform of academic administration by means of information technology

Colleges and universities should promote academic management informatization, introduce modern information technology such as advanced information technology, big data and new media, and promote the reform and innovation of college education management. Managers should improve the application of information technology, and strengthen the technical training of teachers to ensure that teachers master modern information technology; Secondly, strengthen the construction of management platform, increase hardware investment to ensure the stability of the system. Finally, the application rules of information technology were constructed.

Focusing on the "people-oriented" strategy, comprehensively promote the upgrading of academic administration concepts and cultural integration

Concept is the forerunner of behavior, it is particularly important to combine academic management culture with modern management. The principle of promoting full participation and mutual benefit is to create a suitable management environment for knowledge workers, and the practice of emphasizing "people-oriented" and cooperation with other institutions can jointly promote the progress of architectural education. At the same time, the principles of sustainability balance current needs with long-term goals to ensure that architecture education meets present and future challenges.

8.2 Recommendation for Practical Application

(1) Academic organization of architectural education: Efficient management and collaborative cooperation

Academic organizations are encouraged to continue learning and training, to actively adapt to the development trend of architectural education, with good attention to the needs of students, teachers and other stakeholders. In order to ensure efficient

coordination, establish the idea that administrative power serves academic power, clarify the relationship between groups, and pay dynamic attention to the suitability of the system. There should be clear procedures and decision-making processes for establishing meetings and team activities to ensure that they are efficient and purposeful. The Academic Council should remain independent and impartial, develop clear work processes and decision-making mechanisms, while promoting cooperation with other academic units and research institutions to ensure the breadth and usefulness of research activities. These measures will help to improve the effectiveness and efficiency of academic administration.

(2) Academic evaluation and information technology

With the rapid development of information technology, especially big data and artificial intelligence, it provides a more accurate and objective method for academic evaluation, which can dig deep into the core value of academic content and achieve fair and transparent evaluation. Comprehensively promote the informatization of educational administration, strengthen the training of teachers, improve the cognition of the application of technology in the efficiency of academic administration, and comprehensively promote the informatization of academic administration. Technology helps academic administration. The continuous updating and optimization of the academic administration system, such as the introduction of cloud technology and the continuous maintenance of the academic administration system, ensure the safe storage and efficient access of academic administration data.

(3) Creating a blueprint for future academic administration

In today's era of rapid change, academic administration requires constant innovation and progress. Schools should encourage full participation in decision-making and ensure that every decision is well thought out. At the same time, schools should also establish close cooperation with various stakeholders to jointly promote the development of academic activities. In order to achieve these goals, the school needs to create an open, collaborative and innovative environment and always adhere to the principle of putting people first to ensure that every teacher and student can benefit from it.

8.3 Recommendation for Further Research

(1) Further research the relevant theories and research on academic administration, comb through domestic and international literature and successful cases, and research the components and influencing factors of the effectiveness of academic administration

on Architectural Education in colleges and Universities under Liaoning Province more accurately and deeply.

(2) In future research, it would expand the population sample size and scope of the questionnaire survey, such as research samples from different provinces (cities), making the research more persuasive. This will help in building an effective academic administration system for architectural education, refining its components and structure.

(3) In terms of research methods, regression analysis can be further adopted to study the impact of different independent variables on dependent variables, making the results more accurate and reliable.

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