

Collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning province

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Abstracts

The objectives of this research were: (1) to examine the components of collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province, and (2) to propose the guidelines for collaborative innovation educational management for film and television art majors in colleges and universities under Liaoning Province.

The research was a mixed-method approach combining quantitative and qualitative research. The population is composed of administrators and teachers of film and television art majors in colleges and universities under Liaoning province People's Republic of China 1,100 people in total. The sample was 285. The researcher determined sample size with Krejcie and Morgan's table (1970), and obtained by the stratified random sampling technique. The 9 key informants from 12 universities in Liaoning Province with a major in film and television art majors, who were administrators and teachers. The instruments used for data collection were semi-structured interview form, five-point rating scale questionnaires and Focus Group Discussion form. The response rate of questionnaires was 100%. Statistics used for data analysis included frequency, percentage, mean, Standard Deviation, Exploratory Factor Analysis (EFA), and content analysis was employed.

The research findings were: (1) there were four components and 72 key variables of collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province, which consisted of The construction of teaching staff, Resource sharing, Management mechanism optimization and Effective organization building; (2) there were total 14 guidelines for collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province.

Keywords: Collaborative Innovation; Educational Management; Film and Television Art Major; Colleges and Universities in Liaoning Province

Introduction

The development of information technology and the emergence of new media have brought opportunities for the technological progress of film and television, and promoted the improvement of film and television science and technology. In recent years, the film and television art industry has sprung up and developed rapidly. It has been improved in technology and sublimated in art, which has attracted wide attention and praise from the whole society. At the beginning of this century, the state also issued a series of policy documents for the revitalization, development and prosperity of the cultural industry, which accelerated the development of the film and television cultural industry to a certain extent, and also stimulated the prosperity of the film and television cultural education.

With the rapid development of mobile 5g, artificial intelligence and other technologies, traditional media continue to integrate to form a new media system. Under the development trend, local art colleges and universities that cultivate high-level film and television art professionals closely related to technology, media carrier, audience, communication form and content, on the one hand, maintain forward-looking thinking in the future process of media integration, grasp the opportunity, based on regional development, innovation, transformation and collaborative training, Cultivate more high-level applied and innovative talents for the film and television industry. On the other hand, we must make a comprehensive analysis of the needs of the market from the perspective of culture, adapt to the development requirements of the times, and make contributions to the inheritance and guidance of traditional culture and social progress and civilization. These are the problems that local art colleges and universities must deeply study and solve at this stage.

Yan Jiajun (2021) in the research “Exploration on the value of film and television art education courses in ordinary colleges and universities” It was found that: The film and television art education course is to cultivate talents for the film and television industry. Both actors and directors are the carriers of film and television art. In the current higher education, it has become inevitable to cultivate talents in the film and television arts through new education management models and management systems. The continuous improvement of managers' management capabilities, management level, and management methods is the top priority at the moment.

Research Objectives

1. To examine the components to collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province.
2. To propose the guidelines for collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province.

Research Methodology

4.1. Research Design

4.1.1 Population and sample

Step 1 Semi-structured interviews were conducted with 9 key informants with more than 10 years working experience and 5 years management experience, including 3 professional lecturers, 3 educational leaders and 3 administrators from the universities in Liaoning Province who set up film and television art majors. Selecting by purposive sampling.

Step 2 A five-point rating scale questionnaire. Population was 1,100, the sample was 285 administrators and teachers of film and television art majors, with stratified random sampling method. The researcher determined sample size with Krejcie and Morgan's table (1970), and obtained by the stratified random sampling technique.

Step 3 Focus group discussion was conducted with 9 key informants with more than 20 years working experience and 10 years management experience, including 3 professional lecturers, 3 educational leaders and 3 administrators. Selecting by purposive sampling.

4.1.2. Research instruments

Three research instruments were used to three research tools to examine the objectives of this paper. (1) Semi-structured interview, (2) A five-point rating scale questionnaire (3) Focus Group Discussion form.

1 .Semi-structured interview form

Through the semi-structured interview table, mainly by discovering the main factors, the semi-structured interview is preliminarily completed. The interview was mainly conducted in a non-face-to-face way. A total of 9 respondents were sent by mail and online.

2 .Five-Point Rating Scale Questionnaire

The questionnaires were developed by the researcher, which consists of three parts. Part I: Demographic variables (Checklist), Part II: The components of collaborative innovation education management for film and television Art major in colleges and universities under Liaoning Province (Five-point rating scale), totaling 80 items, Part III: Suggestions and additional comments (Open Ended). Each factor is measured on a 5-point Likert's scale.

3. Focus Group Discussion 9 key informants with more than 20 years working experience and 10 years management experience, including 3 professional lecturers, 3 educational leaders and 3 administrators. Selecting by purposive sampling

4.1.3. Data collection

(1) Researcher contacted key informants and sent interview questionnaires by email, telephone. (2) This part of the questionnaire can be distributed on site or collected through online links. About 285 questionnaires need to be completed in about 2 weeks. And (3) Focus Group Discussion can be conducted on site, with researchers leading participants and open-ended discussions.

4.1.4.Data analysis

phase1.The collected data were analyzed by content analysis.

phase2.The data of demographic variables were analyzed by descriptive statistics;Frequency, and percentage. The variables of collaborative innovation of educational management for film and television art majors were analyzed by descriptive statistics; mean; Standard Deviation (S.D). For interpretation criteria about classifying mean score, it was analyzed by the concept of Best (John W.Best, 1997:190) collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Provincewas analyzed by Exploratory Factor Analysis (EFA).

phase3.The data from Focus Group Discussion was analyzed by content analysis

Results

1. Data Analysis on Questionnaire: Demographic Information

The researcher analyzed the results of the questionnaire. The method of analysis is as follows:

Table 4-1 Demographic information results of questionnaire data analysis (n=285)

Item	Options	Frequency	Percentage
Gender	Male	151	53.00
	Female	134	47.00
Age	25-34 years old	76	26.70
	35-44 years old	74	26.00
	45-54 years old	59	20.70
	Old than 54	76	26.70
Education	Undergraduate course	93	32.60
	Master	111	38.90
	Doctor	81	28.40
Working	1-5 years	63	22.10
	6-10 years	65	22.80
	11-15 years	85	29.80
	More than 15 years	72	25.30
Position	Professional lecturer	115	40.40
	Educational leaders	91	31.90
	Administrators	79	27.70
		285	100.0

2. Result of Data Analysis on Questionnaire: variable analysis

The researcher analyzed the arithmetic mean (Mean) and standard deviation (S.D) and compared the derived arithmetic mean with the guidelines based on the best guidelines.

The results show that the arithmetic mean, standard deviation and level of each method variable are components of the influencing factors of collaborative innovation of educational management for film and television art majors in colleges and universities.

Table 4-2 Descriptive statistics Questionnaire

Item	Mean	S.D.	Skewness	Kurtosis	Level
Q1	3.51	1.269	-0.397	-0.854	High
Q2	3.32	1.233	-0.321	-0.733	Moderate
Q3	3.11	1.085	0.108	-0.523	Moderate
Q4	3.51	1.109	-0.273	-0.64	High
Q5	3.29	1.195	-0.286	-0.667	Moderate
Q6	3.39	1.213	-0.385	-0.66	Moderate
Q7	3.36	1.147	-0.347	-0.51	Moderate
Q8	3.34	1.222	-0.372	-0.73	Moderate
Q9	3.27	1.185	-0.327	-0.603	Moderate
Q10	3.16	1.232	-0.113	-0.936	Moderate
Q11	3.30	1.196	-0.302	-0.669	Moderate
Q12	3.40	1.110	-0.242	-0.502	Moderate
Q13	3.47	1.268	-0.409	-0.848	Moderate
Q14	3.53	1.164	-0.304	-0.772	High
Q15	3.38	1.272	-0.417	-0.813	Moderate
Q16	3.35	1.170	-0.306	-0.602	Moderate
Q17	3.33	1.191	-0.308	-0.629	Moderate
Q18	3.35	1.124	-0.237	-0.603	Moderate
Q19	3.37	1.148	-0.208	-0.635	Moderate
Q20	3.37	1.232	-0.435	-0.713	Moderate
Q21	3.39	1.255	-0.483	-0.746	Moderate
Q22	3.32	1.247	-0.299	-0.834	Moderate
Q23	3.36	1.119	-0.21	-0.598	Moderate
Q24	3.43	1.141	-0.337	-0.648	High
Q25	3.36	1.135	-0.221	-0.58	Moderate
Q26	3.52	1.191	-0.285	-0.816	High
Q27	3.52	1.146	-0.456	-0.448	High

Q28	3. 29	1. 151	-0. 232	-0. 67	Moderate
Q29	3. 39	1. 135	-0. 266	-0. 594	Moderate
Q30	3. 39	1. 132	-0. 402	-0. 5	Moderate
Q31	3. 52	1. 218	-0. 366	-0. 8	High
Q32	3. 11	1. 065	0. 056	-0. 473	Moderate
Q33	3. 40	1. 123	-0. 341	-0. 442	Moderate
Q34	3. 33	1. 226	-0. 286	-0. 771	Moderate
Q35	3. 40	1. 111	-0. 259	-0. 444	Moderate
Q36	3. 53	1. 191	-0. 361	-0. 799	High
Q37	3. 15	1. 073	0. 084	-0. 58	Moderate
Q38	3. 51	1. 090	-0. 369	-0. 478	High
Q39	3. 37	1. 114	-0. 305	-0. 598	Moderate
Q40	3. 34	1. 174	-0. 378	-0. 554	Moderate
Q41	3. 52	1. 165	-0. 31	-0. 739	High
Q42	3. 40	1. 185	-0. 397	-0. 564	Moderate
Q43	3. 33	1. 189	-0. 251	-0. 791	Moderate
Q44	3. 13	1. 032	0. 377	-0. 479	Moderate
Q45	3. 25	1. 099	0. 101	-0. 723	Moderate
Q46	3. 17	1. 116	-0. 108	-0. 573	Moderate
Q47	3. 40	1. 143	-0. 244	-0. 752	Moderate
Q48	3. 34	1. 084	-0. 201	-0. 551	Moderate
Q49	3. 36	1. 210	-0. 207	-0. 825	Moderate
Q50	3. 35	1. 263	-0. 386	-0. 815	Moderate
Q51	3. 24	1. 077	-0. 037	-0. 508	Moderate
Q52	3. 40	1. 163	-0. 35	-0. 577	Moderate
Q53	3. 40	1. 166	-0. 272	-0. 66	Moderate
Q54	3. 53	1. 232	-0. 259	-1. 012	High
Q55	3. 04	1. 030	0. 188	-0. 272	Moderate
Q56	3. 34	1. 141	-0. 31	-0. 551	Moderate
Q57	3. 52	1. 283	-0. 449	-0. 842	High
Q58	3. 53	1. 238	-0. 372	-0. 804	High
Q59	3. 40	1. 139	-0. 27	-0. 611	Moderate
Q60	3. 54	1. 288	-0. 469	-0. 83	High
Q61	3. 08	0. 983	0. 293	-0. 341	Moderate

Q62	3.16	1.203	0.143	-0.985	Moderate
Q63	3.32	1.098	-0.249	-0.509	Moderate
Q64	3.10	1.031	0.338	-0.579	Moderate
Q65	3.34	1.123	-0.258	-0.565	Moderate
Q66	3.37	1.161	-0.326	-0.558	Moderate
Q67	3.20	1.047	-0.056	-0.492	Moderate
Q68	3.35	1.152	-0.16	-0.708	Moderate
Q69	3.40	1.092	-0.291	-0.516	Moderate
Q70	3.40	1.150	-0.297	-0.64	Moderate
Q71	3.38	1.232	-0.318	-0.829	Moderate
Q72	3.54	1.271	-0.425	-0.833	High
Q73	3.37	1.170	-0.24	-0.663	Moderate
Q74	3.33	1.122	-0.143	-0.671	Moderate
Q75	3.34	1.104	-0.262	-0.516	Moderate
Q76	3.53	1.309	-0.443	-0.903	High
Q77	3.28	1.206	-0.159	-0.798	Moderate
Q78	2.94	0.931	0.409	0.017	Moderate
Q79	3.18	1.090	-0.025	-0.762	Moderate
Q80	3.34	1.133	-0.296	-0.64	Moderate

From Table 4-2, it was summarized that descriptive analysis uses the mean or median to describe the overall picture of the data. From Table 2, we can see that there are no outliers in the current data. The average of the 80 questions ranged from 2.94 to 3.54, indicating that the respondents had opinions on the value of the variable at this level. The arithmetic mean ranges from medium to high, and the standard deviation ranges from 0.931 to 1.309, which shows that all research subjects have relatively consistent acceptance of the research.

Table 4-3 Principal Component Analysis before Extraction Sums of Squared Loadings

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.581	18.226	18.226	12.706	15.705	15.705
2	11.153	13.941	32.167	10.42	12.975	26.211
3	9.216	11.522	43.686	9.862	11.914	39.421
4	5.997	7.496	51.183	5.374	9.846	43.264
5	2.103	4.948	62.693	2.554	7.448	61.267

6	1.617	2.948	63.919	2.140	4.148	63.919
7	1.207	2.226	65.216	1.725	3.726	64.116
8	1.017	2.011	70.644	1.412	3.311	69.122

From Table 4-3 it was summarized that the situation of factor extraction and the information amount of factor extraction. It can be seen from the above table: A total of 8 factors were extracted from factor analysis, and the variance interpretation rates of these 6 factors after rotation were 18.266%, 32.167%, 43.686%, 51.183%, 62.693% , 63.919% , 65.216%,and, 70.644% respectively. The interpretation rate of cumulative variance before rotation is 70.644%.

Table 4-4 Principal Component Analysis after Extraction Sums of Squared Loadings

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.581	18.226	18.226	13.204	16.505	16.505
2	11.153	13.941	32.167	11.02	13.775	30.281
3	9.216	11.52	43.686	10.486	13.107	43.387
4	5.997	7.496	51.183	6.237	7.796	51.183

From Table 4-4 it was summarized that a total of 4 factors were extracted from factor analysis, and their characteristic root values are all greater than 1. The variance explanation rates of these four factors after rotation are 16.505%, 13.775%, 13.107%, and 7.796% respectively, and the cumulative variance explanation rate after rotation is 51.183%.

Table 4-5 Components of collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province

Element	component	Number of variables	Factor loading
1	component 1	24	0.588–0.796
2	component 2	18	0.582–0.801
3	component 3	19	0.572–0.780
4	component 4	11	0.584–0.798
	All	72	0.572–0.801

From Table 4-5, it can be seen that there are the following four components: component 1 contains 24 variables, with factor loadings between 0.588 and 0.796; component 2 contains 18 variables, with factor loadings between 0.582 and 0.801; Component 3 contains 19 variables, with factor loadings ranging from 0.572 to 0.780; component 4 contains 11 variables, with factor loadings ranging from 0.584 to 0.798.

Based on exploratory factor analysis (EFA), the relevant variables were extracted and their key component variables were analyzed to derive the four effective components of the collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning Province. Then the correspondence between variables and components was analyzed through the values of factor loading coefficients, and the components were named according to the correspondence between variables and components.

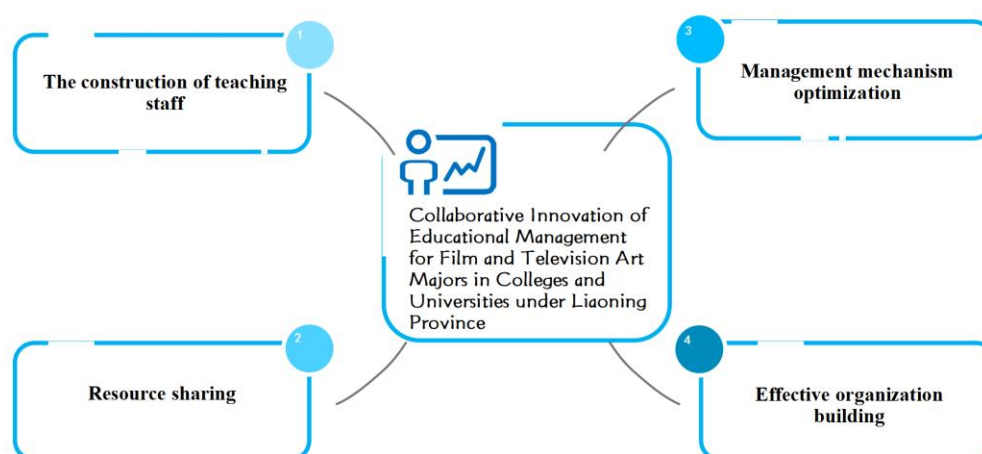


Figure4.1 Components of Collaborative Innovation of Educational Management for Film and Television Art Majors in Colleges and Universities under Liaoning Province

3. Result of Data Analysis for the guidelines for collaborative innovation of educational management for film and television art majors education in colleges and universities under Liaoning Province

The researcher sorted out and analyzed the discussions of 9 experts, choosing percentage guidelines that were greater than or equal to 50%, a total of 14 guidelines are sorted out, which are divided into 4 parts:

Guideline From the Focus Group Discussion

Components 1: The construction of teaching staff

Mainly include: 1).Encourage teachers to innovate education and teaching models, 2). Diversity of educational backgrounds among team managers.

Components 2: Resource sharing

Mainly Includes : 1).Have industry Basis for cooperation and mentor guidance , 2).Managing Diversity and Cultural Education,3).Sustainable Development of Educational Managements, 4).Communication and cooperation with other professional education managers in the industry;

Components 3: Management mechanism optimization

Mainly include: 1).Human resource construction in education management, 2).The scientific nature of the management system, 3).Crisis management and handling capabilities , 4).Develop scientific plans and standardized work plan projects, 5).Optimize management departments and strengthen the management responsibilities and scope of each department;

Components 4:Effective organization building

Mainly includes:1).Organization and planning skills, 2).Develop professional development directions based on your own resources and characteristics, 3).Establish clear rules and regulations in organizational construction

Discussion

1. Discussion about major findings of objective 1

The research was formed through a literature review, and a semi-structured interview to study collaborative innovation of educational management for film and television art majors in colleges and universities under Liaoning province. There were 4 important components of collaborative innovation educational management for film and television art majors in colleges and universities under Liaoning province.

Component 1: The construction of teaching staff

The major finding “Encourage teachers to innovate education and teaching models” were revealed as such because regarding the need to reevaluate teaching concepts, methods, and goals in innovative art education is essential for preparing students for the challenges and opportunities of the 21st century. It acknowledges the evolving nature of art and creativity and advocates for a dynamic, adaptable, and student-centered approach to art education. By embracing these principles, art educators can nurture the next generation of artists, designers, and creative thinkers who will shape the future of art and culture. The findings of this study are consistent with those of Song Chun (2017), Zhou Ning (2017) ,Feng Guanxing (2019) and Li Shang (2022). This research finding was in accordance with the theories or research of Zhu Jiang, Yang Yuhang & Ma Jinjing (2023) which found that: Within the team, teachers can communicate, exchange and cooperate with each other, clarify their respective work tasks and responsibilities through brainstorming, and achieve overall management. Using team building as a link, integrating educational resources, highlighting the core tasks of different teachers, and achieving consistent rights and responsibilities can not only grasp the development trends of teachers, but also avoid ineffective communication within the team, ensure the construction of a human resources management platform, and effectively meet the needs of different teachers. Teachers’ basic needs and individual needs, and promote teachers’ development. This research finding was in

accordance with the theories or research of Zhang Qian, Zhang Zhiping & Lu Xiaoxiao. (2023) which found that: Improve the assessment and incentive mechanism for innovation and entrepreneurship teachers, establish external guarantee mechanisms and other measures to promote the construction of innovation and entrepreneurship teachers in local universities and improve the level of collaborative innovation education management and education.

Component 2:Resource Sharing

The major findings“Have industry Basis for cooperation and mentor guidance” were revealed as such because As a highly creative field, the film and television arts major requires schools to adopt flexible and innovative methods in education management to meet student needs and industry standards. The film and television art major in Liaoning Province has been established for more than 20 years. With the vigorous development of the film and television art industry, the development of the film and television art major in colleges and universities has entered a new development cycle, and its education management model also needs to be improved and innovated. .Resource sharing and industry Basis for cooperation and mentor guidance plays an important role in the collaborative innovation education management of university film and television arts majors. This kind of sharing includes not only material resources, but also the sharing of knowledge, experience and cooperation opportunities, which helps to improve the quality of education and broaden the horizons of disciplines.The findings of this study are consistent with those of Huang Ninghao (2018), Jia Xiaoning (2019) ,Zhou Zhixin (2020) and Liu Shasha (2020).This research finding was in accordance with the theories or research of Chi Jinmi. (2017) “Research on the current status and strategies of higher education resource sharing and co-construction. Value Engineering ” It was found that The educational resource sharing platform should have the characteristics of openness, unity and sustainability. When building the platform, all parties should establish special funds and special management personnel.According to the actual situation of open sharing and operation of the platform, we will formulate a series of management specifications, such as the platform's use management system and service procedures, strictly review educational resources, and establish a set of "resource evaluation indicators" to evaluate the platform.. Also, the findings were in the same direction with Wang Hongxi. (2015) It was found that:Conduct review, screening and optimization of educational resources to ensure the quality of platform resources. In addition, the standardization of educational resources needs to be improved through platform construction. Standardization construction is an important prerequisite for resource sharing and co-construction. Therefore, when building the platform, it is necessary to unify the requirements and attributes of resource production, standardize resource construction behaviors, and lay the foundation for the sharing and exchange of resources. Resource sharing is a key way to achieve this goal.

Component 3:Management mechanism optimization

The major finding “Optimize management departments and strengthen the management responsibilities and scope of each department” were revealed as The optimization of the management mechanism is important for the film and television art majors in colleges and

universities in Liaoning Province, because it helps to improve the performance, efficiency and adaptability of colleges and universities, and at the same time ensures that the educational management of the film and television art majors in colleges and universities in Liaoning Province can better achieve its goals. Educational mission and strategic goals. By streamlining administrative procedures, reducing redundancies and improving decision-making efficiency, universities can operate more efficiently and ensure optimal use of resources. Today, the educational environment is constantly changing, and colleges and universities need to be able to flexibly adapt to new needs, trends, and challenges. The optimization of management mechanisms can help the film and television art majors in colleges and universities in Liaoning Province better cope with changes. The findings of this study are consistent with those of Hu Zhifeng (2017), Yu Guoming ning (2019), Guan Xing (2016) and Shang Zhenyu (2022). This research finding was in accordance with the theories or research of Zhang Xuming. (2023). Research on the optimization path of emergency management mechanism in universities under the background of digital reform. Chengcai. which found that WThe optimization of university management mechanisms is crucial to the long-term success and sustainable development of universities. By continuously evaluating and improving management mechanisms, universities can better adapt to changes, improve performance, attract talent, and better achieve their educational and research goals.

Component 4: Effective organization Building

The major findings “Organization and planning skills” were revealed as It covers the levels, division of responsibilities, communication channels and power relationships among various departments and units within the university. The organizational structure provides a clear framework for universities and helps define the responsibilities and duties of each department and unit. Function. This helps ensure that work tasks are clearly defined and avoid confusion and duplication. A reasonable organizational structure can improve the work efficiency of colleges and universities. A clear division of labor and coordination mechanisms between different departments help ensure that tasks are completed smoothly. Appropriate organizational structure can promote cooperation and information sharing among different departments. The importance of organizational structure in universities is that it has a profound impact on the operation and management of universities, helping to achieve the goals of universities, improve efficiency, promote cooperation and adapt to changes. Therefore, universities should continually evaluate and adapt their organizational structures to ensure that they meet changing needs and challenges. The findings of this study are consistent with those of Liu Haijun (2018), Zhou Zhiyongn (2018), Xiao Li (2019) and Fang Wen (2022). The findings were in the same direction with Yang Shuobin. (2014). “The construction and enlightenment of Cambridge University Charter on academic organizations. University Education Management” which found that :The organizational structure of a university should be consistent with its mission and strategic goals. It ensures that resources and manpower are allocated effectively to achieve these goals. Organizational structure affects the effectiveness of decision making and execution. A clear structure can help decision makers make decisions

more quickly and accurately. The standardized and scientific organizational structure promotes the standardization and scientificity of educational management of the film and television art majors in colleges and universities in Liaoning Province. It can also systematically deepen the organizational structure and promote the improvement of various aspects of education management, thereby effectively improving the film and television art major. education and teaching management. The findings were in the same direction with Guo Xiaoli, Zhou Linzhen & Hong Lin. (2022). in the research “Construction of grassroots teaching organizations based on the functions of colleges and universities - also talking about the generation logic of quality culture. Journal of Yancheng Institute of Technology (Social Science Edition) ” which found that Proper organizational structure and position structure help attract and retain high-quality faculty and staff. People prefer to join an organization that is orderly and efficient. Flexible organizational structures can help colleges and universities adapt better to changes. In times of change, it can adjust and reallocate resources and functions. Moreover, from the research of Song Huanbin & Chen Dekun. (2016). in the research “Effectiveness construction of the organizational system and working mechanism of secondary colleges in universities. Journal of Liaoning Administration Institute” , which found that :Sensure that resources are used appropriately to meet the needs of education and research. The organizational structure defines the responsibilities of various departments and units and helps establish responsibility and accountability. This helps ensure the job is completed on time and without problems.

2.2 Discussion about major findings of objective 2

There are 14 guidelines for collaborative innovation of educational management for film and television art majors education in colleges and universities under Liaoning Province.

Components 1: The construction of teaching staff

The construction of teaching staff is one of the core elements of the quality of education and student development in universities and schools. It involves several factors, including encouraging teachers to innovate educational and teaching models and diversity of educational backgrounds among team managers. The findings “ Encourage teachers to innovate education and teaching models.” were in the same direction with Ding Jianfeng. (2023). in the research “ Expand new ideas for the construction of university teaching staff. Human Resources ” which found that: Talent evaluation is also a difficult problem in the construction of faculty in colleges and universities. Colleges and universities need to formulate an evaluation system that suits their own conditions, and consider building a diversified evaluation mechanism based on the development status of different departments, job requirements, and the age of teachers. This article will comprehensively discuss these main factors, as well as their role and importance in teaching staff development. Encouraging teachers to innovate education and teaching models is one of the key factors in the construction of teaching staff. The field of education is constantly developing and changing, so teachers need to actively explore new educational methods and teaching technologies to meet the changing needs of students.

Components 2: Resource sharing

Resource sharing is of great significance in the field of education, as it can promote the dissemination of knowledge, improve the quality of education, reduce costs, and promote innovation. The main factors for resource sharing include the foundation and guidance of

industry cooperation, managing diversity and cultural education, sustainable development of educational management, connections and support in related disciplines and industries, and communication and cooperation with other professional education managers in the industry. etc. The first important element of resource sharing is partnership with industry. The findings “Managing Diversity and Cultural Education” were in the same direction with Wang Hongxi. (2015). in the research “Realize resource sharing and do a good job in education management. Times Education ” which found that : With the current rapid economic and social development, the sharing of educational resources has become an important part of the development of education. It is urgent to improve the utilization efficiency of educational resources and reduce the waste of resources. Although investment in education continues to increase, there is always a shortage of resources. At the same time, there are various duplication and waste problems. Resource sharing requires the establishment of a sustainable education management model. This includes managing resources effectively, ensuring their continued availability, and maintaining and improving the quality of education over the long term. Sustainable development also involves the financial viability of education management and the rationality of resource allocation. Schools need to develop long-term plans to ensure the stability and sustainability of resource sharing. Resource sharing requires linkages and support with relevant disciplines and industries. This means that education management needs to collaborate with relevant academic fields, industry bodies and research institutions to obtain expertise and resources.

Components 3: Management mechanism optimization

The optimization of management mechanisms is an important aspect in university and school education management. It involves multiple factors, including human resource construction, the scientific nature of the management system, crisis management and handling capabilities, scientific plans and standardized work plan projects, as well as the management department's optimization. The findings “Optimize management departments and strengthen the management responsibilities and scope of each department.” were in the same direction with Fan Lizhou. (2021,76-77). in the research “ On the reform, innovation and operation of cultural management of education and teaching management mechanisms in colleges and universities. Cultural Industry ” which found that: Colleges and universities should carry out reforms according to the development needs of the times, comprehensively improve the education and teaching management mechanism of my country's colleges and universities, and effectively promote the optimization of education management models, methods and content. Building a strong education management team, including experienced managers and enthusiastic faculty and staff, is key to ensuring the quality of education and the effective operation of the institution. Human resource building also includes establishing a mentor system to pass on experience and knowledge by guiding and training new employees. The scientific nature of the management system is the basis for the optimization of the management mechanism. This includes establishing clear management processes, rules and decision-making mechanisms.

Components 4: Effective organization building

Effective organization building is one of the key elements for any organization to achieve its strategic goals and improve performance. In the field of education, universities and schools also need effective organizational building to respond to changing needs and challenges. The main factors of Effective organization building include organizational and planning capabilities, professional development direction, and the establishment of rules and regulations. Organization and planning capabilities are the core of Effective organization building. The findings “Organization and planning skills” were in the same direction with Ding Jianfeng. (2023,130-131).in the research “ Effectiveness construction of the organizational system and working mechanism of secondary colleges in universities. Journal of Liaoning Administration Institute ” which found that: Explore new paths and new mechanisms for the construction of grassroots teaching organizations based on the functions of universities, improve teaching standards, improve teaching skills, reform teaching evaluation, enhance teaching motivation, further improve teaching quality evaluation and guarantee mechanisms, incentive mechanisms and continuous improvement mechanisms, and continuously improve The teaching ability level of college teachers has important practical significance for the development of colleges and universities and the nurturing and formation of quality culture.Colleges need to ensure that planning is consistent with resource allocation and staffing to achieve their educational mission and goals. Each school has unique resources and characteristics, so developing professional direction is critical. Schools need to determine the most appropriate development direction based on their own resources and strengths. This may include subject specialization in specific areas, research focus, international education, innovation and entrepreneurship support, etc.

Conclusions

Through content analysis. After data collection, content analysis will be conducted to analyze the collected data. From the perspective of research objectives, the main findings are as follows:

There were four components and 72 variables of collaborative innovation of educational management for film and television art majors education in colleges and universities under Liaoning Province.

1. There were four components were founded which consisted of 1) The construction of teaching staff 2) Resource sharing 3) Management mechanism optimization 4) Effective organization building

2. There were total 14 guidelines of collaborative innovation of educational management for film and television art majors education in colleges and universities under Liaoning Province. which consisted of 1) Encourage teachers to innovate education and teaching models, 2) Diversity of educational backgrounds among team managers, 3) Have industry Basis for cooperation and mentor guidance, 4) Managing Diversity and Cultural Education, 5) Sustainable Development of Educational Management, 6) Communication and cooperation with other professional education managers in the industry, 7) Human resource construction

in education management, 8) The scientific nature of the management system, 9) Crisis management and handling capabilities, 10) Develop scientific plans and standardized work plan projects, 11) Optimize management departments and strengthen the management responsibilities and scope of each department, 12) Organization and planning skills, 13) Develop professional development directions based on your own resources and characteristics, 14) Establish clear rules and regulations in organizational construction.

Recommendations

1. Recommend for Policies Formulation

1. Colleges and universities to adopt digital educational tools and online learning platforms to adapt to the educational needs of the digital age. Provide support and resources to help educators effectively integrate technology and innovative teaching methods.

2. Education management in colleges and universities, including diversity in admissions, faculty, and leadership. Support inclusive education practices that ensure all students have equal access and support.

3. Research the role of educational management in sustainable development, including environmental education, social responsibility and sustainability education. Study sustainability assessment and reporting in educational institutions to advance sustainability goals.

4. Universities to carry out interdisciplinary and interdepartmental collaborative innovation projects to promote integration between disciplines and the sharing of academic resources.

5. Universities in carrying out collaborative innovation education projects, including the purchase of new technology equipment, system management, teacher training.

2. Recommendation for Practical Applications

1. Establish a clear vision and goals: Ensure that the educational institution has a clear mission and vision to guide management decisions. Clear goals help develop strategic plans and priorities.

2. Establishing an expert supervision team is of great significance to the educational management of universities, which needs to track the latest developments, comply with complex regulations, respond to changing educational needs, and ensure educational quality and innovation.

3. For the educational management of universities the For the educational management of universities these mechanisms can be used to continuously improve curricula and teaching methods. In practice, students can be assessed regularly to understand their needs and feedback. mechanisms can be used to continuously improve curricula and teaching methods.

4. Use technologies such as 5G and artificial intelligence to integrate online education resources and provide a more flexible management model so that managers can better adapt to the digital learning environment.

5. Digital teaching management system: Establish a digital teaching management system to achieve efficient management of information sharing, student evaluation, course adjustment.

3. Recommendation for Further Research

1. Research to strengthen interdisciplinary cooperation and integrate knowledge in engineering, computer science, creative writing and other fields into courses to cultivate comprehensive film and television professionals.

2. Research to universities establish closer ties with the film, television, media and art industries. Work with industry partners to deliver practical project management and work placement opportunities, ensuring students gain practical experience, understand industry requirements and help them become more employable.

3. Research to provide teachers with a digital office environment and provide students with online courses, virtual reality (VR) and augmented reality (AR) experiences.

4. Research to promote international cooperation projects, encourage teachers to communicate to expand international horizons, optimize project cooperation and management, and students to participate in exchange projects, international research and international internships to achieve cross-cultural exchanges.

5. Research to colleges and universities establish a feedback mechanism to collect feedback from students and industry to continuously improve curriculum and education management.

References

- Ding Jianfeng. (2023). *Expand new ideas for the construction of university teaching staff. Human Resources* (08), 130-131.
- Fan Lizhou. (2021). *On the reform, innovation and operation of cultural management of education and teaching management mechanisms in colleges and universities. Cultural Industry* (21), 76-77.
- Feng Guanxing. (2019). *Postmodern Concepts and Propositions of Western Educational Management Theory. Modern Educational Management* (04), 1-5.
- He Li. (2020). *The impact of big data on higher education management and optimal management. Public Relations World* (02), 149-150.
- Gao Xia & Chi Lingda. (2023). *The construction of application-oriented teaching teams should be strengthened after the transformation of local colleges and universities. Journal of Huaibei Vocational and Technical College* (02), 65-68.
- Guo Xiaoli, Zhou Linzhen & Hong Lin. (2022). *Construction of grassroots teaching organizations based on the functions of colleges and universities*, 117-119
- Guan Xing .(2016). *Exploration and practice of inter-school cooperation talent training model in local universities. University* (13), 106-109.

- He Jia. (2009). *Reasonable Incentives: Innovation and Breakthrough in Educational Management*. *China Science and Technology Information* (11), 261-263.
- Hu Zhifeng & Xu Liang. (2020). *The concept and path of the professional construction of "Drama and Film Studies" under the background of the new liberal arts*. *Drama (Journal of Central Academy of Drama)* (03), 1-8.
- Huang Ping. (2018). *Research on the Basic Elements and Countermeasures of the Collaborative Mechanism of Educational Management in Universities*. *Jiangsu Higher Education* (12), 67-70
- Jiang Mei. (2019). *The integration path of film and television art education in the new media era*. *Film Review* (18), 97-100.
- Li Shang. (2022).. *Research on the construction of teaching staff for innovation and entrepreneurship education in colleges and universities*. *Science and Technology Promotes Development* (Z1), 87-92.
- Li Yiran. (2023). *Research on my country's foreign cultural communication strategy from the perspective of film and television culture*. *Western Radio and Television* (10), 159-161.
- Liu Yueyuan. (2023). *Research on the construction of "dual-qualified" teaching staff of the Open University under the background of industry-education integration*. *Journal of Tianjin Radio and Television University* (03), 56-59.
- Shang Zhenyu.(2022).*Realize resource sharing and do a good job in education management*. *Times Education*(04),66-69
- Yang Yuhang & Ma Jinjing. (2023) .*The construction and enlightenment of Cambridge University Charter on academic organizations*. *University Education Management* , 55-56
- Yan Ying & Yan Tao. (2023). *Analysis of Collaborative Mechanism of Innovation and Entrepreneurship Education in Colleges and Universities Based on Synergy Theory*. *Higher Education Exploration* (01), 108-113.
- Yan Jiajun. (2021).*Exploration on the value of film and television art education courses in ordinary colleges and universities* (02), 116-119.
- Zhang Qian, Zhang Zhiping & Lu Xiaoxiao. (2023). *Research on the construction path of innovation and entrepreneurship faculty in local universities*. *Science and Technology Wind* (24), 66-68.