



MANAGERIAL GUIDELINES OF ENTREPRENEURSHIP EDUCATION FOR STUDENT'S EMPLOYABILITY IN ART UNIVERSITIES UNDER LIAONING PROVINCE

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Abstract

This research aimed to propose the managerial guidelines of entrepreneurship educational management for students' employability in art universities under Liaoning Province. Qualitative research methods were used in focus group discussion from the collected using semi-structured interviews and questionnaires for exploratory factor analysis. The focus group discussion by experts to verify both components and indicators are valid. There are six included: Entrepreneurship Environment, Entrepreneurship Resources, Teaching Management, Educational Curriculum, Student Employability, and Entrepreneurship Results, the managerial guidelines of entrepreneurship educational management for student employability in art universities under Liaoning Province, from six components total of 29 guidelines included: five guidelines for Entrepreneurship Environment, five guidelines for Entrepreneurship Resources, five guidelines for Teaching Management, four guidelines for Educational Curriculum, four guidelines for Student's Employability, and six guidelines for Entrepreneurship Results.

Keywords: Managerial Guidelines, Entrepreneurship Education, Student Employability, Art Universities, Liaoning Province

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Introduction

Under the background of the current social development, the number of university graduates is on the rise, which undoubtedly brings great pressure to employment. The number of university graduates in 2023 was 11.58 million, an increase of 820,000, which is a new high after the number of university graduates first broke 10 million in 2022. In 2024, the number of university graduates in China is expected to reach 11.79 million, a year-on-year increase of 210,000 (Ministry of Education, 2023). The production and operation of some industries and enterprises have not returned to the pre-epidemic level. There are still uncertainties in the employment market, and the ability of some small and medium-sized enterprises to expand employment has declined. There is great pressure on total employment, and the structural problem of both difficulty in recruiting and difficulty in finding employment is still prominent. There are large differences in employment demand among different professions, industries and regions, and it is difficult to recruit general workers and there is a shortage of skilled workers. Job seekers hope to have more adequate employment opportunities, more reasonable labor remuneration, and more reliable social security (Ministry of Education, 2021).

Data show that in 2023, there will be about 370,000 fresh graduates in Liaoning Province, and the same total pressure will not decrease. However, art majors often face employment challenges after graduation, because the traditional job market is relatively limited, special skills and education are required, and the entrepreneurial field is still to be developed. The government and arts institutions need to focus on how to better cultivate the employability of these students, to better adapt to the needs of society. At the same time, it is also necessary to realize that entrepreneurship plays an important role in the modern economy, encourages students to cultivate entrepreneurship, helps them understand the opportunities and challenges of entrepreneurship, and thus creates jobs for themselves to support the development of local economies and cultural industries. Therefore, in the current environment, it is crucial to improve students' employability and entrepreneurship education.

This paper aims to solve the problems of students' employability and entrepreneurial education management of art colleges and universities under Liaoning Province and provides useful research and management ideas for art education and entrepreneurial education. It has important practical significance in policy formulation, promoting multi-party cooperation, optimizing education management, improving students' employment and entrepreneurship opportunities, and promoting local economic development and knowledge transfer. It will help improve art education and entrepreneurship education, create more opportunities and benefits for students and the local economy, and promote the coordinated development of talent training and the local economy.

Based on the research on the development status of innovation and entrepreneurship education in domestic colleges and universities in the past decade, this paper takes art colleges and universities in Liaoning province such as Luxun Academy of Fine Arts, Shenyang Conservatory of Music, Liaoning University of Communication, Dalian University of Arts, Liaoning Advertising Vocational College. An example to analyze the current problems of employability and entrepreneurship education management of university students, especially art majors. Based on the outstanding cases of employment and entrepreneurship education in colleges and universities at home and abroad, this paper fills the research gap from both theoretical and empirical perspectives and puts forward suggestions on the development of employability entrepreneurship education management of art majors in art colleges and universities, to achieve greater substantive results in the management of art majors' entrepreneurship education in art colleges and universities.



Research Objective

To propose the managerial guidelines of entrepreneurship educational management for students' employability in art universities under Liaoning Province.

Review of Literature

Educational Administration Theory

The systematic management theory did not begin to form until the end of the 19th century. Early management theories have a profound influence and guiding significance on the formation and development of educational management theories and educational management practice activities. In the 1950s, the theory of educational management in a practical sense was formed. After the 1960s, various management theories emerged in an endless stream.

Taylor (1911) created systems to gain maximum efficiency from workers and machines in the factory; and learn how to complete a task in the least amount of time. Taylor wants to seek "how to improve the efficiency of labor production". These views of Taylor were applied by F.Bobbitt in educational management, emphasizing measurement and evaluation, and implementing quantitative control over teachers' teaching and students' learning (Zhao Shanhe, 2011). How school administrators during this period were keen to apply the ideas and methods of efficiency management to schoolwork. Scholars of education management have studied the standardization of teachers' work and how to train school administrators with practical skills according to the actual work needs (Cui Xiufen, Wang Fengqiu, 1997).

Fayol (1916) was the first to identify management as a continuous process of evaluation. He divides administrative behavior into Fayol's 5 Management Functions: Planning, Organizing, Commanding, Coordinating, and Controlling. He recognizes 14 principles that should guide the management of organizations: Division of Work, Authority and Responsibility, Discipline, Unity of Command, Unity of Direction, Subordination of Individual Interests to the General Interest, Remuneration of Personnel, Centralization, Scalar Chain (Line of Authority), Order, Equity, Stability of Tenure of Personnel, Initiative, Esprit de Corps. Fayol's theory tried to deepen the research object and think about management from the macro perspective of the organization. This brings new concepts to educational management, making the viewpoints of responsibility and power distribution, unified command, and unified leadership applied to the practice of educational management (Zhao Shanhe, 2011).

Gulick is better known for his work in public administration. Departmentation and principles of homogeneity, grouping persons by: Purpose, process, persons or things and place. In 1937 he created POSDCORB to express his view of the functions of the manager, expanding Fayol's five management functions into seven functions: Planning, Organizing, Staffing, Directing, Coordinating, Reporting, and Budgeting (Amadi- Eric, C, 2008).

Weber (1947) defined bureaucratic administration as the exercise of control on the basis of knowledge. He used and defined the terms authority and power. He classified organizations according to the legitimacy of their power. Weber recognizes that rational-legal authority is used in the most efficient form of organization. Weber outlined his ideal bureaucracy: A continuous system of authorized jobs maintained by regulations, Specialization, A stated chain of command of offices, Rules, Impersonality, Free selection of appointed officials, Full-time paid officials, Career officials, Private/Public split, The finances and interests of the two should be kept firmly apart. The application of Weber's management thought in education can better integrate educational resources, promote education development with a target, and avoid the problem of teachers' difficulty in making concerted efforts in the teaching process (Zhao Shanhe, 2011).

The classical management theory of Taylor, Fayol, Weber, and others is a theoretical model born in response to the needs of the development of the times, all of which emphasize



the scientific and rational production process, and the importance of "efficiency". However, times are different after all, and the connotation of ideas is bound to change greatly. When accepting such classical ideas, we should selectively absorb them (Zhao Shanhe, 2011). Classical organizational theory has also had an impact on the improvement of the organizational construction of the education system. It should also be noted that the school organization has its characteristics, the hierarchical relationship is not strict, the principal only controls and guides the teachers in general, the departments have little influence on each other, and the teachers complete their work independently. Therefore, the influence of classical organization theory has a certain limit (Cui Xiufen, Wang Fengqiu, 1997).

Human Relations Theory was put forward by Mayo et al. after complex experiments and demonstrations in 1933. Mayo's point of view directly targets entrepreneurs and holders of classical management theories who only pay attention to efficiency, pay more attention to the important role of people in society, and require managers to provide a relatively relaxed psychological environment for the management to think and deal with problems. It is a human relations model, a management model that views the employee as socially motivated and operates from the assumption that a socially need-satisfied worker is a productive worker. Because Worker Satisfaction leads to Enhanced Worker performance (Zhao Shanhe, 2011). Mayo's Human Relations theory further set off the thought of democratic management. Koopman et al. (1943) published the book Democracy in School Administration, which was full of examples of democratic management, attached great importance to the idea of extensive participation of teachers and students in decision-making, and demanded that school administrators should find ways to implement such participation (Cui Xiufen, Wang Fengqiu, 1997).

Barnard, C. (1968) proposed one of the first modern theories of organization by defining organization as a system of consciously coordinated activities. He argued that managers must gain acceptance for their authority; and cautioned managers to issue no order that could not or would not be obeyed. Barnard stressed the role of the executive in creating an atmosphere where values and purpose are coherent. Organizational success is linked to the ability of a leader to create a cohesive environment. He proposed that a manager's authority is derived from subordinates' acceptance. Barnard formulated two interesting theories, one of authority and the other of incentives. He sets the channels of communication rules.

Maslow's (1943) theory of an internal need hierarchy has become one of the more popular conceptualizations for human motivation. According to Maslow's theory, the needs form a hierarchy. The five basic need levels are the foundation for this model, from low to high are Physiological needs, Safety and security needs, Belonging, love, and social needs, Esteem needs, and Self-actualized needs. If the lower-level needs haven't been met, a person will try to satisfy those needs before trying to satisfy higher-level needs. Once the lower-level needs have been satisfied, a person will then focus their behavior on the needs of the next level. Some scholars try to discuss the hierarchy of teachers' needs according to Maslow's hierarchy of needs theory. They think that what teachers want to satisfy is the need for self-esteem, autonomy, and self-realization. The behavioral science theory makes up for the deficiency of the classical organization management theory and reflects the regularity of management activities from one side (Cui Xiufen, Wang Fengqiu, 1997).

In the 1960s, Management science achieved unprecedented development, and various management schools sprung up. The social systems school points out that organizations at all levels of society are cooperative systems, the responsibility of managers is to maintain the normal activities of this cooperative system and make it adapt to the external environment. The social technology school further emphasizes the complexity and dynamic balance of the internal and external environment of the organizational system. The contingency theory school



proposed, that there is no one best way to organize and manage people in all circumstances, and organizations operating in an environment characterized by change and instability must take effective measures to cope with changes on a case-by-case basis.

Management theory with the system thought as the core has exerted a great influence on educational management research after the middle of the 20th century. Many have begun to look at school organization from an open system perspective. The school is a complex system, and the change of one subsystem inevitably leads to the change of other subsystems. Moreover, the external system of the school also influences the school system, such as the political system, the economic system, the cultural system, the legal system, the technological system, and the ecological system. Therefore, school organizations should determine school goals, work plans, and management behaviors according to changes in the internal and external environment from the perspective of contingency. The open system management theory enables us to fully understand the educational organization, and see its independence, but also see that it is part of the social system, thus providing us with a new thinking of the overall management of the system.

Today, we still need to take management science as the basis of thought and method to discuss the theory and practice of educational management. However, educational management is different from general management activities, It has its special activity law. So, education management research must be based on its own, based on education management practice, we do not have to accept the Western management theory. Meanwhile, the development of society deepens the research of theory, and the improvement of theory more effectively promotes social practice. Neither the research of management theory nor educational management theory can be separated from the foundation of society (Cui Xiufen, Wang Fengqiu, 1997).

Entrepreneurship Educational Management

In academic circles, entrepreneurial behavior has been regarded as an important driver of economic, employment growth, and innovation development. (Ji Danjun, 2014).

Early Entrepreneurship education originated in business schools and engineering schools to train future entrepreneurs and engineers. These early courses emphasized entrepreneurship and innovation but were often limited to specific areas of expertise. In the middle of the 20th century, as entrepreneurial activity grew globally, more and more schools and universities began to offer courses in entrepreneurship. The courses are designed to teach skills such as business plan writing, market research, and risk management (Xiao Peijuan, 2013).

In 1947, Professor Myles Mace of Harvard Business School pioneered a course in entrepreneurship education: Management of New Enterprises. This is the first time entrepreneurship education has appeared in universities (Zhou Bo, Chen Yan, 2010).

The 1980s to 1990s marked an important development in the management of entrepreneurship education. Many higher education institutions have created entrepreneurship centers and entrepreneurship programs to support students and alumni in their entrepreneurial endeavors. The teaching practice by the construction of professional disciplines has promoted the rapid formation of the discipline system of entrepreneurship education in universities. The teaching methods of entrepreneurship education are flexible and diversified, and the teaching force of entrepreneurship education is highly effective, providing a strong guarantee for subsequent development. The professional curriculum provides a platform for students to learn theoretically and practice. The establishment of the university entrepreneurship education curriculum system is mainly due to the transformation of social and economic structure. Social development and economic transformation need the strength of emerging small and medium-sized enterprises, and universities should offer entrepreneurship education courses in response



to social needs to train urgently needed talents suitable for social construction (Xiao Peijuan, 2013).

The European Parliament and the European Commission adopted a Recommendation on Key Competences for Lifelong Learning in 2006, which sets out eight objectives for the development of key competencies, the key competence "sense of initiative and entrepreneurship" is included. A 2008 report by the European Union's Enterprise and Industry Directorate-General on entrepreneurship education in the EU's higher education system pointed out that university entrepreneurship education courses are mainly concentrated in business schools, there are fewer entrepreneurship courses in non-business fields; many universities are faced with a shortage of teachers and insufficient funds. There is less collaboration between faculty and cross-departmental departments and fewer interdisciplinary entrepreneurship education courses; The curriculum is not flexible enough. In 2009, the EU published the Strategic Framework for European Cooperation in Education and Training, to strengthen the cultivation of students' creativity, innovation, and entrepreneurial ability in teaching and training at all levels and regard it as a long-term educational strategic goal. (Ji Danjun, 2014).

In 1998, Tsinghua University took the lead in holding an entrepreneurship competition and began the research and promotion of entrepreneurship education in China; after the "Challenge Cup" College Student Entrepreneurship Plan Competition in 1999, colleges and universities gradually carried out innovation and entrepreneurship education; colleges and universities across the country gradually established college student entrepreneurship incubation bases and support funds: In 2002, Heilongjiang University established the School of Entrepreneurship, and the Ministry of Education identified 9 pilot colleges for entrepreneurship education; after Premier Li Keqiang put forward the call for "mass entrepreneurship and innovation", innovation and entrepreneurship education became even more popular (Hu Haiyang, 2016).

In 2007, the report of the 17th National Congress of the Communist Party of China put forward the guiding ideology of "promoting entrepreneurship to drive employment". Promoting employment through entrepreneurship has become the basic policy orientation for implementing entrepreneurship education (Xiao Peijuan, 2013). Economic structural adjustment and industrial upgrading have led to increasingly serious employment structural contradictions and a reduction in the number of jobs. The difficulty in finding employment for college graduates and the resulting increase in employment pressure are the most direct reasons why entrepreneurship education has been valued and vigorously promoted in China in recent years (Hu Yongxin, 2010). Entrepreneurial activities can bring about an increase in jobs and produce a multiplier effect of promoting employment (Rao Yuping, 2009). The development of entrepreneurship education oriented towards employment promotion is based on the adjustment and transformation of social and economic structure (Xiao Peijuan, 2013).

The domestic mainly focuses on the initial construction of the university entrepreneurship education system. With the advent of the knowledge and information age, countries are vying to develop a lifelong learning society. The connotation of entrepreneurship education has once again undergone profound changes, and it has entered a stage of curriculum exploration oriented toward quality education. Promoting lifelong learning ability is the ultimate direction of curriculum exploration—sexual goals. Entrepreneurship education must be targeted at students of all grades and majors in colleges and universities to the greatest extent possible. The course goal has been raised to the cultivation of entrepreneurial qualities with entrepreneurial awareness, entrepreneurial knowledge and skills, entrepreneurial abilities, and entrepreneurial psychological qualities. These qualities should be cultivated as part of an individual's lifelong learning ability, laying the foundation for the development of learning



abilities necessary for students who receive entrepreneurship education in their subsequent lives.

The exploration of entrepreneurship education from the perspective of curriculum theory should include disciplinary courses to learn basic theoretical knowledge of entrepreneurship, activity courses to strengthen entrepreneurial awareness, practical courses to provide entrepreneurial drills, and environmental courses to create an entrepreneurial cultural atmosphere (Xiang Dongchun, 2003). Allow students to understand the entrepreneurial environment, entrepreneurial policies, and policies, and to provide certain direction and reference for their future career planning and life positioning. It is a comprehensive ability and quality cultivation based on students' hobbies and knowledge structure (Pan Yan, 2010). The curriculum should be designed to provide universal entrepreneurship education so that every student can learn entrepreneurial knowledge and skills, cultivate entrepreneurial awareness, and exercise entrepreneurial psychological qualities. It should also establish a wide range of professional entrepreneurship courses to reflect subject expertise, sexual knowledge, and constantly improving the entrepreneurship education system to achieve the goal of quality education (Xiao Peijuan, 2013).

Morris et al. (2013) proposed that entrepreneurship education should cultivate students' "key abilities". Social Cognitive Career Theory holds that one's career choice is related to self-efficacy and "outcome expectations." Bandura's agentic theory of human capital development holds that individual behavior is motivated by self-belief. Entrepreneurship education can develop students' "agentic capabilities" (including key abilities, self-regulation abilities, and self-efficacy). According to Bandura, self-efficacy goes through the following four development processes in entrepreneurial behavior: (1) Previous successful experience; (2) the experience of empathy (the experience of others); (3) verbal persuasion; (4) Physiological stimulation. By teaching these procedures, entrepreneurship education can enhance students' entrepreneurial expectations, and students' entrepreneurial self-efficacy will be enhanced and lead to entrepreneurial behavior. Another important theoretical basis is Ajzen's Theory of Planned Behavior, which holds that entrepreneurial behavior is determined by entrepreneurial intention and educational experience can change entrepreneurial intention (Rideout E.C & Gray D.O, 2013).

In the aspect of entrepreneurship education representatives in China, are divided into four types with different characteristics. 1) Knowledge-oriented entrepreneurship education practice - the content of entrepreneurial knowledge at different levels be comprehensively disseminated, ensuring the breadth and depth of entrepreneurial education content. 2) Socially oriented entrepreneurship education practice - train and provide more innovative talents for enterprises, and fully guarantee the demand for talents for enterprise development; through enterprises to open up internship places for students, build practice platforms, create an entrepreneurial environment, and increase employment positions, it can create more opportunities for the growth and success of students. Integrate high-quality resources, collect enterprise information, and establish enterprise demand database; Employ a comprehensive base of senior consultants and extra-curricular entrepreneurship instructors to provide professional guidance and training in entrepreneurship, career planning, employment, and other aspects. 3) Individual-oriented entrepreneurship education practice - innovation and entrepreneurial management intensive class, entrepreneurial management elite class are typical. Cultivate entrepreneurial talents with a solid professional foundation, business management ability, high innovation awareness, innovation quality, and innovation skills. Through interaction and communication with international elite schools and enterprise strategic cooperation, explore a variety of modes of training, with a broad international vision and fine High-level management professionals with good command of foreign languages, reasonable

knowledge structure, profound professional knowledge, and strong innovation and competitiveness. 4) Comprehensive entrepreneurship education practice - focuses on the interaction of the elements of entrepreneurship education, including the education provider, the recipient, and the social environment. Starting from multiple links such as entrepreneurial enlightenment, professional knowledge training, entrepreneurial competitions, entrepreneurial practice, etc., to provide students with a more complete system, more abundant resources, and more targeted entrepreneurial innovation education. Among them, is the initiation of entrepreneurship through lectures, training, and other forms to achieve the popularization of basic concepts and knowledge of entrepreneurship, as well as entrepreneurial interests and inspiration; Professional knowledge training relies on the curriculum education of the first class to help students acquire various aspects of professional knowledge needed for entrepreneurship, such as policies and regulations, entrepreneurial literacy, and entrepreneurial management; In the entrepreneurial event, students are trained to explore market demand, formulate entrepreneurial plans and practice entrepreneurial ideas in the form of competition. Through internships in enterprises (especially start-ups), students can gain direct experience in enterprise operations and help entrepreneurial teams to incubate (Li Huajing et al., 2009).

Student's Employability

Employability is proposed to adapt to changes in the job market. In the 1950s and 1960s, employability was a social and economic goal to achieve full employment. By the 1970s, employability remained focused on how to achieve full employment in policy, mainly designed to increase knowledge and skills. After the 1980s, research on employability shifted to the company or organization level, focusing on how to enhance organizational flexibility. Since the 1990s, research on employability has become a hot topic in the field of human resource management in Europe and the United States (Luo Ruifeng, 2010).

In China, with the continuous development and improvement of the socialist market economic system, especially with the gradual acceleration of the popularization and socialization process of higher education, the competition in higher education has become increasingly fierce. Chinese scholars generally believe that a student's employability no longer simply refers to a certain skill or ability but is a comprehensive concept. The earliest systematic and comprehensive discussion of this concept in China is by Zheng Xiaoming (2005), he believes that employability refers to the university graduates' ability to realize the employment ideal, meet social needs, and realize the reality in social life through the study of knowledge and the development of comprehensive quality. The employability of university students is a synthesis of various abilities, including learning ability, ideological ability, practical ability, application ability, and adaptability, etc. Employability comes into being as an evaluation parameter that directly reflects the efficiency of running a university, the competitiveness of university students, the evaluation of colleges and universities by the social market, and the selection criteria of graduates.

Students' employability supports students to get a job based on competencies including knowledge, skills, ability, characteristics, and attitude: Theoretical knowledgeability; Practical ability; Adaptability; Social ability; Language expression ability; Communication skills; and Competitiveness (Luo Ruifeng, 2010).

The American Society for Training and Development states that employability covers 16 skills that fall into five categories: basic competencies, communication, adaptability (problem-solving, thinking creatively), group effectiveness (interpersonal skills, teamwork), and influence (Feng Huichun, 2007).

Vocational ability model theory divides employability into three parts: knowledge and skills, personal ability, and professional quality. Knowledge and skills refer to the professional knowledge and skills students have learned, personal ability includes communication ability,

learning ability, and collaboration ability, and professional quality refers to the comprehensive quality students need in work, such as proactive, responsible, self-management, team spirit and other aspects (McClelland, 1975).

Social cognitive theory emphasizes that students need to possess self-understanding, self-regulation, social skills, and other abilities. Students' experience and social resources are also important factors affecting employability (Bandura, 1970s).

According to the theory of market demand, students' employability needs to be adjusted and updated continuously with the changes in market demand. Students need to pay attention to industry trends, job requirements, skill needs, and other factors, and strive to improve the ability to match them (David Ricardo, 1817).

The current situation of teaching material construction: The imperfect teaching management system leads to subjectivity in the selection of teaching materials; borrowing ordinary undergraduate teaching materials cannot be in line with the needs of talents, nor can it adapt to the actual situation of each school's positioning and characteristics; the serious lack of information channels leads to blindness in the selection of teaching materials; the reform and innovation of teaching materials seriously lag behind the speed of production development.

The positioning and characteristics of teaching material construction should be: strong professional pertinence; focusing on cultivating abilities; basic theories should be moderate; in line with national conditions; have strong applicability; it appropriately reflects the new developments in the field of technical science, study similar teaching materials at home and abroad to draw useful nutrients.

The strategy of teaching material construction is summarized: organize social demand survey and formulate teaching material quality evaluation standards; establish teaching material information database; organize and train front-line technical personnel of enterprises to participate in teaching material construction; integrate employment-oriented school running policies throughout the teaching material construction; set up a teaching material construction fund to encourage the construction of applied teaching materials (Xu Xiaochang and Hou Xin, 2009).

Research Method

The research methodology was mixed methodology, including qualitative and quantitative research. Qualitative research: From a review of literature and related research, studied variables concerning entrepreneurship education for students' employability in art universities under Liaoning Province. According to the variables of literature statistics, formulate personnel in-depth interviews from 5 art universities under Liaoning Province, conducted in-depth interviews with key informants' providers, transcribed and classified the data, and then enumerated and classified these variables. Based on the literature review and in-depth interviews with key informants, combined similar variables, and finally selected effective variables after repeated comparison. Prepared a research instrument as a five-level rating scale questionnaire. Focus group discussions were conducted based on the components derived from the quantitative research, proposing the managerial guidelines of entrepreneurship educational management for students' employability in art universities under Liaoning Province. In Focus group discussions, seven experts who held important positions in different art universities under Liaoning Province were selected as key interviewees. These respondents have a wide range of educational management and teaching practice experience to ensure that they can provide deep and valuable insights. Research Instruments, there are five main research instruments, including a Literature Review, In-depth Interviews Form, and Focus Group Discussion Form: Experts are invited to propose managerial guidelines based on the components obtained from the Exploratory Factor Analysis.

Conclusion Results and Discussion

Conclusion Results

There were 29 managerial guidelines of entrepreneurship education for students' employability in art universities under Liaoning Province (see Figure 1). Included five guidelines for Entrepreneurship Environment, five guidelines for Entrepreneurship Resources, five guidelines for Teaching Management, four guidelines for Educational Curriculum, four guidelines for Student Employability, and six guidelines for Entrepreneurship Results.

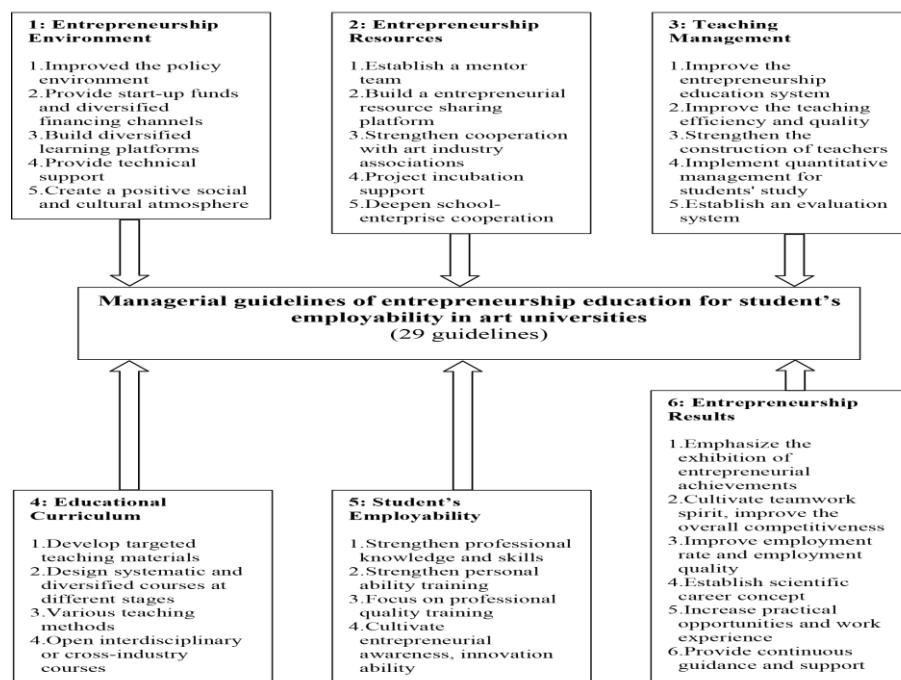


Figure 1 Managerial guidelines of entrepreneurship education for student's employability in art universities under Liaoning Province

Discussion

The major findings were revealed as such these components cover all aspects needed for entrepreneurship education, from the external environment and resource support for entrepreneurship to internal teaching management and educational curriculum design, as well as assessing students' employability and entrepreneurial outcomes, forming a comprehensive entrepreneurship education system. The entrepreneurial environment and resources partly consider the entrepreneurial ecosystem around the school, including policy support, market demand, enterprise cooperation, etc., to provide students with external conditions and resources to start a business. The teaching management and education courses involve how to organize and manage the implementation process of entrepreneurship education, including teaching methods, curriculum setting, teacher training, etc., to ensure the effective implementation and quality assurance of entrepreneurship education. Students' employability and entrepreneurial achievements focus on the individual development of individual students and measure the actual effect of entrepreneurship education and the actual growth of students by evaluating students' employability and entrepreneurial achievements. Together, these components constitute a complete set of entrepreneurship education management guidelines, covering all aspects from the educational environment to the actual results, aiming to comprehensively improve students' entrepreneurial ability and employment competitiveness, as highlighted by a series of recent studies. Wang Limei, Wang Quemei (2015), He Jiayue (2017) Zhang Lixin



(2017), Peng Guo (2022), Huayan Huang (2023), Li Fei (2023), and Yahui REN (2023) pointed out the importance of cultivating students' entrepreneurial and innovative ability in order to stand out in the fiercely competitive job market. Jin Ke (2013), Zhuang Lijun, Li Dandan (2014) found that through entrepreneurship education, schools can provide students with more employment opportunities and the ability to start their businesses, to improve students' employability and competitiveness. Da Jing (2014), Lv Jidong (2015), Wang Chang (2016), and Wang Ying (2021) believed education management should be carried out according to the characteristics of art students, Entrepreneurship education needs to be customized and optimized according to their unique creative abilities, industry particularity, market competition, and personalized development paths. Han Xiaoxi (2014) found that measures should be taken to help art college students firmly establish a scientific concept of career selection, improve the service system of art college students, and strengthen the support for art college students to guide and promote their employment and entrepreneurship. Chen Wei et al. (2014), Jiang Zhuo (2015), Jianfeng Luo (2016), Jehangir Bharucha (2019), and Liu Yafang et al. (2021) believed the importance of school-enterprise cooperation and make the maximum use of enterprise education resources to promote the entrepreneurship and employment of students finally. Wang Sheng (2022) and Al Yousifi Anfal et al. (2023) proposed Applying cloud computing and big data analysis technology to education management and entrepreneurship education. Srinivas RRS (2013) states that teachers play a vital role in improving students 'employability, this paper further puts forward the guidelines of establishing mentor teams and strengthening the construction of teachers to do a good job in entrepreneurship education for students' employability.

New Knowledge, or Originality

Based on Exploratory Factor Analysis (EFA), the variables were extracted, and the key component variables were analyzed to get 6 effective components of Managerial guidelines of entrepreneurship education for student's employability in art universities under Liaoning Province. The components consisted of Entrepreneurship Environment, Entrepreneurship Resources, Teaching Management, Educational Curriculum, Student employability, and Entrepreneurship Results (see Figure 2). These six components interact and influence each other, together forming a system, aiming to improve entrepreneurship education for student's employability in art universities under Liaoning Province. Optimizing each component, and coordinating the relationship between them, is crucial to achieving this goal.

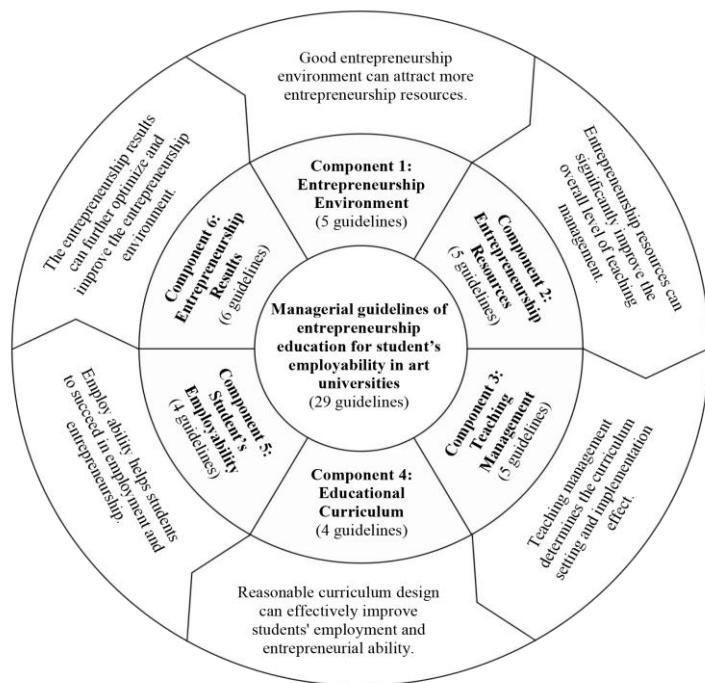


Figure 2 Components of Managerial guidelines of entrepreneurship education for student's employability in art universities under Liaoning Province

Recommendation

Recommendation for Policy Formulation

1. Transformation of government functions.
2. Give full play to the guiding role of the government.
3. Promote the implementation of policies.
4. Strengthen financial support.
5. Give full play to the supervisory function of the government.
6. Local governments shall establish an information communication platform for school-enterprise cooperation.
7. Give full play to the guiding and coordinating role of the industry.

Recommendation for Practical Application

1. Entrepreneurship Environment: Improve the policy environment; Provide start-up funds and diversified financing channels; Build diversified learning platforms; Provide technical support; Create a positive social and cultural atmosphere.
2. Entrepreneurship Resources: Establish a mentor team; Build an entrepreneurial resource-sharing platform; Strengthen cooperation with art industry associations; Project incubation support; Deepen school-enterprise cooperation.
3. Teaching Management: Improve the entrepreneurship education system; Improve the teaching efficiency and quality; Strengthen the construction of teachers; Implement quantitative management for students' study; Establish an evaluation system.
4. Educational Curriculum: Develop targeted teaching materials; Design systematic and diversified courses at different stages; Various teaching methods; Open interdisciplinary or cross-industry courses.
5. Student's Employability: Strengthen professional knowledge and skills; Strengthen personal ability training; Focus on professional quality training; Cultivate entrepreneurial awareness, and innovation ability.



6. Entrepreneurial Results: Emphasize the exhibition of entrepreneurial achievements; Cultivate teamwork spirit, improve overall competitiveness; Improve employment rate and employment quality; Establish scientific career concept; Increase practical opportunities and work experience; Provide continuous guidance and support.

Recommendation for Future Research

1. The scope of data collection can be expanded to cover more colleges and students, including art majors in comprehensive universities and normal colleges, to obtain more representative data. Compare the similarities and differences between art colleges and universities in Liaoning Province and other regions in the students' employability and entrepreneurship education, learn from the successful experience and practices, and put forward more universal suggestions.

2. Future Research for entrepreneurship education for students' employability in art universities can strengthened from the following aspects: Specific policy implementation effect; School-enterprise cooperation mode; Entrepreneurship education curriculum design; Individual differences of students; Learning from the international experience; Technical support and platform construction; Connecting entrepreneurship education with the job market; Student psychological and behavioral research; Effect evaluation system of entrepreneurship education; Expand the research methods.

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