GUIDELINES FOR IMPROVING OF INDUSTRY EDUCATION INTEGRATION PRIVATE UNIVERSITIES IN GUANGDONG PROVINCE

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A thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy Program in Educational Administration Academic Year 2024

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ABSTRACT

The objectives of this research were: 1) to study the current situation, 2) to develop guidelines, and 3)to evaluate suitability and feasibility of guideline for improving of industry education integration of private universities in Guangdong Province. The sample were 291 administrators from 10 private universities in Guangdong. Research instruments include: 1) questionnaire, 2) structured interview, and 3) evaluation form. The data analysis by using percentage, mean value, standard deviation and content analysis.

The results were found that: 1) the current situation of industry education integration private Universities in five aspects was at medium level. Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was talent development, followed by teacher resources management, management mechanism, financial management, and science and technology was the lowest mean. 2) The guideline for improving of industry education integration private universities in Guangdong Province, combined with the interviews, the researcher proposes: 1) improving teacher resources management; 2) supporting financial management; 3) complete management mechanism; 4) complete talent development; 5) enhancing science and technology, a total of 32 guidelines. The suitability and feasibility evaluation of the guidelines were at a high level.

Keywords: Guideline, Industry Education Integration, Private Universities

ชื่อเรื่อง	แนวทางการพัฒนาการบูรณาการการศึกษาภาคอุตสาหกรรม
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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์ 1) เพื่อศึกษาสภาพปัจจุบัน 2) เพื่อพัฒนาแนวทาง และ 3) เพื่อประเมินความเหมาะสมและความเป็นไปได้ของแนวทางการพัฒนาการบูรณาการการศึกษา ภาคอุตสาหกรรมของมหาวิทยาลัยเอกชนในมณฑลกวางตุ้ง กลุ่มตัวอย่างในการวิจัยครั้งนี้ ได้แก่ คุณครูโรงเรียนรัฐบาลในเมืองซ่งหยวน จำนวน 5 แห่ง รวมทั้งสิ้น 291 คน เครื่องมือที่ใช้ในการวิจัย ได้แก่ 1) แบบสอบถาม 2) แบบสัมภาษณ์ และ 3) แบบประเมิน สถิติที่ใช้ในการวิจัย ได้แก่ ค่าร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการวิเคราะห์เนื้อหา

ผลการวิจัยพบว่า 1) สภาพปัจจุบันของการบูรณาการการศึกษาภาคอุตสาหกรรมของ มหาวิทยาลัยเอกชนในมณฑลกวางตุ้ง โดยภาพรวมทั้ง 5 ด้าน อยู่ในระดับกลาง เมื่อพิจารณาเป็น รายด้าน พบว่า การพัฒนาบุคลากร มีค่าเฉลี่ยสูงสุด รองลงมา คือ การจัดการแหล่งทรัพยากร บุคลากรครู กลไกการจัดการ การจัดการการเงิน ส่วนวิทยาศาสตร์และเทคโนโลยี มีค่าเฉลี่ยต่ำสุด 2) แนวทางการพัฒนาการบูรณาการการศึกษาภาคอุตสาหกรรมของมหาวิทยาลัยเอกชนในมณฑล กวางตุ้ง ได้แก่ 1) พัฒนาการจัดการแหล่งทรัพยากรบุคลากรครู 2) สนับสนุนการจัดการการเงิน 3) กลไกการบริหารจัดการที่ครบครัน 4) พัฒนาบุคลากรอย่างครบวงจร 5) เสริมสร้างวิทยาศาสตร์ และเทคโนโลยี รวมทั้งสิ้น 32 มาตรการ 3) ผลการประเมินความเหมาะสมและความเป็นไปได้ของ แนวทาง มีค่าเฉลี่ยอยู่ในระดับสูง

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Chapter 1

Introduction

Rationale

Global level: The industry education integration has been developing with the process of industrialization, and under the promotion of the four industrial revolutions of "steam age", "electrical age", "information age" and "green industry", the development of industry-education integration presents phased and progressive characteristics, and the integration mode of industry and education in various countries has distinct national characteristics. Western Europe, the United States and Japan and other countries began to explore the reform of the industrial talent training model with the industry in the middle of the 18th century, and France established the first engineering colleges in the 40s of the 18th century, nearly half of the board members of the college are representatives of the industry, and the degrees and courses are set up based on the needs of the industry; In 1901, the British Sunderland Institute of Technology proposed a talent training model of "theory-practice-theory" (Dai Bin, Li Rui, 2020, p.35-37). After the rapid development of the four industrial revolutions, science and technology and talents have become important symbols to measure the comprehensive strength of the country, and the industry education integration has been recognized by all walks of life. In 2017, the Massachusetts Institute of Technology (MIT) successively released the "New Engineering Education Transformation" plan and the "MIT Global Strategic Plan" to promote the deep integration of universities and enterprises, and start a new journey of leading the fourth industrial revolution "new education".

China level: In 1985, the Ministry of Education approved the pilot work of 24 universities and enterprises to jointly train engineering masters, and China began to try to cultivate application-oriented talents through the combination of production, education and research. In 2014, "industry education integration" first appeared in China's national document "Decision of the State Council on Accelerating the Development of Modern Vocational Education". In 2017, "Several Opinions of the

General Office of the state council on Deepening the industry education integration" elevated the industry education integration to the overall institutional arrangement at the institutional level of the education system and human resources system, and in 2019, the National Development and Reform Commission and the Ministry of Education successively issued a series of documents such as the "National Pilot Implementation Plan for the industry education integration" to actively promote the participation of large enterprises in professional degree graduate education (Wang Shuguo, 2022, p.56-59). Since then, China has elevated the industry education integration to a major reform task in national construction, and the government has planned as a whole, and carried out the exploration and practice of in-depth cooperation in the industry education integration in colleges and universities, enterprises, etc. in a variety of ways and forms, hoping to eventually promote the entire education system, talent training chain and industrial system around technological change to achieve innovation, integration and sharing, and promote the systemic change of the industrial system and the higher education system (Xie Xiaozhen, 2019, p.13-15).

In the development stage of popularization of higher education, private universities will also face new opportunities and challenges as they take on more responsibilities (Luo Xianfeng, 2020, p.5-6). At present, the mismatch between the supply side and the demand side of technical and skilled talents is particularly serious, and the problem of structural unemployment has become a major hidden danger affecting the sustainable development of my country's economy and society. Exploring its causes, the disconnection between the higher education chain, the talent training chain, the industrial chain, and the technological innovation chain is the main reason for the generally low level of talent training supply in China. Therefore, the focus of today's vocational education development must be in the direction of cultivating technical and skilled talents.

Guangdong Province level: Guangdong Province located in the south of China, the most economically developed and open area in China, and it is also the pioneer and vanguard of China's reform and opening up. Guangdong Province has attracted a large number of high-quality talents, including scientists, engineers, entrepreneurs and entrepreneurs, and has rich talent resources and innovative capabilities. Guangdong Province has a high level of higher education, with first-class universities and research institutions, providing strong support for talent cultivation and innovation. Guangdong has a total of 162 institutions of higher learning, including 25 private undergraduate institutions. Deepening the integration of production and education is an important part of my country's higher education reform. The industrial structure of different regions is different, and the difficulties and problems faced by the integration and development of universities and local industries are also different (Source: Baidu Encyclopedia, 2023).

One of the important links for local undergraduate institutions to realize the transformation of private universities is to integrate and develop with local industries, and let industries participate in the talent cultivation and teaching links of universities. Among the 25 private universities in Guangdong, some universities have carried out deep industrial integration and achieved good development in professional construction, teaching reform and talent development. However, there are also some universities that develop slowly and are not closely integrated with industry, and the development of each university varies greatly.

Guangzhou Xinhua University (hereinafter referred to as GZXH) is located in Guangzhou City, Guangdong Province. It is a multi-disciplinary undergraduate private university covering economics, law, education, literature, science, engineering, medicine, management, art and other disciplines. I have been working at GZXH since 2019, and I have been the director of GZXH Industrial College since 2023. In 2015, the Ministry of Education of China put forward the policy of transforming local undergraduate colleges into application-oriented universities. GZXH College quickly responded to the call of the Ministry of Education, aiming at the transformation of application-oriented universities, cultivating application-oriented talents and serving the needs of local industrial development. So I often reflect on what causes these differences. As a middle manager of GZXH, what should I do to help our school to improve the management level of private universities and make better development. In response to the above questions, I often discussed with managers of related universities, and constantly reviewed literature, learned relevant theoretical knowledge, and analyzed management strategies of other universities. After continuous learning and thinking, I realized that to achieve the goal of transformation to private universities, it is necessary to have a matching management strategy of private universities to promote the industry education integration, so as to improve the quality of talent cultivation in the university and achieve the transformation and development goals of private universities.

Based on the above, I decided to conduct the "Guideline for improving of industry education integration in Guangdong private universities" research. Based on the theories of educational management and industry-education integration, this study will analyze the current situation of industry-education integration and its causes through research methods such as questionnaires and interviews, use statistical analysis techniques, propose management strategies for industry-education integration of private universities in Guangdong on this basis, and evaluate the feasibility of the proposed management strategies. We hope to provide some references for the management of private universities and the transformation and development of private universities.

Research Questions

1. What is the current situation of industry education integration of private universities in Guangdong Province?

2. What are the guidelines for improving of industry education integration private universities in Guangdong Province?

3. What level of suitability and feasibility industry education integration guidelines of private universities in Guangdong Province?

Objectives

1. To study the current situation of industry education integration of private universities in Guangdong Province.

2. To develop guideline for improving of industry education integration private universities in Guangdong Province.

3. To evaluate suitability and feasibility of guideline for improving of industry education integration of private universities in Guangdong Province.

Scope of the Research

Population and the Sample Group

The Population

The population were research 10 private universities in Guangdong Province. Totaling 1200 administrators of industry education integration.

The Sample Group

The sample group were manager who involved in the industry-education integration at private universities in Guangdong Province. Accorded to Krejcie and Morgan (1970) sampling table, they were selected by purposive sampling method from 10 universities which located in Guangdong Province, and used by systematic random sampling, totaling 291 people. The 10 universities selected include: Guangzhou Xinhua University, Guangdong Baiyun University, Guangzhou City University of Technology, Software Engineering Institute of Guangzhou, Nanfang College Guangzhou, Guangdong University of Foreign Studies South China Business College, Guangzhou Huashang University, Guangzhou Institute of Science and Technology, Zhuhai College of Science and Technology, Dongguan City University.

The Variable

Guideline for improving of industry education integration private universities in Guangdong Province five aspects:

- 1. Teacher Resources Management
- 2. Financial Management
- 3. Management Mechanism
- 4. Talent Development
- 5. Science and Technology

Advantages

1. To use provides a scientific reference for the improving of industry education integration in private universities in Guangdong Province.

2. To use improve the integrated development of industry and education, and promote the construction of disciplines in private universities.

3. To use construction of an integrated management system of industry and education provides an innovative path for the cultivation of outstanding talents in private universities.

Definition of Terms

Industry Education Integration refers to the close combination of industry and teaching, mutual support and mutual promotion, and the formation of a schoolrunning mode for the integrated development of schools and industry. The industry education integration is not simply an "upgraded version" of school-enterprise cooperation. There are both similarities and differences. The similarities are reflected in the industry education integration and school-enterprise cooperation are both an educational concept and a talent development mode, which emphasizes the close cooperation between schools and enterprises and collaborative education. The difference is reflected in the former is the result, focusing on the change of management system, that is, through the stable, efficient and deep cooperation relationship, finally make the industry enterprises and higher vocational colleges develop into a talent supply and demand community; the latter is the means, emphasizing the school mode change, focus on the practicality and effectiveness of talent, its limited depth of cooperation and breadth. Industry-education integration consisted of five following aspects: 1) Teacher Resources Management, 2) Financial Management, 3) Management Mechanism, 4) Talent Development, 5) Science and Technology.

Teacher resource management refers to the management of the school's teaching force through management activities, with the aim of improving the quality of teaching, enhancing the quality of teachers and improving teaching effectiveness. It contains: staffing, performance assessment, talent selection, position promotion,

teacher evaluation system and other personnel organization contents; teacher ethics education, teacher behaviour, teacher professional conduct, sense of responsibility and mission and other teacher ethics construction contents; teacher recruitment, study seminars, talent selection, title assessment, career planning and other teacher development aspects. The teacher resource management model is related to the achievement of the university's development goals and talent training objectives. Under the concept of industry-education integration, "dual-teacher teachers" and" teacher evaluation and growth system" have received widespread attention from scholars.

Financial management refers to the process of raising, allocating, using and monitoring funds in a rational manner to achieve financial objectives and to ensure the long-term development and stable operation of an enterprise or organisation in the course of its operation. Financial management includes financial decision-making, financial control, financial analysis and other aspects. Its main objective is to achieve effective management and use of funds in order to maximise the return on corporate wealth value and profit. The financial management of the industry-education integration includes the source of funds, funding input, planning and budgeting, resource allocation, financial supervision and risk management, etc. It also involves the allocation of inputs and interests between universities and enterprises. In the context of the industry-education integration, "diversified input methods" and "distribution of university-enterprise rights and interests" have received attention from academics.

Management Mechanism refers to the process of establishing a set of management system framework within an organisation by developing various types of management regulations, processes and standards, and relying on the organisational structure to advance work, ensure management efficiency, quality, accuracy and stability, and achieve organisational goals. The mechanism can include various management systems, which can be improved and adjusted according to the needs and characteristics of different organizations. It can be an incentive mechanism, an operation mechanism, an evaluation mechanism, a sharing mechanism, a cooperation and trust mechanism, a benefit distribution mechanism, etc. Each mechanism should have a clear division of responsibilities, clear role requirements, clear workflow and process control, effective monitoring and tracking, scientific performance distribution and incentive mechanism, and corresponding assessment and improvement mechanism. Through an effective management mechanism, the organization can improve the transparency, scientificity and effectiveness of management, stimulate the initiative and enthusiasm of employees, improve operational efficiency and economic benefits, and obtain better competitive advantage and sustainable development.

Talent Development refers to the process of cultivating talents with certain knowledge, skills, quality and innovation ability through education, training, practice and other means. The purpose of talent training is to enable students to gradually acquire certain professional knowledge and skills in learning, practice and work, form good quality and innovation ability, and become talents in specific fields. However, different fields and universities have different educational philosophies and training objectives. In general, the purpose of talent training is to meet the needs of enterprises or organisations for talent and to promote their sustainable development and progress, as well as to cultivate the various types of talents needed for the development of the country in various fields.

Science and Technology refers to the bridge and link between the education system and the industrial system to achieve high-quality development, and is an important part of high-quality industry education integration. It can promote the transformation of education goals, knowledge systems, training methods, teaching systems, and teacher team construction in the education system from "information islands" to "system online", serve the digital transformation of industrial needs and industrial chains, and achieve the purpose of synergy and linkage between talent chain, education chain, industrial chain and innovation chain.

Private Universities refers to higher education institutions that are established by social organizations or individuals other than state institutions with non-state financial funds, with student tuition as the source of school-running funds, not for profit, and with clear property rights. As a beneficial supplement to the popularization of higher education in public universities, they are private universities in a broad sense. Private undergraduate education plays a positive role in meeting China's economic and social development, the need for highlevel applied talents as well as promoting the process of massification of higher education in China, and is a major decision deployment of the Chinese State Council to guide some local undergraduate universities to transform into applied ones. They basically have the following common characteristics: 1) the goal of running education is not based on the pursuit of knowledge perse, but to meet the demand for talents for economic and social development; 2) the form of running education is characterized by the industry education integration; 3) the level of running education is usually a general private undergraduate university.

Guideline for improving refers to is the theoretical system of how an organisation develops. Strategies of development is a major choice, planning and strategy for the development direction, speed and quality of development, development points and development capabilities of an organisation within a certain period of time. strategies of development can help an organisation to guide its longterm development direction, specify its development goals, identify its development points as well as the real purpose of strategies of development is to solve the development problems of the organisation and to achieve rapid, healthy and sustainable development of the organisation.

Research Framework

Based on Synergetics theory (Hermann Haken, 1976), the theories of educational management and industry-education integration, the research framework of this paper is show in Figure 1.1.

Industry education integration:

- 1. Teacher resoures management
- 2. Financial management
- 3. Management mechanism
- 4. Talent development
- 5. Science and Technology

Guideline for Improving of Industry Education Integration Private Universities in Guangdong

Figure 1.1 Research Framework

Chapter 2

Literature Review

This chapter will focus on the research questions raised in Chapter 1 and summarize the main theoretical basis and related researchers involved in this research, so as to clarify the theoretical inheritance, improvement and expansion relationship between this research and existing achievements. In order to explore the theoretical basis of the industry education integration in Private Universities, this chapter sets out the theories as follow:

- 1. Concept of Educational Administration
- 2. Concept of Industry Education Integration
- 3. Context of Private Universities
- 4. Related Research

The details are as follows.

Concept of Educational Administration

In the 50s of the 20th century, the study of educational management has always adopted a common-sense judgment method, that is, the method of inseparating facts and values is satisfied with providing normative standards, that is, telling education administrators "how it should be". It was not until the rise of behavioral science that this approach began to undergo a fundamental shift in attention to the study of the question of "what really is". This is the rise of the Western education management community.

T.B. Greenfield (1983, p.182-183) and others emphasize the subjective value component in the study of education management and oppose the use of purely scientific logical empirical methods to study education management issues. But on the whole, empirical research on education management still occupies a pivotal position in the West until now.

After the 80s of the 20th century, Chinese and Western educational managemen theories were in the process of vigorous development, various theoretical schools and management models engaged in fierce academic confrontation, and the development of higher education management entered a historical period of both prosperity and confusion. Compared with the seventies, the guiding ideology and focus of education management research have changed, mainly reflected in the emergence and development of "subjective models", "cultural models" and "comprehensive models" of education management, and education management pays more attention to the study of organizational culture, pays more attention to the study of policies, and especially emphasizes the theory of emphasizing practice.

Cubertson (1999, p.56-55) argues that research in education management should be oriented towards current practice and establish a 'theory of practice' lannaccone stresses that those working in education management should design their own approaches with extreme confidence, rather than becoming trapped in learning.

Western educational management and its research, from the end of the 19th century, on the one hand, it takes education as a starting point and develops along the traditional path of empirical management and its research.

Yang Tianping (2020, p.56) pointed out to sum up, the concepts of education management in ancient and modern China and abroad are different. In ancient society, educational management was dependent on and subordinate to other activities, so its so-called educational management ideas could only be scattered and embryonic. Independent form of educational management and its research activities emerged from modern Western society, and under the theoretical banner of positivism and post-positivism, it has now developed into a relatively mature science of pluralistic juxtaposition and plural integration. Although China's education management and its research, although it started not late, has also roughly experienced the ups and downs of the century, and has its own uniqueness and uniqueness, but on the whole, both its practical level and the research methods it uses and its research results are still decades behind foreign countries. Therefore, it is necessary to distinguish these differences and differences to maintain a sober academic awareness, which is conducive to the healthy development of educational management scientific research in China.

To sum up, education management refers to the planning, organization, control and control of the education system, which includes two major parts. So the meaning of education management from two aspects, one is to start from the macro level of the national or local government and optimize the allocation of educational resources in order to achieve the development goals of national or regional education. The other is a unified and planned management activity for various affairs based on teaching in order to achieve the purpose of training and achieve the teaching goals. To put it simply, education management is the efficient allocation of resources for teaching activities organized by educational groups at different levels in order to achieve to achieve educational goals.

Higher Education Management

Li Guangping, Chen Wuyuan (2020, p.64-65) In the context of popularizing higher education, through exploring new development paths, deepening the reform of the full-credit teaching management system, building a multi-governance teaching management organizational structure, strengthening the construction of the operation mechanism of information teaching management, improving the management level and teaching quality, meeting the development needs of college students, and promoting the sustainable development of higher education in the popularization stage.

Zheng Wen (2020, p.64) After the Ministry of Education of China carried out the pilot of undergraduate vocational education, the relationship between applied higher education and undergraduate vocational education was proposed, from the historical evolution of vocational education, through comparative research with undergraduate vocational education in major developed countries, this paper proposed that undergraduate applied education can be used to supervise undergraduate vocational education.

Liu Zhongtong (2020, p.84) proposed that to improve the evaluation system of higher education and improve the ability of higher education governance, it is first necessary to improve the relevant policy and regulatory system, promote the separation of management and evaluation, and clarify the responsibilities and rights of the government, universities and social intermediary organizations in the governance and evaluation of higher education establish closer and more effective mechanisms for cooperation and dialogue among all disciplines to achieve the best interests of higher education as a whole.

Yu Xiaobo.et.al (2020, p.75) Pan Maoyuan's ideas on higher education management are centered on talent training, academics, striving for first-class, and pursuing excellence, and the specific content mainly includes the construction of modern university system, university classification positioning and characteristic development, teaching development and management innovation, and the specialization of education management cadres. The basic characteristics of Pan Maoyuan's higher education management thinking are the combination of tradition and reality, the balance between macro and micro, and the unity of theory and practice.

Wang Ling, Jiang Ke (2021, p.46) proposed to promote the modernization of China's higher education governance system and governance capacity, establish the concept of legislative governance, and gradually improve the relationship between the government and higher education; Build a modern university governance system with orderly operation and improve the university's self-management ability; Give full play to multidisciplinary wisdom and improve the diversified governance capabilities of colleges and universities.

To sum up, from the definition of management, it can be seen that the socalled higher education management is the management covering the entire field of higher education, not simple higher education administration, nor pure ordinary college management, but comprehensive management including both. Higher education management can also be understood from both macro and micro aspects, from the macro aspect, it refers to proposing tasks, formulating plans, providing conditions, issuing regulations, and issuing instructions according to the needs of the country; From the micro aspect, it is to directly organize talent training and scientific research according to the requirements of superiors. To put it simply, higher education management is the decision made by managers to optimize the allocation of various elements within the organization to ensure the order and efficiency of daily management work and achieve higher education goals.

Informationization of Education

Xu Qiuxuan, Wu Yonghe (2021, p.38) On the basis of analyzing the requirements of new education informatization infrastructure standards, the framework of new education informatization infrastructure standards is constructed from the four levels of digital foundation, system specification, application scenarios and goal orientation, so as to solve the problem of lack of normative thinking and coordination in education informatization construction. It is proposed to standardize the construction of new infrastructure for education informatization, and promote the construction of new infrastructure for education informatization from the aspects of goals, network platforms, and security applications. Finally, 10 suggestions are put forward to promote the standardization of new education informatization informatization informatization solve the standardization of new education informatization informatization informatization informatization informatization informatization from the aspects of goals, network platforms, and security applications. Finally, 10 suggestions are put forward to promote the standardization of new education informatization informati

Ren Youqun, Wan Kun (2020, p.58) From the comprehensive application, induction and deduction of literature research, the three layers of the digital divide in the current development of basic education informatization are analyzed: the digital technology access gap, the digital technology use gap and the literacy gap. Secondly, the operation of technology-enabled basic education information is proposed from three aspects: the connotation of technology empowerment, the operation logic of technology empowerment, and the possible impact on basic education informatization. Finally, from both theoretical and practical aspects, the implementation path of basic education informatization includes the core layer, application layer, support layer, support layer, operation path of technology empowerment, technology empowerment, and realize the transformation from digital divide to technology empowerment.

Huang Bingrui (2020, p.115-116) From the perspective of big data education organization, this paper discusses the seven elements of smooth communication platform, appropriate digital resources, convenient learning tools, diversified learning methods, flexible teaching organization, effective support services, and close government-enterprise-school collaboration, including enterprises, families, and society.

Chen Lin (2020, p.128) proposes to accelerate the innovation and leadership of information intelligence theory, knowledge, action and creation unified theory, and collaborative cognitive theory at the theoretical level; Accelerate the innovation of education models, the contemporary sublimation of teachers, the innovation of largescale education development, and the fairness of innovative education at the practical level.

Wu Wei (2020, p.104-105) From four aspects: building an online teaching support service system and paying attention to the development of online teaching in weak schools, this paper proposes strategies to deal with large-scale and long-term online teaching to improve the information literacy of teachers and students. online teacher training to enhance collaborative teaching and research; Innovate online teaching mode to strengthen teacher-student interaction; Promote home-school cooperation and jointly create an external support environment.

Huang Ying, Dong Wenjie (2019, p.94) From the aspects of curriculum, teaching, learning, environment, teacher development, evaluation, education management and organization, discuss the challenges of transforming the vocational education model such as returning to the essence of education and avoiding technological shortcomings, put forward the development goal of "adapting and leading artificial intelligence", and build a path and model to change vocational education.

Yang Xiaohong, Li Zhaoyi (2019, p.68) In the "Internet+" era, the path of promoting multi-collaborative construction of "smart campus" ecological environment, building a resource model of diversified co-creation, sharing and service, building a hierarchical teaching model, and developing a professional blended learning model for teachers is proposed.

Xie Youru (2019, p.154) pointed out that the construction of smart campus should be guided by education informatization 2.0, pay attention to integration and innovation, pay attention to mechanism guarantee, and highlight regional characteristics. On this basis, a new development of smart campus application and research is proposed, in order to provide ideological guidance and practical reference for the future construction and application of smart campus.

Ren Youqun, Wan Kun (2019, p.102) Put forward the county basic education informatization development strategy: improve the county basic education informatization policy guarantee mechanism, guide high-quality enterprises to participate in the supply of education informatization services, improve teachers' information technology application ability training, transform student learning evaluation methods, and promote the high-quality and balanced development of county and county basic education informatization.

To sum up, informationization of education refers to a new educational method that mainly uses modern information technology to develop educational resources, optimize the educational process, and cultivate and improve students' information literacy as an important goal under the guidance of modern educational ideas and theories.

Education Management System

Zhang Jie (2022, p.63) The reform of the college education management system puts forward four aspects: establishing the concept of lifelong education, introducing the credit banking system, giving full play to the advantages of "Internet +", and improving the supervision mechanism of the lifelong education system in colleges and universities, which is expected to provide certain references and references for relevant personnel.

Fan Guorui (2020, p.53) believed that from the perspective of pluralistic governance, the path for social organizations to participate in supervision and evaluation can be broadened by strengthening legislative construction, strengthening institutional supply, building certification standards, and standardizing access procedures and evaluation mechanisms. At the same time, strengthen social organizations' professional qualifications and professional capacity, establish and improve mechanisms for social organizations' participation in oversight and evaluation, and bring about effective docking between social organizations and oversight and evaluation. Xue An (2020, p.37) proposed to establish and improve the emergency education management system and operation mechanism; The adjustment of education supply is imminent, reform the learning-centered education supply structure, and reform the emergency talent training system.

Zhou Chuan (2019, p.24-25) believed that the modernization of the higher education governance system and governance capacity is a new vision for the reform of China's higher education management system, and to this end, substantive reform and breakthroughs should be made on the basis of deepening the reform of the national administrative system.

Li Sha, Sun Miantao (2019, p.16-17) In the process of formulating education system reform policies, a more systematic theoretical design of education system reform policies was carried out, and countermeasures and measures for various types of education system reform at all levels were put forward. In terms of the logic of realization, it embodies the logic that theory originates from practice and theory guides practice, and embodies the symbiotic symbiosis and co-development of diversified education system theory.

Yang Zunwei (2018, p.76) The reform of China's higher education management system is expected to change the management functions of the government and build a new relationship between the government, schools and society. Accelerate the construction of the education legal system and implement the autonomy of colleges and universities; Strengthen the cultivation of intermediary organizations and establish a higher education governance system.

To sum up, education management system refers to a systematic platform or framework for the management and coordination of educational activities within a country or organization. This system covers the education command system at the government level and the unit level, and aims to ensure the effective allocation of educational resources, the smooth implementation of education policies, and the continuous improvement of education quality.

Concept of Industry Education Integration

Industry education integration adheres to the guidance of cultivating highquality technical and skilled talents, strengthens school-enterprise cooperation, deepens the industry education integration, focuses on resources, systems, culture, etc., brings together government, schools, industry and enterprises, gives play to the government's macro-control function, builds a long-term mechanism for the industry education integration, establishes an open and inclusive education system, carries out dynamic monitoring and multi-dimensional evaluation, and promotes the deep industry education integration.

Concept of Synergetics theory

Hermann Haken (1976, p.24) Synergetics is proposed by the famous German physicist Hermann Haken in 1976, which is an emerging discipline gradually formed and developed since the 70s of the 20th century, and is an important branch theory of systems science. In 1971, he proposed the concept of synergy, and in 1976, he systematically discussed synergy theory, published "Synergetics-AnIntroduction", and also wrote "Advanced Synergetics".

Synergy theory mainly refers to an open system that deviates from the original equilibrium state due to the exchange of internal factors and the external environment, and then reconstructs it through the synergy of each within the system, so as to move from disorder to order. No matter how complex the system, once effectively intervened by external factors, the subsystems will coordinate with each other, resulting in a "1+1>2" synergistic effect.

The industry education integration is an overall system composed of schools, students, industries, and enterprises as the main stakeholders, and the government, family, society, etc. as indirect stakeholders, and each stakeholder or stakeholder is also a subsystem in the overall system. According to the synergy theory, when the external effective intervention or the internal content of the overall system is self-adjusted, all the subsystems in the overall system and all the elements within the subsystem itself will coordinate and cooperate to form an overall effect, so that the whole system changes from a disordered state to an ordered state, thus producing a synergistic effect of 1+1>2.

There is no official definition of the integration of production and education at present. It is generally believed that the integration of production and education is a school-running model in which vocational schools adapt to the industrial structure in terms of school layout, professional setting, and personnel training objectives according to the needs of industrial development, forming a seamless integration of schools and enterprises. At present, scholars have not yet reached a consensus on the connotation of the industry education integration.

Chen Nian (2014, p.37) and others believe that the integration of production and education involves the two fields of vocational education and industry, and is an in-depth collaboration between vocational colleges and enterprises to achieve the purpose of improving the effect of talent training.

Zhou Jinsong and Yang Shanjiang (2014, p.61) believed that the integration of production and education has two meanings. The first meaning of production and education mainly refers to industry enterprises and school education; the second meaning of production and education refers to "production and teaching".

Yang Shanjiang (2020, p.53) pointed out that the integration of production and education is the mutual cooperation between the education and industry entities, and the mutual complementarity of advantages can be realized through cooperation.

Peihua (2014, p.29) pointed out that the integration of production and education is the organic combination of "productive learning" and "learning production", "productive teaching" and "teaching production", which is the basis of the combination of theory and practice.

Cao Dan (2015, p.42) believes that the integration of production and education is teaching in production practice and production in teaching activities. The two are intertwined and inseparable.

Kong Yuan (2015, p.31) proposed the integration of production and education, integrating education and teaching, production labor, quality cultivation, skill improvement, transformation of scientific research results, operation management, and social services. Allan Klingstrom's (1978, p.172) research pointed out that the integration of production and education is a talent training model, which closely links educational activities and social production activities, and is characterized by the combination of work and learning, two-way participation, and social service.

Li Shihui, Chen Zhijun, Wang Bo (2021, p.38) In response to the problems of independent associations, courses, competitions and scientific research in traditional teaching, and the lack of deep integration between industry and education, the innovative system of training highly skilled talents is proposed, which is "deep integration between industry and education, and synergy between group courses, competitions and research". Through the "Three One Project", the system is to effectively integrate industry and education, and to build a collaborative education mechanism of society, curriculum, competition and scientific research with the two-way skills workshop as the platform, so as to provide a reference for the cultivation of innovative high-skilled talents.

Zou Yuxiang (2021, p.57) Based on this, we take the industry education integration and school-enterprise cooperation as the entry point, coupled with the talent development objectives, specifications and talent development quality assessment mechanism of vocational universities, take the reform of curriculum system and teaching content as the starting point, based on the competence-based theory and the theory of vocational competence development stage, take the government chain, vocational college chain and enterprise chain as the outer helix, and take the knowledge and skills training as the outer helix. Based on the reform of the curriculum system and teaching content, and based on the competency-based theory and the stage of vocational ability development theory, we build the practical innovation platform of school-enterprise cooperation with the government chain, vocational college chain and enterprise lipital and the knowledge chain, skill chain and quality chain as the internal spiral, and establish the double spiral talent development mode to promote the innovation of the talent development mode of vocational universities.

Chen Xing (2017, p.55) studied the dynamics of the integration of production and education in application-oriented colleges and universities, and proposed that the confusion of concepts, conflicts between stakeholders, insufficiency of various resources, and imperfections in various systems are the four reasons for the lack of motivation for the integration of production and education in application-oriented colleges and universities.

He Yaomin and Ding Jianshi (2015, p.41-42) pointed out that in the process of exploring the integration of production and education, my country's vocational education has gradually formed six modes: school-enterprise cooperation, enterprise introduction, factory-in-school, group school, school-run enterprise, and enterprise-run school.

He Xingyue (2021, p.36) and others believe that the typical models of foreign production-education integration include Germany's "dual system" model, the United States "cooperative education" model, Japans "industry-university cooperation" model, and Australia's "TAFE" model.

Wang Danzhong (2014, p.73) proposed that there are six types of cooperation models for the integration of production and education: "enterprise + school", "business+school", "business+enterprise+school", "government+school", "government+e nterprise+school", and "government+business +enterprise+school".

Tang Xiaoyan (2022, p.58) proposed that the models that can promote the industry education integration include the industry-education integration model based on the industrial park, the industry-education integration model of the school-enterprise joint construction technology research center, the industry-education integration model of the school-enterprise joint construction of the secondary college, the joint construction model of the double-teacher team under the leadership of the group company, and the school-enterprise joint construction of the student studio model.

Some foreign countries with developed higher education have long begun to explore the integration of production and education, and the models vary from country to country. The United States adopts the "alternative work-study" education model. At the same time, the school will also arrange internship positions for students through special departments of the school, and the students' wages will be settled by the enterprise. The education and training model in the UK is a "sandwich". Students

practice in companies during the day and attend classes at night. It is also called an alternate talent training model. The employment rate of students trained in this way is much higher than that of full-time students. Germany adopts the "dual system" talent training model. Students take cultural courses in schools. The courses are jointly customized by schools and enterprises according to social development needs and enterprise employment needs, and enterprises teach students professional skills. In the TAFE college in Australia, the industry education integration is the government and society providing the funds needed for the school, and the formulation of the curriculum is jointly completed by government officials, school teachers, and enterprises. The French "apprenticeship" training model is cultivated by the "apprenticeship training center". From this point of view, foreign production-education integration models are mainly divided into three types. The first one is the enterpriseled model represented by the Australian TAFE college and the German "dual system". In this model, students mainly learn skills in enterprises, and the student unions cultivated are more in line with the needs of enterprises, but the student unions lack the spirit of independence. The second is the model of paying equal attention to both schools and enterprises, based on the American "engineering-study alternation training model" and the British "sandwich" training model. This training model not only pays attention to the learning of students' theoretical knowledge, but also pays attention to the cultivation of students' professional skills. It is a talent training model worth learning. The third mode of integration of production and education, represented by the French "apprentice training center", this training mode pays more attention to the comprehensive ability of students.

Huang Lin (2019, p.28) pointed out that the current common problems in the integration of production and education in colleges and universities are: the talent training mode of colleges and universities is the same; the driving force for college reform is insufficient; enterprises lack willingness to participate; "double-qualified" teachers are scarce; Effective team; lack of collaborative education mechanism; single mode of integration of production and education; cooperation between schools and enterprises is not deep enough.

Wang Ke (2020, p.16) It is took Hebei University of Communication as an example to discuss the development model of industry-education integration of Hebei University of Communication, which is mainly divided into three development models: stage theory (taking the stage as the practice center), integration theory (professional and industrial integration, classroom and stage integration, teaching and creation integration), and three-change theory (homework becomes work, work becomes product, and product becomes commodity).

Du Liansen (2018, p.51) believes that the in-depth industry education integration should eventually be implemented at the organizational level to achieve the organizational integration of colleges and enterprises.

Li Ke (2021, p.79) believes that on the issue of the industry education integration, we should strengthen the government's overall planning, enable enterprises to give full play to the main role of participating in education, comply with the government's call to further promote teaching reform, accelerate the establishment and improvement of the two-way docking service system of supply and demand of industry-education integration, and introduce school-enterprise cooperation laws and regulations to take corresponding policies and measures, and give full play to the important role of deepening the industry education integration in the comprehensive revitalization of the new era.

Ismet P (2020, p.65) believes that the establishment of new ways of cooperation between manufacturing education and industrial manufacturing can prepare for innovation and maintain competition, so that manufacturing education construction can play a certain role in promoting the competition of manufacturing, and use the competitive advantage of the industry and enhance the national economy to meet global challenges.

Chen Nianyou (2020, p.49) and others believe that the industry education integration in vocational colleges is not a general industrial integration, and the education of vocational colleges and their related industry enterprises carry out deeper cooperation, and the starting point of industry-education integration is to improve the quality of talent training and then cooperate with enterprises.

Cao Dan (2021, p.77) believes that there are many problems in the process of cooperation and education between colleges and universities and enterprises in China, mainly including the shallow depth of cooperation, the lack of guarantee of collaborative education funds, the lack of stability in the cooperation process, the lack of integration channels, the simple cooperation model, the backward construction of teachers, the lack of quality assurance system and monitoring and evaluation system.

Liu Zhimin (2018, p.63) pointed out from the perspective of promoting the synergy and symbiosis between education and industry, combined with the new requirements for the development of vocational education proposed in the report of the 19th National Congress, and pointed out that artificial intelligence, the Internet and the real economy must be combined at present, and gradually realize the "integration" of education and industry from "integration" to true "integration".

Allan Klingstprom's (1978) chosen teacher resources management, interest power, management mechanism, talent development, science and technology, financial management; Chen Xing(2017) chosen teacher resources management, talent development, information symmetry, terrace; Cao Dan (2015) chosen teacher resources management, management mechanism, talent development, science and technology, financial management, coordinate ability; Chen Nian (2014) chosen teacher resources management, interest power, management mechanism, talent development, financial management; Chen Zhijun(2021) chosen science and technology, terrace; Du Liansen (2018) chosen interest power, management mechanism, talent development; He Yaomin (2015) chosen teacher resources management, environment; Huang Lin(2019) chosen talent development, financial management, terrace, coordinate ability; Ismet P(2020) chosen management mechanism, talent development, financial management, information symmetry, coordinate ability; Li Shihui (2021) chosen teacher resources management, interest power, management mechanism, science and technology, financial management; Liu Zhimin (2018) chosen management mechanism, talent development.

To sum up, the integration and cooperation between industry and teaching is a school-running model in which vocational colleges and enterprises jointly cultivate talents. The basic content of the connotation of industry-education integration includes: industry-education integration is not only the industry education integration, but also the integration of production and teaching, which can cultivate talents that industries and enterprises really need. Its main purpose is to improve the quality of talent training and meet the needs of enterprise development, so as to better promote economic development and serve the society.

According to Synergetics theory (Hermann Haken, 1976) and literature of industry and education, summarizing them into 5 aspects, including: 1) teacher resources management, 2) financial management, 3) management mechanism, and 4) talent development, 5) science and technology.

Teacher Resources Management for Industry Education Integration

Liu Dayu,Ding Chen (2023, p.51) proposed that the improvement of teachers' teaching ability in higher vocational colleges should start from enhancing teachers' suitability and improving teaching, strengthening the guarantee of higher vocational colleges and universities to improve teaching ability, strengthening the service output of enterprises to teachers in higher vocational colleges, and improving the evaluation effect of teaching ability.

Meng Qinggang, Cao Ying (2023, p.69) Five important measures for the construction of high-quality "dual-teacher" vocational education teachers were proposed. They are: accelerating the implementation of the "dual-teacher" teacher recognition standards, implementing the vocational school teacher education upgrade plan, promoting the integrated training of vocational teachers, strengthening the construction of the "dual-teacher" teacher training system, and strengthening the construction of part-time teachers.

An Xuewu (2023, p.91) explores the main principle of school-enterprise cooperation and the common vision and goal of high-quality education, relies on joint projects to form a structured "dual-teacher" high-quality teaching team, builds a school-enterprise cooperation platform to support team development, improves the operation system to ensure the quality of team building, improves project performance management and assessment mechanism, and improves the quality of team development. An effective way to build a team.
Hao Tianliang (2021, p.83) found that the factors affecting the implementation of enterprise practice policies of college teachers can be attributed to three aspects: difficulty in enterprise identity integration, obvious conflict between school-enterprise roles, and poor quality of enterprise practice. It is recommended to enrich the enterprise work experience of vocational education teachers in the pre-service stage, establish a normal mechanism for teachers' enterprise practice, and actively cultivate teachers' awareness of professional development.

Fu Hanfei (2020, p.48) pointed out that to strengthen the introduction of talents, by expanding talent introduction channels, strengthening the introduction of part-time teachers, and improving salary and welfare benefits, and continuously enriching the team of full-time and part-time "dual-teacher" teachers; Secondly, it is necessary to increase the intensity of teacher training and improve the overall quality of the "dual-teacher" teacher" teaching team; At the same time, it is necessary to implement the status of enterprises as the main body of participation and improve the school-enterprise alliance cultivate a "dual-teacher" teacher responsibility mechanism; In addition, it is necessary to strengthen institutional guarantees and create a good employment environment.

Changfeng (2020, p.76) found that the reasonable two-way flow of schoolenterprise personnel has built a bridge of mutual operation, mutual assistance and mutual benefit for school-enterprise cooperation and industry-education integration. The support of national policies can effectively promote the two-way flow of school and enterprise personnel; The personal development of school-enterprise personnel has an uncertain impact on the two-way flow of school-enterprise personnel; Limited interests of enterprises and shallow school-enterprise cooperation are the key factors hindering the flow of school-enterprise personnel.

Zhongyi Zhu, Guangjun Guo (2020, p.88) found that the current management of teacher resources integrating industry and education in higher vocational education has problems such as imperfect system design, insufficient teacher capacity and investment, insufficient financial investment, and imperfect construction of base conditions. Five suggestions are put forward: first, build a capacity system including education and teaching capabilities, scientific research capabilities, social service capabilities, cultural inheritance and innovation capabilities, and international exchange and cooperation capabilities; The second is to improve the construction of a talent system with structured, industrialized and socialized levels; The third is to improve the institutional system of teacher training, education and teaching reform, and scientific research services; The fourth is the performance salary system, title assessment system, and incentive system of science and technology service system; Fifth, strengthen the construction of conditions, funds, supervision and protection systems.

Huang Wenqi (2019, p.57) proposed that in order for private universities to successfully establish a faculty team that integrates industry and education, the most important point is to start from the source of teachers and strictly require teacher appointment standards. Standardized and rigorous teacher entry standards are the key to ensuring that colleges and universities can absorb high-quality and high-level teachers.

Xu Ying (2017, p.86) proposed that the understanding of the connotation of higher vocational "dual-teacher" teachers should start from both individual and group aspects: for individual teachers, "dual-teacher" teachers refer to compound teachers who not only master relevant basic theoretical knowledge, but also have strong professional practice experience; From the perspective of the group, it means that the teaching team includes both full-time teachers from the university itself and part-time teachers from enterprises, emphasizing the rationality of the structure. At the same time, she also summarized and sorted out the constituent elements and policies of the "dual-teacher" teacher team of higher vocational education, and pointed out the great practical significance of the topic of the construction of the "dual-teacher" teacher team of higher vocational education.

World Economic Forum, Whitepaper (2019) World Economic Forum (WEF) 2017 white paper "Realizing Human Potential in the Fourth Industrial Revolution" also pointed out that in order to cope with the impact of the new round of industrial revolution, we must pay attention to the cultivation of talents, and the foothold of cultivating talents lies in education, the main force of education is teachers, and the main role of teachers must be highly valued.

To sum up, Teacher Resource Management refers to the management of the school's teaching force through management activities such as planning, organising, leading and controlling, with the aim of improving the quality of teaching, enhancing the quality of teachers and improving teaching effectiveness. It contains: staffing, performance assessment, talent selection, position promotion, teacher evaluation system and other personnel organisation contents; teacher ethics education, teacher behaviour, teacher professional conduct, sense of responsibility and mission and other teacher ethics construction contents; teacher recruitment, study seminars, talent selection, title assessment, career planning and other teacher development aspects. The teacher resource management model is related to the achievement of the university's development goals and talent training objectives. Under the concept of industry-education integration, "dual-teacher teachers" and "teacher evaluation and growth system" have received widespread attention from scholars.

Financial Management for Industry Education Integration

Li Wanqing (2023, p.16) The financial management personnel of higher vocational colleges should follow the high-level and high-standard financial supplyside reform requirements, and continuously deepen the financial management and internal control of higher vocational colleges under the school-enterprise cooperation model. Strengthen the construction of internal human resources in high-level vocational colleges, and build human resource planning and incentive policies that meet the characteristics of higher vocational colleges.

Ye Junhua (2023, p.82) proposed that if you want the stable and sustainable development of the industry education integration, you need to pay attention to the work of financial management, and you can continuously improve the financial management system of both schools and enterprises integrating industry and education, strengthen financial audit supervision, clarify property rights relations, and continuously improve the comprehensive quality of financial personnel to reduce financial risk problems and improve their own risk resistance.

Zhou Yizhu (2021, p.21) School-enterprise cooperation should seek the convergence of the interests of both parties according to the principle of "complementary advantages, mutual benefit and win-win". Only by establishing a

scientific and reasonable benefit distribution plan can we better solve the contradiction between the "public welfare" of the school and the "profit" of the enterprise.

Stimac, M. (2020, p.129) mainly studies the theoretical definition and specific practice of financial strategy. Firstly, it affirms the necessity of financial strategy for the economic development of enterprises and organizations operating in the current economic environment, and summarizes the specific characteristics of financial strategy: if the overall strategy of the company is tree-like, then the financial strategy has the characteristics of subordination and branching, but at the same time, other strategies of the company will also support the implementation of the financial strategy; The analysis of financial strategy is a long-term complexity plan that is developed and adjusted according to the context of the system.

Liu Yurong (2020, p.27) proposed to build a short-term financial risk prevention mechanism. The risk prevention mechanism is established to reasonably evaluate the relevant financial situation of cooperative education programs. The first is to prepare a cash flow statement, evaluate the short-term income, financial situation and cash flow statement of the cooperative school project, and the overall budget for the future advanced income and expenditure to ensure that the cooperative school project can have accurate cash flow in the coming period. Short-term financial risk prevention mechanisms require weekly, monthly, and quarterly units. Second, build a long-term financial risk prevention mechanism. On the basis of the short-term financial risk prevention mechanism, it is necessary to formulate a long-term risk prevention mechanism according to the specific conditions of the cooperative school project, such as assessing the financial situation at this stage in three or five years, and formulating reasonable revenue and expenditure forecasting techniques, and revising the longterm financial risk prevention mechanism annually according to the actual situation of short-term finance, so as to ensure that its own financial risks can be effectively controlled and budgeted.

Liu Yurong (2020, p.19) pointed out that under the background of big data, colleges and universities should set up financial management positions oriented to the school-enterprise cooperation model. According to a large amount of data, vocational

colleges can integrate advanced computer algorithms and cloud computing capabilities into the process of school-enterprise innovation collaboration and integration, set the requirements of different accounting management positions, build an information-based incentive system, and fully guide accounting managers to follow the established financial management goals and take school-enterprise integration and innovation as a guide to ensure the orderly development of financial work in higher vocational colleges. The economic activities of higher vocational colleges are realized by relying on physical strength and intelligence. If the professional quality and vitality of financial management personnel in higher vocational colleges are insufficient, it will cause the lack of competitiveness and vitality in the development of colleges and universities.

Jiang Yadan (2019, p.93) proposed that financial management is an important guarantee role for the industry education integration. To apply big data in the innovation of financial management in universities, it is necessary to establish a sound big data application mechanism and apply the process of big data the possible problems in the university are comprehensively sorted out, and the background and basis of higher education reform and university development are used to formulate a detailed big data application mechanism according to the development of universities themselves, so that universities can correctly and effectively apply big data to strengthen financial management. At the same time, according to the process and specific situation of financial management innovation of universities, its application mechanism should be continuously revised and improved, so that it can always ensure that big data is in the financial management of universities. It can be applied comprehensively and correctly. In addition, it is also necessary to effectively supervise the implementation of the big data application mechanism to ensure that the optimized mechanism can be implement.

Mahanim Hanid, Othman Mohamed, et al (2019, p.667) At the corporate level, in addition to these factors, long-term communication and team cohesion are also indispensable factors for successful cooperation. Nazar, Zamani (2018, p.75-88) research focuses on how to reduce financial risks through financial strategy layout, and evaluates the company's management quality by risk coefficient and overall output by analyzing the selection and execution effects of different financial strategies. Nazar and Zamani's research considers financial strategy to be both a dimension in overall strategy and a specific strategy in financial management, and mentions the adoption of different types of financial decisions.

Ye Junhua (2013, p.106) pointed out that with the continuous development and growth of the national economy, the demand for talents in various enterprises has been growing. Higher vocational colleges and universities are the key point of talent transfer. Among them, the industrial college model of in-depth cooperation between universities and enterprises is the current trend, which can meet the needs of enterprises for their own talents. Under the background of the industry education integration, the industrial college can achieve coordinated development under the strength of many parties, but there are many problems in financial management, including imperfect financial management system, ambiguous property rights relationship, unbalanced level of school-enterprise cooperation, insufficient financial supervision and accounting management and accounting problems. Therefore, if you want the stable and sustainable development of the industrial college, you need to pay attention to the work of financial management, you can continuously improve the financial management system of the industrial college, strengthen the financial audit supervision, clarify the property rights relationship of the industrial college, and continuously improve the comprehensive quality of financial personnel, so as to reduce the financial risk problem of the industrial college and improve its own risk resistance.

To sum up, Financial Management is the process of raising, allocating, using and monitoring funds in a rational manner to achieve financial objectives and to ensure the long-term development and stable operation of an enterprise or organisation in the course of its operation. Financial management includes financial decision-making, financial control, financial analysis and other aspects. Its main objective is to achieve effective management and use of funds in order to maximise the return on corporate wealth value and profit. The financial management of the industry-education integration includes the source of funds, funding input, planning and budgeting, resource allocation, financial supervision and risk management, etc. It also involves the allocation of inputs and interests between universities and enterprises. In the context of the industry-education integration, "diversified input methods" and "distribution of university-enterprise rights and interests" have received attention from academics.

Management Mechanism for Industry Education Integration

Wang Hua, Deng Cheng (2022, p.32) The study finds that the three basic functions of modern technical colleges are coeducation based on factor integration, joint innovation based on knowledge value-added, and benefit symbiosis based on value creation. It is recommended to establish and improve operational mechanisms such as development momentum mechanism, information sharing mechanism, cooperation and trust mechanism, and benefit distribution mechanism, and promote effective linkage between the two.

Zhou Zhengzhu, Yang Mei (2021, p.20) research points out that in order to break through the bottleneck of industry-education integration development, promote the deep industry education integration in application-oriented undergraduate colleges, establish the concept of "big platform", and promote platform construction by level and stage; Explore new models of organizational system through institutional design; Improve the management mechanism so that second-level universities become the main body of the construction of the industry-education integration platform; Establish and improve the system, strengthen the guiding role of assessment and incentive in the construction of the integration platform of industry and education.

Liu Jingjing (2021, p.60) proposed that in order to further promote the practical process of modern apprenticeship, it is necessary to clarify the structure, form, knowledge and technology in the process of industrial development, clarify the fundamental requirements of the industry for the professional layout, implementation subject, faculty and development orientation of modern apprenticeship, and build the integration mechanism of modern apprenticeship and industrial development from the following dimensions: interest-driven, collaborative cooperation, dual teacher teaching, and mutual recognition of qualifications, in order to better realize the integrated

development of education and industry, and study the integration mechanism of modern apprenticeship and industrial development.

Xu Quan, Cheng Baozhi (2021, p.15) Taking the Zhongxing Information College of Daqing Normal University as an example, the study expounds the path, strategy, practice and effectiveness of local undergraduate colleges to cultivate applicationoriented talents with technical skills that meet social needs by relying on new forms of application-oriented talent training such as industrial colleges, top-level design and concept updating, and actively combines with industry and industry needs to provide better opportunities for local undergraduate colleges and universities to meet the needs of regional economic development. It aims to provide a reference for the construction of industrial colleges and the innovation of talent training mechanism of local undergraduate colleges and universities in the process of transformation and development.

Fei Shanshan (2020, p.58-61) First, the coupling points and internal relationships of industry-education integration are analyzed from the three aspects of suitability requirements, internal dynamics and external conditions of the establishment of the industry-education integration mechanism, and then the talent training and training mechanism, science and technology finance support mechanism, science and technology development and achievement transformation mechanism are designed from the macro level. From the meso level, the operation mechanism of the interaction and mutual assistance community between industrial clusters and discipline clusters of vocational colleges, the resource sharing mechanism of regional vocational colleges and regional industrial organizations, the mechanism of scientific and technological research and development, and the financial incentive mechanism are designed. Design internal reform mechanisms such as the operation mechanism of industry-education integration organization, the dual-oriented professional construction mechanism, and the transformation mechanism of scientific and technological achievements from the micro level.

Li Jing, Wang Xuhui (2020, p.40) proposed to enhance the endogenous driving force of first-class academic clusters leading the deep industry education integration from the aspects of cooperation mechanism, formation mode, institutional structure and resource allocation, realize the practical leading role of first-class academic clusters on the deep industry education integration from the aspect of supply and demand matching, policy supply, intermediate organization coordination, and establish a service platform for industry-education integration.

Zhang Jie (2020, p.55) "The school-enterprise cooperation model of integration of characteristic enterprises is conducive to forming a school-enterprise collaborative education mechanism and promoting in-depth cooperation between schools and enterprises; It is conducive to the precise docking of professional and industrial needs, and deepens the industry education integration. "Professional enterprise integration" generally exists in the form of a tertiary college, and the second-level college is responsible for the construction and operation management of the third-level college as the responsible department. In the operation of the school-enterprise cooperation model of "special-enterprise integration", a school council should be established, school-enterprise should participate in the whole process of talent training.

Qian Wei (2020, p.24) Introduced the "1234" practical mechanism of "1+N" open school-enterprise cooperation of "School of Industrial Technology" of Shanghai University of Technology, aiming to improve students' engineering practice and innovation ability, with schools and enterprises as the main body, thought leadership, teacher teaching and research improvement, student internship four hands and three elements, enterprise tutor teaching, graduation project and student participation in enterprise project development.

Wang Rong, Huang Lin (2019, p.41) recommended to establish a talent development supply system that is compatible with regional economic needs, which should not only break the inertia of the talent development of traditional undergraduate colleges, but also break the bottleneck that restricts the industry education integration through institutional reform. Through the two levels of government and school, the reform idea of industry education integration is put forward, which provides a reference for the implementation of the industry education integration and the solution of the "two skins" problem of supply and demand for talent training.

Liu Xia (2020, p.41-45) Through the CAS characteristic analysis of industryeducation integration in vocational colleges, it is found that industry-education integration has four characteristics: diversity, aggregation, flow and nonlinearity, and then builds an "O2O" mode operation platform including resource integration mechanism, collaborative operation mechanism, information communication mechanism, incentive and constraint mechanism.

To sum up, Management Mechanism refers to the process of establishing a set of management system framework within an organisation by developing various types of management regulations, processes and standards, and relying on the organisational structure to advance work, ensure management efficiency, quality, accuracy and stability, and achieve organisational goals. The mechanism can include various management systems, such as financial management, human resource management, teaching management, risk management, knowledge management, etc., which can be improved and adjusted according to the needs and characteristics of different organizations. It can be an incentive mechanism, an operation mechanism, an evaluation mechanism, a sharing mechanism, a cooperation and trust mechanism, a benefit distribution mechanism, etc. Each mechanism should have a clear division of responsibilities, clear role requirements, clear workflow and process control, effective monitoring and tracking, scientific performance distribution and incentive mechanism, and corresponding assessment and improvement mechanism. Through an effective management mechanism, the organization can improve the transparency, scientificity and effectiveness of management, stimulate the initiative and enthusiasm of employees, improve operational efficiency and economic benefits, and obtain better competitive advantage and sustainable development.

Talent Development for Industry Education Integration

Huang Xiaobiao, Hu Shimin, Liu Yuhua (2022, p.9-11) In September 2021, General Secretary Xi Jinping made a major strategic deployment at the Central Talent Work Conference to build a high-level talent highland in the Guangdong-Hong Kong-Macao Greater Bay Area, which put forward new and higher requirements and expectations for the development of higher education and high-level talent construction in the Greater Bay Area, and also gave great historical opportunities.

Zou Yuxiang (2021, p.5) Based on this, we take the industry education integration and school-enterprise cooperation as the entry point, coupled with the talent development objectives, specifications and talent development quality assessment mechanism of vocational universities, take the reform of curriculum system and teaching content as the starting point, based on the competence-based theory and the theory of vocational competence development stage, take the government chain, vocational college chain and enterprise chain as the outer helix, and take the knowledge and skills training as the outer helix. we build the practical innovation platform of school-enterprise cooperation with the government chain, vocational college chain and enterprise chain as the external spiral and the knowledge chain, skill chain and quality chain as the internal spiral.

Chen Zhijun, Li Shihui, Wang Bo (2021, p.8) Aiming at the problems of independent associations, courses, competitions and scientific research in traditional teaching, as well as the insufficient deep industry education integration, this paper proposes a high-skilled talent training innovation system of "deep industry education integration, collective courses, competitions and scientific research collaboration". Through the "Three Ones Project", the system effectively integrates industry and education, builds a collaborative education mechanism for society, curriculum, competition and scientific research based on two-way skill workshops, and provides a reference for cultivating innovative high-skilled talents.

Feng Chun (2021, p.10) In view of the problems faced by the training of intelligent manufacturing talents under the background of new projects, explore the reform path of intelligent manufacturing talent training in local universities: facing the needs of industrial development, guided by the output of achievements, optimize the intelligent manufacturing talent training system; Through in-depth promotion of the industry education integration, a new model of intelligent manufacturing talent training will be built; Build a sustainable development of school-enterprise cooperation with two-way communication between college teachers and enterprise talents as the core.

This system has proven to be more effective than others. The system has been proven to improve the quality of training of regional smart manufacturing technical personnel.

Song Yiman (2019, p.5) believes that the focus of modern economic development is still on the real economy, and the current ability of talents cultivated by secondary vocational education to serve the society is insufficient, and it is necessary to further deepen the industry education integration and give full play to the supporting role of secondary vocational education in talents and technology.

Yang Guomin (2021, p.93) proposed to build a school-enterprise cooperation platform for regional industrial colleges, closely connect the training process of highskilled talents with regional industries, deepen the industry education integration, build "creating majors in line with the industry, standards in line with posts, courses due to tasks, and teaching due to examinations", promote the dynamic adjustment and optimization of training models through industry-education integration indicators, so that talent training closely follows social and economic development, and cultivate high-quality and high-skilled talents for industrial development.

Christopher Dougherty (1987, p.61) Since the establishment of the German "dual system" system, a large number of professional and high-quality talents have been trained, which is also an important factor why German industry is famous in the world. In 1969, the Vocational Education Act was adopted, which represented the official introduction of the "dual system" education system in Germany. The wellknown expert Christopher Dowerfer in "The German Dual System: A Different Perspective" talks about two problems in the dual system, namely the popularity of vocational education and the location of training, which analyzes and concludes that although the amount of vocational training in Germany is more than in many other countries, the effect is not as obvious as its quantity, in many occupational fields, apprentices are the main labor force, but it is unrealistic to let apprentices in all vocational fields receive the same level of training.

Liu Juan,Zhang Lian (2020, p.15) The "sandwich" education system began in the United Kingdom, was founded in 1901 Sunderland Technical College, the founder of this school clearly understood that the shortcomings of the traditional education model could not meet the talent needs of social development, so experimentally introduced "sandwich" education in its engineering college, so that students can work during the day and study at night, while learning knowledge, increase work experience to obtain higher qualifications.

Huang Riqiang (2022, p.9) pointed out that the "sandwich" education model emphasizes the cultivation of students' universal ability, which is lifelong for students, will not be unusable with the change of specific occupation, and is a necessary skill for anyone engaged in any job.

Liu Juan (2020, p.60) and other relevant researchers wrote the article "Analysis of the Development Process of British Sandwich Education and Its Policy Initiatives" after investigation, and pointed out that the success of the "sandwich" education model is inseparable from the reasonable positioning of the British government itself, and only under such a reasonable positioning can the "sandwich" model provide the necessary guarantee, followed by the dual teaching links and resources of schools and enterprises, which help students combine theory and practice and improve their professional skills, which are the success factors of sandwich education.

In sum up, Talent Development refers to the process of cultivating talents with certain knowledge, skills, quality and innovation ability through education, training, practice and other means. The purpose of talent training is to enable students to gradually acquire certain professional knowledge and skills in learning, practice and work, form good quality and innovation ability, and become talents in specific fields. However, different fields and universities have different educational philosophies and training objectives. In general, the purpose of talent training is to meet the needs of enterprises or organisations for talent and to promote their sustainable development and progress, as well as to cultivate the various types of talents needed for the development of the country in various fields.

Science and Technology for Industry Education Integration

Yang Zongkai, Rao Jingyang (2022, p.49) With the full integration of digital technologies such as artificial intelligence, big data, and cloud computing into human society, they have gradually become a solid support for educational reform. The research on digital technology-enabled education involves different subdivisions such as basic education, vocational education, and postgraduate education, and ultimately

points to the fact that the digitalization of education can be used as an important reference indicator for building a high-quality education system.

Research Group on Artificial Intelligence and Vocational Education Transformation, Think Tank Team, National Institute of Development Strategy, Wuhan University (2020, p.115) In the digital era, the industry education integration is an important way to cultivate high-quality talents who meet the needs of industrial digital transformation and intelligent upgrading, and is a "catalyst" to accelerate the development of strategic emerging industries

Notice of the State Council on the issuance of the 14th Five-Year Plan for the development of the digital economy (2022). During the "Thirteenth Five-Year Plan" period, China deeply implemented the strategy of digital economy development, with global leadership in information infrastructure, steady progress in industrial digital transformation, competitive development of new formats and new models, remarkable results in digital government construction and continuous deepening of international cooperation in digital economy, providing a realistic foundation for digital technology to release huge transformative potential.

Yang Liushuo, Zhang Hui, Wu Xujun (2023, p.109) The core of promoting the high-quality development of industry-education integration led by digital technology is to use the characteristics of cross-border integration, innovation-driven, structural reshaping and decentralization of digital technology to provide new concepts, new models and new forms for the systematic construction of practical teaching systems.

Yang Liushuo, Zhang Hui, Wu Xujun (2023, p.109) Explore the "digital +" practical teaching system, that is, from the dimensions of training goals, teaching scenarios, teaching content, teaching methods, teaching resources, etc., break the barriers between schools and enterprises, and strengthen the whole process and full-cycle participation of both schools and enterprises.

Huai Jinpeng (2023) The efficient management of industry-education integration realizes business collaboration, process optimization, structural reshaping and precise management through the correlation comparison and logic verification of big data, artificial intelligence and other technologies, and organically combines common requirements with classification evaluation, so as to better improve the efficiency of education management and the scientific level of educational decisionmaking.

Zhang Zhengang, Hu Antao, et al. (2022, p.160) The Guangdong-Hong Kong-Macao Greater Bay Area proposes to build an international science and technology innovation center with global influence, and clearly puts scientific and technological innovation in a prominent position, which puts forward higher requirements for the quality of scientific and technological innovation talent training.

Wang Chun (2022, p.3) Digital technology means information feedback is the use of digital technology means such as internship comprehensive platform, small video, WeChat and other methods of regular interviews, to investigate the opinions of training subjects on the teaching and internship environment, and provide information for the adjustment of school teaching and enterprise work practice plans.

Liu Jie and Zheng Li (2022, p.12) analyzed the demand characteristics of business talents in the digital economy era and the new trend of future industry education integration, and proposed that new business talents in the digital economy era should form a composite knowledge structure on the basis of new thinking, understanding new rules, new theories and mastery of new tools, have data decisionmaking and innovation capabilities, and have the value concept of international vision and win-win cooperation, as well as the excellent quality of lifelong learning and continuous improvement. The future model innovation of industry-education integration mainly lies in giving full play to the supporting role of science and technology, and establishing systematic and effective industry-university interaction in the complex ecosystem led by universities.

Xiang Yangxue, Chen Jin (2020, p.74) The model innovation of industryeducation integration in the era of digital economy mainly lies in giving full play to the supporting role of science and technology, establishing systematic and effective industry-university interaction in a complex ecosystem dominated by universities, including realizing the intelligence of the teaching process in specific scenarios, and completing the dissemination and application of knowledge in enterprise operations, so as to form a talent training ecosystem with mutual feedback. In sum up, High-quality industry education integration is an important part of high-quality education system, in which technology, as a bridge and link to promote the high-quality development of both the education system and the industrial system, can promote the transformation of education goals, knowledge systems, training methods, teaching systems, and teacher team construction in the education system from "information islands" to "system online", serve the digital transformation of industrial demand and industrial chain, and achieve the purpose of synergy and linkage of talent chain, education chain, industrial chain and innovation chain.

Information about Industry Education Integration in Guangdong

Huang Haining, Chen Xihua (2020, p.13-19) The Outline of Guangdong Province's Medium- and Long-Term Education Reform and Development Plan (2010-2020) further proposes that different types of colleges and universities in the region should be scientifically positioned and gradually form a development pattern with clear positioning, distinctive characteristics and outstanding advantages. The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area plays an important strategic role in the overall development of the country. The cultivation of application-oriented talents is a reliable guarantee for the construction and development of the Bay Area. Therefore, discussing the demand for applicationoriented universities in the construction of the Guangdong-Hong Kong-Macao Greater Bay Area is the premise of the accurate positioning of Guangdong universities, which is conducive to breaking the current situation of talent training supply side and industrial demand.

(Source: Central People's Government of the People's Republic of China, 2019). The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area proposes to promote the development of educational cooperation, build a talent highland, vigorously improve the level of education science and technology, and build a strong country with talents and education. The economic construction of the Greater Bay Area has promoted the development of private universities, and the construction of the Greater Bay Area needs to rely on private universities to provide high-quality application-oriented talents to a certain extent, providing a sustainable innovation impetus. (Source: National Economic and Social Development Plan of the People's Republic of China, 2021). In 2021, the Outline of the 14th Five-Year Plan for National Economic and Social Development and the Long-term Goals for 2035 adopted by the Fourth Session of the 13th National People's Congress proposed to "actively and steadily promote the construction of the Greater Bay Area" and "strengthen the coordinated development of industry, education and research in Guangdong, Hong Kong and Macao", which clarified the direction for the industry education integration in the Greater Bay Area. Central People's Government of the People's Republic of China. Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Goals for 2035.

Chen Fang, Zheng Wen (2019, p.6) Guangdong Province has fully implemented school-enterprise precise docking and precise education, solved the problem of incompatibility between education chain, talent chain and industrial chain and innovation chain, broadened the funding source channels of colleges and universities through school-enterprise cooperation, and improved their innovation and entrepreneurship capabilities.

To sum up, Guangdong private universities integrate industry-education talent training model to promote the high-quality development of the Guangdong-Hong Kong-Macao Greater Bay Area economy. As a private university that cultivates application-oriented talents, it must pay attention to the needs of enterprises, improve the platform and guarantee mechanism for collaborative education, improve the teaching effect of school-enterprise collaborative education, give full play to the mission of private universities to serve regional economic development, and cultivate innovative talents with applied technology skills for regional economic and social development.

Context of Private Universities

Private universities are a group of higher education institutions with different levels, categories, and levels. The logic of its existence and the organizational mechanism of its operation have their own characteristics, which are mainly reflected in practical, practical and practical aspects. However, different temporal and spatial environments have different needs for running applied universities, thus shaping their own personalities.

Hu (2013, p.16) Chinese scholars believe that "private universities" is a new type of university that emerges and develops along with the massification of higher education in China. The proposed type of university" private universities" follows the research paradigm of typology. Based on the actual operation of universities, higher education administrators and higher education researchers use discursive research or ideal type method to propose "private university" as an ideal type of higher education, and theoretically summarize the basic characteristics of "private university" and the path of building "private university". Theoretically, the basic characteristics of "private universities" and the path of building an private universities have been summarized.

Shao Peide (1993, p.102) After 1977, the original state-run public higher education system was struggling, especially the lack of financial resources of the central government seriously restricted the development of public higher education 1975-1985, China's public education expenditure accounted for only 2.6% of the GNP of that year, while the world average was 6%—7% in the same period. The limited increase in education funding is like a drop in the bucket, and the state is unable to manage education. In order to solve this problem, people of insight in the academic circles at that time pointed out that the education funding system should be reformed, and a new system of education funding should be established by the government, society and citizens through various channels, and experts from the Ministry of Finance also wrote that "while the state greatly increases education funding, it is also necessary to call on society and families to increase investment in education."

After 1992, the development of private higher education began to accelerate, and the interests of the central government in the meantime were also very clear: with the gradual abolition of the employment "dual-track system", especially the impact of the large-scale development and development of enterprise organizations as the basic form of economic activities, the welfare of the distribution of employment positions gradually declined to candidates, the market for college graduates to choose their own jobs continued to expand, and by 2000, the employment registration card of college graduates replaced the graduate dispatch card, and the employment policy was marketized. The central government no longer needs to bear the burden of employment of college graduates, and it also opens the door for private higher education to enter full-time academic education. It was also after 1992 that the gross enrollment rate of higher education in China began to rise, entering the stage of transformation from elite education to mass education, which also put more pressure on the government's higher education expenditure.

Huang Lin, Sui Guohui (2019, p.11) Although private universities have received the attention of China's Ministry of Education, they still suffer from the dilemma of academic value and the practical dilemma of integrating industry and education. On the one hand, private universities have been produced for a relatively short time, the theoretical system is still not perfect, and there is still a big gap between them and traditional academic universities in terms of academic research and academic value. On the other hand, the following problems generally exist in the industry education integration in private universities: 1) the talent cultivation mode has not changed fundamentally; 2) the driving force of university change is insufficient; 3) the driving force of enterprise participation in university education is insufficient; 4) the practical application ability of dual-teacher faculty is insufficient; 5) it is difficult to form an effective team between university and enterprise; 6) the mechanism of collaborative education is missing; 7) the cooperation mode between university and enterprise is single, and the industry education integration is only formal.

As of 2023, there are 25 private universities in Guangdong, namely, Guangzhou Xinhua College, Guangdong Baiyun College, Guangdong Peizheng College, Guangdong Neusoft College, Guangzhou City Institute of Technology, Guangzhou Software College, Guangzhou Nanfang College, Guangdong University of Foreign Studies Nanguo Business College, Guangzhou Huashang College, South China Agricultural University Zhujiang College, Guangzhou Institute of Technology, Guangzhou Huali College, Guangzhou Institute of Applied Science and Technology, Guangzhou Business College, Guangzhou Business College, Guangzhou Vocational and Technical University of Science and Technology and so on. The development of these universities has the abovementioned problems in different degrees.

Related Research

This study investigates the management guideline of industry education integration in private universities. Through literature search and analysis of key words related to this study, we found that the relevant studies are mainly distributed in the following areas: teacher resources management, financial management, management mechanism, talent developmen, science and technology.

Liu Dayu, Ding Chen (2023, p.51) pointed out higher vocational teachers shoulder the heavy burden of cultivating applied talents with both theoretical knowledge and strong practical skills for the front line of production and construction, and the level of teaching ability of higher vocational teachers will directly affect the training quality of talents in higher vocational colleges. On the basis of drawing on previous researches, combined with the existing research results at home and abroad, this study systematically summarizes the structure of higher vocational teachers' teaching ability, and takes the four aspects of teaching design ability, teaching implementation ability, teaching evaluation ability, and information technology application ability as the research object of this paper. In this paper, the current development status of teachers' teaching ability at four levels is summarized. The evaluation results were combined with the questionnaire survey of teachers in the school to further explore the influencing factors and summarize the impact on teaching quality.

An Xuewu (2023, p.91) suggest that the school-enterprise cooperation to build a "dual-teacher quality" teaching team is an important path for vocational education to improve teaching quality and cultivate outstanding skilled talents. With the practice of "two-way counterpart temporary post" of schools and enterprises as a breakthrough, through the methods of "professional teachers to the enterprise on a temporary post, and hiring technical backbone skilled craftsmen to teach part-time in the school", we can effectively break through the bottleneck of the construction of the "double teacher quality" teaching team of vocational schools, realize the effective docking of vocational education and front-line production, and build a multi-level, high-quality, reasonable structure and distinctive "double teacher quality" professional teaching team with obvious echelon characteristics and can play a demonstration and leading role.

Hao Tianliang (2021, p.83) suggest that enterprise practice policy is an important driving force to promote teachers' professional development and improve teachers' practical teaching ability. However, the implementation of the policy did not meet expectations, but was full of difficulties. Based on this, this study conducted in-depth interviews with 21 professional teachers from 6 higher vocational colleges in Jiangsu, Zhejiang and Shanghai, in order to understand the understanding of the dilemma of the policy implementation by the direct participants of enterprise practice. The results show that the factors affecting the implementation of enterprise practice policy for teachers in higher vocational colleges can be summarized into three aspects: the difficulty of integrating enterprise identity, the obvious conflict between school and enterprise roles, and the low quality of enterprise practice. It is suggested to enrich the enterprise work experience of vocational education teachers in the pre-service stage, establish a normalized mechanism for teachers' enterprise practice, and actively cultivate teachers' professional development awareness.

Xu Ying (2017, p.86) suggest that in view of the problems and challenges faced by the high-quality development of higher vocational education, the construction strategies such as the industry education integration, the implementation of talent training and technological innovation in cooperation with enterprises, the cultivation of first-class brand majors led by clusters, and the systematic planning to build a "dual teacher and four titles" teacher team are proposed, so as to improve the effectiveness of service development through the combination of education and training, and form a new pattern of opening up to the outside world with innovative paths, multi-governance and improving internal governance.

Li Wanqing (2023, p.16) proposed that the implementation of comprehensive management of internal financial risks in higher vocational colleges is an effective means to stabilize the national strategy of rejuvenating the country through science and education and the strategic value of strengthening the country with talents, and it is also an important way to stabilize its education level. It is the only way to realize the sustainable development of China's higher education.

Ye Junhua (2023, p.82) proposed that the financial management of the integration of industry and education is still in the exploratory stage in the schoolenterprise cooperation model. In the actual process of financial management, there are often problems such as imperfect budget mechanism, imperfect management mechanism and low degree of information application. As a non-profit institution, vocational colleges need to continue to improve and build a financial management mechanism that meets the development characteristics of the times. Therefore, this paper explores the necessity and existing problems of financial management in vocational colleges and universities from the perspective of the integration of industry and education and the school-enterprise cooperation model, and believes that it is necessary to build a sound financial risk prevention mechanism, reasonably set up financial management positions, and scientifically evaluate financial management, so as to promote the orderly development of financial management in vocational colleges.

Stimac, M. (2020, p.129) pointed out that financial management is an important part of university management, which helps to improve the service efficiency and governance ability of universities. This paper focuses on the management practice of colleges and universities, sorts out the relationship between the policy basis, institutional foundation and content basis of financial management, analyzes the outstanding problems, and puts forward countermeasures to optimize the integration path from three aspects: strengthening system construction, focusing on the concept of "integration of industry and finance", and making full use of modern information technology, in order to improve the financial management process, and realize the modernization of financial management governance ability. The conclusions of this study are helpful to provide empirical evidence for relevant departments and universities to formulate policies and systems, promote the

standardization and scientificization of financial management integration, and promote the transformation from financial accounting to management accounting in universities.

Wang Hua and Deng Cheng (2022, p.32) proposed that the integration of industry and education is an important part of the long-term development of higher vocational education, and the characteristics of the integration of industry and education in higher vocational education under the background of market economy are: multi-functional compound, demand-oriented, multi-subject management and industrialization. To build a mechanism for the integration of industry and education, we must take technology as the entry point, set up a technology platform integrating production, learning and research, and follow the enterprise management mechanism, the industrialized operation mechanism, the value-oriented evaluation mechanism, the market-oriented advance and retreat mechanism and the talent flow mechanism responsible for the industry association.

Zhou Zhengzhu, Yang Mei (2021, p.20) proposed that in view of the current phenomenon of derailment and disconnection between college-bachelor's bridging education, the OBE education concept can be applied to promote the seamless transition between college and bachelor, build a college-bachelor's bridging course system and college bridging majors, achieve the training goals of college-bachelor bridging talents by formulating training, clarify graduation requirements, optimize the curriculum system, and improve the quality assessment mechanism.

Fei Shanshan (2020, p.58-61) pointed out that the construction of vocational education industry-education integration enterprise has a solid theoretical foundation, historical foundation, contemporary foundation, practical foundation and industrial foundation. The construction of vocational education industry-education integration enterprises requires joint efforts in terms of sound institutional layout, activation of endogenous power, and formulation of provincial standards.

Qian Wei (2020, p.24) suggest that cultivating applied talents through the integration of industry and education has become the only way for the development of applied universities. The integration of industry and education involves schools, governments, industry enterprises and many other subjects, through the establishment

of "government-led, industry-guided, enterprise-involved, school-promoted" four-ring linkage collaborative education management mechanism, collaborative construction of practical teaching platform, collaborative construction of curriculum system, collaborative construction of teaching team, reform of teaching methods and evaluation mechanism, can effectively promote the integration of industry and education in applied universities, and cultivate applied talents.

Zou Yuxiang (2021, p.5) pointed out that the strategy of deepening the industry education integration adheres to the guidance of cultivating high-quality technical and skilled talents, strengthens school-enterprise cooperation, deepens the industry education integration, focuses on resources, systems, culture, etc., brings together government, schools, industry and enterprises, gives play to the government's macro-control function, builds a long-term mechanism for the industry education integration, establishes an open and inclusive education system, carries out dynamic monitoring and multi-dimensional evaluation, and promotes the deep industry education integration.

Chen Zhijun, Li Shihui, Wang Bo (2021, p.8) pointed out that the rapid development of society, the requirements for talents in all walks of life are increasing year by year. In order to improve students' comprehensive ability and realize the effective combination of theory and practice, many colleges and universities have begun to explore the feasibility of the high-level application-oriented talent training model with the connotation of "integration of industry and education". Based on the integration of industry and education to achieve high-level application-oriented talent training, colleges and universities need to comprehensively analyze the current situation of their own education and the development needs of students, so as to formulate targeted talent training plans, carry out in-depth cooperation with enterprises, and promote students to verify theories in practice, enrich practice in theory, and then achieve long-term development. This paper discusses and analyzes the connotation and advantages of the integration of industry and education in colleges and universities, the problems faced by the integration of industry and education in colleges and universities, and the training mode of high-level applied talents with the connotation of "integration of industry and education".

Feng Chun (2021, p.10) suggested that the training objectives and evaluation standards of innovative and entrepreneurial talents in higher vocational colleges should be taken as the main line, and the problems existing in the process of innovation and entrepreneurship talents in higher vocational colleges should be systematically summarized in accordance with the principles of integration of industry and education and open education, and the reform and innovation of innovation and entrepreneurship talent training mode should be actively explored, and new measures of knowledge system diversification, ability structure diversification, quality structure diversification and education mode diversification should be proposed, so as to reconstruct a new model of innovation and entrepreneurship talent training that integrates talent training and service local economic and industrial development.

Huang Riqiang (2022, p.9) suggested that the industry education integration is an important starting point for improving the quality of application-oriented talent training and regional economic and social innovation and development, and is also a necessary way to build a high-level application-oriented university.

Yang Zongkai,Rao Jingyang (2022, p.49) proposed to starting from the new connotation of the industry education integration in regional vocational education in the era of digital economy, the three core meanings of "connection", "data" and "intelligence" in the construction of the digital connotation of the industry education integration are clarified. Based on the all-round "connection" between industry and education inside and outside, promote the great expansion of "data" of industry and education, realize the "intelligent" development strategy of the industry-education integration system, and form a good ecology of industry-education integration.

Yang Liushuo, Zhang Hui, Wu Xujun (2023, p.109) proposed that digital technology empowers the integration of industry and education, which is the only way for higher education to adapt to the development trend of the times and respond to the needs of national development. With the deepening of the digital transformation of the integration of industry and education, the innovative effect of digital technology has become more and more prominent, and the integration of industry and education empowered by digital technology has become an inevitable means to promote and realize the high-quality development of the integration of

industry and education. The high synergy between demand-side policies and supplyside policies, the strong coupling between the needs of education reform and industrial transformation, and the enhanced availability of digital technology at the social level also improve the feasibility of digital technology to empower the highquality development of industry-education integration. It is necessary to promote the integration of industry and education to achieve high-quality development by building a big data platform for information sharing, promoting the digital transformation of the teaching team, exploring the "digital +" practical teaching system and enabling the assessment and evaluation supervision mechanism, so as to cultivate high-quality talents urgently needed by the modern industry.

Xiang Yangxue, Chen Jin (2020, p.74) proposed that with the rapid development and application of 5G communication technology, as well as the largescale construction and use of new infrastructure, the new digital economy model of big data, artificial intelligence, and new Internet platforms is constantly "spreading" in traditional industries, and is rapidly promoting the transformation and iterative upgrading of industries. Starting from the current situation of the integration of industry and education in the digital background, this paper analyzes the new challenges of the integration of industry and education under the "digital transformation" by taking the marketing major as an example, and explores the construction of a marketing professional integration model based on the "digital middle platform" in view of the challenges faced by the integration of industry and education, so as to cultivate more high-quality talents.

To sum up, through literature search and analysis of keywords related to this study, the above research is a guideline for the integration of industry education in private universities.

Chapter 3 Research Methodology

This research focuses on guidelines improving the innovative of industry education integration in Guangdong Private Universities. To study the current situation and provide guidelines and evaluation guidelines for improving the innovative of industry education integration in Guangdong Private Universities. The researcher have the following procedures. The purpose of this research is to study the following aspects: 1) to study the level of industry education integration of private universities in Guangdong, 2) to develop strategies of development for industry education integration of private universities in Guangdong, 3) to evaluate the guidelines of development of industry- education integration of private universities in Guangdong. The researcher have the following procedures.

- 1. The population / Sample group
- 2. Research Instruments
- 3. Data Collection
- 4. Data analysis

Phase 1: The objective of this phase is to study the level of industry education integration in Guangdong Private Universities.

The Population / Sample Group

The Population

The population of this research were 1200 administrators from 10 private universities in Guangdong Province.

The Sample Group

According to Krejcie and Morgan (1970) sampling table, the sample group of this research were 291 administrators from 10 private universities in Guangdong. By using purposive random sampling and sample random sampling was also used by drawing from private universities.

No	Private university in Guangdong	Population	Sample
			group
1	Guangzhou Xinhua University	126	31
2	Guangdong Baiyun University	119	29
3	Guangzhou City University of Technology	118	29
4	Software Engineering Institute of	120	29
	Guangzhou		
5	Nanfang College Guangzhou	125	30
6	Guangdong University of Foreign Studies	116	28
6	South China Business College		
7	Guangzhou Huashang University	121	29
8	Guangzhou Institute of Science and	115	29
	Technology		
9	Zhuhai College of Science and Technology	118	28
10	Dongguan City University	122	29
	Total	1,200	291

Table 3.1 Lists of university and sample size

According to table 3.1, it showed that Guangzhou Xinhua University, Guangdong Baiyun University, Guangzhou City University of Technology, Software Engineering Institute of Guangzhou, Nanfang College Guangzhou, Guangdong University of Foreign Studies South China Business College, Guangzhou Huashang University, Guangzhou Institute of Science and Technology, Zhuhai College of Science and Technology, Dongguan City University.

Research Instruments

Questionnaire

The instrument to collect the data for objective one, to study the current situation of the industry education integration in Guangdong private universities was questionnaire. The questionnaire designed based on the integration of industry education in five following aspects: 1) Teacher Resources Management; 2) Financial

Management; 3) Management Mechanism; 4) Talent Development; 5) Science and Technology.

The questionnaire was provided into two parts:

Part 1: Survey about personal information of respondents, gender, age, educational background, job title and working years.

Part 2: Survey about the current situation of industry education integration in Guangdong private universities. There are 10 questions for teacher resources management, 11 questions for financial management , 13 questions for management mechanism, 12 questions for talent development, and 12 questions for science and technology, total 58 questions. The criteria for data interpretation based on five-point Likert's scale, as follows:

5 express the level of industry education integration at the highest level
4 express the level of industry education integration at high level
3 express the level of industry education integration at medium level
2 express the level of industry education integration at low level
1 express the level of industry education integration at the lowest level
The data interpretation for average value is based on Rensis Likert (1932).

The data interpretation is as follows:

4.50 – 5.00 refers to the highest level

3.50 – 4.49 refers to high level

2.50 – 3.49 refers to medium level

1.50 – 2.49 refers to low level

1.00 – 1.49 refers to the lowest level

Constructing a questionnaire process

The construction process of questionnaire was as follows:

Step 1: Reviewing and analyzing documents, concepts, theories, and research related to improving of industry education Integration.

Step 2: Constructing the questionnaire about the current situation of managers of industry education integration in private universities in Guangdong. Then sending the questionnaire outline of questionnaire to the thesis advisors to review and revise the contents according to the suggestions.

Step 3: The index of objective congruence (IOC) of the questionnaire was examined by three industry education integration experts in Guangdong universities.

Step 4: Revise the questionnaire based on the experts' suggestions.

Step 5: The questionnaire was distributed to 30 administrators in private universities in Guangdong for try-out. The questionnaire was tested for reliability and validity.

Step 6: The questionnaire was applied to 291 administrators in private universities in Guangdong.

Data Collection

The data collection for objective 1: to study the current situation of industry education integration in Guangdong private universities, as following procedured:

Step 1: The researcher requested requirement letter form the graduate school, Bansomdejchaopraya Rajabhat University for requiring to collect the data from 291 administrators in private university in Guangdong.

Step 2: The researcher distributed the questionnaire to 291 administrators. A total of 291 questionnaires can be returned, accounting for 100%.

Data Analysis

The data analysis in this research, the researcher analyze the data by package program, as follows:

Step 1: The personal information of the respondents classified by gender, age, educational background, job title and working years were analyzed by frequency and percentage.

Step 2: The current situation of integration of industry-education in private universities in Guangdong in five following aspects: 1) teacher resources management, 2) financial management, 3) management mechanism, 4) talent development, and 5) science and technology, were analyzed by mean value and standard deviation. **Phase 2:** the objective of this phase is to formulate the guideline for Improving the industry education integration in Guangdong Private Universities.

Key information

The interviewees in this research were 20 high-level administrators in private universities in Guangdong. The qualifications of interviewees are as follows:1)at least 5 years of work experience of the industry education integration administrator in private universities,2)have extensive experience of the industry education integration,3)must be willing to participate in the recorded semi-structured interviews,4) must be willing to review their interview transcripts for validation.

Research Instruments

Structured Interview

The instrument to collect the data for objective two, to develop guideline for improving of industry education integration private universities in Guangdong Province.

The structured interview designed based on the current situation of innovative leadership of middle-level administrators in private universities and industry education integration in five following aspects: 1) improving teacher resources management, 2) supporting financial management, 3) complete management mechanism, and 4) complete talent development, 5) enhancing science and technology. The structured interview provide into two parts:

Part 1: the personal information of interviewees, classified by interviewee, interviewer, education background, work experience, interview time, and interview date.

Part 2: the questions about suggestion for improving the current situation of industry education integration base on five aspects: 1) improving teacher resources management, 2) supporting financial management, 3) complete management mechanism, and 4) complete talent development, 5) enhancing science and technology, for middle-level administrators in private universities in Guangdong Province.

Constructing a structured interview process

Step 1: Structured interviews were conducted with industry education integration administrators from 10 private universities in Guangdong Province.

Step 2: Organize and summarize data from structured interviews.

Data Collection

The data collection for objective 2: to provide guideline for improving of industry education integration in guangdong private universities.

Step 1: Structured interviews were conducted with industry education integration administrators from 10 Guangdong private universities.

Step 2: Organize and summarize data from structured interviews.

Data Analysis

The structured interview about guideline for improving of industry education integration private universities in Guangdong Province was analyzed by content analysis.

Phase 3: the objective of this phase is to evaluate the guideline for improving the industry education integration in Guangdong Private Universities.

Key information

The experts for evaluation of the suitability and feasibility of guidelines for improving industry education integration were 15 high-level administrators in Guangdong. The qualifications of the experts are as follows: 1) at least 10 years of work experience in the integration of industry education work, 2) come from different universities, 3) academic title is associate professor or above, and have a deeper understanding and research on the integration of industry education work.

Research Instruments

Evaluation form

The instrument to collect the data for objective three, to evaluate guideline for improving of industry education integration of private universities in Guangdong Province. The evaluation form designed based on guideline for improving the industry education integration in Guangdong Private Universities in five following aspects: 1) improving teacher resources management guideline, 2) supporting financial management guideline, 3) complete management mechanism guideline, and 4) complete talent development guideline, 5) enhancing science and technology guideline. The evaluation form provide into two parts:

Part 1: the personal information of interviewees, classified by work position, work experience, educational background, and academic title.

Part 2: The evaluation form about the guideline for improving of industry education integration of private universities in Guangdong Province. The criteria for data interpretation based on a five-point Likert's scale, as follows:

5 refers to the suitability and feasibility of the model at the highest level
4 refers to the suitability and feasibility of the model at a high level
3 refers to the suitability and feasibility of the model at a medium level
2 refers to the suitability and feasibility of the model at a low level
1 refers to the suitability and feasibility of the model at the lowest level
The data interpretation for mean value based on Rensis Likert (1932).

The data interpretation are as follows:

4.50 – 5.00 express the highest level

- 3.50 4.49 express high level
- 2.50 3.49 express medium level
- 1.50 2.49 express low level

1.00 – 1.49 express the lowest level

Constructing a evaluation form process

The construction process of evaluation form are as follows:

Step 1: Constructing the evaluation form about guideline of the industry education integration of private universities in Guangdong Province.

Step 2: The evaluation form was applied to 15 high-level administrators in private universities in Guangdong Province.

Data Collection

The data collection for objective 3: to evaluate the guideline of improving of industry education integration of private universities in Guangdong

Step 1: The researcher requested requirement letter form the graduate school, Bansomdejchaopraya Rajabhat University for requiring to invite the expert to evaluate the guideline.

Step 2: The researcher distributed the evaluation form to high-level administrators. A total of 15 evaluation form.

Data Analysis

The data analysis in this research, the researcher analyzes the data by package program, as follows: The evaluation of the suitability and feasibility of guidelines for improving of industry education integration private universities in Guangdong Province is analyzed by Mean and standard deviation.

Chapter 4 Data Analysis Results

This research was to study Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province. The objectives of this research were 1) To study the current situation of industry education integration of private universities in Guangdong Province; 2) To develop guideline for improving of industry education integration private universities in Guangdong Province; 3) To evaluate guideline for improving of industry education integration of private universities in Guangdong Province. The data analysis result can be presented as follows:

- 1. Symbol and abbreviations
- 2. Presentation of data analysis
- 3. Results of data analysis

The details are as follows.

Symbol and Abbreviations

- N refers to population
- n refers to sample group
- $\overline{\mathrm{X}}$ refers to mean
- S.D. refers to standard deviation

Presentation of Data Analysis

Part 1: The analysis about personal information of administrators involved in the Industry Education Integration, classified by of the school, gender, age, education, professional title, and work experience year. Presented the data in the form of frequency and percentage.

Part 2: Data analysis of the current situation of industry education integration private Universities in Guangdong Province. Presented the data in the form of mean and standard deviation. Part 3: The analysis results about the interview contents of guideline for improving of industry education integration private universities in Guangdong Province.

Part 4: The analysis results about the evaluation of the suitability and feasibility of guideline for improving of industry education integration private universities in Guangdong Province. Presented the data in the form of mean and standard deviation.

Results of Data Analysis

The researcher analyzed the data in 4 parts as follows:

Part 1: Personal information of managers involved in the Industry Education Integration, classified by of the school, gender, age, education, professional title, and work experience year.

 Table 4.1 Number and percentage of respondents

(n = 291)

	Personal Information	Number of	Percentage(%)
		people	
School	Guangzhou Xinhua University	31	10.64
	Guangdong Baiyun University	29	9.97
	Guangzhou City University of Technology	29	9.97
	Software Engineering Institute of	29	9.97
	Guangzhou		
	Nanfang College Guangzhou	30	10.30
	Guangdong University of Foreign Studies	28	9.62
	South China Business College		
	Guangzhou Huashang University	29	9.97
	Guangzhou Institute of Science and	29	9.97
	Technology		
	Zhuhai College of Science and	28	9.62
	Technology		
	Dongguan City University	29	9.97
	Total	291	100
(n	=	291)	
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	Personal Information	Number of	Porcontago(96)
	reisonat information	people	Fercentage(%)
Gender	male	144	49.48
	female	147	50.52
	Total	291	100
Age	25 years old or below	53	18.21
	26 to 35	91	31.27
	36 to 45	85	29.21
	46 to 55	44	15.12
	56 years old or up	18	6.19
	Total	291	100
Education	Bachelor degree or below	21	7.22
	Bachelor degree	112	38.48
	Master's degree	118	40.55
	Doctoral degree	40	13.75
	Total	291	100
Professional	Teaching assistant	82	28.18
title	Assistant Professor	112	38.48
	Associate professor	73	25.09
	Professor	24	8.25
	Total	291	100
Work	within 5 years	69	23.71
Experience	5 to 10 years	70	24.05
year	11 to 15 years	65	22.34
	16 to 20 years	51	17.53
	More than 20 years	36	12.37
	Total	291	100

According to Table 4.1, the distribution of respondents' schools shows that male respondents for 144 people accounted for 49.48%, and female respondents for 147 people accounted for 50.52%. Respondents' age distribution is as follows: 53 people accounted for 18.21% are between 25 years old or below, 91 people accounted for 31.27% are between 26-35 years old, 85 people accounted for 29.21% are between 36-45 years old, 44 people accounted for 15.12% are between 46-55 years old, and 18 people accounted for 6.19% are 56 years old or older. In terms of educational background, 21 people accounted for 7.22% of respondents hold a Bachelor degree or below,112 people accounted for 38.48% of respondents hold a bachelor's degree, 118 people accounted for 40.55% hold a master's degree, and 40 people accounted for 13.75% hold a doctoral degree. The professional titles of respondents are as follows: 82 people accounted for 28.18% are teaching assistants, 112 people accounted for 38.48% are assistant professor, 73 people accounted for 25.09% are associate professors, and 24 people accounted for 8.25% are professors. In terms of years of experience, 69 people accounted for 23.71% of respondents have less than 5 years of experience, 70 people accounted for 24.05% have 5-10 years of experience, 65 people accounted for 22.34% have 11-15 years of experience, 51 people accounted for 17.53% have 16-20 years of experience, and 36 people accounted for 12.37% have more than 20 years of experience.

Part 2: Data analysis of the current situation of industry education integration private Universities in Guangdong Province. Presented the data in the form of mean and standard deviation.

In accordance with the results of questionnaires, this study analyzed the level of industry education integration in Guangdong private Universities from 5 aspects: including 1) Teacher Resources Management; 2) Financial Management; 3) Management Mechanism; 4) Talent Development; 5) Science and Technology. The average value and standard deviation were attained. The survey questionnaire used in this study was specifically designed by the researchers for this study, and the survey results are as follows:

Table 4.2The mean and standard deviation of the current situation of industry
education integration of Private Universities in Guangdong Province in five
aspects

No	Industry education integration of Private Universities in Guangdong Province	$\overline{\mathbf{X}}$	S.D.	level	order
1	Teacher Resources Management	3.35	0.57	Medium	2
2	Financial Management	3.22	0.61	Medium	4
3	Management Mechanism	3.27	0.55	Medium	3
4	Talent Development	3.37	0.52	Medium	1
5	Science and Technology	3.19	0.64	Medium	5
	Total	3.28	0.53	Medium	

According to Table 4.2, the data showed that the current situation of industry education integration of Private Universities in Guangdong Province in five aspects was at medium level ($\overline{X} = 3.28$). Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was talent development ($\overline{X} = 3.37$), followed by Teacher Resources Management ($\overline{X} = 3.35$), Management Mechanism ($\overline{X} = 3.27$),Financial Management ($\overline{X} = 3.22$), and Science and Technology was the lowest mean ($\overline{X} = 3.19$).

(n = 291)

Table 4.3Analysis result of the current situation of industry education integration ofPrivateUniversities in GuangdongProvince in Teacher resourcesmanagement

(n = 291)

	Teacher resources management	$\overline{\mathbf{X}}$	S.D.	level	order
1	Administrators have teacher resource	3.47	0.90	Medium	1
	management skills to promote the				
	development of teachers integrating industry				
	and education.				
2	Administrators manages the school's teachers	3.35	0.81	Medium	4
	who integrate industry and education.				
3	Administrators improve teaching quality	3.35	0.86	Medium	4
	through planning, organizing and other				
	management activities.				
4	Administrators improve teacher quality through	3.36	0.85	Medium	3
	management activities such as leading and				
	controlling.				
5	Administrators have formulated management	3.35	0.88	Medium	4
	systems for staffing, performance assessment,				
	talent selection, position promotion, teacher				
	evaluation, etc.				
6	Administrators have formulated teacher ethics	3.34	0.88	Medium	5
	education, teacher behavior, teachers'				
	professional ethics, sense of responsibility, and				
	sense of mission.				
7	Administrators have formulated teacher	3.31	0.86	Medium	6
	development content such as teacher				
	recruitment, study seminars, talent selection,				
	title assessment, and career planning.				

Table 4.3 (Continue)

(n =	291)
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	Teacher resources management	$\overline{\mathbf{X}}$	S.D.	level	order
8	Administrators ensure the realization of	3.29	0.89	Medium	7
	university development goals and talent				
	training goals through the teacher resource				
	management model.				
9	Administrators recognize dual-teacher teachers	3.42	0.85	Medium	2
	as educators who pay equal attention to				
	theory and practice.				
10	Administrators have established a teacher	3.27	0.88	Medium	8
	evaluation and growth system.				
	Total	3.35	0.57	Medium	

According to Table 4.3, the data showed that the current situation of industry education integration of private universities in Guangdong Province in teacher resources management was at medium level ($\overline{X} = 3.35$). Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was administrators have teacher resource management skills ($\overline{X} = 3.47$), followed by administrators recognize dual-teacher teachers as educators who pay equal attention to theory and practice ($\overline{X} = 3.42$), and administrators have established a teacher evaluation and growth system was the lowest mean ($\overline{X} = 3.27$).

Table 4.4 Analysis result of the current situation of industry education integration ofPrivate Universities in Guangdong Province in Financial Management

(n	=	291)
(

	Financial Management	$\overline{\mathbf{X}}$	S.D.	level	order
1	Administrators have scientific financial	3.17	0.93	Medium	5
	management skills.				
2	Administrators scientifically and rationally	3.23	0.94	Medium	4
	raise, allocating, using and monitoring				
	industry-education integration funds.				
3	Administrators implement financial	3.17	0.93	Medium	5
	management to ensure the long-term				
	development and stable operation of a				
	business or organization during its operations.				
4	Administrators have scientific financial	3.13	0.94	Medium	8
	decision-making capabilities.				
5	Administrators have scientific financial control	3.14	0.97	Medium	7
	capabilities.				
6	Administrators have scientific financial analysis	3.15	0.97	Medium	6
	capabilities.				
7	Administrators invest sufficient funds for the	3.30	0.84	Medium	3
	industry education integration.				
8	Administrators scientifically and rationally	3.30	0.85	Medium	3
	allocate funds, plan budgets and resource				
	allocation.				
9	Administrators have established a scientific	3.17	0.95	Medium	5
	financial supervision mechanism to prevent				
	financial risks.				

Table 4.4 (Continue)

(n	=	291)
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	Financial Management	$\overline{\mathbf{X}}$	S.D.	level	order
10	Administrators support and promote	3.36	0.81	Medium	1
	diversified input methods for integrating				
	industry and education.				
11	Administrators fairly and reasonably	3.31	0.83	Medium	2
	distribution rights and interests of both				
	parties in school-enterprise cooperation.				
	Total	3.22	0.61	Medium	

According to Table 4.4, the data showed that the current situation of industry education integration of private universities in Guangdong Province in financial management was at a medium level (\overline{X} =3.22). Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was administrators support and promote diversified input methods for integrating industry and education (\overline{X} =3.36), followed by administrators fairly and reasonably distribution rights and interests of both parties in school-enterprise cooperation (\overline{X} = 3.31), and administrators have scientific financial decision-making capabilities was the lowest mean (\overline{X} = 3.13).

Table 4.5Analysis result of the current situation of industry education integration ofPrivate Universities in Guangdong Province in Management Mechanism

(n	=	291)
(11	_	Z91)

	Management Mechanism	$\overline{\mathbf{X}}$	S.D.	level	order
1	Administrators has established a set of	3.24	0.89	Medium	7
	management system framework for the				
	industry education integration.				
2	Administrators rely on the organizational	3.27	0.81	Medium	5
	structure to promote work, thereby ensuring				
	the efficiency, quality, accuracy and stability				
	of management and achieving organizational				
	goals.				
3	Administrators have established a financial	3.24	0.89	Medium	7
	management mechanism that integrates				
	industry and education.				
4	Administrators has built a human resources	3.21	0.92	Medium	8
	management mechanism that integrates				
	industry and education.				
5	Administrators has built a teaching	3.30	0.86	Medium	4
	management mechanism that integrates				
	industry and education.				
6	Administrators has built a risk management	3.14	0.99	Medium	9
	mechanism that integrates industry and				
	education.				
7	Administrators have developed an incentive	3.26	0.87	Medium	6
	mechanism for positions that integrate				
	industry and education.				
8	Administrators have established a school-	3.36	0.84	Medium	1
	enterprise cooperation operation mechanism.				

(n = 291)

	Management Mechanism	$\overline{\mathbf{X}}$	S.D.	level	order
9	Administrators have established an evaluation	3.30	0.84	Medium	4
	mechanism for teachers integrating industry				
	and education.				
10	Administrators have established a school-	3.36	0.84	Medium	1
	enterprise teaching resource sharing				
	mechanism.				
11	Administrators have developed a trust and	3.32	9.78	Medium	2
	benefit distribution mechanism for cooperation				
	between universities and enterprises.				
12	Administrators have a clear division of	3.31	0.82	Medium	3
	responsibilities between universities and				
	enterprises and have clear work processes.				
13	Administrators have developed a scientific,	3.21	0.92	Medium	8
	transparent and effective management				
	mechanism to stimulate employees' initiative				
	and enthusiasm.				
	Total	3.27	0.55	Medium	

According to Table 4.5, the data showed that the current situation of industry education integration of private universities in Guangdong Province in Management Mechanism was at a medium level ($\overline{X} = 3.27$). Consider for the result of the study aspects ranged from the highest to the lowest level were as following: administrators have established a school-enterprise cooperation operation mechanism and Administrators have established a school-enterprise teaching resource sharing mechanism were the highest mean($\overline{X} = 3.36$),followed by administrators have developed a trust and benefit distribution mechanism for cooperation between universities and enterprises($\overline{X} = 3.32$), and Administrators has built a risk management mechanism that integrates industry and education was the lowest mean($\overline{X} = 3.14$).

Table 4.6Analysis result of the current situation of industry education integration ofPrivate Universities in Guangdong Province in Talent Development

(n = 291)

	Talent Development	$\overline{\mathbf{X}}$	S.D.	level	order
1	Administrators are committed to cultivating	3.41	0.89	Medium	3
	talents with certain knowledge, skills, qualities				
	and innovative abilities.				
2	Administrators have established a talent	3.40	0.83	Medium	4
	training model for students to study and				
	practice.				
3	Administrators encourage students to master	3.36	0.80	Medium	7
	professional knowledge and skills and become				
	talents in specific fields.				
4	Administrators implement talent educational	3.39	0.80	Medium	5
	philosophies that meet regional needs.				
5	Administrators set talent training objectives	3.34	0.82	Medium	8
	that meet regional needs.				
6	Administrators have established a complete	3.32	0.83	Medium	10
	talent training and management mechanism.				
7	Administrators promote the training model of	3.37	0.81	Medium	6
	students studying alternately in universities and				
	enterprises.				
8	Administrators jointly carry out professional	3.44	0.85	Medium	2
	skills certificate certification with enterprises.				
9	Administrators work together with enterprises	3.34	0.80	Medium	8
	to build a teaching resource library.				
10	Administrators actively encourage students to	3.47	0.82	Medium	1
	participate in corporate job practice.				

Table 4.6 (Continue)

(n = 291)

	Talent Development	$\overline{\mathbf{X}}$	S.D.	level	order
11	Administrators work with enterprises to	3.33	0.81	Medium	9
	cultivate application-oriented talents that				
	meet market needs.				
12	Administrators implement talent training to	3.32	0.79	Medium	10
	meet the needs of enterprises for talents and				
	cultivate the professional talents needed for				
	the development of various fields in the				
	country.				
	Total	3.37	0.52	Medium	

According to Table 4.6, the data showed that the current situation of industry education integration of private universities in Guangdong Province in Talent Development was at a medium level (\overline{X} =3.37). Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was administrators actively encourage students to participate in corporate job practice (\overline{X} =3.47),followed by administrators jointly carry out professional skills certificate certification with enterprise (\overline{X} =3.44),and administrators have established a complete talent training and management mechanism, administrators implement talent training to meet the needs of enterprises for talents and cultivate the professional talents needed for the development of various fields in the country were the lowest mean (\overline{X} = 3.32).

Table 4.7 Analysis result of the current situation of industry education integration ofPrivate Universities in Guangdong Province in Science and Technology

(n = 291)

	Science and Technology	$\overline{\mathbf{X}}$	S.D.	level	order
1	Administrators recognize that technology is	3.30	0.82	Medium	3
	an important part of the education system				
	and the industrial system to achieve high-				
	quality development of the industry				
	education integration.				
2	Administrators have new concepts, new	3.14	0.98	Medium	8
	models, and new forms of educational				
	goals for the industry education integration.				
3	Administrators have a knowledge system	3.05	1.00	Medium	10
	that integrates industry and education with				
	new concepts, new models, and new forms.				
4	Administrators have new concepts, new	3.02	1.00	Medium	11
	models, and new forms of training methods				
	that integrate industry and education.				
5	Administrators have a teaching system that	3.18	0.97	Medium	7
	integrates industry and education with new				
	concepts, new models, and new forms.				
6	Administrators have new concepts, new	3.05	0.97	Medium	10
	models, and new forms of teacher team				
	construction that integrate industry and				
	education.				
7	Administrators promote information islands	3.21	0.87	Medium	6
	trans for to system online integrating				
	industry and education.				

(n = 291)

	Science and Technology	$\overline{\mathbf{X}}$	S.D.	level	order
8	Administrators cultivate talents integrating	3.33	0.82	Medium	2
	industry and education that meet the serve				
	the digital transformation of industrial needs				
	and industrial chains.				
9	Administrators use digital technology to	3.27	0.82	Medium	5
	achieve the perfect combination of				
	education and technology, and realize the				
	innovative development of the talent chain,				
	education chain, and industry chain.				
10	Administrators have optimized the digital	3.29	0.82	Medium	4
	development planning strategy for the				
	industry education integration to adapt to				
	the development needs of the digital era				
	and promote the sustainable development				
	of the industry education integration.				
11	Administrators build digital-based facilities	3.41	0.85	Medium	1
	to provide a better educational				
	environment and meet students' learning				
	needs.				
12	Administrators are required to be managers	3.07	0.98	Medium	9
	with practical experience in digital				
	technology and business.				
	Total	3.19	0.64	Medium	

According to Table 4.7, the data showed that the current situation of industry education integration of private universities in Guangdong Province in Science and Technology was at a medium level (\overline{X} =3.19). Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was administrators build digital-based facilities to provide a better educational environment and meet students' learning needs(\overline{X} =3.41),followed by administrators cultivate talents integrating industry and education that meet the serve the digital transformation of industrial needs and industrial chains (\overline{X} = 3.33), and administrators have new concepts, new models, and new forms of training methods that integrate industry and education was the lowest mean (\overline{X} = 3.02).

Part 3: The analysis results about the interview contents of guideline for improving of industry education integration private universities in Guangdong Province.

In this study,20 high-level administrators from private universities in Guangdong Province are interviewed in this study to understand the current situation of the integration of industry education in Guangdong Province private universities. The interviewees must meet the following criteria: 1) at least 8 years of work experience of the industry education integration administrator in private universities, 2) have extensive experience of the industry education integration, 3) must be willing to participate in the recorded semi-structured interviews, 4) must be willing to review their interview transcripts for validation.

The list of interviewees is as follows:

Table 4.8 Personal information of Interview
Table 4.8 Personal information of interview

Interviewees	Education background	Interview Date	Interview time
Interviewee 1	Education :Master's degree	Dcember	10:00am
	Job title: Professional Director	15 th ,2023	GMT+8
	work experience :15 years		60 minutes
Interviewee 2	Education :Master's degree	Dcember	14:00pm
	Job title: Vice-President	15 th ,2023	GMT+8
	work experience :18 years		60 minutes
Interviewee 3	Education :Ph.D. degree	Dcember	10:00am
	Job title: Dean	16 th ,2023	GMT+8
	work experience :22 years		50 minutes
Interviewee 4	Education :Master's degree	Dcember	14:00pm
	Job title: Vice-President	16 th ,2023	GMT+8
	work experience :25 years		70 minutes
Interviewee 5	Education :Ph.D. degree	Dcember	10:00am
	Job title: Dean	20 th ,2023	GMT+8
	work experience :21 years		50 minutes
Interviewee 6	Education :Ph.D. degree	Dcember	14:00pm
	Job title: Vice-President	20 th ,2023	GMT+8
	work experience :20 years		70 minutes
Interviewee 7	Education :Master's degree	Dcember	10:00 am
	Job title: Dean	24 th ,2023	GMT+8
	work experience :20 years		60 minutes
Interviewee 8	Education :Master's degree	Dcember	9:00 am
	Job title: Professional Director	25 th ,2023	GMT+8
	work experience :19 years		50 minutes

Table 4.8 (Continue)

Interviewees	Education background	Interview Date	Interview time
Interviewee 9	Education :Ph.D. degree	Dcember	13:00 pm
	Job title: Vice-President	25 th ,2023	GMT+8
	work experience :18 years		60 minutes
Interviewee 10	Education :Master's degree	Dcember	11:00 am
	Job title: Dean	23 rd ,2023	GMT+8
	work experience :15 years		60 minutes
Interviewee 11	Education :Master's degree	Dcember	10:00 am
	Job title: Vice-President	26 th ,2023	GMT+8
	work experience :17 years		55 minutes
Interviewee 12	Education :Ph.D. degree	January	10:00am
	Job title: Professional Director	4 th ,2024	GMT+8
	work experience :16 years		55 minutes
Interviewee 13	Education :Master's degree	January	13:00pm
	Job title:Dean	4 th ,2024	GMT+8
	work experience :15 years		55 minutes
Interviewee 14	Education :Ph.D. degree	January	10:00am
	Job title: Vice-President	7 th ,2024	GMT+8
	work experience :18 years		65 minutes
Interviewee 15	Education :Ph.D. degree	January	15:00am
	Job title: Dean	7 th ,2024	GMT+8
	work experience :20 years		60 minutes
Interviewee 16	Education :Master's degree	January	9:00 am
	Job title: Vice-President	10 th ,2024	GMT+8
	work experience :20 years		70 minutes

Table 4.8 (Continue)

Interviewees	Education background	Interview Date	Interview time
Interviewee 17	Education :Master's degree	January	14:00 am
	Job title: Professional Director	10 th ,2024	GMT+8
	work experience :18 years		90 minutes
Interviewee 18	Education :Ph.D. degree	January	9:00 am
	Job title: Vice-President	12 th ,2024	GMT+8
	work experience :20 years		50 minutes
Interviewee 19	Education :Master's degree	January	14:00 am
	Job title: Professional Director	12 th ,2024	GMT+8
	work experience :24 years		60 minutes
Interviewee 20	Education :Ph.D. degree	January	17:00 am
	Job title: Vice-President	12 th ,2024	GMT+8
	work experience :22 years		55 minutes

The research team conducted 20 face-to-face interviews. Each interview was conducted one-on-one in a more private location where others could not overhear the conversation, ensuring that the interviewees were not disturbed by other factors.

The experts agree with the outline guideline for improving of industry education integration private universities in Guangdong Province, which mainly include 5 aspects: 1) Improving teacher resources management;2)Supporting financial management; 3)Complete management;4)Complete talent development; 5)Enhancing science and technology. Combined with the interviews, the researcher proposed 32 guidelines in 5 aspects. There are 7 guidelines for improving teacher resources management, 6 guidelines for supporting financial management, 6 guidelines for supporting financial management, 7 guidelines for enhancing science and technology.

Industry							
Education	Guidelines						
Integration							
	1) Develop an effective management model for teacher training						
	integrating industry and education						
	2) Scientifically and rationally plan teacher resources and staffing						
	3) Establish a teacher evaluation system integrating industry and						
Improving	education, linked to performance appraisal and professional title						
Tanahar	evaluation						
Teacher	4) Improve teachers' practical abilities and professional qualities						
Resources	5) Provide opportunities for interdisciplinary exchanges and						
Management	cooperation between teachers and rationally plan teachers' careers						
	6) Improve incentive assessment and establish teacher feedback						
	mechanism						
	7) Constructing a training system for a "double-qualified" teacher						
	team						
	1) Improve financial management system						
	2) Allocate funds scientifically and rationally, plan budget and						
	allocate resources						
	3) Introducing diversified funding sources and establishing special						
Supporting	funds for the industry education integration						
Financial	4) Establish scientific financial transparency and supervision						
Management	mechanisms to prevent financial risks						
	5) Strengthen financial team building and training to cultivate						
	financial decision-making capabilities						
	6) Strengthen financial transparency, supervision and risk						
	management to ensure fund security						

Table 4.9	Guideline	for	improving	of	industry	education	integration	private
	universities i	n Gu	angdong Pro	ovin	се			

Table 4.9 (Continue)

Industry	
Education	Guidelines
Integration	
	1) Establish a sound management mechanism for the industry
	education integration
	2) Establish a clear organizational structure and management system
	3) Strengthen the standardized management of school-enterprise
Complete	cooperation projects
Management	4) Recruit people with business management experience as industry-
Mechanism	education integration managers
Mechanism	5) Clarify the fair and reasonable distribution of rights and interests
	in school-enterprise cooperation
	6) Establish a scientific and reasonable communication mechanism
	and incentive mechanism, and strengthen resource integration and
	sharing
	1) Clarify the goals and positioning of talents training for the industry
	education integration
	2) Optimize the curriculum system and teaching content of the
	industry education integration
Complete	3) Strengthen practical teaching and practical training to improve
Talont	practical ability
	4) Establish long-term and stable school-enterprise cooperation
Development	projects to provide students with more practical opportunities and
	career development resources.
	5) Cooperate with enterprises to build a teaching resource library
	6) Innovate talent training models and paths, and improve
	evaluation and feedback mechanisms

Table 4.9 (Continue)

Industry	
Education	Guidelines
Integration	
	1) Optimize the digital development planning strategy for the
	industry education integration, and promote the sustainable
	development of the industry education integration
	2) Improve the educational goals of new concepts, new models, and
	new forms of industry education integration
	3) Strengthen the cultivation of digital talents integrating industry and
Enhancing	education
	4) Build digital teaching infrastructure
	5) Establish digital teaching resources integrating industry and
recinology	education
	6) Promote the introduction of digital technology into practical
	teaching links
	7) Promote digital innovation and application of industry-education
	integration



Figure 4.1 The guideline of improving teacher resources management



Figure 4.2 The guideline of supporting financial management



Figure 4.3 The guideline of complete management mechanism



Figure 4.4 The guideline of complete talent development



Figure 4.5 The guideline of enhancing science and technology



Figure 4.6 The guideline of industry education integration

Part 4: The analysis results about the evaluation of the suitability and feasibility of guideline for improving of industry education integration private universities in Guangdong Province. Presented the data in the form of mean and standard deviation.

The analysis results at this stage led by experts and scholars studying higher education in Guangdong Province private universities. 15 qualified experts to evaluated the suitability and feasibility of implementing the guidelines. They adopted the form of a 5-level scoring table, namely, highest, high, average, low, and lowest. A respondents can only choose one level. The results are shown in the following table:

Table 4.10 Mean and standard deviation of expert evaluation guidelines for improvingindustry education integration of private universities universities inGuangdong Province

Guidelines		suita	bility	level	feasibility		level
		$\overline{\mathbf{X}}$	S.D.		$\overline{\mathbf{X}}$	S.D.	
1	Improving Teacher Resources	151	0.48	highest	4.67	0.45	highest
	Management	4.94	0.40	riigitest	4.07	0.45	riighest
2	Supporting Financial Management	4.51	0.50	highest	4.67	0.48	highest
3	Complete Management Mechanism	4.51	0.51	highest	4.69	0.46	highest
4	Complete Talent Development	4.58	0.50	highest	4.66	0.49	highest
5	Enhancing Science and Technology	4.42	049	high	4.67	0.46	highest
	Total	4.51	0.49	highest	4.67	0.47	highest

According to Table 4.10,the data showed that experts' overall evaluation of the suitability and feasibility of the model is at the highest level(\overline{X} =4.51, \overline{X} =4.67), indicating that the model has a highest suitability and feasibility. Among the 5 aspect, the suitability and feasibility evaluation of the improving teacher resources management, supporting financial management, complete management mechanism, complete talent development are the highest level, and enhancing science and technology is high level.

Table 4.11 Mean and standard deviation of expert evaluation guidelines for improvingindustry education integration of private universities universities inGuangdong Province in improving teacher resources management

Guidelines -		suita	bility		feasibility		امرما	
	Improving teacher resources ma		S.D	level	$\overline{\mathbf{X}}$	S.D.	level	
Improving teacher resources management								
1	Develop an effective	4.93	0.26	highest	4.80	0.41	highest	
	management model for teacher							
	training integrating industry and							
	education							
2	Scientifically and rationally plan	4.40	0.51	high	4.33	0.49	high	
	teacher resources and staffing							
3	Establish a teacher evaluation	4.53	0.52	highest	4.80	0.41	highest	
	system integrating industry and							
	education, linked to							
	performance appraisal and							
	professional title evaluation							
4	Improve teachers' practical	4.40	0.51	high	4.60	0.51	highest	
	abilities and professional							
	qualities							
5	Provide opportunities for	4.47	0.52	high	4.87	0.35	highest	
	interdisciplinary exchanges and							
	cooperation between teachers							
	and rationally plan teachers'							
	careers							
6	Improve incentive assessment	4.53	0.52	highest	4.60	0.51	highest	
	and establish teacher feedback							
	mechanism							

Table 4.11 (Continue)

Guidelines —		suita	bility	امروا	feasibility		lovol
		$\overline{\mathbf{X}}$	S.D	level	$\overline{\mathbf{X}}$	S.D.	
7	Constructing a training system	4.53	0.52	highest	4.67	0.49	highest
	for a "double-qualified"						
	teacher team						
	Total	4.54	0.48	highest	4.67	0.45	highest

According to Table 4.11,the data showed that experts' overall evaluation of the suitability and feasibility of the teacher resources management is at the highest level($\overline{X} = 4.54$, $\overline{X} = 4.67$), indicating that the teacher resources management has a highest suitability and feasibility. Among the 7 guidelines, the suitability and feasibility are both above a high level.

The suitability of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow:the highest mean was Develop an effective management model for teacher training integrating industry and education (\overline{X} =4.93),followed by Establish a teacher evaluation system integrating industry and education, linked to performance appraisal and professional title evaluation, improve incentive assessment and establish teacher feedback mechanism,and constructing a training system for a "double-qualified" teacher team (\overline{X} =4.53).and scientifically and rationally plan teacher resources and staffing was the lowest mean (\overline{X} = 4.33).

The feasibility of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow:the highest mean was provide opportunities for interdisciplinary exchanges and cooperation between teachers and rationally plan teachers' careers (\overline{X} =4.87), followed by develop an effective management model for teacher training integrating industry and education (\overline{X} =4.80),and scientifically and rationally plan teacher resources and staffing was the lowest mean (\overline{X} = 4.60).

Table 4.12 Mean and standard deviation of expert evaluation guidelines for improvingindustry education integration of private universities universities inGuangdong Province in supporting financial management

Guidelines		suita	bility	level	feasibility		level
			S.D.		$\overline{\mathbf{X}}$	S.D.	
	Supporting financial manageme	ent					
1	Improve financial management	4.40	0.51	high	4.67	0.49	highest
	system						
2	Allocate funds scientifically and	4.47	0.52	high	4.73	0.46	highest
	rationally, plan budget and						
	allocate resources						
3	Introducing diversified funding	4.33	0.49	high	4.73	0.46	highest
	sources and establishing special						
	funds for the industry						
	education integration						
4	Establish scientific financial	4.73	0.46	highest	4.60	0.51	highest
	transparency and supervision						
	mechanisms to prevent						
	financial risks						
5	Strengthen financial team	4.47	0.52	high	4.60	0.51	highest
	building and training to						
	cultivate financial decision-						
	making capabilities						
6	Strengthen financial	4.53	0.52	highest	4.67	0.49	highest
	transparency, supervision and						
	risk management to ensure						
	fund security						
	Total	4.51	0.50	highest	4.67	0.48	highest

According to Table 4.12,the data showed that experts' overall evaluation of the suitability and feasibility of the supporting financial management at the highest level ($\overline{X} = 4.51$, $\overline{X} = 4.67$), indicating that the supporting financial management has a highest suitability and feasibility. Among the 6 guidelines, the suitability and feasibility are both above a high level.

The suitability of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow:the highest mean was establish scientific financial transparency and supervision mechanisms to prevent financial risks (\overline{X} =4.73), followed by strengthen financial transparency, supervision and risk management to ensure fund security(\overline{X} =4.53). and introducing diversified funding sources and establishing special funds for the industry education integration was the lowest mean (\overline{X} = 4.33).

The feasibility of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow: the highest mean were allocate funds scientifically and rationally, plan budget and allocate resources and introducing diversified funding sources and establishing special funds for the industry education integration (\overline{X} =4.73), followed by Improve financial management system and Strengthen financial transparency, supervision and risk management to ensure fund security

 $(\overline{X} = 4.67)$,and establish scientific financial transparency and supervision mechanisms to prevent financial risks and strengthen financial team building and training to cultivate financial decision-making capabilities was the lowest mean ($\overline{X} = 4.60$).

Table 4.13 Mean and standard deviation of expert evaluation guidelines for improvingindustry education integration of private universities universities inGuangdong Province in complete management mechanism

Guidelines		suita	suitability		feasibility		level
	Guidelines	$\overline{\mathbf{X}}$	S.D.		$\overline{\mathbf{X}}$	S.D.	
	Complete management mechar	nism					
1	Establish a sound management	4.67	0.49	highest	4.67	0.49	highest
	mechanism for the industry						
	education integration						
2	Establish a clear organizational	4.53	0.52	highest	4.67	0.49	highest
	structure and management						
	system						
3	Strengthen the standardized	4.40	0.51	high	4.60	0.51	highest
	management of school-						
	enterprise cooperation projects						
4	Recruit people with business	4.47	0.52	high	4.67	0.49	highest
	management experience as						
	industry-education integration						
	managers						
5	Clarify the fair and reasonable	4.53	0.52	highest	4.60	0.51	highest
	distribution of rights and						
	interests in school-enterprise						
	cooperation						
6	Establish a scientific and	4.47	0.52	high	4.93	0.26	highest
	reasonable communication						
	mechanism and incentive						
	mechanism, and strengthen						
	resource integration and sharing						
	Total	4.51	0.51	highest	4.69	0.46	highest

According to Table 4.13,the data showed that experts' overall evaluation of the suitability and feasibility of the complete management mechanism at the highest level($\overline{X} = 4.51$, $\overline{X} = 4.69$), indicating that the complete management mechanism has a highest suitability and feasibility. Among the 6 guidelines, the suitability and feasibility are both above a high level.

The suitability of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow:the highest mean were establish a clear organizational structure and management system and clarify the fair and reasonable distribution of rights and interests in school-enterprise cooperation(\overline{X} = 4.53), followed by Recruit people with business management experience as industry-education integration managers and establish a scientific and reasonable communication mechanism and incentive mechanism, and strengthen resource integration and sharing(\overline{X} = 4.47).and strengthen the standardized management of school-enterprise cooperation projects was the lowest mean (\overline{X} = 4.40).

The feasibility of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow: the highest mean was Establish a scientific and reasonable communication mechanism and incentive mechanism, and strengthen resource integration and sharing(\overline{X} =4.93), followed by establish a sound management mechanism for the industry education integration, establish a clear organizational structure and management system, and recruit people with business management experience as industry-education integration managers(\overline{X} =4.67).and strengthen the standardized management of school-enterprise cooperation projects, Clarify the fair and reasonable distribution of rights and interests in school-enterprise cooperation were the lowest mean (\overline{X} = 4.60).

Table 4.14 Mean and standard deviation of expert evaluation guidelines for improvingindustry education integration of private universities universities inGuangdong Province in complete talent development

Guidelines		suita	bility	level	feasibility		level
	Complete talent development		S.D.		$\overline{\mathbf{X}}$	S.D.	
	Complete talent development						
1	Clarify the goals and positioning	4.60	0.51	highest	4.67	0.49	highest
	of talents training for the						
	industry education integration						
2	Optimize the curriculum system	4.73	0.46	highest	4.73	0.46	highest
	and teaching content of the						
	industry education integration						
3	Strengthen practical teaching	4.40	0.51	high	4.60	0.51	highest
	and practical training to improve						
	practical ability						
4	Establish long-term and stable	4.60	0.51	highest	4.67	0.49	highest
	school-enterprise cooperation						
	projects to provide students						
	with more practical						
	opportunities and career						
	development resources.						
5	Cooperate with enterprises to	4.47	0.52	high	4.67	0.49	highest
	build a teaching resource library						
6	Innovate talent training models	4.67	0.49	highest	4.60	0.51	highest
	and paths, and improve						
	evaluation and feedback						
	mechanisms						
	Total	4.58	0.50	highest	4.66	0.49	highest

According to Table 4.14,the data showed that experts' overall evaluation of the suitability and feasibility of the complete talent development at the highest level $(\overline{X} = 4.58, \overline{X} = 4.66)$, indicating that the complete talent development has a highest suitability and feasibility. Among the 6 guidelines, the suitability and feasibility are both above a high level.

The suitability of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow: the highest mean was optimize the curriculum system and teaching content of the industry education integration (\overline{X} =4.73),followed by innovate talent training models and paths, and improve evaluation and feedback mechanisms(\overline{X} =4.67).and Strengthen practical teaching and practical training to improve practical ability was the lowest mean (\overline{X} = 4.47).

The feasibility of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow: the highest mean was optimize the curriculum system and teaching content of the industry education integration (\overline{X} =4.73), followed by Clarify the goals and positioning of talents training for the industry education integration, establish long-term and stable school-enterprise cooperation projects to provide students with more practical opportunities and career development resources, and cooperate with enterprises to build a teaching resource library (\overline{X} =4.67), and strengthen practical teaching and practical training to improve practical ability, innovate talent training models and paths, and improve evaluation and feedback mechanisms were the lowest mean (\overline{X} = 4.60).

Table 4.15 Mean and standard deviation of expert evaluation guidelines for improvingindustry education integration of private universities universities inGuangdong Province in enhancing science and technology

Guidelines		suita	bility		feasibility		level
	Guideunes	$\overline{\mathbf{X}}$	S.D.	- level -	$\overline{\mathbf{X}}$	S.D.	
Enha	ancing science and technology						
1	Optimize the digital development	4.20	0.41	high	4.47	0.52	high
	planning strategy for the industry						
	education integration, and promote						
	the sustainable development of the						
	industry education integration						
2	Improve the educational goals of	4.40	0.51	high	4.73	0.46	highest
	new concepts, new models, and						
	new forms of industry education						
	integration						
3	Strengthen the cultivation of digital	4.47	0.52	high	4.67	0.49	highest
	talents integrating industry and						
	education						
4	Ruild digital toaching infrastructure	4.67	0.49	highes	4.87	0.35	highest
	build digital leaching initiastructure			t			
5	Establish digital teaching resources	4.53	0.52	highes	4.53	0.52	highest
	integrating industry and education			t			
6	Promote the introduction of digital	4.33	0.49	high	4.60	0.51	highest
	technology into practical teaching						
	links						
7	Promote digital innovation and	4.33	0.49	high	4.80	0.41	highest
	application of industry-education						
	integration						
	Total	4.42	0.49	high	4.67	0.46	highest
According to Table 4.15,the data showed that experts' overall evaluation of the suitability of the enhancing science and technology at the high level(\overline{X} =4.42,),and the feasibility of the enhancing science and technology at the highest level(\overline{X} =4.67), indicating that the enhancing science and technology has a highest suitability and feasibility. Among the 7 guidelines,the suitability and feasibility are both above a high level.

The suitability of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow:the highest mean was Build digital teaching infrastructure(\overline{X} =4.67),followed by establish digital teaching resources integrating industry and education(\overline{X} =4.53).and optimize the digital development planning strategy for the industry education integration, and promote the sustainable development of the industry education integration was the lowest mean (\overline{X} = 4.20).

The feasibility of guidelines for improving industry education integration, the levels from the highest to lowest mean were as follow:the highest mean was Build digital teaching infrastructure(\overline{X} =4.87), followed by promote digital innovation and application of industry-education integration(\overline{X} =4.80),a n d optimize the digital development planning strategy for the industry education integration, and promote the sustainable development of the industry education integration was the lowest mean (\overline{X} = 4.47).

Chapter 5

Conclusion Discussion and Recommendations

The objectives of this research were include: 1) to analyze the level of industry education integration of private universities in Guangdong Province, 2) to develop guideline for improving of industry education integration private universities in Guangdong Province, 3) to evaluate the guideline for improving of industry education integration of private universities in Guangdong Province. The sample group in this research were administrators of private universities in Guangdong Province. The interview group were 20 high-level administrators from private universities in Guangdong Province. The order to solve the problems mentioned in Chapter 1 and achieve the above research objectives, the researchers adopted the following research findings, the conclusion, discussion and recommendations of this research are as follows.

Conclusion

The purpose of this study was to explore the management guideline of Guangdong Province private universities based on the industry education integration, as well as to assess the suitability and feasibility of the model. Through investigation and analysis, the following conclusions were drawn:

Part 1: The current situation of industry education integration private Universities in Guangdong Province.

Part 2: The guideline for improving of industry education integration private Universities in Guangdong Province.

Part 3: The suitability and feasibility of guideline for improving of industry education integration private Universities in Guangdong Province.

Part 1: The current situation of industry education integration private Universities in Guangdong Province.

The current situation of industry education integration private Universities in five aspects was at medium level. Consider for the result of the study aspects ranged

from the highest to the lowest level were as following: the highest mean was talent development, followed by Teacher Resources Management, Management Mechanism, Financial Management, and Science and Technology was the lowest mean.

Teacher Resources Management was at medium level. The current situation of Guangdong Province Private Universities scores medium level, among which, "administrators have teacher resource management skills to promote the development of teachers integrating industry and education", "administrators recognize dual-teacher teachers as educators who pay equal attention to theory and practice" score relatively high, The scores of "administrators ensure the realization of university development goals and talent training goals through the teacher resource management model" and "administrators have established a teacher evaluation and growth system" are lower.

Financial Management was at medium level. The current situation of Guangdong Province Private Universities scores medium level, among which "administrators support and promote diversified input methods for integrating industry and education" and "administrators fairly and reasonably distribution rights and interests of both parties in school-enterprise cooperation" have higher scores, and "administrators invest sufficient funds for the industry education integration" has higher scores. The scores of "administrators have scientific financial control capabilities" and "administrators have scientific financial decision-making capabilities" are lower.

Management Mechanism was at medium level. The current situation of Guangdong Province Private Universities scores medium level, among which "administrators have established a school-enterprise cooperation operation mechanism", "administrators have developed a trust and benefit distribution mechanism for cooperation between universities and enterprises" and "administrators have established a school-enterprise teaching resource sharing mechanism" have higher scores. The scores of "administrators has built a risk management mechanism that integrates industry and education", "administrators have developed a scientific, transparent and effective management mechanism to stimulate employees' initiative and enthusiasm" and "administrators has built a human resources management mechanism that integrates industry and education" are lower. Talent Development was at medium level. The current situation of Guangdong Province Private Universities scores medium level, among which "administrators actively encourage students to participate in corporate job practice" and "administrators jointly carry out professional skills certificate certification with enterprises" score high, and "administrators are committed to cultivating talents with certain knowledge, skills, qualities and innovative abilities" scores high. The scores of "a complete talent training and management mechanism" and "administrators implement talent training to meet the needs of enterprises for talents and cultivate the professional talents needed for the development of various fields in the country" are lower.

Science and Technology was at medium level. The current situation of Guangdong Province Private Universities scores medium level, among which "administrators build digital-based facilities to provide a better educational environment and meet students' learning needs" and "administrators cultivate talents integrating industry and education that meet the serve the digital transformation of industrial needs and industrial chains" score high, and "administrators recognize that technology is an important part of the education system and the industrial system to achieve high-quality development of the industry education integration" scores high. The scores of "administrators have new concepts, new models, and new forms of training methods that integrates industry and education with new concepts, new models, and new forms", and "administrators have new concepts, new models, and new forms", and "administrators have new concepts, new models, and new forms", and "administrators have new concepts, new models, and new forms", and "administrators have new concepts, new models, and new forms", and "administrators have new concepts, new models, and new forms", and "administrators have new concepts, new models, and new forms of teacher team construction that integrate industry and education" are lower.

Through the research of this topic, we have a better understanding of the current situation of industry education integration in Guangdong Province private universities, which is of medium level. Among the factors affecting the integration of industry education in Guangdong Province private universities, the following factors are listed in order of score: Talent development, Teacher Resources Management, Management Mechanism, Financial Management, and Science and Technology, but the scores of each factor are relatively close.

Part 2: The guideline for improving of industry education integration private Universities in Guangdong Province.

The guideline for improving of industry education integration private universities in Guangdong Province, combined with the interviews, the researcher proposed 32 guidelines in 5 aspects. There are 7 guidelines for improving teacher resources management, 6 guidelines for supporting financial management, 6 guidelines for complete management mechanism, 6 guidelines for complete talent development, 7 guidelines for enhancing science and technology. Through the analysis of the effectiveness and feasibility of the guidelines proposed in this study, it was found that the effectiveness and feasibility of the guidelines were at a high level.

Improving teacher resources management consists of 7 guidelines, as follow: 1) Develop an effective management model for teacher training integrating industry and education; 2) Scientifically and rationally plan teacher resources and staffing; 3) Establish a teacher evaluation system integrating industry and education, linked to performance appraisal and professional title evaluation; 4) Improve teachers' practical abilities and professional qualities; 5) Provide opportunities for interdisciplinary exchanges and cooperation between teachers and rationally plan teachers' careers; 6)Improve incentive assessment and establish teacher feedback mechanism;7)Constructing a training system for a "double-qualified" teacher team.

Supporting financial management consists of 6 guidelines, as follow: 1) Improve financial management system; 2) Allocate funds scientifically and rationally, plan budget and allocate resources; 3) Introducing diversified funding sources and establishing special funds for the industry education integration; 4) Establish scientific financial transparency and supervision mechanisms to prevent financial risks; 5)Strengthen financial team building and training to cultivate financial decision-making capabilities; 6) Strengthen financial transparency, supervision and risk management to ensure fund security.

Complete management mechanism consists of 6 guidelines, as follow: 1) Establish a sound management mechanism for the industry education integration; 2) Establish a clear organizational structure and management system; 3) Strengthen the standardized management of school-enterprise cooperation projects; 4) Recruit people with business management experience as industry-education integration managers; 5) Clarify the fair and reasonable distribution of rights and interests in schoolenterprise cooperation; 6) Establish a scientific and reasonable communication mechanism and incentive mechanism, and strengthen resource integration and sharing.

Complete talent development consists of 6 guidelines, as follow: 1) Clarify the goals and positioning of talents training for the industry education integration; 2) Optimize the curriculum system and teaching content of the industry education integration; 3) Strengthen practical teaching and practical training to improve practical ability; 4) Establish long-term and stable school-enterprise cooperation projects to provide students with more practical opportunities and career development resources; 5) Cooperate with enterprises to build a teaching resource library; 6) Innovate talent training models and paths, and improve evaluation and feedback mechanisms.

Enhancing science and technology consists of 7 guidelines, as follow: 1) Optimize the digital development planning strategy for the industry education integration, and promote the sustainable development of the industry education integration; 2) Improve the educational goals of new concepts, new models, and new forms of industry education integration; 3) Strengthen the cultivation of digital talents integrating industry and education; 4) Build digital teaching infrastructure; 5) Establish digital teaching resources integrating industry and education; 6) Promote the introduction of digital technology into practical teaching links; 7) Promote digital innovation and application of industry-education integration.

Part 3: The suitability and feasibility of guideline for improving of industry education integration private Universities in Guangdong Province.

The suitability and feasibility of guideline for improving of industry education integration private Universities in Guangdong Province in 5 aspects were at highest with the values between 4.00-5.00, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability and feasibility.

The suitability of improving teacher resources management was highest level with the values was 4.54, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability. The feasibility of improving teacher resources management was highest level with the values was 4.67, which means guideline for improving of industry education integration private Universities in Guangdong Province are feasibility.

The suitability of supporting financial management was highest level with the values was 4.51, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability. The feasibility of supporting financial management was highest level with the values was 4.67, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability.

The suitability of complete management mechanism was highest level with the values was 4.51, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability. The feasibility of complete management mechanism was highest level with the values was 4.69, which means guideline for improving of industry education integration private Universities in Guangdong Province are feasibility.

The suitability of complete talent development was highest level with the values was 4.58, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability. The feasibility of complete talent development was highest level with the values was 4.66, which means guideline for improving of industry education integration private Universities in Guangdong Province are feasibility.

The suitability of enhancing science and technology was high level with the values was 4.42, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability. The feasibility of enhancing science and technology was highest level with the values was 4.67, which means guideline for improving of industry education integration private Universities in Guangdong Province are suitability.

Discussion

Part 1: The current situation of industry education integration private Universities in Guangdong Province.

The current situation of industry education integration of Private Universities in Guangdong Province in five aspects was at medium level. Consider for the result of the study aspects ranged from the highest to the lowest level were as following: the highest mean was talent development, followed by Teacher Resources Management, Management Mechanism, Financial Management, and Science and Technology was the lowest mean. It is very important to enhance the industry education integration in private universities in Guangdong Province, and to promote the comprehensive development of talent training, scientific and technological innovation, industrial development, university social influence and local economic development, so as to promote the overall economic and social development of Guangdong Province.

Teacher Resources Management was at medium level. This is because 1) The managers of private universities in Guangdong Province have human resource capabilities and have basically established a teacher resource management system, but the pertinence and suitability of the current teacher resource management still need to be strengthened; 2) The identification of dual-qualified teachers is limited to those with qualification certificates in relevant industries. The school's oversimplified identification of dual-qualified teachers. The identification conditions for dual-qualified teachers are relatively broad; 3) there is a lack of teacher evaluation and growth system, teachers' class remuneration is not as much as that given by enterprises, and teachers' enthusiasm for participating in the industry education integration is not high (Cao Ye, Meng Qingguo, 2023, p.19-24); This means that the university lacks scientific evaluation system and incentive mechanism for teachers' participation in industry education integration, and the management mode of joint training of teachers between universities and enterprises and the growth mechanism of teachers' practice and exercise in enterprises need to be strengthened in terms of reasonableness and effectiveness (Hao, T. C., 2021, p.33-35).

Financial Management was at a medium level. This is because 1) Administrators of Guangdong Province Private Universities support and promote diversified investment methods for industry education integration and can fairly and reasonably distribute the rights and interests of both parties in school-enterprise cooperation, but the administrators lack scientific financial control and financial decision-making capabilities (Yang Guangjun, Zhou Fenghua, 2020, p.77-81); 2) Administrators' financial analysis capabilities need to be enhanced (Zhang Tingting, 2019, p.49-51); 3) It is reflected in the combination of traditional management mode and modern management concept, which not only has a certain standardized and institutionalized foundation, but also fails to fully adapt to the new changes and new needs brought about by the integration of industry and education. If the financial management is only at a medium level in the integration of industry and education, it may mean that the school needs to strengthen the connection between finance and industry, resource integration, cost control.

Management Mechanism was at a medium level. This is because 1) Guangdong Province Private Universities generally have established a schoolenterprise cooperation operation mechanism, and jointly developed a cooperative trust and benefit distribution mechanism and a teaching resource sharing mechanism with enterprises. However, many universities have not yet formed a risk management mechanism for the industry education integration (Pan Nianping. 2017, p.62-65); 2) Many private universities fail to effectively stimulate the initiative and enthusiasm of employees when formulating management mechanisms, and the human resources management mechanism for the industry education integration is not yet complete (Chi, Chunyang, 2021, p.50-53). When formulating the management mechanism for the integration of industry and education, private universities lack systematization and forward-looking, resulting in loopholes and defects in the system design.

Talent Development was at a medium level. This is because 1)Talent development, lack of effective quality evaluation system. In the industry education integration, the quality evaluation of talent training is an important link. However, many private universities in Guangdong Province lack an effective quality evaluation system, which cannot objectively and comprehensively evaluate students' learning achievements and practical ability, (Yang Mei, Wang Ying, Zhou Zhengzhu, 2021, p.26-32); 2) Administrators lack practical management experience in the industry education integration, and it is difficult to effectively guide the cultivation of students' practical ability; There may be problems in communication and coordination between university administrators and enterprises, resulting in the ineffective implementation of talent training plans(Xu Chang, Xie Xudong, 2018, p.25-30+32); 3) The goal of talent training is not clear, and managers do not fully consider the needs of enterprises and markets when formulating talent training programs, resulting in unclear training goals, lack of pertinence and practicability (Chi, Chunyang, 2021, p.50-53).

Science and Technology was at a medium level. This is because 1) Administrators rely too much on traditional education models, ignore the new requirements that technology puts forward for talent training, lack innovative spirit, and lack personalized training plans (Yang GQ, Zhu W, Lu WG, 2021, p.25-28); 2) Administrators lack new ideas, new models, and new forms of industry-education integrated training methods, which will lead to The rigidity of the knowledge system. 3) The lack of motivation to update knowledge and skills in teaching staff construction makes it difficult to improve the overall quality of the teaching staff and affects the innovation of teaching staff construction (Zou Yuxiang, 2021, p.140-146). In terms of science and technology, the curriculum tries to meet the needs of the industry, but the degree of integration may still be insufficient. This is reflected in the fact that the update speed of course content may lag behind the development of the industry, and the fit between the practical teaching link and the actual needs of enterprises needs to be improved.

Part 2: The guideline for improving of industry education integration private Universities in Guangdong Province.

The guideline for improving of industry education integration private universities in Guangdong Province, combined with the interviews, the researcher proposed 32 guidelines in 5 aspects. There are 7 guidelines for improving teacher resources management, 6 guidelines for supporting financial management, 6 guidelines for complete management mechanism, 6 guidelines for complete talent development, 7 guidelines for enhancing science and technology. Through the analysis of the effectiveness and feasibility of the guidelines proposed in this study, it was found that the effectiveness and feasibility of the guidelines were at a high level.

Teacher resources management, this study 7 guidelines , of which guidelines 1 and 3 are the most valuable, which I will express in detail below. The first guidelines "Develop an effective management model for teacher training integrating industry and education", based on the core concepts of teacher resource management, this guide aims to provide guidance and reference for the effective management of teacher training. By clarifying management objectives, optimizing management processes, and improving management efficiency, this guide is committed to building a set of teacher training management systems that meet the needs of the industry education integration (Cao Ye, Meng Qingguo. 2023, p.19-24). The third guidelines "Establish a teacher evaluation system integrating industry and education, linked to performance appraisal and professional title evaluation" are proposed based on the development strategy of teacher resource management. It is of great significance to improve the teaching quality of teachers, promote the professional development of teachers, enhance the professional awareness of teachers, ensure the quality of talent training, and promote the in-depth development of the industry education integration. This will help cultivate high-quality talents in line with market demand and promote sustainable economic and social development (Jiang Aihua et al., 2019, p.121-126).

Financial management, this study 6 guidelines ,of which guidelines 3 and 4 are the most valuable, which I will express in detail below. The third guidelines "Introducing diversified funding sources and establishing special funds for the industry education integration" are based on important considerations of financial management, to ensure the stability of funds, improve utilization efficiency, promote resource integration and sharing, enhance risk resilience, and promote the standardization of financial management. All these will help promote the in-depth development of the industry education integration, and improve the quality of talent training and the level of industrial innovation (Sun Yunzhi, 2021, p.94-99). The fourth guidelines "Establish scientific financial transparency and supervision mechanisms to prevent financial risks" is an important practice based on the concept of financial management, which can not only ensure the safety of funds, improve the efficiency of decision-making,

promote trust and cooperation, and prevent financial risks, but also promote the standardization and standardization of financial management, and provide a strong guarantee for the healthy and sustainable development of the industry education integration(Ding Chen, Liu Dayu, 2023, p.74-78).

Management mechanism, this study 6 guidelines , of which guidelines 1 and 2 are the most valuable, which I will express in detail below. The first guidelines "Establish a sound management mechanism for the industry education integration", it is one of the core elements. A sound management mechanism for the industry education integration is of great significance for promoting the in-depth development of the industry education integration, improving the quality of talent training, accelerating scientific and technological innovation and transformation, and ensuring the stability and sustainability of cooperation. It is an important guarantee for the standardization, systematization and scientificization of the industry education integration, and plays an important role in improving the overall level and competitiveness of the industry education integration (Liu L, Zhou JH, 2022, p.55-60). The second guidelines "Establish a clear organizational structure and management system" is the key to ensuring the effective operation and core role of the management mechanism, which can clarify responsibilities and division of labor, promote communication and collaboration, improve decision-making efficiency, ensure project implementation and promote sustainable development (Hao TC, 2021, p.21-22). Through the establishment of a scientific and efficient organizational structure and management system, we can promote the industry education integration to make new progress and make positive contributions to economic and social development (Guo Guangjun, Zhu Zhongyi, 2020, p.33-37).

Talent development, this study 6 guidelines, of which guidelines 2 and 6 are the most valuable, which I will express in detail below. The second guidelines "Optimize the curriculum system and teaching content of the industry education integration" is an important part of the core concept of talent development. It helps to meet the needs of the industry, improve the quality of talents, promote educational innovation, enhance the competitiveness of talents, and promote the in-depth development of the industry education integration. Therefore, in the process of

industry education integration, we should attach great importance to the optimization of the curriculum system and teaching content, ensure that talent training is closely linked with industrial development, and provide strong support for economic and social development (Zhou Yurong, Zhang Anfu, Li Zhifeng, 2020, p.134-138). The sixth guidelines "Innovate talent training models and paths, and improve evaluation and feedback mechanisms", it is very important for the realization of the core concept of talent development. It helps to adapt to the rapidly changing market demand, improve the quality of talent training, enhance the employ ability of students, promote the education system (Ran Yunfang, Lu Yingqi, Zhang Rui, 2022, p.45-47). Therefore, in the process of industry education integration, it is necessary to actively explore new models and paths for the cultivation of innovative talents, improve the evaluation and feedback mechanism, and provide strong support for talent training (Zhou Bukun et al., 2021, p.77-78).

Science and technology, this study 7 guidelines , of which guidelines 4 and 5 are the most valuable, which I will express in detail below. The fourth guidelines "Build digital teaching infrastructure" is based on the core concept of science and technology, which is of vital significance. It can improve the efficiency and quality of teaching, promote the equity and popularization of education, enhance the ability of learning and innovation, promote the in-depth development of the industry education integration, and enhance international competitiveness. Therefore, in the process of industry education integration, it is necessary to increase investment and construction of digital teaching infrastructure to provide strong support for talent training and scientific and technological innovation (Xie Xiaozhen, Liu Peihui, 2022, p.156-157). The fifth guidelines "Establish digital teaching resources integrating industry and education" is a key measure based on the core concepts of science and technology. It can realize resource sharing and optimal allocation, promote the docking of teaching content and industry needs, promote the innovation of teaching methods, support independent learning and lifelong learning, and improve the industry education integration. Therefore, in the process of industry education integration, we should pay attention to and strengthen the construction and application of digital teaching resource library to provide strong support for talent training and scientific and technological innovation (Yang Guangjun, Zhou Fenghua, 2020, p.52-57).

Part 3: The suitability and feasibility of guideline for improving of industry education integration private Universities in Guangdong Province.

The researchers invited 15 experts to evaluate the guidelines for improving of industry education integration private Universities in Guangdong Province. They have a deeper understanding of the industry education integration and research. Based on Likert (1932)'s, the average data interpretation shows that the suitability and feasibility of the guide for the industry education integration in Guangdong private universities are at the highest level in five aspects, and its values are between 4.00 and 5.00, indicating that the guide for the improvement of the industry education integration in private universities in Guangdong Province are suitability and feasibility.

The suitability and feasibility of guideline of improving teacher resources management for improving the industry education integration of private universities in Guangdong Province are suitability and feasibility. Improving teacher resources management is crucial for the industry education integration in private universities, aiming to jointly cultivate high-quality talents that meet the market demand. Teachers are the key force in the implementation of the industry education integration, so it is very important to improve the management of teacher resources (Zhou Bukun et al., 2021, p.77-78). Optimizing the allocation of teacher resources, strengthening teacher training and development, establishing an effective incentive mechanism, strengthening the information construction of teacher resources, and strengthening the construction of teacher resources, and strengthening the level of teacher resource management, promote the industry education integration integration to a deeper level, help cultivate more high-quality talents in line with market demand, and promote the sustainable and healthy development of the economy and society(Huang Haining, Chen Xihua (2020, p.13-19).

The suitability and feasibility of guideline of supporting financial management for improving the industry education integration of private universities in Guangdong Province are suitability and feasibility. Supporting financial management plays an important role in the industry education integration, and fund raising, cost

control, risk management, and decision-making optimization provide strong support for the financial management of private universities(Huang Lin, Sui Guohui (2019, p.11). It supporting financial management can promote transparency and supervision of financial management, and improve the reputation and competitiveness of the school (Zhong Zhongshan et al., 2022, p.101).

The suitability and feasibility of guideline of complete management mechanism for improving the industry education integration of private universities in Guangdong Province are suitability and feasibility. Complete management mechanism is very necessary. The industry education integration involves multiple subjects such as schools, enterprises, and governments, and in order to achieve effective cooperation and coordination, it is necessary to establish a complete management mechanism(Yang Shanjiang (2020, p.53). Formulating policies and regulations for the industry education integration, clarifying responsibilities and division of labor, establishing information sharing and exchange platforms, and improving management mechanisms such as evaluation and feedback mechanisms can promote the effective cooperation and coordination of all parties involved in the industry education integration, and improve the quality of talent training and the level of industrial development. It can also provide more opportunities and platforms for private universities and other educational institutions to cooperate with enterprises, and promote the deep integration and development of education and industry (Deng SH, Wang H, 2022, p.110-111).

The suitability and feasibility of guideline of complete talent development for improving the industry education integration of private universities in Guangdong Province are suitability and feasibility. Complete talent development is an important link in the industry education integration. By clarifying the goal of talent training, optimizing the curriculum system and teaching content, strengthening the construction of the teaching team, improving the evaluation and feedback mechanism, strengthening school-enterprise cooperation and resource sharing, providing personalized development support, and building a talent development support system, we can effectively promote the all-round development of talents and improve the quality of talent training (Chen Xing, 2017, p.55). It will help meet the industry's

demand for high-quality talents and promote the sustainable economic and social development of the Guangdong-Hong Kong-Macao Greater Bay Area(Chi Chunyang, 2021, p.16-20).

The suitability and feasibility of guideline of enhancing science and technology for improving the industry education integration of private universities in Guangdong Province are suitability and feasibility. Enhancing science and technology is an important development direction for the industry education integration. Science and technology are the key factors to promote industrial development and innovation, and by strengthening the construction of digital infrastructure, promoting the reform and innovation of scientific and technological teaching, strengthening the cultivation and introduction of digital talents, and promoting the deep integration of science and technology and industry (Li Ke, 2021, p.79). we can effectively improve the scientific and technological level in the industry education integration, and promote the digital transformation and upgrading of education and industry. It has enhanced the competitiveness and influence of the industry education integration integration in private universities in Guangdong Province (Yang Me, Wang Ying, Zhou Zhengzhu. (2021, p.69-70).

Recommendations

The research result showed that the recommendations about guideline for improving of industry education integration private universities in Guangdong Province are as follows:

Teacher Resources Management, administrators should optimize the allocation of teacher resources and improve the teaching quality and social service capabilities of the industry education integration. Improve teachers' practical ability and professional quality, organize teachers to participate in practical projects, improve their practical ability and problem-solving ability, and conduct regular professional quality training to improve teachers' education and teaching level and professional ethics.

Financial Management, administrators should improve the financial management system and improve financial management levels to provide a strong

guarantee for the smooth progress of the industry education integration. Actively seek financial support from the government, enterprises, society, etc., expand funding source channels, and set up a special industry-education integration fund account to uniformly manage and use funds to ensure long-term and stable cooperation in the project.

Management Mechanism, administrators should establish a sound management mechanism for the industry education integration, promote in-depth cooperation and common development between schools and enterprises, and achieve resource sharing, complementary advantages and mutual benefit and win-win results. Give priority to talents with rich business management experience as managers of the industry education integration. They have stronger resource integration and project management capabilities.

Talent Development, administrators should strengthen talent training management under the industry education integration model, improve students' comprehensive quality and employment competitiveness, provide strong talent support for industrial development and social progress, help promote in-depth cooperation between schools and enterprises, and achieve resource sharing and mutual benefit. Establish long-term and stable cooperative relationships with enterprises, jointly carry out talent training projects, and promote the integration of student internships, practical training and employment through school-enterprise cooperation to improve students' employment competitiveness.

Science and Technology, administrators should promote the deep integration of technological innovation and industrial development, promote digital development under the industry education integration, cultivate talents with digital skills and thinking, and promote the deep integration and common development of industry and education. Invest in the construction of digital classrooms, laboratories, online learning platforms and other infrastructure, and establish digital teaching resources that integrate industry and education to provide students with a rich digital learning environment. Cooperate with enterprises to jointly develop digital teaching resources, such as online courses, virtual laboratories, simulation software, etc.

Future Researches

This research paper discusses the management guidelines for improving industry education integration of private universities universities in Guangdong Province, which has important practical guiding significance for the management of the industry education integration in private universities. Due to the limitations of researchers' own knowledge and level, the research on the industry education integration in private universities is not comprehensive enough. In the future, other researchers can conduct more in-depth research in the following directions based on new theories and practices:

1. Deepen the industry education integration: Private universities should further strengthen cooperation with the industry to achieve resource sharing and complementary advantages. It can improve students' practical ability and employability competitiveness, but also help promote innovation and development in the industry.

2. Strengthen the construction of teachers: Private universities should increase their efforts to attract more outstanding talents with industrial experience and innovation ability to join the teaching team. Strengthen the training and development of teachers, and improve the teaching level and industry awareness of teachers.

3. Innovative talent training model: Private universities should actively explore innovative talent training models. Through practical teaching, project-driven, case analysis, etc., students can improve their practical ability and innovative spirit. It strengthens students' career planning and employment guidance to help them better adapt to market demand and career development.

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Appendix

Appendix A

List of Specialists and Letters of Specialists Invitation for IOC Verification

List of Specialists and Letters of Specialists Invitation for IOC Verification

- 1. Professor Dr.Mei Biqi, Guangdong Pharmaceutical University
- 2. Professor Dr.Li Aihua, Sun Yat-sen University
- 3 Professor Dr.Chen Weiqing, Sun Yat-sen University
- 4. Professor Dr.Wang Xianhua, Guangzhou Xinhua University
- 5. Professor Dr.Zhou Xuyu, Sun Yat-sen University

Appendix B Official Letter



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Tan Jingying, Guangzhou Xinhua University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research.

With your expertise, we would like to ask your permission to evaluate the attached guideline. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Lai Mingjie, Guangdong Baiyun University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely, in

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Lei Min, Guangdong Peizheng University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research.

With your expertise, we would like to ask your permission to evaluate the attached guideline. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely, 51,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Ref.No. MHESI 0643.14/225

Dear Professor Dr. Guo Weiming, Guangdong Neusoft University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely, su

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Wang Lei, Guangzhou City Institute of Technology

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Ref.No. MHESI 0643.14/ 227

Dear Professor Dr. Zhang Mingjun, Guangzhou Software University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research.

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Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School


Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Cao Kexue, Guangzhou Nanfang University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Luo Huiming, Guangdong University of Foreign Studies Nanguo Business University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Guang Xiangdong, Guangzhou Huashang University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Cai Xingyong, South China Agricultural University Zhujiang University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Gao Wencai, Guangzhou Institute of Technology

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Li Meng, Guangzhou Huali University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Dear Professor Dr. Xun Haipeng, Guangzhou Institute of Applied Science and Technology

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

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With your expertise, we would like to ask your permission to evaluate the attached guideline. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely,

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School



Bansomdejchaopraya Rajabhat University 1061 Itsaraparb Hirunrujee Thonburi Bangkok 10600

12 February 2024

RE: Invitation to evaluate the guideline

Ref.No. MHESI 0643.14/ 235

Dear Professor Dr. Shu Guangmei, Guangzhou Business University

Mrs.Chen Jiancong is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research.

With your expertise, we would like to ask your permission to evaluate the attached guideline. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely, 52

(Assistant Professor Akaranun Asavarutpokin) Vice Dean of Graduate School

Appendix C

Research Instrument

1. Survey Questionnaire

Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province

Instructions:

In order to understand the current situation of the industry education integration in private universities in Guangdong province and to propose strategies conducive to the improving of the industry education integration in private universities in Guangdong province, a questionnaire survey will be conducted on the managers of the private universities involved in the industry education integration.

Each question and answer in this questionnaire is not right or wrong, and the answers you provide will only be used for overall statistical analysis. They will never be processed or publicly released individually, and the information will be kept strictly confidential and not disclosed to anyone. You do not need to provide your personal name when filling out the questionnaire. Please feel free to answer the questions.

Part 1: Respondent Status (Personal Information)

1. School:

- Guangzhou Xinhua University
- Guangdong Baiyun University
- Guangzhou City University of Technology
- Software Engineering Institute of Guangzhou
- □ Nanfang College Guangzhou
- Guangdong University of Foreign Studies South China Business College
- Guangzhou Huashang University
- Guangzhou Institute of Technology
- Zhuhai College of Science and Technology
- Dongguan City University

- 2. Gender:
 - 🗖 male
 - ☐ female
- 3. Age:
 - **2**5 years old or below
 - **2**6 to 35
 - **3**6 to 45
 - **4**6 to 55
 - **5**6 years old or up

4. Education:

- □ Bachelor degree
- □ Master's degree
- Doctoral degree

5. Professional Title:

- Teaching assistant
- ☐ The lecturer or Assistant Professor;
- □ Associate professor
- □ Professor
- 6. Experience:
 - \Box within 5 years
 - 5 to 10 years
 - **1**1 to 15 years
 - □ 16 to 20 years
 - ☐ More than 20 years

Part 2: Survey Questionnaire on the Guideline for Improving of Industry Education Integration Private Universities in Guangdong

No.	Dependent Variable Name	5	4	3	2	1
	Teacher Resources Management					
	(The first variable)					
	Administrators have teacher resource					
1	management skills to promote the					
L	development of teachers integrating industry					
	and education.					
2	Administrators manages the school's teachers					
2	who integrate industry and education.					
	Administrators improve teaching quality through					
3	planning, organizing and other management					
	activities.					
	Administrators improve teacher quality through					
4	management activities such as leading and					
	controlling.					
	Administrators have formulated management					
5	systems for staffing, performance assessment,					
5	talent selection, position promotion, teacher					
	evaluation, etc.					
	Administrators have formulated teacher ethics					
	education, teacher behavior, teachers'					
0	professional ethics, sense of responsibility, and					
	sense of mission.					
	Administrators have formulated teacher					
7	development content such as teacher					
1	recruitment, study seminars, talent selection,					
	title assessment, and career planning.					
8	Administrators ensure the realization of					

No.	Dependent Variable Name	5	4	3	2	1
	university development goals and talent					
	training goals through the teacher resource					
	management model.					
	Administrators recognize dual-teacher teachers					
9	as educators who pay equal attention to theory					
	and practice.					
10	Administrators have established a teacher					
10	evaluation and growth system.					
No.	Financial management (The second variable)	5	4	3	2	1
1	Administrators have scientific financial					
1	management skills.					
	Administrators scientifically and rationally raise,					
2	allocating, using and monitoring industry-					
	education integration funds.					
2	Administrators implement financial					
	management to ensure the long-term					
	development and stable operation of a					
	business or organization during its operations.					
4	Administrators have scientific financial decision-					
4	making capabilities.					
Б	Administrators have scientific financial control					
5	capabilities.					
	Administrators have scientific financial analysis					
0	capabilities.					
	Administrators invest sufficient funds for the					
I	industry education integration.					
	Administrators scientifically and rationally					
8	allocate funds, plan budgets and resource					
	allocation.					
9	Administrators have established a scientific					

No.	Dependent Variable Name	5	4	3	2	1
	financial supervision mechanism to prevent					
	financial risks.					
	Administrators support and promote diversified					
10	input methods for integrating industry and					
	education.					
	Administrators fairly and reasonably distribution					
11	rights and interests of both parties in school-					
	enterprise cooperation.					
No.	Management mechanism (The third variable)	5	4	3	2	1
	Administrators has established a set of					
1	management system framework for the industry					
	education integration.					
	Administrators rely on the organizational					
	structure to promote work, thereby ensuring					
2	the efficiency, quality, accuracy and stability of					
	management and achieving organizational					
	goals.					
	Administrators have established a financial					
3	management mechanism that integrates					
	industry and education.					
	Administrators has built a human resources					
4	management mechanism that integrates					
	industry and education.					
	Administrators has built a teaching management					
5	mechanism that integrates industry and					
	education.					
	Administrators has built a risk management					
6	mechanism that integrates industry and					
	education.					
7	Administrators have developed an incentive					

No.	Dependent Variable Name	5	4	3	2	1
	mechanism for positions that integrate industry					
	and education.					
0	Administrators have established a school-					
ð	enterprise cooperation operation mechanism.					
	Administrators have established an evaluation					
9	mechanism for teachers integrating industry and					
	education.					
	Administrators have established a school-					
10	enterprise teaching resource sharing					
	mechanism.					
	Administrators have developed a trust and					
11	benefit distribution mechanism for cooperation					
	between universities and enterprises.					
	Administrators have a clear division of					
12	responsibilities between universities and					
	enterprises and have clear work processes.					
	Administrators have developed a scientific,					
12	transparent and effective management					
15	mechanism to stimulate employees' initiative					
	and enthusiasm.					
No.	Talent development (The fourth variable)	5	4	3	2	1
	Administrators are committed to cultivating					
1	talents with certain knowledge, skills, qualities					
	and innovative abilities.					
2	Administrators have established a talent training					
Z	model for students to study and practice.					
	Administrators encourage students to master					
3	professional knowledge and skills and become					
	talents in specific fields.					
4	Administrators implement talent educational					

No.	Dependent Variable Name	5	4	3	2	1
	philosophies that meet regional needs.					
E	Administrators set talent training objectives that					
5	meet regional needs.					
6	Administrators have established a complete					
0	talent training and management mechanism.					
	Administrators promote the training model of					
7	students studying alternately in universities and					
	enterprises.					
0	Administrators jointly carry out professional					
0	skills certificate certification with enterprises.					
0	Administrators work together with enterprises to					
9	build a teaching resource library.					
10	Administrators actively encourage students to					
10	participate in corporate job practice.					
	Administrators work with enterprises to					
11	cultivate application-oriented talents that meet					
	market needs.					
	Administrators implement talent training to					
	meet the needs of enterprises for talents and					
12	cultivate the professional talents needed for					
	the development of various fields in the					
	country.					
No.	Science and Technology (The fifth variable)	5	4	3	2	1
	Administrators recognize that technology is an					
	important part of the education system and the					
1	industrial system to achieve high-quality					
	development of the industry education					
	integration.					
2	Administrators have new concepts, new					
	models, and new forms of educational goals for					

No.	Dependent Variable Name	5	4	3	2	1
	the industry education integration.					
	Administrators have a knowledge system that					
3	integrates industry and education with new					
	concepts, new models, and new forms.					
	Administrators have new concepts, new					
4	models, and new forms of training methods					
	that integrate industry and education.					
	Administrators have a teaching system that					
5	integrates industry and education with new					
	concepts, new models, and new forms.					
	Administrators have new concepts, new					
6	models, and new forms of teacher team					
0	construction that integrate industry and					
	education.					
	Administrators promote information islands					
7	trans for to system online integrating industry					
	and education.					
	Administrators cultivate talents integrating					
8	industry and education that meet the serve the					
0	digital transformation of industrial needs and					
	industrial chains.					
	Administrators use digital technology to achieve					
	the perfect combination of education and					
9	technology, and realize the innovative					
	development of the talent chain, education					
	chain, and industry chain.					
	Administrators have optimized the digital					
10	development planning strategy for the industry					
10	education integration to adapt to the					
	development needs of the digital era and					

No.	Dependent Variable Name	5	4	3	2	1
	promote the sustainable development of the					
	industry education integration.					
	Administrators build digital-based facilities to					
11	provide a better educational environment and					
	meet students' learning needs.					
	Administrators are required to be managers with					
12	practical experience in digital technology and					
	business.					

2. Interview outline

Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province

Instructions:

The interviewees in this research were 20 high-level administrators in private universities in Guangdong. The qualifications of interviewees are as follows:1)at least 5 years of work experience of the industry education integration administrator in private universities,2)have extensive experience of the industry education integration,3)must be willing to participate in the recorded semi-structured interviews,4) must be willing to review their interview transcripts for validation.

Part 1: Respondent Status (Personal Information)

Name (Interviewee):
Position:
School:
Date of Interview:
Length of interview:

Part 2: Interview outline

Content	Question				
	What is your opinion about the				
	guideline outline of the teacher				
Teacher Resources Management	resources management of industry				
	education integration private				
	universities in Guangdong Province?				
	What is your opinion about the				
	guideline outline of the financial				
Financial Management	management of industry education				
	integration private universities in				
	Guangdong Province?				
	What is your opinion about the				
	guideline outline of the management				
Management Mechanism	mechanism of industry education				
	integration private universities in				
	Guangdong Province?				
	What is your opinion about the				
	guideline outline of the talent				
Talent Development	development of industry education				
	integration private universities in				
	Guangdong Province?				
	What is your opinion about the				
	guideline outline of the science and				
Science and Technology	technology of industry education				
	integration private universities in				
	Guangdong Province?				

The interview is as follows:

Interviewee 1

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, it formulate clear policies on teacher resources management of the industry education integration, highlighting the importance of the industry education integration, further promoting the in-depth cooperation between private universities and enterprises, and jointly formulating teacher training plans to ensure that teachers have cutting-edge knowledge in the industry.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, strengthen financial supervision and risk management, strictly control the use of funds for the industry education integration projects and prevent financial risks. Encourage diversified sources of funding, including government funds, enterprise input and social donations, to improve sustainable financial security for the industry education integration projects. Strengthen the management and reporting of financial information and provide timely and accurate financial statements to provide scientific basis for decision-making.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management system of the industry education integration, including organizational structure, division of responsibilities and process specification, to ensure the efficient operation of the industry education integration. Strengthen internal and external cooperation and communication to form an integrated management mode of industry-university-research application and promote resource sharing and complementary advantages. Set up a special management team for the integration of industry-education, responsible for project planning, organization and implementation, effect evaluation, etc. to guarantee the professionalism and continuity of management.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, optimizing the talent cultivation program, incorporating industrial demands into the curriculum design and talent cultivation plan, and Development students' practical ability and application ability. Promote the in-depth integration of industry-university-research, strengthen the cooperation between schools and industry, establish a joint mechanism for training talents from industryuniversity research, provide opportunities for industrial internships, practical training and innovative projects, and cultivate high-quality applied talents that meet the needs of industrial development. Strengthen students' career planning and employment guidance, provide career counselling, expand employment channels and entrepreneurial support, and guide students to make career planning and choices according to their interests and industrial needs. Establish a mechanism to assess the quality of talent development in industry university research, and continuously improve the talent development programme through multi-dimensional assessments such as students' practical achievements, graduation employment rate and evaluation by employers, so as to improve the quality of talent development and its suitability to industry.

5.What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, compared with public universities, private universities have unique advantages in the industry education integration, and compared with public universities, we can adapt to market demand more flexibly and quickly adjust the direction of teaching and scientific research. This flexibility allows us to quickly seize opportunities in technological innovation and contribute to local economic development.

Interviewee 2

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, regularly conduct surveys and forecasts on teacher demand, and plan and allocate teachers in a scientific and reasonable manner according to the demand of the integration project. Scientifically and rationally plan teacher resources and staffing.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, establish a sound financial management system and internal control mechanism, including financial budget, fund management and accounting, to ensure the financial management of the industry education integration project is standardized and transparent. Strengthen financial supervision and risk management, establish a financial risk assessment system, conduct regular financial risk assessments, and identify, prevent and respond to financial risks in a timely manner. Introduce diversified sources of funding, including government funding, corporate input and social donations, to reduce the dependence on a single source of funding and improve the financial sustainability of theindustry education integration projects. Strengthen financial reporting and information disclosure, provide timely and accurate financial statements, enhance communication and collaboration with partner enterprises and government departments, and ensure the transparency and legal compliance of financial information.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, to establish a clear management organization or department for the industry education integration, to clarify the organizational structure, division of responsibilities and workflow, and to form a scientific and efficient management system. Strengthen internal and external cooperation and communication, establish an integrated management mode of industry-university-research-application, and promote resource sharing, information sharing and benefit coordination among partners.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, that "Internet +" should be taken as the driving force for talent training, and the formation should be centered on promoting the comprehensive quality and all-round development of students, with the goal of mutual benefit and win-win for all stakeholders, and promote the data, openness, dynamic, personalization and flexibility of the talent training process. Through the Internet technology, the various cross-border elements in the government, industry, enterprises and school systems are deeply integrated and recombined, so as to promote structural changes in the school education system and form a new model of talent training for the industry education integration in the information age. Based on the connotation and characteristics of "Internet+", this paper proposes a new path for the cultivation of talents integrating industry and education, which is based on the "five integrations" of training objectives, dynamic curriculum system, interactive teaching activities, sharing of teaching resources, and comprehensive learning evaluation.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, Close cooperation with companies is essential to our research work. The company provides us with the latest technical information and market demand, so that we can conduct in-depth research on practical problems, so as to produce more scientific research results with practical value.

Interviewee 3

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province? In my opinion, in order to achieve the goal of integrating industry and education, private universities should establish closer cooperation with enterprises. By jointly developing a teacher training plan, teachers can have a deeper understanding of the needs of the industry and master the cutting-edge knowledge of the industry. At the same time, through cooperation and communication with enterprises, it can also provide teachers with more practical opportunities and improve their practical teaching ability.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, it is necessary to clearly emphasize the core position of the industry education integration in financial management of private universities, and ensure that financial management serves the strategic goal of industry education integration. In the financial management measures of the industry education integration, the special requirements for financial management are clearly stated, such as the flexibility of the use of funds, the analysis of cost-effectiveness, and the trade-off between risks and returns. At the same time, it is recommended that the university set up a special industry-academia integration fund to support related projects and activities. This not only refers to the financial funds to support the projects and activities of the industry education integration, but also refers to the financial management concepts, methods and systems to adapt to and promote the development of the industry education integration in private universities.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for theindustry education integration, and clarify the responsibilities and authority of management at all levels to ensure the efficient operation of theindustry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the scientific nature of decision-making. Strengthen the standardised management of University-Industry Cooperation, including the signing, execution and evaluation of cooperation contracts, to ensure the smooth promotion of cooperation projects and the evaluation and improvement of cooperation effects. Strengthen the role of industry participation in management and set up industry expert committees or relevant advisory bodies to provide professional guidance and support for the integration of industry-education.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to set up a multi-level and multi-discipline talent cultivation system, including undergraduate, postgraduate and continuing education, in order to meet the multi-level and multi-discipline talent needs of industrial development. Strengthen practical education and industrial training, provide abundant practical opportunities and practical project participation, and cultivate students' practical skills and innovative and entrepreneurial spirit. Promote an integrated curriculum design that integrates industry-university-research and incorporates industrial needs into the content of the curriculum to improve its practicality and vocational literacy development. Establish an effective evaluation system, including comprehensive student quality assessment and teacher education and teaching evaluation, to promote quality and continuous improvement of talent development. Strengthen cooperation with industry and establish a mechanism for joint training between industry, academia and research, including internship, practical training and laboratory co-construction, to enhance students' industrial awareness and practical skills.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, the integration model of industry and education helps private universities to cultivate professionals who are more in line with market demand. By cooperating with enterprises, we can keep abreast of industry trends and talent needs, and adjust teaching plans to equip students with stronger practical ability and sense of innovation.

Interviewee 4

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, The author believes that clarifying the selection criteria for the industry education integration in private universities, including academic ability, practical experience and industry background, will help improve the overall quality of the teaching staff of private universities. Through strict screening, more outstanding talents with industry experience and teaching ability can be introduced, which will provide a strong guarantee for the sustainable development of private universities.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management policies, private universities should set up special fund projects for "industry-university-research" cooperation to support projects related to high-tech industrialization. The government should incentivize and guide the influx of private capital into SMEs and formulate specific policies to ensure implementability. It is recommended to set up a special government fund to support science and technology intermediaries in the form of free subsidies or low-interest loans, and encourage them to provide services for industryuniversity-research cooperation or the transformation of high-tech achievements. At the same time, it is also necessary to establish a sound investment mechanism to ensure that there is sufficient investment capital. The government has invested in various forms of industry-education integration activities, forming a comprehensive, multi-level and multi-channel financing to alleviate the pressure of insufficient funds for the industry education integration, and provide strong support for coordinated innovation. 3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish inter-departmental and inter-disciplinary management institutions, including the Management Committee of University-Industry. Research Cooperation and the Project Management Office of University-Industry Research Cooperation, which are responsible for coordinating, organizing and supervising the implementation and management of the integration of industryeducation projects. Establish special positions and responsibilities for University-Industry Cooperation, clarify the duties and powers of relevant personnel, and establish a scientific and reasonable performance evaluation and incentive mechanism to stimulate the enthusiasm and innovative spirit of managers to actively participate in the work of University-Industry Integration. Introduce advanced management concepts and methods, such as project management, performance management and risk management, to improve the management level and efficiency of the integration of industry-education projects and ensure that the projects are completed on schedule, in terms of quality and quantity. Strengthen the management of the whole process of the industry-education integration project, including project planning, cooperation negotiation, contract management, project execution and transformation of results, to ensure that the industry-education integration project can move forward smoothly in all aspects. Strengthen the communication and collaboration with industrial partners and establish good cooperation relationship and cooperation mechanism, including cooperation agreement, project cooperation framework, intellectual property management, etc., so as to promote the indepth development of University-Industry Cooperation.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, based on industrial demands, adjust and optimize the professional settings and curriculum system, and improve the relevance and practicality of talent cultivation. Strengthen cooperation with enterprises, promote the design and implementation of industry-academia integration curriculum, closely integrate practical teaching with industrial reality, and cultivate high-quality talents with practical operation ability and innovation spirit. Provide diversified modes of talent development, including academic education, continuing education and in-company training, to meet the needs of different levels and needs of talent development. Set up a talent development quality assessment and monitoring mechanism to evaluate and provide feedback on training effectiveness and continuously optimise talent development programmes and methods. Provide good career development support, including internship, practical training, practice and employment services, etc., to help students make a smooth transition to their careers and continuously enhance their competitiveness in career development.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, scientific and technological innovation is the core driving force for the development of private universities. The industry education integration provides us with a good platform for achieving scientific and technological innovation. On this platform, we can work with enterprises to develop new technologies and new products to promote industrial upgrading and economic development.

Interviewee 5

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, it is necessary to improve the teacher selection mechanism and introduce industry experts to participate in the review. In order to further improve the fairness and professionalism of the selection of teachers for the industry education integration in private universities, it is recommended to improve the teacher selection mechanism and introduce experts from the industry and education integration industry to participate in the evaluation. Industry experts have rich practical experience and professional knowledge, and are able to better evaluate the candidates' industry background and teaching ability, and ensure that the selected teachers meet the needs of industry-education integration.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management policies, private universities should improve the financial budget management system for the industry education integration. The budget management system is the foundation of the school's financial management, and a sound budget management system can ensure the rational allocation and effective use of the school's funds.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, to formulate scientific performance evaluation indexes, to conduct regular evaluation and monitoring of theindustry education integration projects, and to adjust management strategies and measures in time. Strengthen the monitoring and evaluation of the integration of industry-education projects, establish a performance evaluation system, identify and solve problems in the projects in a timely manner, and enhance the overall performance and social impact of the projects. Strengthen the management of intellectual property rights of the integration projects, including patent application, technology transfer and commercialisation, to improve the technological transformation and economic benefits of the projects. Strengthen the cooperation and participation with experts from outside the university and representatives from enterprises, etc. to form a management model of comanagement and co-construction, and promote the participation and co-management of multiple parties in theindustry education integration. Enhance the comprehensive quality and management ability of the managers, including project management, negotiation and negotiation, teamwork, innovation and entrepreneurship, etc., so as to provide strong management support for the smooth implementation of the integration of industry education projects.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, that the educational concept should be changed and a student-centered personalized teaching model should be constructed. Teachers design teaching activities reasonably, explore an information-based teaching model that conforms to the individualized development of students, and take the initiative to build a student-centered teaching model. Through the comprehensive collection of students' learning process data, in-depth analysis of students' knowledge structure, emotional structure, value tendency and cognitive characteristics, in order to grasp the overall trend of the existing student group's learning status, learning preferences, learning rules, etc., and use "pain point thinking" to accurately locate the "incurable diseases" encountered by students, so as to "prescribe the right medicine" and put forward targeted learning guidance strategies. Through diagnostic analysis, auxiliary information such as comprehensive quality, aptitude, and career intention are collected, and learning resources are automatically pushed to students through screening and intelligent matching, so as to truly realize personalized customized learning.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, by working with companies, we can gain a deeper understanding of industry trends and grasp the frontiers of technology. This provides strong support for our scientific research topic selection, and makes our research direction closer to market demand and industrial development direction.

Interviewee 6

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province? In my opinion, it is an important means to establish and improve the performance evaluation mechanism of teachers in private universities, and to evaluate the performance of teachers. The requirements for the performance evaluation mechanism of teachers are put forward, including the formulation of scientific evaluation standards and the establishment of effective incentive mechanisms. This will help stimulate teachers' enthusiasm and creativity and improve the quality of education and teaching.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management policies, private universities should strengthen risk management. As the school grows in size and expands its business, so does the financial risk. Strengthening risk management can ensure the financial security of the school. It is recommended that private universities establish a risk assessment and early warning mechanism to conduct regular assessments of possible financial risks. At the same time, formulate risk response strategies and measures to improve risk response capabilities. For major risks, it is necessary to report to relevant departments and leaders in a timely manner.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, to establish a clear management organization for theindustry education integration, to clarify the responsibilities and powers of management departments at all levels, and to ensure the orderly implementation of theindustry education integration. Strengthen internal and external cooperation and communication, and promote effective communication and collaboration between different departments within the university and between the university and external partners such as enterprises and the government, so as to form an integrated management model of industry-university-research-application. Set up a special management team for theindustry education integration, responsible for the planning, organization and implementation, supervision and evaluation of the project. 4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, the establishment of long-term and stable school-enterprise cooperation is very important for the industry education integration in private universities. By clarifying the cooperation objectives of the two sides, signing cooperation agreements, jointly formulating talent training programs, building practical teaching bases and carrying out industry-university-research cooperation, we can provide students with more practical opportunities and career development resources, and promote the improvement of the school's teaching quality and the transformation and application of scientific research achievements. At the same time, the implementation and management of school-enterprise cooperation projects require both parties to strengthen communication and cooperation to ensure the smooth implementation of the project and achieve the expected results.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, private universities should pay attention to their own characteristics in the industry education integration. We should form a unique scientific research and teaching model according to our own advantages and the characteristics of local industries, so as to stand out in the fierce competition.

Interviewee 7

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, it is diversified teacher performance evaluation system should be established. In order to comprehensively and objectively evaluate the performance of teachers, it is recommended to establish a diversified teacher performance evaluation system. In addition to the traditional evaluation of scientific research achievements and teaching quality, multiple evaluation indicators such as student evaluation and enterprise evaluation can also be introduced to ensure the fairness and accuracy of the evaluation results.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, strengthening the construction of financial management information technology is an important means to improve management efficiency and quality. Private universities and universities should be encouraged to strengthen the construction of financial informatization, establish a sound financial information system, and realize the rapid transmission and sharing of financial information.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for theindustry education integration, clarify the responsibilities and authority of management at all levels, and ensure the efficient operation of theindustry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the scientific nature of decision-making. Strengthen the standardised management of University-Industry Cooperation, including the signing and fulfillment of cooperation contracts, the management of intellectual property rights, and the promotion of the transformation of results, to ensure the legal and compliant operation of University-Industry Integration, establish a performance evaluation system, regularly evaluate and give feedback on the work of University-Industry Integration, discover problems and correct them in time, and continuously improve the management mechanism.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to set up clear talent cultivation goals and cultivation plans, including practical aspects of integration of industry-university research, participation in practical projects and cultivation of practical skills, etc., so as to ensure the cultivation of applied talents that meet industrial demands. Promote the deep connection between teaching and industrial needs, establish an industry-oriented curriculum system, integrate industrial practice into course teaching, and improve students' practical application ability and industrial suitability. Strengthen the teaching capacity of teachers, including providing education and teaching training and curriculum design support, encouraging teachers to participate in industry-university research projects, and enhancing their level of teaching integration between industry, university and research. Strengthen cooperation with enterprises and establish a cooperation mechanism for the training of talents from industry-university-research, including the construction of enterprise practice bases, guidance from enterprise mentors and industrial skills certification, to improve students' practical working ability and employ ability.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, the investment and support of enterprises in technological innovation have played a positive role in promoting the scientific research development of private universities. The company's capital, equipment and technical support provide us with good conditions for scientific research, so that our research work can be carried out smoothly.

Interviewee 8

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, it that paying attention to the continuing education and development of teachers in private universities is an important way to improve the quality and teaching ability of teachers. It is proposed that specific measures such as strengthening teacher training and encouraging teachers to participate in academic exchanges will help improve the professional level and comprehensive quality of teachers, and provide strong support for the development of the industry education integration in private universities.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that the efficiency of fund use should be improved in terms of financial management, and the efficiency of fund use is one of the important indicators to measure the financial management level of private universities. Improving the efficiency of the use of funds can reduce the operating costs of private universities and improve economic benefits. It is suggested that private universities should strengthen the planning and scientificity of the use of funds and optimize the allocation of funds. At the same time, strengthen the supervision and evaluation of the use of funds to ensure the compliance and effectiveness of the use of funds. For major projects or activities, it is necessary to conduct pre-evaluation and in-process monitoring to ensure that the benefits of the use of funds are maximized.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for theindustry education integration, and clarify the responsibilities and authority of management at all levels to ensure the efficient operation of theindustry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the of decision-making. Reinforce the standardisation scientific nature and institutionalisation of University-Industry Cooperation, including the signing of cooperation agreements, project management and distribution of results, to ensure fair, just and sustainable development of cooperation. Strengthen the supervision and evaluation of industry-education integration projects, establish a performance
evaluation mechanism, regularly assess the progress and effectiveness of projects, and promptly adjust management strategies and improve working models. Improve the management system of the integration of industry-education, including organizational structure, division of responsibilities and process specification, etc., and clarify the responsibilities and rights of various departments and personnel in the integration of industry-education.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to formulate talent cultivation plan and curriculum system that meet the needs of integration of industry-education, and cultivate high-level applied talents with practical ability, innovation spirit and industrial literacy. Implement a teaching mode that integrates industry and education, including practical training, internship and practice in cooperation with schools and enterprises to enhance students' practical skills and industrial suitability. Strengthen the cultivation of students' practical and innovative abilities, including participation in research projects and innovation and entrepreneurship education, to enhance students' research capabilities and innovation awareness. Strengthen cooperation with industry and establish a mechanism for training talents from industry, university and research, including joint training and internship and employment, etc., to enhance students' employment competitiveness and practical operation ability. Strengthen students' career planning and employment services, and provide support such as career guidance and career selection counselling to help students better integrate into the industrial sector and society.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, the industry education integration is conducive to promoting the transformation and application of scientific research achievements in private universities. By cooperating with enterprises, we can transform scientific research results into real productivity and create more economic value for society.

Interviewee 9

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to increase investment and support the continuing education of teachers in private universities. Teachers are encouraged to actively participate in continuing education and development activities, and special training funds and training subsidies can be provided to provide more training opportunities and resource support for teachers in private universities.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, in terms of financial management, private universities should build financial informatization, which is an important means to improve the efficiency and quality of financial management. Through the construction of financial informatization, real-time sharing and monitoring of financial data are realized, and the transparency and accuracy of financial management are improved. It is suggested that private universities should increase investment in financial informatization construction and establish financial informatization platforms. At the same time, the quality of financial personnel is improved, and the quality of financial management personnel directly affects the quality of financial management. Private universities should emphasize the training and management of financial personnel, improve their professional quality and professional ethics, and ensure the standardization and effectiveness of financial management.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, strengthen the standardized management of the cooperation between education and industry, establish clear cooperation agreements and contracts, clarify the cooperation content, rights and responsibilities and benefit distribution, and ensure the cooperation relationship is fair, legal and sustainable. Strengthen the supervision and evaluation of industry-university-research cooperation projects, establish a project management and evaluation system, and conduct regular monitoring and evaluation of cooperation projects to identify and solve problems in a timely manner, so as to ensure the smooth promotion and effective achievement of the projects. Establish an intellectual property management system for University-Industry Research Cooperation, including patent application, technology transfer and commercialisation, to reasonably protect and utilise intellectual property rights and maximise the industrialisation and economic benefits of the results of University-Industry Research Cooperation. Strengthen the publicity and promotion of University-Industry Research Cooperation, improve the visibility and influence of the cooperation projects, attract more outstanding enterprises and institutions to participate in the cooperation, and promote the expansion of University-Industry-Research Cooperation to a wider field.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, set up a multi-level and multi-discipline talent cultivation system, including undergraduate, postgraduate and continuing education, to meet the different talent needs of the integration of industry-education. Strengthen practical teaching, enhance the construction and utilisation of industry-academia-research practice bases, provide training opportunities for practical projects and actual positions, and cultivate talents with practical operational skills and the ability to solve practical problems. Strengthen interdisciplinary and professional integration, promote the deep integration of industry-university-research, and cultivate interdisciplinary and comprehensive talents with strong comprehensive qualities to adapt to the diversification and complexity of industrial development. Set up talent incentive policies, such as establishing a reward system for industry-university-research talents and internship and practical training allowances, to stimulate students' enthusiasm and creativity in participating in the industry education integration. Strengthen cooperation with enterprises and industries, provide internship, practical training, employment and entrepreneurship support, and establish a long-term mechanism for training talents in industry-university research to achieve effective output of talents and maximize social value.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, in the industry education integration, private universities should pay more attention to the protection and management of intellectual property rights. We should establish a sound intellectual property protection system to ensure that the legitimate rights and interests of scientific research results are fully protected.

Interviewee 10

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to build and improve the informatization of the industry education integration in private universities. Informatization construction is an important means to improve the efficiency and level of the management of faculty resources in the industry education integration in private universities, and specific measures such as strengthening the construction of information management system and promoting resource sharing are proposed, which will help to realize the digital, networked and intelligent management of faculty resources and improve the management efficiency and level.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, broaden the fund source channels of the integration of production and education, set up special funds to ensure the investment. Strengthen the standardization of financial management process of the integration of production and education, organize relevant personnel to study, plan and prepare the budget for the integration of production and education scientifically, and use it reasonably. Strengthen the process management to ensure the and reasonable compliance of fund use.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, sort out the division of responsibilities of application-oriented universities about the work of industry education integration, clarify the responsibility and power of internal units, improve the awareness of phase service and improve the efficiency of collaboration. Strengthen the research, analysis and study of the case of integration of production and education, form the research atmosphere of integration of production and education, and improve the scientific and effective management mechanism. Establish an incentive mechanism for the industry education integration, and incorporate relevant work into the work points and performance assessment of the school. Strengthen the contact and communication with enterprises, research the actual needs of enterprises, and form an atmosphere of mutual help. Call on the local government to strengthen guidance and introduce policies to promote the development of industry education integration jointly with science and technology, education, industry and information technology departments to cultivate the atmosphere of industry education integration and collaborative innovation.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, increase the participation of enterprises in talent cultivation of application-oriented universities, let enterprises deeply participate in talent cultivation orientation, curriculum setting, teaching practice, innovation and entrepreneurship, curriculum resource construction and assessment and evaluation, and participate in the iterative update of talent cultivation program in the closed loop of talent cultivation, and let enterprise managers realize that enterprises are also one of the subjects of talent cultivation, and also the beneficiaries of talent cultivation. Strengthen students' understanding and awareness of enterprises, help students establish career concepts, do career planning, improve students' purpose and initiative of learning, and school and enterprise jointly guide and counsel students to use their professional knowledge to solve practical problems and improve their practical handson ability and comprehensive ability.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, cooperation with the government, industry associations and other institutions can provide more resources and support for scientific and technological innovation of private universities. These institutions can provide us with policy guidance, financial support, talent training and other assistance to promote greater progress in our scientific research.

Interviewee 11

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that the implementation of the "double-teacher" teacher training plan, the development of a detailed "double-teacher" teacher training plan, including curriculum setting, practical exercise, enterprise cooperation, etc., to ensure that teachers can have both teaching and practical ability, regularly arrange teachers to enterprises for internship or temporary training, encourage teachers to participate in enterprise research and development, production, management and other activities, in-depth understanding of industry dynamics and technological development.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management, private universities should establish a financial performance evaluation system, which is an important tool to measure the effectiveness of school financial management. Through the establishment of a scientific financial performance evaluation system, the financial status and operating results of the school can be objectively evaluated, and the financial management of the industry education integration can be improved. It is suggested that private universities should establish a financial performance evaluation system including financial indicators and non-financial indicators in the financial management of the industry education integration, including financial indicators such as revenue growth rate, cost control rate, asset turnover rate, and non-financial indicators such as teacher and student satisfaction and social reputation. At the same time, the incentive mechanism and restraint mechanism of financial performance evaluation should be established, and the evaluation results should be combined with the development plan and goals of the university, so as to promote the continuous improvement and development of the financial management of private universities.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, strengthen the standardized management of the cooperation between education and industry, establish clear cooperation agreements and contracts, clarify the cooperation content, rights and responsibilities and benefit distribution, and ensure the cooperation relationship is fair, legal and sustainable. Strengthen the supervision and evaluation of industry-university-research cooperation projects, establish a project management and evaluation system, and conduct regular monitoring and evaluation of cooperation projects to identify and solve problems in a timely manner, so as to ensure the smooth promotion and effective achievement of the projects. Establish an intellectual property management system for University-Industry Research Cooperation, including patent application, technology transfer and commercialisation, to reasonably protect and utilise intellectual property rights and maximise the industrialisation and economic benefits of the results of University-Industry Research Cooperation. Strengthen the publicity and promotion of University-IndustryResearch Cooperation, improve the visibility and influence of the cooperation projects, attract more outstanding enterprises and institutions to participate in the cooperation, and promote the expansion of University-Industry-Research Cooperation to a wider field.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, set up a multi-level and multi-discipline talent cultivation system, including undergraduate, postgraduate and continuing education, to meet the different talent needs of the integration of industry-education. Strengthen practical teaching, enhance the construction and utilisation of industry-academia-research practice bases, provide training opportunities for practical projects and actual positions, and cultivate talents with practical operational skills and the ability to solve practical problems. Strengthen interdisciplinary and professional integration, promote the deep integration of industry-university-research, and cultivate interdisciplinary and comprehensive talents with strong comprehensive qualities to adapt to the diversification and complexity of industrial development. Set up talent incentive policies, such as establishing a reward system for industry-university-research talents and internship and practical training allowances, to stimulate students' enthusiasm and creativity in participating in the industry education integration. Strengthen cooperation with enterprises and industries, provide internship, practical training, employment and entrepreneurship support, and establish a long-term mechanism for training talents in industry-university research to achieve effective output of talents and maximize social value.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, technological innovation under the industry education integration can help enhance the social reputation and influence of private universities. By cooperating with enterprises to carry out scientific research projects and jointly develop new technologies, we can demonstrate our scientific research strength and innovation capabilities, and improve the recognition and trust of society.

Interviewee 12

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to establish a mutual employment system for school-enterprise tutors, formulate clear conditions and procedures for mutual employment, and allow private university teachers to work in enterprises on a temporary basis and participate in enterprise R&D, production and other activities; At the same time, business experts can also work as part-time teachers or give lectures at private universities. Establish mutual employment agreements, clarify their respective responsibilities and rights and interests, promote the flow of talents between schools and enterprises, and improve the practical ability and enterprise innovation ability of teachers in the industry education integration in private universities.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management, private universities should clarify the long-term and short-term goals of financial management, and ensure that financial management activities are consistent with the overall strategy and development plan of the university. This helps to ensure the rational allocation and effective use of funds to achieve the sustainable development of the industry education integration in schools. At the same time, establish and improve the financial management system, including the budget system, the revenue and expenditure management system, the asset management system, the financial examination and approval system, etc., to ensure the standardization and legitimacy of financial management. The financial management system is regularly reviewed and updated to meet the needs of the school's development and changes in the external environment.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, to establish a clear management organization or department for theindustry education integration, to clarify the organizational structure, division of responsibilities and workflow, and to form a scientific and efficient management system. Strengthen internal and external cooperation and communication, establish an integrated management mode of industry-university-research-application, and promote resource sharing, information sharing and benefit coordination among partners.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to set up the objectives and planning of talent cultivation in the industry education integration, to clarify the professional direction, subject requirements and teaching mode of cultivation, and to dovetail closely with industrial demands. Strengthen the design and implementation of industry-education integration curriculum, focus on practical teaching and practical application, and improve students' practical operation ability and practical problem-solving ability. Promote the integration of industry-education innovation and entrepreneurship education, cultivate students' sense of innovation, innovation ability and entrepreneurship, and encourage students to participate in innovation and entrepreneurship projects and practical activities. Strengthen the assessment and certification of the training of talents integrated with industry-education, establish a quality monitoring and evaluation system, and ensure that the talents trained meet the needs of industry and the expectations of society. Strengthen collaborative cooperation in the training of talents from industry to university, and promote the participation of industry in teaching, internship and graduation design to enhance students' practical ability and employ ability.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, private universities should pay attention to cultivating students' innovative consciousness and practical ability in the industry education integration. We should cultivate students' innovative spirit and practical ability through curriculum setting and practical teaching, so that they can become high-quality talents with innovative spirit and practical ability.

Interviewee 13

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to build a scientific teacher job evaluation system, improve the "double-teacher" teacher evaluation method, implement a professional title evaluation system that conforms to the characteristics of private universities, and incorporate teaching, scientific research, social services, and guidance for students' employment, innovation and entrepreneurship into teachers' work responsibilities. At the same time, a school-enterprise mutual employment and cotraining mechanism is established to realize the complementarity of school-enterprise talents and technical resources, flexibly hire enterprise management personnel and technical backbones as off-campus professional leaders or enterprise mentors, and encourage teachers in the school to participate in enterprise technical research.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management, private universities should strengthen the construction of financial management teams, improve the professional quality and professional ability of financial personnel, regularly organize training and learning for financial personnel, and update financial management knowledge and skills. Encourage financial personnel to participate in the decisionmaking and planning process of private universities, and improve the participation and influence of financial management. At the same time, the financial management performance will be included in the assessment and incentive mechanism of the university, the outstanding financial personnel will be commended and rewarded, and the financial personnel will be encouraged to put forward innovative financial management suggestions and methods, so as to promote the continuous improvement and development of the financial management of the industry education integration in private universities.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for theindustry education integration, and clarify the responsibilities and authority of management at all levels to ensure the efficient operation of theindustry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the scientific nature of decision-making. Strengthen the standardised management of University-Industry Cooperation, including the signing, execution and evaluation of cooperation contracts, to ensure the smooth promotion of cooperation projects and the evaluation and improvement of cooperation effects. Strengthen the role of industry participation in management and set up industry expert committees or relevant advisory bodies to provide professional guidance and support for the integration.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to set up a multi-level and multi-discipline talent cultivation system, including undergraduate, postgraduate and continuing education, in order to meet the multi-level and multi-discipline talent needs of industrial development. Strengthen practical education and industrial training, provide abundant practical opportunities and practical project participation, and cultivate students' practical skills and innovative and entrepreneurial spirit. Promote an integrated curriculum design that integrates industry-university-research and incorporates industrial needs into the content of the curriculum to improve its practicality and vocational literacy development. Establish an effective evaluation system, including comprehensive student quality assessment and teacher education and teaching evaluation, to promote quality and continuous improvement of talent development. Strengthen cooperation with industry and establish a mechanism for joint training between industry, academia and research, including internship, practical training and laboratory co-construction, to enhance students' industrial awareness and practical skills.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, enterprises should actively participate in the scientific research projects of private universities to jointly promote scientific and technological innovation and industrial development. Enterprises can provide private universities with practical platforms and technical support to help us better carry out scientific research.

Interviewee 14

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to strengthen the construction of the teaching team of the industry education integration, introduce leading talents, and accelerate the introduction and training of a group of leading talents, famous teachers and academic leaders with international influence and domestic first-class. In addition, we have established teacher training bases, and cooperated with enterprises to establish teacher training bases such as "master studios" and "expert workstations" to promote the improvement of the overall level of teachers.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that in terms of financial management, private universities should use information technology to improve management efficiency: introduce advanced financial management software and systems, realize the electronic, automatic processing and analysis of financial data, strengthen the integration and sharing of financial information, and improve the coordination and efficiency of financial management.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management system of the industry education integration, including organizational structure, division of responsibilities and process specification, to ensure the efficient operation of the industry education integration. Strengthen internal and external cooperation and communication to form an integrated management mode of industry-university-research application and promote resource sharing and complementary advantages. Set up a special management team for the integration of industry-education, responsible for project planning, organization and implementation, effect evaluation, etc. to guarantee the professionalism and continuity of management.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, optimizing the talent cultivation program, incorporating industrial demands into the curriculum design and talent cultivation plan, and Development students' practical ability and application ability. Promote the in-depth integration of industry-university-research, strengthen the cooperation between schools and industry, establish a joint mechanism for training talents from industryuniversity research, provide opportunities for industrial internships, practical training and innovative projects, and cultivate high-quality applied talents that meet the needs of industrial development. Strengthen students' career planning and employment guidance, provide career counselling, expand employment channels and entrepreneurial support, and guide students to make career planning and choices according to their interests and industrial needs. Establish a mechanism to assess the quality of talent development in industry university research, and continuously improve the talent development programme through multi-dimensional assessments such as students' practical achievements, graduation employment rate and evaluation by employers, so as to improve the quality of talent development and its suitability to industry.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, scientific and technological innovation under the mode of industry education integration is conducive to the formation of benign interaction and coordinated development of education, scientific research and industry. Through the development model of industry-university-research integration, we can achieve a good situation of resource sharing, complementary advantages and mutual promotion.

Interviewee 15

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, Establish clear guidelines and criteria for teacher resources management, focusing on recruitment, selection and evaluation of relevant industrial experience, practical skills and teaching effectiveness. Provide professional development opportunities for faculty members to enhance their industrial knowledge and skills, such as industry-university collaboration programmes, industrial internships and continuing education programmes. Implement performance-driven incentives and rewards to motivate faculty and staff to actively participate in industry-related research, innovation and collaborative projects. Create a supportive and inclusive work environment that encourages open communication, teamwork and mutual learning between faculty and industry partners. Strengthen mechanisms for monitoring and evaluating the performance of faculty and staff in the industry education integration, and provide feedback and support for improvement.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, in terms of financial management, private universities should establish an effective internal control system to ensure the compliance and accuracy of financial activities, including the control of financial approval process, internal audit, risk management, etc. Strengthen the management and supervision of key positions and sensitive links to prevent the occurrence of financial fraud and violations. At the same time, it will improve financial transparency, strengthen the disclosure and transparency of financial information, regularly announce the financial special funds and operating results of the school's industry-education integration to faculty, staff and students, and establish a financial information disclosure platform to facilitate all parties to inquire and understand the financial information of the school.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for the industry education integration, clarify the responsibilities and authority of management at all levels, and ensure the efficient operation of the industry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the scientific nature of decision-making. Strengthen the standardised management of University-Industry Cooperation, including the signing and fulfillment of cooperation contracts, the management of intellectual property rights, and the promotion of the transformation of results, to ensure the legal and compliant operation of University-Industry Integration, establish a performance evaluation system, regularly

evaluate and give feedback on the work of University-Industry Integration, discover problems and correct them in time, and continuously improve the management mechanism.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to set up clear talent cultivation goals and cultivation plans, including practical aspects of integration of industry-universityresearch, participation in practical projects and cultivation of practical skills, etc., so as to ensure the cultivation of applied talents that meet industrial demands. Promote the deep connection between teaching and industrial needs, establish an industry-oriented curriculum system, integrate industrial practice into course teaching, and improve students' practical application ability and industrial suitability. Strengthen the teaching capacity of teachers, including providing education and teaching training and curriculum design support, encouraging teachers to participate in industry-university research projects, and enhancing their level of teaching integration between industry, university and research. Strengthen cooperation with enterprises and establish a cooperation mechanism for the training of talents from industry-university-research, including the construction of enterprise practice bases, guidance from enterprise mentors and industrial skills certification, to improve students' practical working ability and employ ability.

5.What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, private universities should pay attention to cooperation and exchanges with international advanced enterprises and institutions in the industry education integration. Through cooperation with international advanced enterprises and institutions, we can introduce advanced technology and management experience to improve our scientific research level and innovation ability.

Interviewee 16

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to strengthen the policy support and guarantee for teachers integrating industry and education, formulate relevant policies and regulations, and provide policy guarantee for the construction of teachers integrating industry and education. Establish a coordination mechanism for the construction of teachers integrating industry and education to ensure the smooth implementation of various measures; At the same time, supervision and inspection should be strengthened, so as to establish a sound supervision and inspection mechanism to carry out all-round supervision and inspection of teachers integrating industry and education in private universities.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that private universities and enterprises should implement a benefit-sharing and risk-sharing mechanism. Benefit sharing, according to the resources invested by both parties, contributions and the actual benefits of the project, formulate a reasonable benefit distribution plan. This ensures that both parties get a reasonable return on the collaboration, which in turn inspires motivation and engagement for both parties. Risk sharing, various risks may arise in the process of cooperation, such as market risks, technical risks, financial risks, etc. Both parties shall jointly bear these risks and formulate corresponding risk response strategies and measures. By sharing risks, the pressure on a single party to take risks can be reduced, and the stability and sustainability of cooperation can be enhanced.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for the industry education integration, and clarify the responsibilities and

authority of management at all levels to ensure the efficient operation of the industry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the decision-making. Reinforce the scientific nature of standardisation and institutionalisation of University-Industry Cooperation, including the signing of cooperation agreements, project management and distribution of results, to ensure fair, just and sustainable development of cooperation. Strengthen the supervision and evaluation of industry-education integration projects, establish a performance evaluation mechanism, regularly assess the progress and effectiveness of projects, and promptly adjust management strategies and improve working models. Improve the management system of the integration of industry-education, including organizational structure, division of responsibilities and process specification, etc., and clarify the responsibilities and rights of various departments and personnel in the integration of industry-education.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to formulate talent cultivation plan and curriculum system that meet the needs of integration of industry-education, and cultivate high-level applied talents with practical ability, innovation spirit and industrial literacy. Implement a teaching mode that integrates industry and education, including practical training, internship and practice in cooperation with schools and enterprises to enhance students' practical skills and industrial suitability. Strengthen the cultivation of students' practical and innovative abilities, including participation in research projects and innovation and entrepreneurship education, to enhance students' research capabilities and innovation awareness. Strengthen cooperation with industry and establish a mechanism for training talents from industry, university and research, including joint training and internship and employment, etc., to enhance students' employment competitiveness and practical operation ability. Strengthen students' career planning and employment services, and provide support such as career guidance and career selection counselling to help students better integrate into the industrial sector and society.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, scientific and technological innovation is one of the important means to promote the high-quality development of private universities. The industry education integration is an effective way to achieve this goal. By cooperating with enterprises to carry out scientific research projects and jointly develop new technologies, we can continuously improve our scientific research strength and innovation capabilities.

Interviewee 17

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, strengthen the selection and training of faculty members, pay attention to the subject expertise and practical experience of teachers, and improve the overall quality of faculty members. Strengthen the structural adjustment of the faculty, focus on the introduction and training of professional faculty in industrial fields, and enhance the industrial suitability of the faculty. Strengthen the exchange and cooperation of the faculty, encourage in-depth collaborative research and project cooperation between faculty and industrial partners, and enhance the practical experience and industrial insight of the faculty. Strengthen the interdisciplinary and interdisciplinary research of the faculty team, cultivate faculty members with strong comprehensive quality and innovation ability, and promote interdisciplinary research and practical innovation of the industry education integration.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that private universities and enterprises should establish regular financial audit and evaluation mechanisms. Financial audit: Conduct regular financial audits of industry-education integration cooperation projects to ensure the compliant use of funds and the financial health of the project. The audit process should be open and transparent, and both private universities and enterprises can participate and understand the results of the audit. The results of the audit can be used as a basis for adjusting cooperation strategies and optimizing the use of funds.Project evaluation, the economic and social benefits of the cooperation project are evaluated, and through the evaluation, you can understand the implementation effect, existing problems and improvement directions of the project. The evaluation results should be used as an important reference for decision-making by both parties to promote the continuous improvement and development of cooperation projects.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish inter-departmental and inter-disciplinary management institutions, including the Management Committee of University-Industry. Research Cooperation and the Project Management Office of University-Industry Research Cooperation, which are responsible for coordinating, organizing and supervising the implementation and management of the integration of industryeducation projects. Establish special positions and responsibilities for University-Industry Cooperation, clarify the duties and powers of relevant personnel, and establish a scientific and reasonable performance evaluation and incentive mechanism to stimulate the enthusiasm and innovative spirit of managers to actively participate in the work of University-Industry Integration. Introduce advanced management concepts and methods, such as project management, performance management and risk management, to improve the management level and efficiency of the integration of industry-education projects and ensure that the projects are completed on schedule, in terms of quality and quantity. Strengthen the management of the whole process of the industry-education integration project, including project planning, cooperation negotiation, contract management, project execution and transformation

of results, to ensure that the industry-education integration project can move forward smoothly in all aspects. Strengthen the communication and collaboration with industrial partners and establish good cooperation relationship and cooperation mechanism, including cooperation agreement, project cooperation framework, intellectual property management, etc., so as to promote the indepth development of University-Industry Cooperation.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, based on industrial demands, adjust and optimize the professional settings and curriculum system, and improve the relevance and practicality of talent cultivation. Strengthen cooperation with enterprises, promote the design and implementation of industry-academia integration curriculum, closely integrate practical teaching with industrial reality, and cultivate high-quality talents with practical operation ability and innovation spirit. Provide diversified modes of talent development, including academic education, continuing education and in-company training, to meet the needs of different levels and needs of talent development. Set up a talent development quality assessment and monitoring mechanism to evaluate and provide feedback on training effectiveness and continuously optimise talent development programmes and methods. Provide good career development support, including internship, practical training, practice and employment services, etc., to help students make a smooth transition to their careers and continuously enhance their competitiveness in career development.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, in the industry education integration, private universities should pay more attention to the construction of their own scientific research teams and talent training. We should build a high-quality and high-level scientific research team by introducing outstanding talents, strengthening team building, and improving the level of scientific research.

Interviewee 18

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that it is necessary to strengthen the international exchange of teacher resources for the industry education integration in private universities. International exchange is an important way to improve the quality of teacher resources, through exchanges and cooperation with internationally renowned universities and enterprises, we can introduce international advanced educational concepts and teaching resources, and improve the internationalization level of teacher resources. This will help to broaden the international vision of teachers and improve their education and teaching level and scientific research ability.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that private universities and enterprises should jointly participate in budget planning and fund raising. Before the start of the project, both parties should jointly participate in the budget planning work, determine the budget needs of the project through full discussion and consultation, and formulate the corresponding budget plan, which will help to ensure the adequate and rational use of project funds. At the same time, in terms of fundraising, both private universities and enterprises should jointly raise the funds required for the project, and enterprises can provide financial support through investment and donations, while private universities can use their own resources and channels, such as government subsidies and alumni donations, to raise funds. The two sides can also jointly explore diversified funding channels, such as applying for scientific research project funding and seeking social financial support.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, to formulate scientific performance evaluation indexes, to conduct regular evaluation and monitoring of the industry education integration projects, and to adjust management strategies and measures in time. Strengthen the monitoring and evaluation of the integration of industry-education projects, establish a performance evaluation system, identify and solve problems in the projects in a timely manner, and enhance the overall performance and social impact of the projects. Strengthen the management of intellectual property rights of the integration projects, including patent application, technology transfer and commercialisation, to improve the technological transformation and economic benefits of the projects. Strengthen the cooperation and participation with experts from outside the university and representatives from enterprises, etc. to form a management model of comanagement and co-construction, and promote the participation and co-management of multiple parties in the industry education integration. Enhance the comprehensive quality and management ability of the managers, including project management, negotiation and negotiation, teamwork, innovation and entrepreneurship, etc., so as to provide strong management support for the smooth implementation of the integration of industry education projects.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to formulate multi-level and multi-discipline talent cultivation plans, including different levels of undergraduate students, postgraduate students and continuing education, etc., and cultivate applied talents adapted to the industry education integration according to the needs of industrial development and market demand for talents. Promote innovation in the curriculum system and teaching methods, focus on the cultivation of practical and application skills, strengthen the practical teaching links in the integration of industry, academia and research, and enhance students' industrial practice and innovation capabilities. Strengthen cooperation with industry and promote the industry education integration in the form of practical training and school-enterprise cooperation projects, so that students can better understand the actual needs of industry and grasp practical operating skills. Strengthen career planning and employment services for students, including career guidance and internship and employment recommendation, to help students better integrate into the industrial sector and achieve a smooth transition in employment and career development.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion,by partnering with companies on research projects, private universities can better understand market needs and technological trends. This provides more valuable reference information for us to formulate teaching plans and adjust research directions.

Interviewee 19

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that the teaching quality, scientific research achievements, enterprise evaluation and other aspects of teachers should be included in the performance evaluation system to ensure the comprehensiveness and fairness of the evaluation. In addition to the quality of teaching and scientific research achievements, attention should also be paid to teachers' social services, enterprise evaluation, etc. This ensures that the assessment is comprehensive and impartial, and provides more accurate guidance for teacher development.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, private universities and enterprises should establish a clear cooperation framework and financial agreement. The private university and the enterprise should sign a detailed cooperation agreement, which clearly defines the cooperation objectives, duration, rights and obligations of both parties, resources to be invested, expected results, etc. The agreement should also make special reference to financial terms, including the use, management, distribution and supervision of funds. In addition, a special financial account is set up to manage the funds of the cooperation project, so as to ensure that the funds are earmarked and avoid misappropriation or abuse of funds. At the same time, both parties can know the flow of funds in real time through this account.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, to establish a clear management organization for the industry education integration, to clarify the responsibilities and powers of management departments at all levels, and to ensure the orderly implementation of the industry education integration. Strengthen internal and external cooperation and communication, and promote effective communication and collaboration between different departments within the university and between the university and external partners such as enterprises and the government, so as to form an integrated management model of industry-university-research-application. Set up a special management team for the industry education integration, responsible for the planning, organization and implementation, supervision and evaluation of the project.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to develop a talent cultivation program that meets the needs of industry education integration, including curriculum setting, practical teaching, internship and training, etc., to cultivate students with practical ability and innovative and entrepreneurial spirit demanded by industry. Strengthen cooperation with industry and establish an industry-university-research talent development model, including industry mentors, enterprise training bases and industry-university-research projects, to provide practical work opportunities and hands-on exercises to improve students' industrial suitability. Promote the integration of industry-education innovation and entrepreneurship education, including entrepreneurship courses, entrepreneurship practice and entrepreneurship mentors, to cultivate students' innovative thinking, teamwork and entrepreneurial management skills. Strengthen employment services and career planning guidance, providing students with career counselling, internship employment opportunities and career development guidance to promote smooth employment and provide high quality talents for industry.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, scientific and technological innovation under the industry education integration will help enhance the comprehensive strength and competitiveness of private universities. By cooperating with enterprises to carry out scientific research projects and jointly develop new technologies, we can continuously improve our comprehensive strength and competitiveness, and make greater contributions to local economic development.

Interviewee 20

1. What is your opinion about the guideline outline of the teacher resources management of industry education integration private universities in Guangdong Province?

In my opinion, that industry-university-research cooperation projects should be carried out, an industry-university-research cooperation mechanism should be established, and teachers and enterprises should be encouraged to cooperate in scientific research projects and new product development. Through cooperative projects, promote the transformation and application of scientific research achievements and promote industrial development.

2. What is your opinion about the guideline outline of the financial management of industry education integration private universities in Guangdong Province?

In my opinion, that private universities and enterprises should strengthen communication and cooperation to establish long-term and stable cooperative relations. Private universities and enterprises have established an effective communication mechanism, held regular meetings, exchanged experiences, shared information, etc., through communication, they can keep abreast of the progress of the project, existing problems and solutions, and promote trust and understanding between the two parties. At the same time, private universities and enterprises should work closely together to complete the work of the cooperation project. In the process of implementing the industry education integration, the two sides should support and help each other to solve the problems and difficulties encountered. By working together, you can ensure that the project runs smoothly and achieves the desired results. The industry education integration is a long-term process, which requires the joint efforts and continuous investment of both sides, therefore, the two sides should establish a long-term and stable cooperative relationship, and achieve mutual benefit and common development by continuously deepening the content and methods of cooperation. This will help improve the quality and efficiency of the cooperation projects and promote the sustainable development of both parties' careers.

3. What is your opinion about the guideline outline of the management mechanism of industry education integration private universities in Guangdong Province?

In my opinion, establish a clear management institution and organizational structure for the industry education integration, and clarify the responsibilities and authority of management at all levels to ensure the efficient operation of the industry education integration. Implement information management, establish an information platform for the integration of industry-education, realise information sharing and optimisation of business processes, and improve management efficiency and the scientific nature of decision-making. Reinforce the standardisation and institutionalisation of University-Industry Cooperation, including the signing of cooperation agreements, project management and distribution of results, to ensure fair, just and sustainable development of cooperation. Strengthen the supervision and evaluation of industry-education integration projects, establish a performance evaluation mechanism, regularly assess the progress and effectiveness of projects, and promptly adjust management strategies and improve working models. Improve the management system of the integration of industry-education, including organizational structure, division of responsibilities and process specification, etc., and clarify the

responsibilities and rights of various departments and personnel in the integration of industry-education.

4. What is your opinion about the guideline outline of the talent development of industry education integration private universities in Guangdong Province?

In my opinion, to formulate talent cultivation plan and curriculum system that meet the needs of integration of industry-education, and cultivate high-level applied talents with practical ability, innovation spirit and industrial literacy. Implement a teaching mode that integrates industry and education, including practical training, internship and practice in cooperation with schools and enterprises to enhance students' practical skills and industrial suitability. Strengthen the cultivation of students' practical and innovative abilities, including participation in research projects and innovation and entrepreneurship education, to enhance students' research capabilities and innovation awareness. Strengthen cooperation with industry and establish a mechanism for training talents from industry, university and research, including joint training and internship and employment, etc., to enhance students' career planning and employment services, and provide support such as career guidance and career selection counselling to help students better integrate into the industrial sector and society.

5. What is your opinion about the guideline outline of the science and technology of industry education integration private universities in Guangdong Province?

In my opinion, private universities should pay attention to cultivating students' innovative and entrepreneurial spirit and practical ability in the industry education integration. We should cultivate students' innovative and entrepreneurial spirit and practical ability through curriculum setting, practical teaching, entrepreneurship guidance, etc., so that they can become high-quality talents with innovative spirit and practical ability, and provide more valuable contributions to future social and economic development.

3. Assessment checklist

Assessment checklist of Guideline for Improving of Industry Education Integration Private Universities in Guangdong Province

Thank you very much for your busy schedule and participation in the evaluation of this study. Please evaluate the suitability and feasibility of the guideline of Guangdong province in private Universities based on the industry education integration, with the numbers 5, 4, 3, 2 and 1 corresponding to highest, high, average, low and lowest.

		Ada	ptab	oility		Feasibility				
Assessment checklist		4	3	2	1	5	4	3	2	1
1. Improving Teacher Resources Management										
1.1 Develop an effective										
management model for teacher										
training integrating industry and										
education										
1.2 Scientifically and rationally plan										
teacher resources and staffing										
1.3 Establish a teacher evaluation										
system integrating industry and										
education, linked to performance										
appraisal and professional title										
evaluation										
1.4 Improve teachers' practical										
abilities and professional qualities										
1.5 Provide opportunities for										
interdisciplinary exchanges and										
cooperation between teachers and										
rationally plan teachers' careers										

		Ada	ptab	oility		Feasibility					
Assessment Checklist	5	4	3	2	1	5	4	3	2	1	
1.6 Improve incentive assessment											
and establish teacher feedback											
mechanism											
1.7 Constructing a training system											
for a "double-qualified" teacher											
team											
2. Supporting financial management											
2.1 Improve financial management											
system											
2.2 Allocate funds scientifically and											
rationally, plan budget and allocate											
resources											
2.3 Introducing diversified funding											
sources and establishing special											
funds for the industry education											
integration											
2.4 Establish scientific financial											
transparency and supervision											
mechanisms to prevent financial											
risks											
2.5 Strengthen financial team											
building and training to cultivate											
financial decision-making											
capabilities											
2.6 Strengthen financial											
transparency, supervision and risk											
management to ensure fund											
security											

Assessment checklist		Ada	ptab	oility		Feasibility					
		4	3	2	1	5	4	3	2	1	
3. Complete management mechanism											
3.1 Establish a sound management											
mechanism for the industry											
education integration											
3.2 Establish a clear organizational											
structure and management system											
3.3 Strengthen the standardized											
management of school-enterprise											
cooperation projects											
3.4 Recruit people with business											
management experience as											
industry-education integration											
managers											
3.5 Clarify the fair and reasonable											
distribution of rights and interests in											
school-enterprise cooperation											
3.6 Establish a scientific and											
reasonable communication											
mechanism and incentive											
mechanism, and strengthen											
resource integration and sharing											
4. Complete talent development											
4.1 Clarify the goals and positioning											
of talents training for the industry											
education integration											
4.2 Optimize the curriculum system											
and teaching content of the											
industry education integration											

Assessment checklist		Ada	ptab	oility		Feasibility					
Assessment checklist	5	4	3	2	1	5	4	3	2	1	
4.3 Strengthen practical teaching											
and practical training to improve											
practical ability											
4.4 Establish long-term and stable											
school-enterprise cooperation											
projects to provide students with											
more practical opportunities and											
career development resources.											
4.5 Cooperate with enterprises to											
build a teaching resource library											
4.6 Innovate talent training models											
and paths, and improve evaluation											
and feedback mechanisms											
5. Enhancing science and technolo	ogy										
5.1 Optimize the digital											
development planning strategy for											
the industry education integration,											
and promote the sustainable											
development of the industry											
education integration											
5.2 Improve the educational goals											
of new concepts, new models, and											
new forms of industry education											
integration											
5.3 Strengthen the cultivation of											
digital talents integrating industry											
and education											
5.4 Build digital teaching											
infrastructure											

Assessment sheeldist		Ada	ptab	oility		Feasibility					
Assessment checklist	5	4	3	2	1	5	4	3	2	1	
5.5 Establish digital teaching											
resources integrating industry and											
education											
5.6 Promote the introduction of											
digital technology into practical											
teaching links											
5.7 Promote digital innovation and											
application of industry-education											
integration											

Appendix D

The Results of the Quality Analysis of Research Instruments

Guideline for Improving of Industry Education Integration Private Universities in

No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity	
Tea	cher Resources Management(The	first va	riable)						
	Administrators have teacher								
1	resource management skills to								
1	promote the development of	1	1	0	1	1	0.80	valid	
	teachers integrating industry and								
	education.								
	Administrators manages the								
2	school's teachers who integrate	1	1	1	1	1	1	valid	
	industry and education.								
2	Administrators improve teaching	1	1	1	1	1	1		
	quality through planning,							valid	
5	organizing and other							vatiu	
	management activities.								
	Administrators improve teacher				1	1	0.80		
1	quality through management	1	1	0				valid	
4	activities such as leading and	T	I	0				vatiu	
	controlling.								
	Administrators have formulated								
	management systems for								
Б	staffing, performance	1	1	1	1	1	1	valid	
5	assessment, talent selection,	T	T	1	1	1	T	vatiu	
	position promotion, teacher								
	evaluation, etc.								
	Administrators have formulated								
6	teacher ethics education,	1	1	1	1	1	1	valid	
	teacher behavior, teachers'								

Guangdong Province
No	Industry Education Integration	Expert	Expert	Expert	Expert	Expert	IOC	validity
	professional ethics, sense of responsibility, and sense of mission.		2		4			
7	Administrators have formulated teacher development content such as teacher recruitment, study seminars, talent selection, title assessment, and career planning.	1	1	0	1	1	0.80	valid
8	Administrators ensure the realization of university development goals and talent training goals through the teacher resource management model.	1	1	1	1	1	1	valid
9	Administrators recognize dual- teacher teachers as educators who pay equal attention to theory and practice.	1	1	0	1	1	0.80	valid
10	Administrators have established a teacher evaluation and growth system.	1	1	1	1	1	1	valid
Fina	ncial management (The second v	rariable)					
1	Administrators have scientific financial management skills.	1	1	1	1	1	1	valid

		Experts						
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
2	Administrators scientifically and rationally raise, allocating, using and monitoring industry-	1	1	0	1	1	0.80	valid
3	Administrators implement financial management to ensure the long-term development and stable operation of a business or organization during its operations.	1	1	1	1	1	1	valid
4	Administrators have scientific financial decision-making capabilities.	1	1	1	1	1	1	valid
5	Administrators have scientific financial control capabilities.	1	1	1	1	1	1	valid
6	Administrators have scientific financial analysis capabilities.	1	1	0	1	1	0.80	valid
7	Administrators invest sufficient funds for the industry education integration.	1	1	1	1	1	1	valid
8	Administrators scientifically and rationally allocate funds, plan budgets and resource allocation.	1	1	1	1	1	1	valid
9	Administrators have established a scientific financial supervision mechanism to prevent financial risks.	1	1	0	1	1	0.80	valid

			Experts					
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
	Administrators support and				1	1	1	valid
10	promote diversified input	1	1	1				
10	methods for integrating industry	I	T	1			1	valid
	and education.							
11	Administrators fairly and					1	1	valid
	reasonably distribution rights	1	1	1	1 1			
11	and interests of both parties in	Ţ	T	T		T	valid	
	school-enterprise cooperation.							
Man	agement mechanism (The third v	variable	2)					
	Administrators has established a							
1	set of management system	1	1	1	1	1	1	valid
	framework for the industry	_	T	T	T		T	valid
	education integration.							
	Administrators rely on the							
	organizational structure to					1	0.80	valid
2	promote work, thereby ensuring	1	1	0	1			
2	the efficiency, quality, accuracy	T	T					
	and stability of management and							
	achieving organizational goals.							
	Administrators have established							
3	a financial management	1	1	1	1	1	1	valid
5	mechanism that integrates	T	T	T	L	L L	L	valiu
	industry and education.							
	Administrators has built a human				1			
1	resources management	1	1	1		1	1	valid
4	mechanism that integrates	1	L L	1				
	industry and education.							

		Experts						
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
	Administrators has built a						0.00	valid
-	teaching management	1	1	0	1	1		
2	mechanism that integrates	Ţ	1	0	1	1	0.80	
	industry and education.							
6	Administrators has built a risk							
	management mechanism that	1	1	1	1	1	1	
	integrates industry and	Ţ	I	T		1	1	valid
	education.							
7	Administrators have developed							
	an incentive mechanism for	1	1		1	1	1	1.1
	positions that integrate industry	L	L	L	L	L	L	valid
	and education.							
	Administrators have established	1						valid
8	a school-enterprise cooperation		1	1	1	1 1	1	
	operation mechanism.							
	Administrators have established		1		1	1	1	valid
0	an evaluation mechanism for	1						
9	teachers integrating industry and	L	L	L	L	L	L	
	education.							
	Administrators have established							
10	a school-enterprise teaching	1	1	0	1	1	0.80	valid
	resource sharing mechanism.							
	Administrators have developed a							
	trust and benefit distribution	1						
11	mechanism for cooperation		1	1	1	1	1	valid
	between universities and							
	enterprises.							

		Experts						
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
	Administrators have a clear							
	division of responsibilities				1			
12	between universities and	1	1	1		1	1	valid
	enterprises and have clear work							
	processes.							
	Administrators have developed a						0.90	
	scientific, transparent and	1						valid
10	effective management		1	0	1	1		
13	mechanism to stimulate		I	0	1	T	0.80	
	employees' initiative and							
	enthusiasm.							
Tale	ent development (The fourth vari	able)						
	Administrators are committed to	1						valid
1	cultivating talents with certain		1	1	1	1	1	
L	knowledge, skills, qualities and			I				
	innovative abilities.							
	Administrators have established							
2	a talent training model for	1	1	1	1	1	1	valid
	students to study and practice.							
	Administrators encourage							
2	students to master professional	1	1	1	1	1	1	valid
5	knowledge and skills and	L	L	L	T	L	L	Valia
	become talents in specific fields.							
	Administrators implement talent				1	1		
4	educational philosophies that	1	1	0			0.80	valid
	meet regional needs.							

				Experts				
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
	Administrators set talent training							
5	objectives that meet regional	1	1	1	1	1	1	valid
	needs.							
	Administrators have established							
6	a complete talent training and	1	1	1	1	1	1	valid
	management mechanism.							
	Administrators promote the					1	0.90	
7	training model of students	1	1	0	1			valid
1	studying alternately in	L L	L	0	T	T	0.00	valiu
	universities and enterprises.							
8	Administrators jointly carry out							valid
	professional skills certificate	1	1	1	1	1	1	
	certification with enterprises.							
	Administrators work together	1						
9	with enterprises to build a		1 0	0	1 1	0.80	valid	
	teaching resource library.							
	Administrators actively				1	1	1	valid
10	encourage students to	1	1	1				
10	participate in corporate job	-	-	-	-	-	-	Valia
	practice.							
	Administrators work with							
11	enterprises to cultivate	1	1	1	1	1	1	valid
	application-oriented talents that	-	-	-	-	-	-	Valia
	meet market needs.							
	Administrators implement talent							
12	training to meet the needs of	1	1	0	1	1	0.80	valid
12	enterprises for talents and	Ť	, i					
	cultivate the professional talents							

		Experts						
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
	needed for the development of							
	various fields in the country.							
Scie	nce and Technology (The fifth va	riable)						
	Administrators recognize that							
	technology is an important part							
1	of the education system and the	1	1	1	1	1		
1	industrial system to achieve	1	I			I	valid	
	high-quality development of the							
	industry education integration.							
2	Administrators have new							
	concepts, new models, and new							
	forms of educational goals for	1	1	0	1	1	0.80	valid
	the industry education							
	integration.							
	Administrators have a knowledge							
	system that integrates industry							
3	and education with new	1	1	1	1	1	1	valid
	concepts, new models, and new							
	forms.							
	Administrators have new							
4	concepts, new models, and new	1	1	0	1	1	0.00	
4	forms of training methods that	I	I	0	L	1	0.80	valid
	integrate industry and education.							
	Administrators have a teaching							
	system that integrates industry							
5	and education with new	1	1	1	1	1	1	valid
	concepts, new models, and new							
	forms.							

		Experts						
No	Industry Education Integration	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	validity
	Administrators have new							
	concepts, new models, and new							
6	forms of teacher team	1	1	1	1	1	1	valid
	construction that integrate							
	industry and education.							
	Administrators promote					1	1	valid
_	information islands trans for to	1	1	1	1			
(system online integrating	L	T	L	L			
	industry and education.							
8	Administrators cultivate talents							
	integrating industry and							
	education that meet the serve	1	1	0	1	1	0.00	valid
	the digital transformation of		L	0	I	1	0.60	vatio
	industrial needs and industrial							
	chains.							
	Administrators use digital							
	technology to achieve the							
	perfect combination of							
Q	education and technology, and	1	1	1	1	1	1	valid
7	realize the innovative	T	T	T	L	T	T	valiu
	development of the talent							
	chain, education chain, and							
	industry chain.							
	Administrators have optimized							
	the digital development							
10	planning strategy for the industry	1	1	0	1	1	0.80	valid
	education integration to adapt to							
	the development needs of the							

	Industry Education Integration			Experts	5			validity
No		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	
	digital era and promote the							
	sustainable development of the							
	industry education integration.							
	Administrators build digital-based	1						
11	facilities to provide a better		1	0	1	1	0.00	valid
11	educational environment and		L L	0	1	T	0.80	
	meet students' learning needs.							
	Administrators are required to be							
12	managers with practical	1	1	1	1	1	1	valid
12	experience in digital technology		L L	1	L	T	L	vatio
	and business.							

Appendix E Certificate of English



Appendix F

The Document for Accept Research



ସି.୯୦)ଇ୴ / ୭୭୯

มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย

วิทยาเขตนครศรีธรรมราช ๓/๓ ม.๕ ต.มะม่วงสองต้น อ.เมือง จ.นครศรีธรรมราช ๔๐๐๐๐ โทร. ๐๓/๕–๓๔๒๔๙๘ โทรสาร ๐๓/๕–๓๔๕๘๖๒

๛ พฤษภาคม ๒๕๖๓/

เรื่อง รับรองการลงบทความวิจัยเพื่อตีพิมพ์ในวารสารมหาจุฬานาครทรรศน์

เรียน นางเฉิน เจี้ยนชง

ตามที่ นางเฉิน เจี้ยนชง และผู้ช่วยศาสตราจารย์ ดร.พัชรา เดชโฮม รองศาสตราจารย์ ดร.นิรันดร์ สุธินิรันดร์ และผู้ช่วยศาสตราจารย์ ดร.สรายุทธ์ เศรษฐขจร ได้ส่งบทความวิจัยเรื่อง "แนวทางการ ปรับปรุงบูรณาการอุตสาหกรรมการศึกษามหาวิทยาลัยเอกชนในจังหวัดกวางตุ้ง" เพื่อพิจารณาตีพิมพ์ใน วารสารมหาจุฬานาครทรรศน์ มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย วิทยาเขตนครศรีธรรมราช ซึ่งได้รับการ คัดเลือกเข้าสู่ฐานข้อมูล ของศูนย์ดัชนีการอ้างอิงวารสารไทย (ศูนย์ TCI) ได้ถูกจัดกลุ่มคุณภาพวารสารประจำปี พ.ศ. ๒๕๖๒ ให้เป็น วารสารที่มีคุณภาพกลุ่มที่ ๒ (TCI ฐาน ๒) และอยู่ในฐานข้อมูล TCI จนถึง ๓๑ ธันวาคม ๒๕๖๙ โดยจะ ดำเนินการจัดพิมพ์ในฉบับต่อไปตามระยะเวลาที่ได้กำหนดไว้ และวารสารมหาจุฬานาครทรรศน์ ได้รับบทความวิจัยของ ท่านเป็นที่เรียบร้อยแล้วนั้น

ในการนี้ วารสารมหาจุฬานาครทรรศน์ มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย วิทยาเขตนครศรีธรรมราช ขอรับรองว่าบทความของท่านได้ผ่านตอบรับเพื่อพิจารณาบทความตีพิมพ์ เผยแพร่ในปีที่ ๑๑ ฉบับที่ ๙ (กันยายน ๒๕๖๙) นี้ ซึ่งภายหลังจากนี้บทความจะผ่านการตรวจสอบ ความถูกต้องทางวิชาการ โดยกองบรรณาธิการวารสารฯ และผู้ทรงคุณวุฒิต่อไป

จึงเรียนมาเพื่อโปรดทราบและดำเนินการต่อไป

เรียนมาด้วยความเคารพ

2) ลงจุาดา 7

(นางสาวปุญฺญาดา จงละเอียด) บรรณาธิการวารสารมหาจุฬานาครทรรศน์ มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย วิทยาเขตนครศรีธรรมราช

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