VERIFICATION DATA OF COSTUME DESIGNER QUALIFICATION EXAMINATION SYSTEM IN COLLEGES AND UNIVERSITIES

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A thesis submitted in partial fulfillment of the requirements for Doctor of Philosophy Program in Digital Technology Management for Education

Academic Year 2023

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ABSTRACT

The purposes of this research were firstly to study the requirements of qualification in the career for fashion designer for higher education fashion design majors and to understand the competency requirements of fashion designers through literature review, HR interviews and surveys of 21 large, medium and small fashion enterprises. Secondly to develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities through the Delphi method. Thirdly to evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions through the expert evaluation method.

The research results show that the employment demand of fashion design graduates includes 6 first-level factors and 42 second-level factors, including academic qualifications and certifications, skills and competency assessments, type, cut and structure, Industry-specific tests, business and marketing skills, knowledge, abilities and qualities to be acquired by graduates. Secondly, constructed a 7-part costume designer qualification examination system is constructed. Thirdly, the structure and content of the 7-part costume designer qualification examination system are suitable for enterprises to evaluate the professional qualification of costume designers.

Keywords: Fashion Designer, professional qualification, competency, employment ability, professional assistance, examination system

Acknowledgement

First of all, I would like to express my deepest respect and gratitude to my tutors, who are not only the guides on my academic road, but also the beacons of my spiritual world. In every stage of the topic selection, framework construction, content deepening and even the final draft of the paper, you have shown me the direction and answered my doubts with profound academic attainments, rigorous academic attitude. At the same time, I would also like to thank the other teachers in the school, you have laid a solid foundation for my academic development.

In this journey, I am extremely grateful to be able to fight alongside a group of like-minded classmates and colleagues.

The understanding and support of my family is the biggest motivation for me to persist until today. Whenever I am tired, it is your smile and encouragement that let me find the courage to move forward again. The company and encouragement of friends also lit up my night sky like stars, so that I found the direction in loneliness and confusion.

In addition, I would like to express my special thanks to the HR staff of the garment companies who participated in my research. Without your help, my research would not be able to proceed smoothly. These data is the foundation of the paper, not only is the source of my deep understanding of the real world. Your support and trust make me deeply feel the charm of combining academic and practice. Here, I would like to express my sincere thanks to you and hope that our cooperation can continue to deepen and jointly promote the prosperity and development of academia and industry.

Standing on the threshold of graduation looking back, although these three years are short, it is the most fulfilling and fulfilling and memorable. It taught me persistence and hard work, but also let me learn to be grateful and give back. I am fully aware that the completion of this dissertation is not only the result of my personal efforts, but also the efforts and expectations of many people. Therefore, I will continue to move forward on the road of knowledge with more full enthusiasm and firm belief, and strive to return what I have learned to society, and live up to my youth and expectations.

Zhou Hongying

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Chapter 1
Introduction

Rationale

According to data from dxsbb.com, In China, the number of college graduates in 2024 will reach 11.79 million, an increase of 210,000 from the previous year. The number of college graduates in 2023 was 11.58 million, an increase of 820 million over the previous year; College graduates of 10.76 million, 2022, an increase of 1.67 million on the previous year. As the number of college graduates increases year by year, college students are faced with the challenge of increasingly fierce competition in the job market. The Ministry of Education, human resources security held the 2024 session of the national ordinary university graduate employment entrepreneurial work video conference, ordered local universities must accurately grasp the situation facing the current college graduates find jobs, gather the key link, more measures and promote more fully a higher quality of employment of college graduates in 2024. With the development and changes of the garment industry, the professional qualification requirements for garment design students are also constantly changing. In order to meet the demand of enterprises for talents and improve the employment competitiveness of students, it is necessary to have a deep understanding of the employment ability requirements of enterprises for college graduates majoring in fashion design, and develop a corresponding qualification examination system to evaluate the comprehensive ability of students.

Qualification tests play a significant role in the career development and recognition of fashion designers. Essential for various reasons, highlighting their significance are Validation of Skills and Knowledge: Enhancing Professional Credibility: Career Advancement Opportunities: Competitive Edge in the Job Market: Global Recognition: Quality Assurance: Skill Development and Learning: Adaptation to Industry Changes: Facilitating Entrepreneurship: Encouraging Continuous Learning:

Qualification tests provide an objective assessment of a fashion designer's skills, knowledge, and expertise. By evaluating design abilities, technical proficiency, and understanding of industry trends, these tests offer a credible validation of a designer's capabilities.

Passing qualification tests enhances a fashion designer's professional credibility and reputation. Accredited qualifications demonstrate that the designer has met industry standards and possesses the necessary skills to excel in the field.

Accredited qualifications open doors to better career opportunities. Fashion designers with recognized qualifications are more likely to be considered for job positions, promotions, or collaborations with reputable fashion houses and brands.

In a competitive fashion industry, qualification tests provide a competitive edge to designers. Having a formal qualification sets them apart from others and may be the determining factor in securing employment or securing projects with prestigious clients.

Many qualification tests are recognized internationally, offering designers recognition beyond their local market. This global recognition enables designers to pursue opportunities on a broader scale and potentially work in various fashion hubs worldwide.

Accredited qualification tests adhere to specific quality standards set by the fashion industry. By passing these tests, designers demonstrate their commitment to maintaining a high level of professionalism and quality in their work.

Preparing for qualification tests requires designers to engage in focused study and skill development. This process allows designers to deepen their knowledge, refine their techniques, and continuously improve their craft.

The fashion industry is ever evolving, with new trends, technologies, and sustainability practices emerging frequently. Qualification tests often incorporate current industry standards, ensuring that designers stay updated and adaptable to these changes.

For designers starting their own fashion businesses, accredited qualifications can provide a strong foundation for entrepreneurship. Clients and investors may have more confidence in working with designers who have proven expertise through qualification tests.

Qualification tests encourage fashion designers to embrace a mindset of continuous learning and self-improvement. By seeking and obtaining additional qualifications, designers demonstrate their commitment to professional growth and lifelong learning.

Research Question

How to develop a qualification examination system for fashion designer of college graduates majoring in fashion design in order to comprehensively evaluate their abilities in technology, design, innovation, teamwork, etc.?

Objective

1. To study the requirements of Verification data of costume designer qualification examination system in colleges and universities.

2. To develop a qualification examination system for Verification data of costume designer qualification examination system in colleges and universities.

3. To evaluate the qualification examination system for Verification data of costume designer qualification examination system in colleges and universities.

Scope of the Research

Population and the Sample Group

Population

The population of this study is HR of 50 enterprises that continue to recruit clothing designers online and offline.

The Sample Group

The sample group is the actual survey object of this study, namely 21 large, medium and small clothing enterprises.

Resource of information

Academic Qualifications and Certifications, Skills and Competency Assessments, Type, cut and structure, Industry-Specific Tests, Business and marketing skills, Knowledge, abilities and qualities to be acquired by graduates

Expected outcome

Costume designer qualification examination system

Time

From August 2021 to July 2022, literature review and theoretical framework construction, methodology exploration and tool development will be carried out. Data collection and analysis will be conducted from July 2022 to July 2023, and the first draft of the paper will be written, mid-term check and feedback will be conducted from August 2023 to June 2024, and the final draft and submission will be carried out.

Content

Questionnaire: As a content variable, it includes a series of questions about the competency requirements for the position of fashion designer, which is used to collect data on the demand for designer positions in enterprises.

Advantages

Diversity: Large, medium and small businesses are covered, and data can be obtained from companies of different sizes and business backgrounds, making the findings more comprehensive and representative.

Practicability: The survey is the actual ability requirements of enterprises for specific positions, and the research results can provide practical guidance for the career preparation and career development of fashion designers.

In-depth insight: Through in-depth communication with business representatives, you can understand the reasons and motivations behind the requirements of designer, thereby revealing trends and changes within the industry.

Comparability: Due to the same survey methods and questions, the data between different enterprises can be compared and analyzed to find commonalities

and differences, and further find the consensus and trend of the ability requirements for designer positions.

Reference value: The research results can provide references for educational institutions, recruiters and designer themselves to help optimize talent development plans and recruitment strategies, improve employee matching and career development opportunities.

Definition of Terms

Fashion Designer, professional qualification, competency, employment ability, professional assistance, examination system

Fashion Designer: A professional in the fashion design team who is responsible for various design tasks and projects.

Professional qualification: A system that provides employment ability assessment and career development support for students. The system evaluates students' skills, knowledge and career orientation through different assessment tools and methods, and provides corresponding career planning and development suggestions.

Competency: Refers to the ability and quality required for a person to successfully complete work tasks in a specific position or occupation.

Employment ability: Refers to an individual's ability to get a job, keep a job, and do a good job after a learning process.

Professional assistance: Refers to the support, guidance, and services provided by experienced professionals.

Examination system: Refers to a system of examination and inspection of learning and teaching. The purpose is to check the teaching situation, promote the learning of students, improve the teaching work, and standardize the examination.

Large, medium and small garment enterprises: according to the scale and scope of business, the surveyed enterprises are divided into three categories: large (registered capital of 10 million and above), medium-sized (registered capital of 5-10 million) and small (registered capital of less than 5 million).

Digital technology: refers to the various digital tools and platforms developed on the basis of information and communication technology. In this study, digital technologies, including but not limited to online assessment platforms, virtual reality and analog environments, data analysis and decision support, are used to improve the effectiveness and efficiency of the employment examination system.

Creative ability: refers to students' ability in creative thinking, creativity and design innovation. In the placement examination for fashion design students, the Creative ability assessment aims to measure the student's creative expression, innovation and uniqueness in the design process.

Research Framework

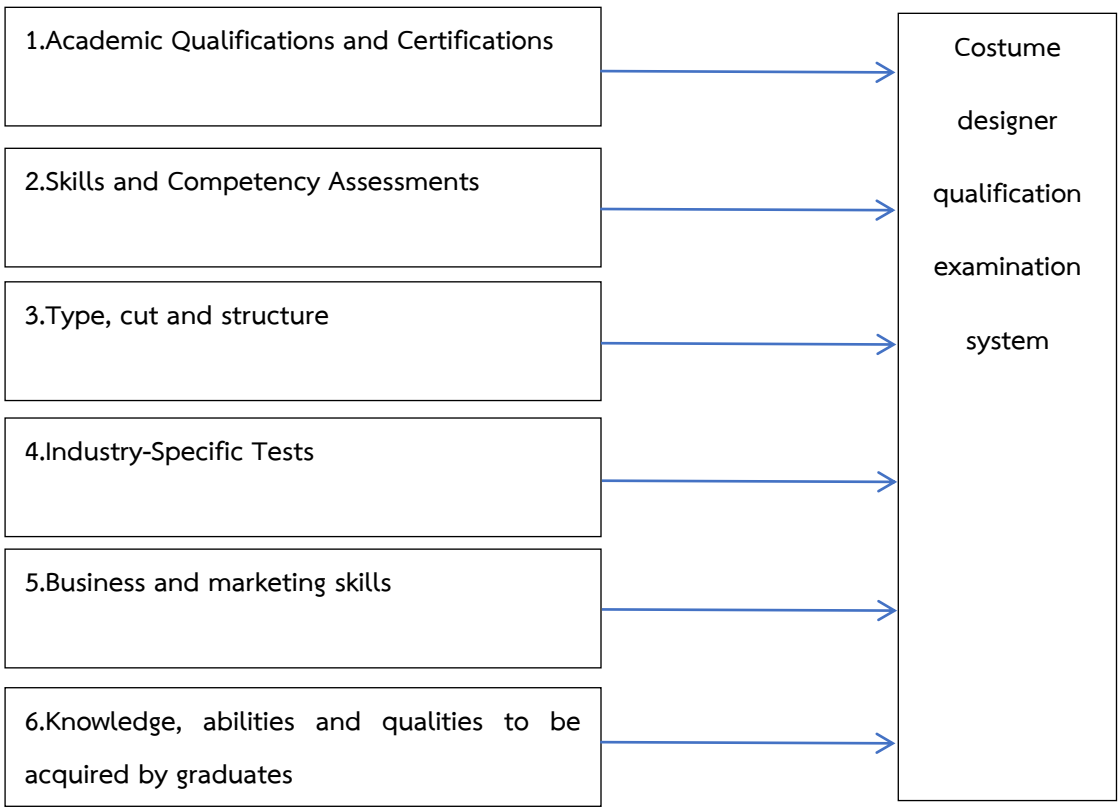

Figure 1.1 Research Framework

As can be seen from the research framework in Figure 1.1, this study will obtain the professional qualification requirements of fashion designers through literature review and expert survey, and complete the construction of the qualification examination system for fashion designers according to 6 first-level elements and 42 second-level elements.

Chapter 2

Literature Review

The purpose of this paper is to study "Graduate costume designer qualification examination system of colleges and universities in Jiangxi", and to provide reference for apparel enterprises to select excellent professionals. The review will be carried out from the following aspects, summarize and analyze the relevant literature achievements, and provide theoretical support and guidance for the construction of the qualification examination system:

1. To study the requirements of qualification in the career for fashion designer for higher education fashion design majors.

2. To develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities.

3. To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions.

The details are as follows.

To study the requirements of qualification in the career for fashion designer for higher education fashion design majors.

1. The concept of college students' employment ability

1.1 Concept of employment ability

Employment ability is a complex concept, but also a concept of development, its connotation elements and influencing factors will continue to be integrated with the political, economic and cultural changes of the society. In the context of Chinese, employment ability is also known as "available", "employment ability" and "labor force", etc.

In 2000, the International LABOUR Congress (LTC) defined it as the ability of a worker to obtain a job, maintain a job, and continue to improve himself in work. In the same year, the United States Commission on Employment and Education

(DFEE) also defined employment ability: they believe that employment ability is not only a short-term process of obtaining a job, but also a long-term dynamic process that can continuously maintain and help career advancement in subsequent work.

In addition to the above social organizations, many authoritative scholars have also given relevant definitions: the famous American management scientist Fugate has defined in his research: employment ability is the ability of job seekers to be recognized by enterprises in the process of job hunting and the ability to obtain additional job opportunities and promotions in the organization.

Based on the above research, we can see that although the academic definition of employment ability is not uniform, there are some similarities. In summary, the academic community recognizes that employment ability is the premise and basis of employment, and the acquisition and maintenance of employment ability is a dynamic and long-term process, which not only refers to the ability of workers or graduates to get jobs, but also refers to the ability to maintain jobs, maintain industry skills, seek promotion opportunities, and meet the needs of the job market. It is a comprehensive ability to measure individual's professional ability, interpersonal skills, ideological character and cultural level.

1.2 Research status of college students' employment ability

In 2002, Zheng explained the concept of college students' employment ability, which was defined as a Chinese university in academic circles. The earliest definition of employment ability. Zheng, a domestic researcher, believes that the employment ability of college students refers to the ability of college graduates to realize their employment ideal, meet the needs of society and realize their own value in social life through knowledge learning and comprehensive quality development. The employment ability of college students is a comprehensive ability (Zheng X, 2002).

According to researcher Wang, college students' employment ability consists of basic skills, individual management skills and team work skills. Basic skills are basic abilities necessary for individual employment and further development, including communication ability, information management ability, mathematical

operation ability, thinking and problem-solving ability, etc. Individual management skills refer to the skills, attitudes and behaviors that promote the development of individual potential and are conducive to the continuous growth of individuals in the employment process, including the ability to display positive attitudes and behaviors, responsibility, adaptation to changes, continuous learning, safe work, etc. Teamwork skills include the ability to work with others and actively participate in project teams (Wang Y, 2005).

Two researchers, Zhang etc. of the College of Education of Liaoning Normal University, analyzed the employment ability of college students by self-designed employment ability assessment questionnaire and found that the employment ability of college students consists of five main factors: The first factor is thinking ability, including innovation ability, ability to recruit new people, information processing ability, analysis and judgment, social insight, problem-solving ability and adaptability. The second factor is social adaptability, including endurance, psychological adjustment ability, frustration resistance, pressure resistance and modification ability; The third factor is autonomy, including diligence, planning ability, dedication and self-learning ability. The fourth factor is social practice ability, including social ability, communication ability, cooperation ability and organization ability; The fifth factor is the ability to apply for employment, including competitive consciousness, sales ability, self-confidence and expression ability (Zhang L & Liu C, 2005).

According to Li etc. of South China University of Technology, the structure of college students' employment ability is divided into three dimensions: inner quality, ability to deal with work and social leadership (Li Y & Liu S & Weng S, 2005).

Two researchers, Lei of Hunan University of Science and Technology and Yu of Jiangxi Normal University, believe that the actual meaning of employment ability should also include employment ability tendency, that is, the ability to find, keep, develop and create jobs (Lei T & Yu W, 2005).

Ren, a researcher at Chongqing Three Gorges University, believes that college students' employment ability should include three levels, namely basic working ability, professional skills and job-hunting skills (Ren J, 2005).

In specific contexts, scholars have different definitions of the concept of employment ability. For example, British scholars HILLAGE & Pollard believe that employment ability refers to people's ability to get a job, maintain a job and get a new job (HILLAGEJ & POLLARDE, 1998).

It is found that the employment ability of Chinese college students is obviously weak in three aspects: informal ability (personality development and social communication), general ability (comprehensive quality and general skills) and adaptive ability (internationalization and modern place) (Yan G, 2016);

However, in the current environment of rapid organizational change, employers expect graduates to be more adaptable and innovative, rather than job-specific training (Yan G, 2014);

The effective way to improve college students' employment ability is not by knowledge capital investment, but mainly by ability capital accumulation (Zong X, Zhou C, 2012);

From the perspective of more specific factors, there is no significant difference in the employment ability of college students in terms of gender, age, student origin region, school type, major category, etc. Political outlook, educational level, student cadre level, internship unit reputation and employment guidance have a significant impact on employment ability (Zhang M, Tao J, 2012).

Major setting and curriculum system, career guidance, school-enterprise cooperation, campus culture, teaching ability, evaluation and incentive are also important factors affecting the cultivation of college students' employment ability (Gong X & CAI T, 2018).

As for the training status of Chinese college students' employment ability, Shi pointed out: "Chinese college students have a certain understanding of how to improve their employment ability and the formation of self-values, but colleges and universities have not established a scientific training mechanism for employment

ability, and their career planning education and guidance system is not mature (Shi Q, & Wang F, 2018)."

To sum up, college students' employment ability has become one of the important issues in the field of higher education research at home and abroad. In the relevant researches, scholars at home and abroad mainly focus on students' learning ability, practical ability, application ability, adaptability, innovation ability and teamwork skills. Based on the investigation of 21 enterprises of different sizes, this study comprehensively examines the influencing factors of college students' employment ability training from the three aspects of students' quality, ability and knowledge, hoping that the research results will be helpful for enterprises to select talents.

Table 2.1 Research status of college students' employment ability

Author / Job ability	Zheng Xiaoming	Wang Yi	Zhang L & Liu C & Li Ying	Liu S	Yu W	Ren Ji	Zou Qi	HILLAGE & Pollard	Yan G	Zong X, Zhou C 2012	Zhang M & Tao J.	Gong X & CAI T	Shi Q & Wang F	Total
Learning ability	√		√			√	√			√	√	√	√	8
Practical ability	√		√	√		√					√	√	√	7
Ability to apply	√	√	√		√	√	√						√	7
adaptability	√	√	√		√				√			√		6
Thinking ability	√		√	√	√									4
Teamwork skill		√					√		√			√	√	5
Social leadership				√	√				√				√	4
Expressive ability							√			√		√		3
Innovation ability						√			√	√	√	√	√	6

2. Explore the core competencies and skills of fashion designers from the perspective of academics and industry practitioners

As one of the two teachers, fashion designers are oriented to consumer demand, and express their creativity or construction through clothing paintings or actual materials. They can complete the process from creative to ready-to-wear independently, but the vast majority of modern enterprises are done through cooperation with pattern-makers. With the refinement of the social division of labor, the essence of designers has been endowed with creativity, and the most important thing is creative conception. The main tasks are: to collect information about the clothing of target consumers; Position the style of the product, including the composition of the overall shape of the garment, the selection of surface accessories and the matching of colors and accessories; Design the drawing of clothing structure, through the style, structure line, color and other detailed and clear description, the design idea into an intuitive visual effect; To design the structure of clothing, the design style will be decomposed into a flat garment structure diagram, and the specifications of each part of the finished product will be formulated according to the style design (Xia Fan, 2013).

Chen mentioned that in terms of the knowledge structure of fashion designers, professional courses include professional basic modules, professional core courses, professional ability expansion and comprehensive practical training projects. The development of professional ability involves garment design and production, display design, clothing digital technology. The comprehensive practical training program is to enable students to apply what they have learned, better adapt to their jobs, and improve their practical operation ability. In terms of professional quality and accomplishment, it mainly focuses on the quality training of humanities and social sciences, improving students' moral quality cultivation and learning general knowledge (Chen X, 2018).

By establishing a human resource management system dominated by competency model, researcher Zhou improved the recruitment, training, assessment and other functional activities of fashion designers, and obtained four competency

traits of local Chinese fashion designers: the trait of market research, the trait of ability, the trait of art, and the trait of personality (Zhou Cong, 2011).

Shi s Design and Research Institute issued 22 questionnaires to 22 student practice units. The questionnaires asked the enterprises to choose one of the five abilities of students concerned about, namely, practical ability, adaptability, working attitude, learning ability and cultivation potential. The results show that the enterprises are most satisfied with the students' learning ability, but they are slightly dissatisfied with their work attitude and cultivation potential. (Liao J, 2015).

According to Mustafa, industrial employers said that technical graduates in Malaysia have sufficient technical skills, but they are still not satisfied with communication and interpersonal skills, critical thinking, problem-solving skills.

A range of empirical evidence shows that employers are more likely to hire graduates with both non-generic and technical skills. For example, a survey of 490 ICT companies in Australia found that 40% of them were dissatisfied with the management and communication skills of recent graduates.

It has also been reported that Japanese engineering graduates lack the initiative and problem-solving skills that employers need.

Similarly, M reports that while technical skills feature prominently among the employable skills needed by local engineering and ICT graduates, such as soft skills, these graduates also need problem-solving skills, communication skills, teamwork and leadership skills.

In order to become a fashion designer, you must improve yourself in all aspects, Strive to make themselves have a large number of first-hand data, fast information channels and popular analysis ability, have a certain knowledge of fabrics and dough supplier resources, writing skills and language communication skills, team spirit and fashion personality, have a certain hand painting or computer drawing ability, understanding of the type of knowledge and process knowledge, The ability of process innovation is a multifaceted ability that a fashion designer needs to strive to achieve. This requires students majoring in fashion design to improve themselves

on the basis of designer quality requirements while learning basic cultural knowledge well (Wang Yuping, 2008).

Zhou pointed out that with the entry of foreign brand clothing, the domestic clothing manufacturing industry has brought a strong impact, Chinese clothing to establish a foothold in the international clothing market, the key is to establish a high-quality clothing designer team. She analyzed the comprehensive qualities that domestic modern fashion designers should have based on the personality charm, professional ability and brand operation ability of fashion designers, and the results showed that a modern fashion designer must have the spirit of team cooperation, comprehensive professional skills, product innovation ability and brand operation ability. (Zhou Q, 2008)

In the era of creative economy, creativity is indispensable to the development of any industry. For the ever-changing, fluctuating currents for the clothing industry, the creativity of clothing designers is not only the necessary ability to achieve self-value, but also the clothing enterprise. A driving force for growth. In this situation, it is particularly important to analyze and study the creativity of fashion designers. By collating a large number of Chinese and foreign literature, the author compares the generation conditions of creativity of famous foreign fashion designers in different periods. The paper analyzes and summarizes the key factors that affect the creation of fashion designers. And how are these key factors set in clothing. The role played by the planner in the creative process is expounded (Fu q, 2014).

The modern clothing market is a very competitive market, and designers must have excellent creative ability to strive for competitive advantages (Zhang H, 2014).

To sum up, the requirements of the post capacity of the costume designer are as follows: To build and develop the capabilities of the architect, to identify the activities and capabilities that are most supportive of the enterprise's strategic objectives, and to cultivate these capabilities in a planned manner. It can better support the development of the enterprise, evaluate the staff's ability and quality, and provide the basis for the human resource management of the enterprise, such as the planning, recruitment and selection, performance test and reward incentive.

The energy quality should include four categories, which are divided into personal quality, basic skills, management skills and professional skills.

Table 2.2 Core skills of fashion designer

Author	Core competence of fashion designer
Xia F, 2013	With consumer demand as the orientation, through clothing painting or actual materials and other means to express the relevant clothing ideas or ideas. The essence of the designer has given creativity, and the most important thing is the creative idea.
Chen X, 2018	The development of professional ability involves garment design and production, display design, clothing digital technology. The comprehensive practical training program is to enable students to apply what they have learned, better adapt to their jobs, and improve their practical operation ability. In terms of professional quality and accomplishment, it is mainly to cultivate the quality of humanities and social sciences, improve students' moral quality and learn general knowledge.
Zhou C, 2011	Through the establishment of a human resource management system led by competency model and the improvement of functional activities such as recruitment, training and assessment of fashion designers, four competency traits of local Chinese fashion designers have been obtained: research market control traits, ability traits, artistic traits and personality traits.
Liao J, 2015	The questionnaire scores the five abilities of students concerned by the enterprise, namely, practical ability, adaptive ability, working attitude, learning ability and cultivation potential. The enterprise has the highest satisfaction with the learning ability of internship students, but it has little criticism on their work attitude and cultivation potential.

Table 2.2 (Continued)

Author	Core competence of fashion designer
Industrial employer	Technical graduates in Malaysia have sufficient technical skills, but they are still not satisfied with communication and interpersonal skills, critical thinking, problem-solving skills.
490 ICT companies in Australia	Management and communication skills are not satisfied with the business of the recent graduates.
Japanese engineering graduate	Lack of initiative and problem-solving skills needed by employers.
M	While technical skills feature prominently among the employment ability skills required by local engineering and ICT graduates, such as soft skills, these graduates also need problem-solving skills, communication skills, teamwork and leadership skills.
Wang Y, 2008	Have a large number of first-hand data, fast information channels and fashion analysis ability, have a certain knowledge of fabrics and dough supplier resources, writing skills and language communication skills, team spirit and fashion personality, have a certain hand drawing or computer drawing ability, understanding of the type of knowledge and process knowledge, The ability of process innovation is a multifaceted ability that a fashion designer needs to strive to achieve.
Zhou Q, 2008	To analyze the comprehensive qualities that modern fashion designers should have, such as personality charm, professional ability and brand operation ability of fashion designers, the results show that as a modern fashion designer must have the spirit of team cooperation, comprehensive professional skills, product innovation ability and brand operation ability.

Table 2.2 (Continued)

Author	Core competence of fashion designer
Fu Q, 2014	In the era of creative economy, creativity is indispensable to the development of any industry. For the ever-changing, fluctuating currents For the clothing industry, the creativity of clothing designers is not only the necessary ability to achieve self-value, but also the clothing enterprise A driving force for growth.
Zhang H, 2014	Modern clothing market is a very competitive market, designers must have excellent creative ability, in order to compete for the advantage.

3. Explore the role of costume designer qualification examination system in selecting and evaluating the professional ability of costume designer

3.1 Overview of the importance of professional assistance in the fashion industry

Professional assistance in the fashion industry plays a vital role in nurturing talent, fostering creativity, and supporting the growth and success of fashion designers. Some key points highlighting the importance of professional assistance for designers in the fashion industry are Skill Development and Training: Industry Knowledge and Guidance: Portfolio and Presentation Enhancement: Networking and Collaboration: Entrepreneurship and Business Development: Industry Exposure and Visibility: Access to Resources: Mentoring and Emotional Support: Skill Diversification: and Personal and Professional Growth.

Professional assistance provides fashion designers with access to specialized training and skill development programs. Through workshops, mentorship, and formal education, designers can enhance their technical expertise, learn new design techniques, and stay updated with the latest industry trends.

Fashion designers benefit from the experience and guidance of industry professionals. Mentors and advisors offer valuable insights into the business aspects of fashion, market demands, and consumer preferences, helping designers align their creative vision with commercial viability.

Professional assistance helps designers refine their portfolios and presentation skills. Expert feedback and coaching enable designers to showcase their work effectively to potential employers, clients, or investors, increasing their chances of securing opportunities and partnerships.

Access to professional networks and connections within the fashion industry is crucial for designers. Professional assistance opens doors to collaboration opportunities with brands, manufacturers, retailers, and other stakeholders, facilitating the development of fruitful partnerships.

For designers interested in starting their own fashion brands, professional assistance provides valuable guidance in business planning, budgeting, marketing, and brand positioning. This support increases the likelihood of a successful launch and sustainable growth.

Professional assistance can expose designers to fashion events, industry conferences, and trade shows. Participation in these platforms offers visibility and recognition, allowing designers to showcase their talent to a broader audience and potential clients.

Designers often require access to specialized resources, such as advanced technology, textile libraries, and manufacturing facilities. Professional assistance can provide access to these resources, which may otherwise be challenging for individual designers to acquire.

The fashion industry can be competitive and demanding, leading to emotional challenges for designers. Professional assistance often includes mentoring and emotional support, helping designers navigate the ups and downs of the industry and maintain their passion for design.

The fashion industry is multifaceted, and designers may seek to expand their skills beyond design, such as learning about sustainable practices, supply chain

management, or digital marketing. Professional assistance facilitates skill diversification and a well-rounded approach to design.

Overall, professional assistance fosters personal and professional growth. It empowers designers to overcome obstacles, embrace continuous learning, and evolve as individuals and creative professionals, contributing to their long-term success and fulfillment in the fashion industry.

3.2 Significance of qualification tests for fashion designers

Qualification tests play a significant role in the career development and recognition of fashion designers. Essential for various reasons, highlighting their significance are Validation of Skills and Knowledge: Enhancing Professional Credibility: Career Advancement Opportunities: Competitive Edge in the Job Market: Global Recognition: Quality Assurance: Skill Development and Learning: Adaptation to Industry Changes: Facilitating Entrepreneurship: Encouraging Continuous Learning:

Qualification tests provide an objective assessment of a fashion designer's skills, knowledge, and expertise. By evaluating design abilities, technical proficiency, and understanding of industry trends, these tests offer a credible validation of a designer's capabilities.

Passing qualification tests enhances a fashion designer's professional credibility and reputation. Accredited qualifications demonstrate that the designer has met industry standards and possesses the necessary skills to excel in the field.

Accredited qualifications open doors to better career opportunities. Fashion designers with recognized qualifications are more likely to be considered for job positions, promotions, or collaborations with reputable fashion houses and brands.

In a competitive fashion industry, qualification tests provide a competitive edge to designers. Having a formal qualification sets them apart from others and may be the determining factor in securing employment or securing projects with prestigious clients.

Many qualification tests are recognized internationally, offering designers recognition beyond their local market. This global recognition enables designers to

pursue opportunities on a broader scale and potentially work in various fashion hubs worldwide.

Accredited qualification tests adhere to specific quality standards set by the fashion industry. By passing these tests, designers demonstrate their commitment to maintaining a high level of professionalism and quality in their work.

Preparing for qualification tests requires designers to engage in focused study and skill development. This process allows designers to deepen their knowledge, refine their techniques, and continuously improve their craft.

The fashion industry is ever evolving, with new trends, technologies, and sustainability practices emerging frequently. Qualification tests often incorporate current industry standards, ensuring that designers stay updated and adaptable to these changes.

For designers starting their own fashion businesses, accredited qualifications can provide a strong foundation for entrepreneurship. Clients and investors may have more confidence in working with designers who have proven expertise through qualification tests.

Qualification tests encourage fashion designers to embrace a mindset of continuous learning and self-improvement. By seeking and obtaining additional qualifications, designers demonstrate their commitment to professional growth and lifelong learning.

3.3 To explore the role and benefits of qualification tests in assisting fashion designers in their careers.

The role and benefits of qualification tests in assisting fashion designers in their careers are crucial for their professional growth and success. Key aspects of how qualification tests play a significant role in supporting fashion designers are: Validation of Skills and Competencies: Career Advancement and Opportunities: Industry Recognition and Trust: Networking and Industry Connections: Skill Enhancement and Learning: Global Mobility and Opportunities: Boosting Self-Confidence: Standards of Professional Practice: Elevating Design Portfolios: Promoting Industry Innovation: Preparation for Entrepreneurship: and Nurturing a Learning Mindset:

Qualification tests assess a fashion designer's skills and competencies objectively. By obtaining a recognized qualification, designers receive validation from industry experts, educational institutions, or professional bodies, which enhances their credibility and confirms their expertise in the field.

Accredited qualifications create opportunities for career advancement. Having formal recognition of skills can open doors to higher-level positions, promotions, or projects with prestigious fashion houses, retailers, or brands.

Qualification tests provide industry recognition and build trust among clients and employers. Fashion designers with recognized qualifications are more likely to be trusted with high-profile projects and collaborations.

In the process of preparing for qualification tests, designers often interact with mentors, instructors, and industry professionals. These connections can lead to networking opportunities and potential collaborations, expanding the designer's professional network.

Preparing for qualification tests requires designers to engage in focused study and skill development. This continuous learning process allows designers to stay updated with industry trends, technologies, and best practices.

Accredited qualifications often have international recognition. This mobility allows fashion designers to work in different parts of the world, expanding their horizons and exposure to diverse markets and cultures.

Successfully passing a qualification test boosts a designer's self-confidence and belief in their abilities. This confidence positively impacts their creativity and willingness to take on more significant challenges.

Qualification tests are designed based on industry standards and best practices. Designers who hold accredited qualifications are more likely to adhere to ethical and professional standards in their work.

Having a recognized qualification adds value to a designer's portfolio. It becomes a noteworthy point of distinction that can attract potential clients, employers, and investors.

Qualification tests often require designers to demonstrate innovative approaches to design and problem-solving. This emphasis on innovation promotes creativity within the fashion industry.

For designers planning to start their own fashion businesses, obtaining a qualification can provide a solid foundation for entrepreneurship. It demonstrates their commitment to professionalism and helps establish credibility with potential clients and stakeholders.

Pursuing qualification tests encourages designers to adopt a learning mindset throughout their careers. It fosters continuous growth and adaptability to the dynamic and evolving fashion landscape.

To develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities.

Development and design of costume designer qualification examination system

1. Review the development of costume designer qualification examination system at home and abroad

Wang mentioned that the vocational qualification certificate has gradually become the basis for enterprises to employ people and the proof of employment of workers. As a famous institution of higher learning, Tongji University took the lead in implementing the vocational qualification certificate system in colleges and universities. Universities in Shanghai have followed suit. The employment certificate is very useful for college graduates to compete for employment in the labor market. It will play a role as a ruler for evaluating whether the knowledge and ability structure of talents is reasonable. It will test whether standardized education and teaching can meet the needs of economic society and market development. For this reason, for clothing majors that emphasize practical skills, the vocational credential system should be taken as a teaching breakthrough, and with this as a guide, the teaching work of practical links should be strengthened to comprehensively improve

the comprehensive quality of students. Cultivate outstanding graduates with both "liberal arts and martial arts", so that they can better adapt to the needs of social development and market changes (Wang Lixin, 2004).

Shanghai Garment Industry Association News: After in-depth research and deliberation by relevant departments, the professional qualification of Shanghai clothing design was incorporated into the professional qualification system of Shanghai Professional and technical personnel, and the Personnel Bureau and the Municipal Economic Commission jointly issued the "Interim Provisions of Shanghai Municipal Professional Qualification of Clothing Design" for unified management. The Municipal Personnel Bureau and the Municipal Economic Commission are jointly responsible for the professional qualification of clothing design in this city, and the evaluation of professional qualification of clothing designers is brought into standardized management. As a result, it means that the policy formulation, organization and coordination, qualification examination and review, and supervision and management of the garment industry will no longer be included in the evaluation of engineering and technical titles, and the Shanghai Garment Industry Association is authorized to set up a professional qualification evaluation committee. Since then, this artistic profession has its own evaluation criteria. At present, Shanghai has made arrangements for the evaluation of the relevant qualifications of the first fashion designers, and Shanghai will take the lead in evaluating a number of senior fashion designers, senior fashion plate-makers, senior fashion technologists and fashion designers, fashion plate-makers, fashion technologists and other titles. (China Textile, 2004)

The development and design of the operation skills test bank is based on the national occupational standards, aiming at the requirements of the occupational activities of garment design customizers, and based on the operational skills and comprehensive working ability in occupational activities, and summarizes the previous experience and deficiencies in the evaluation and assessment of the operation skills of garment design customizers. On the whole, it can fully reflect the scope and level of the operation activities of the garment design customization

worker, and determine the content structure of the examination of the operation skills of the garment design customization worker. For example, the primary clothing design customization worker designs three parts: drawing cutting, sewing technology and clothing machinery, while the intermediate clothing design customization worker has four parts: drawing cutting, sewing technology, clothing machinery and design basis. On the basis of the intermediate worker, the senior clothing design customization worker can increase the content of clothing design and training guidance without testing clothing machinery and design basis. Form the following content structure Table of operational skills assessment (Xiao L, 2005).

Government department pointed out that in 2014, in order to cooperate with the adjustment and reorganization of the national vocational qualification examination, the Municipal Human Resources and Social Security Bureau adjusted the clothing designer examination, which was originally a vocational qualification, to the intermediate title evaluation of the clothing design major of the arts and crafts series (The Bulletin of the Shanghai Municipal People's Government, 2019).

Wang mentioned that with the follow-up of the pace of the construction of a skilled society, the textile and garment industry has an increasing demand for high-quality and skilled personnel. Vocational schools need to improve the academic education and vocational training system of textile and garment vocational continuing education from the aspects of curriculum setting, school-enterprise cooperation, credit transfer, and teacher team, enrich the body of vocational continuing education, focus on training skilled high-quality talents, and promote the sustainable development of textile and garment industry. (Wang W, 2023)

The Department for Education's move from "education" to "science", from "science" to "employment", seems to be a one-word change. However, it can be seen that the British education reform started from weakening the traditional humanities education, gradually attached importance to science, and then directly focused on society. Demand for employment social problems. After this, the United Kingdom set up the National Vocational Qualifications Council, specializing in educational qualifications. To track the equivalence of vocational qualification certificates,

research and formulate a national vocational qualification system and a unified vocational qualification certification standard. Quasi-gradually formed, this standard was born into the later European Qualification Framework and the vocational and technical teaching of many countries, including China. Both have provided valuable experience.

To sum up, the development process of the costume designer qualification examination system can be divided into the following stages: In the early stage, the costume designer qualification examination system may be just a simple theoretical examination, mainly examining the designer's mastery of the basic theory, history and technology of costume design. With the continuous development of the garment industry and the improvement of the requirements for designers' professional skills, the costume designer qualification examination system has gradually improved, and began to include practical operation and evaluation of design works. In order to ensure that test just, fair, and improve the common level of clothing designer, costume designer qualification examination system standardization and normalization gradually. This includes the development of a unified examination syllabus, marking standards, examination procedures, etc. With the continuous development of information technology, the fashion designer qualification examination system has also begun to develop in the direction of information and networking. This includes online registration, online examination, online scoring and other links, which greatly improves the efficiency and convenience of the examination. At present, the costume designer qualification examination system is not only limited to theoretical examination and practical operation, but also begins to pay attention to diversification and individuation. This includes introducing different exam content and formats for designers with different styles and needs, as well as providing personalized training and guidance for designers.

In general, the development of the costume designer qualification examination system is a process of constantly adapting to the needs of the industry and improving the professional level of designers. In the future, with the continuous

progress and application of technology, the fashion designer qualification examination system will continue to develop and improve.

2. Analyze the composition and structure of the existing examination system

2.1 Academic qualifications and accreditation

Academic qualifications and certifications are formal credentials earned by individuals through educational institutions, training programs, or professional organizations. These credentials serve as evidence of a person's completion of specific educational or training requirements, validating their knowledge, skills, and expertise in a particular field. In the context of the fashion industry, academic qualifications and certifications play a vital role in establishing a designer's credibility, enhancing their marketability, and facilitating career advancement. Here are some common academic qualifications and certifications relevant to fashion designers:

A bachelor’s degree in Fashion Design is a comprehensive undergraduate program that equips students with foundational knowledge in fashion design principles, garment construction, pattern making, textiles, and fashion history. This degree is often the minimum requirement for entry-level fashion design positions (San W, 1988).

A Master's degree in Fashion Design is a postgraduate program that allows designers to specialize in specific areas of fashion, conduct research, and develop their creative vision further. This advanced degree can open doors to higher-level design roles and teaching positions in academia (Xue Q, 1997).

Certificate or diploma programs offer shorter durations of study focused on specific aspects of fashion design. These programs are ideal for individuals seeking a targeted skill set or those with limited time to commit to a full degree (Chi H,2020).

Certifications in textiles and apparel may cover specific topics, such as sustainable textiles, textile technology, or fabric dyeing and printing. These certifications demonstrate expertise in working with various materials and understanding their properties.

Fashion designers often use computer-aided design (CAD) software for pattern making, digital illustration, and 3D modeling. Certifications in CAD software

validate a designer's proficiency in using these essential tools. For designers interested in entrepreneurship or managing their own fashion brand, certifications in fashion business and management provide valuable knowledge in marketing, finance, and business operations. As sustainability becomes more crucial in the fashion industry, certifications in sustainable fashion showcase a designer's commitment to ethical and eco-friendly practices. Some fashion organizations or institutions offer specialized certifications in areas such as luxury fashion, couture techniques, fashion styling, or fashion photography. Certain industry organizations or associations offer endorsements or certifications to designers who meet specific criteria. These endorsements add credibility and recognition within the fashion community. (Jing M, 2019).

Accredited Industry Endorsements:

1) Fashion design degrees and diplomas

Fashion design degrees and diplomas are formal educational credentials that aspiring fashion designers can pursue to gain comprehensive knowledge and skills in the field of fashion design. These programs provide a structured curriculum that covers various aspects of fashion design, including design principles, garment construction, pattern making, textiles, fashion history, and industry-specific practices. Both degrees and diplomas offer valuable education and training, but they differ in terms of depth, duration, and career outcomes. Here's a comparison of fashion design degrees and diplomas:

A fashion design degree at the undergraduate level is typically a Bachelor of Fine Arts (BFA) or a Bachelor of Arts (BA) degree. It is a comprehensive and in-depth program that usually spans four years. bachelor's degree programs cover a broad range of subjects related to fashion design, including design theory, illustration, draping, textiles, computer-aided design (CAD), fashion marketing, and trend forecasting. Students often work on design projects and collaborate on runway shows or exhibitions. Bachelor's degree programs provide an extensive exploration of fashion design concepts and techniques. They offer a well-rounded education, encompassing both creative and theoretical aspects. A bachelor’s degree in fashion

design opens doors to various entry-level positions in the fashion industry, such as assistant designer, pattern maker, fashion merchandiser, or visual merchandiser (Yan G, 2014).

After completing a bachelor’s degree, some graduates may choose to pursue a Master's degree in fashion design or related fields for further specialization or academic research.

A fashion design diploma is a shorter and more focused program compared to a degree. It typically spans one to three years, depending on the institution and the level of specialization. Diploma programs focus on practical skills and hands-on training in fashion design. Students receive intensive instruction in garment construction, pattern making, sewing techniques, and design principles. Diploma programs offer specialized training in fashion design but may not cover as many subjects or theory as a degree program. They focus on building technical expertise. Fashion design diploma holders can pursue entry-level positions in the fashion industry, similar to those available to graduates with a bachelor’s degree. They may also consider roles in fashion production or work as design assistants (Wang L., 2004).

Some diploma holders may choose to gain work experience and later pursue a degree for career advancement or academic enhancement.

Specialized certifications in fashion-related disciplines provide designers with targeted expertise in specific areas within the fashion industry. These certifications are designed to enhance a designer's skills and knowledge in specialized fields, making them more competitive and sought-after professionals. Here are some examples of specialized certifications in fashion-related disciplines:

Sustainable Fashion Certification focuses on eco-friendly and ethical practices in the fashion industry. It covers topics such as sustainable materials, responsible production methods, and the promotion of circular fashion concepts. Luxury fashion certifications delve into the world of high-end fashion and luxury brands. Participants learn about the intricacies of luxury design, craftsmanship, and the exclusive market. Fashion styling certifications provide designers with expertise in creating captivating

looks and visual narratives for photo shoots, fashion editorials, or personal styling (Luo Y, 2012).

Fashion Illustration Certification focuses on honing a designer's fashion illustration skills, allowing them to visually communicate their design concepts with precision and creativity. Textile technology certifications concentrate on the technical aspects of fabrics, their properties, and manufacturing processes. Designers gain a deeper understanding of textiles to make informed material choices. Fashion merchandising certifications equip designers with knowledge of retail strategies, brand management, and consumer behavior, essential for successful fashion businesses (Shui X, 2024).

For designers interested in fashion photography, fashion Photography Certification provides the technical skills and artistic knowledge required for capturing stunning fashion imagery. Fashion Business Management Certification focuses on the business side of the fashion industry, including marketing, finance, supply chain management, and entrepreneurship. Couture techniques certifications offer designers specialized training in high-end craftsmanship and couture sewing methods used in luxury fashion. For designers interested in athletic and sportswear design, active and sportswear design certification provides insights into functional design and performance fabrics. Fashion film and media certifications explore the intersection of fashion and visual storytelling, preparing designers to create captivating fashion campaigns and videos. Pattern making and draping certifications focus on the technical aspects of creating patterns and three-dimensional garment construction (Li C, 2005)

It's important to note that the availability of specialized certifications may vary depending on the region and educational institutions. These certifications can be pursued as standalone programs or as part of continuing education initiatives to expand a designer's skillset and stay relevant in a rapidly evolving fashion industry. Choosing the right specialized certification depends on the individual's interests, career goals, and desired area of expertise within the fashion domain.

2.2 Skills and Competency Assessments

1) Evaluating design skills, creativity, and technical proficiency

Evaluating design skills, creativity, and technical proficiency is a critical process in the fashion industry to identify talented designers, assess their potential, and make informed decisions in hiring, collaboration, or educational settings. Various methods and criteria are employed to comprehensively evaluate these aspects. Here are some ways to evaluate design skills, creativity, and technical proficiency in fashion:

Reviewing a designer's portfolio is one of the most effective ways to assess their design skills and creativity. The portfolio showcases the designer's body of work, including sketches, illustrations, finished garments, and design concepts. It provides insights into their artistic vision, aesthetics, and ability to conceptualize and execute ideas. For designers involved in product development or technical design, evaluating their ability to create prototypes and conduct testing ensures their technical proficiency and attention to detail. Providing designers with design challenges or briefs allows them to demonstrate their creative problem-solving abilities. Designers may be asked to develop collections based on specific themes or incorporate particular elements into their designs, showcasing their creativity and adaptability (Yan F, 2016).

Evaluating a designer's technical proficiency involves assessing their proficiency in pattern making, draping, sewing, and other technical aspects of fashion design. Technical exercises can include pattern drafting tasks or garment construction assessments. Attending fashion shows or presentations allows evaluators to witness a designer's work in a real-world context. Observing the cohesion of a collection, the use of materials, and the overall impact of the designs helps in evaluating their design skills. Engaging in interviews and discussions with designers provides an opportunity to understand their creative process, inspirations, and design philosophy. It allows evaluators to gauge the depth of a designer's creativity and passion for their craft. In collaborative projects, designers work in teams to create cohesive collections or design elements. Observing how designers contribute to and communicate within

a team environment reflects their ability to collaborate and innovate (Brandi, T., Sappho, C., & Gansu, Y. 2017).

Assessing a designer's educational background, such as completed degree programs or certifications, provides insights into their formal training and technical knowledge. Consideration of a designer's industry experience, including past projects and positions held, can shed light on their practical application of design skills and ability to work in professional settings. Evaluating a designer's reputation in the industry, awards received, and recognition for their work can indicate the level of their creativity and design skills (Chen X, 2018).

Evaluating design skills, creativity, and technical proficiency is a comprehensive process that involves a combination of subjective and objective assessments. The goal is to identify designers who demonstrate not only artistic flair and innovation but also the technical abilities to bring their creative visions to life in the dynamic world of fashion.

2) Assessments for pattern making, draping, and garment construction

Assessments for pattern making, draping, and garment construction are essential in evaluating a fashion designer's technical proficiency and ability to transform design concepts into well-executed garments. These assessments typically involve practical exercises and hands-on tasks that test the designer's knowledge and skills in these specific areas. Here are some common assessments used to evaluate pattern making, draping, and garment construction abilities:

Pattern Making Assessment:

Designers may be given flat sketches or design ideas and asked to create pattern drafts for the garments. Evaluators assess the accuracy and completeness of the patterns. Designers may be tasked with grading patterns to different sizes or modifying patterns to fit specific body measurements. Assessing a designer's ability to manipulate and adapt existing patterns to create variations or design details (Yu M & Wang H, 2007).

Draping Assessment:

Designers are given fabric and a dress form and asked to drape a garment directly on the form. The evaluation focuses on the designer's understanding of garment structure and proportions. Designers may be given a specific theme or design challenge and asked to create draped designs that align with the given concept (Zhang L, 2021).

Garment Construction Assessment:

Evaluating a designer's sewing skills by providing sewing exercises that test their proficiency in techniques such as seams, hems, zippers, and finishing. Designers may be asked to create sample garments based on provided patterns. Evaluators assess the precision, neatness, and overall quality of the constructed garments. Designers may be required to create technical drawings of their patterns, draping, or garment construction processes. Annotations explaining construction details, seam allowances, and finishing techniques are included to demonstrate technical understanding (Varanasi K, Akbar, Ab. R., Graham, H, Soapbox, A & Eliza, H. 2015)

Designers may be evaluated based on their work on real-world projects, such as creating garments for fashion shows or collaborating with brands or clients. Evaluators observe the execution of designs from concept to completion. Some assessments may be timed to evaluate a designer's ability to work efficiently under pressure. This can be particularly relevant in industry settings where deadlines are critical (Vientiane, A.& Tyndall P. 2019).

Designers may provide documentation of their pattern making, draping, and garment construction work in their portfolios, showcasing a range of designs and techniques they have mastered. Feedback from peers and instructors during in-class critiques or collaborative projects provides additional insights into a designer's technical skills and problem-solving abilities (Xia F, 2013).

These assessments help evaluators gauge a designer's proficiency in pattern making, draping, and garment construction. They ensure that designers possess the necessary technical knowledge and skills to bring their design concepts

to life and create well-constructed garments that meet industry standards and requirements.

2.3 Industry-Specific Tests

1) Knowledge of industry trends, materials, and sustainability practices

Knowledge of industry trends, materials, and sustainability practices is essential for fashion designers to stay relevant, innovative, and responsible in their work. Keeping up with the latest trends, understanding various materials and their properties, and adopting sustainable practices are all crucial aspects of a designer's success in the dynamic and ever-evolving fashion industry. Here's why knowledge in these areas is vital:

Fashion designers must be aware of current and emerging trends in the industry to create designs that appeal to consumers. Understanding trends in colors, silhouettes, patterns, and styles helps designers stay ahead of the competition and cater to changing consumer preferences. Knowledge of different materials and fabrics is essential for selecting the right materials for specific designs. Understanding the properties, durability, and performance of materials allows designers to make informed choices and create high-quality garments. Sustainable fashion practices are becoming increasingly important in the industry. Designers need to be well-versed in sustainable materials, eco-friendly production processes, and ethical supply chains to reduce the environmental impact of their designs. Knowledge of circular fashion concepts, such as upcycling, recycling, and waste reduction, enables designers to design with longevity and end-of-life considerations in mind, contributing to a more sustainable fashion ecosystem (Thomas, I, Barth, M., and Day, T, 2013)

Being aware of eco-friendly dyeing and printing techniques helps designers minimize the environmental impact of color application on fabrics. Understanding ethical fashion standards and fair labor practices is crucial for designers to ensure their designs are produced under responsible and humane conditions. Staying informed about innovative materials and technologies in the fashion industry allows designers to explore new possibilities and experiment with cutting-edge materials. (Arose L, 2013)

Understanding consumer behavior, preferences, and demands helps designers create designs that resonate with target audiences and drive consumer engagement. Knowledge of fashion history and iconic designs can serve as a source of inspiration and provide a foundation for creative concepts. Awareness of global fashion market trends and regional variations helps designers design collections that cater to diverse international markets. Knowledge of industry trends and materials also contributes to a brand's unique identity and positioning in the market. (Volition, P, 2012)

By continuously expanding their knowledge in these areas, fashion designers can create designs that are not only visually appealing but also responsible and sustainable. Keeping up with industry trends, materials, and sustainability practices allows designers to contribute positively to the fashion industry's future and meet the demands of an increasingly conscious and discerning consumer base.

2) Business and marketing skills for fashion entrepreneurs

Business and marketing skills are essential for fashion entrepreneurs to establish and grow successful fashion businesses. Fashion entrepreneurship involves not only creative design skills but also effective management, marketing, and strategic planning to thrive in a competitive market. Here are some crucial business and marketing skills for fashion entrepreneurs:

Developing a comprehensive business plan is the foundation of any successful fashion venture. This includes defining the brand's vision, mission, target audience, competitive analysis, financial projections, and growth strategies. Understanding financial concepts such as budgeting, cash flow management, pricing strategies, and profit margins is crucial for the financial sustainability of the fashion business (Li T & Liu M. 2009)

Knowledge of supply chain management, production processes, and sourcing materials is essential to ensure timely and cost-effective manufacturing of fashion products (Dong W, 2013)

Efficiently managing inventory levels, forecasting demand, and avoiding overstocking or understocking are vital for optimizing costs and meeting customer needs (Zhang Y, 2020).

In the digital age, having an online presence is critical. Fashion entrepreneurs need to be proficient in e-commerce platforms, digital marketing, social media, and online customer engagement. Building a strong brand identity and positioning the fashion business effectively in the market is essential for attracting the right target audience and creating brand loyalty. Conducting market research to understand consumer preferences, trends, and demands helps fashion entrepreneurs design products that align with the market needs (Hou X, 2007).

Fashion entrepreneurs need to develop effective retail and sales strategies to expand distribution channels, establish partnerships, and increase sales. Building strong industry connections and networking with suppliers, retailers, influencers, and media helps fashion entrepreneurs gain exposure and opportunities for collaboration. Familiarity with intellectual property rights, trademarks, copyrights, and legal aspects of the fashion industry ensures the protection of original designs and creative work (Qiao L, 2010).

Emphasizing social and environmental responsibility in business practices, such as adopting sustainable materials and ethical production, is increasingly valued by consumers and stakeholders. Engaging in effective public relations and media outreach helps fashion entrepreneurs gain media coverage, brand exposure, and build a positive brand image. Strong negotiation and communication skills are essential for dealing with suppliers, clients, and business partners to establish mutually beneficial relationships. The fashion industry is dynamic and ever-changing. Fashion entrepreneurs need to be adaptable and resilient in response to market shifts and challenges (Liao J, 2015)

By developing these business and marketing skills, fashion entrepreneurs can effectively manage their ventures, achieve sustainable growth, and navigate the complexities of the fashion industry. Combining creativity with business acumen is key to building a successful and thriving fashion brand.

To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions

3. To explore the principles and methods of developing and designing the costume designer qualification examination system from the perspectives of pedagogy and measurement

3.1 Test preparation strategies and learning resources

Effective exam preparation is crucial for achieving success in qualification tests. Here are some strategies and study resources to help candidates prepare for exams:

Familiarize yourself with the exam format, including the types of questions (multiple-choice, essay, practical, etc.), time limits, and scoring methods. Understanding the structure of the exam helps in planning your study approach. Develop a realistic study schedule that allocates sufficient time for each subject or topic. Break down the material into manageable chunks and set specific study goals for each session. Utilize official study materials provided by the exam organizers or accredited sources. These materials are designed to align with the exam content and can offer valuable insights into what to expect. (Deng S, 2013).

Solve past exam papers or practice questions to familiarize yourself with the exam style and to assess your understanding of the material. Practicing under timed conditions can also help improve time management skills Create concise notes and summaries of key concepts, formulas, or important information. This helps in reinforcing the material and provides a quick review resource closer to the exam date. Online platforms offer various study resources, such as video lectures, interactive quizzes, and study guides. Explore reputable educational websites and online courses related to the exam subject (Robinson J P, 2000).

Collaborate with peers and form study groups to discuss concepts, share knowledge, and ask questions. Explaining concepts to others can reinforce your understanding and help you identify areas that need further review. If available, consider seeking guidance from qualified instructors, tutors, or mentors who can

provide expert insights and answer your questions (Scott, C. A. Clean, A. & Golding, C., 2019).

Practice managing your time effectively during study sessions and practice exams. Allocate more time to areas that need improvement and less time to topics you are already proficient in. Ensure you take regular breaks during study sessions to avoid burnout. Maintain a healthy lifestyle with proper nutrition, exercise, and sufficient sleep. Identify weak areas through practice exams or self-assessment and focus on improving your understanding in those areas. Maintain a positive attitude and believe in your abilities. Confidence in your preparation can positively impact your performance during the exam (Li D, Li A & Deng S, 2005).

Remember that effective exam preparation is a gradual process, and consistency is key. By adopting these strategies and utilizing the right study resources, candidates can approach their exams with confidence and increase their chances of success.

3.2 Collaborating with mentors and experienced professionals.

Collaborating with mentors and experienced professionals is a valuable strategy for personal and professional growth. Mentors can offer guidance, support, and insights based on their own experiences, while experienced professionals can provide valuable industry knowledge and expertise. Here's how to effectively collaborate with mentors and experienced professionals:

Look for mentors who have expertise in your field of interest or are in positions you aspire to achieve. Networking events, industry conferences, and professional organizations are great places to connect with potential mentors. Approach potential mentors with a respectful and open mindset. Express your genuine interest in learning from their experiences and value their time and insights (Hou F, 2016).

Define your goals for the collaboration and what you hope to gain from the mentorship. Clear goals will help guide the mentoring relationship and ensure that both parties understand the objectives. Actively listen to your mentor's advice,

experiences, and feedback. Be open to learning from their wisdom and insights. Take notes and apply the knowledge to your own professional development (Ma T, 2013).

Come prepared with thoughtful and relevant questions for your mentor. Seek advice on overcoming challenges, achieving career milestones, and developing specific skills. Take initiative in the mentoring relationship. Follow up on action items and opportunities discussed during the collaboration. Show your dedication to growth and improvement. (Guttural R, 2019).

Keep your mentor informed about your progress and achievements. Share updates on how their advice and guidance have positively impacted your professional journey. Express gratitude to your mentors for their time and support. A simple thank-you note or acknowledgment goes a long way in maintaining a positive and productive relationship. If possible, offer your own insights and knowledge to your mentor. Reverse mentoring allows you to share your unique perspectives and expertise, fostering a mutually beneficial relationship (Li C, 2019).

Stay in touch with your mentors and experienced professionals beyond formal collaborations. Networking is an ongoing process, and maintaining relationships can lead to future opportunities and connections. Understand that mentors and experienced professionals have their own commitments and responsibilities. Be respectful of their time and avoid overwhelming them with frequent requests. Be flexible and adaptable in your approach to collaborating with mentors and professionals. Adjust your strategies based on their availability and preferred communication methods (Lei D & Bu W, 2005).

Collaborating with mentors and experienced professionals offers a wealth of knowledge, guidance, and support that can significantly impact your career growth and success. By approaching these collaborations with sincerity, gratitude, and a willingness to learn, you can develop meaningful relationships that contribute to your professional development journey.

3.3 Developing a comprehensive study plan and practice routine

Developing a comprehensive study plan and practice routine is crucial for effective exam preparation and skill improvement. A well-structured plan helps you

stay organized, manage your time efficiently, and maintain focus on your learning goals. Here's how to create a comprehensive study plan and practice routine:

Start by defining your specific study goals and objectives. Be clear about what you want to achieve and establish realistic timelines for each goal. Break down the material into subject areas or topics that you need to cover. Prioritize subjects based on their importance or your proficiency level in each area (Lei T, 2005).

Determine how much time you can dedicate to studying each day or week. Consider your other commitments and responsibilities when creating a study schedule. Design a weekly study schedule that outlines when and what you will study. Allocate specific time slots for each subject area and be consistent in following the schedule (Pennington-Miller, B., Stubbornness, B., Langley, A., & Gilbert, A., 2018).

Incorporate short breaks in your study routine to avoid burnout and maintain productivity. Taking breaks helps refresh your mind and improve focus. For skills improvement, practice regularly on a consistent basis. Repetition and consistent practice are essential for mastering any skill. Gather study resources such as textbooks, online courses, study guides, and practice materials. Use a variety of resources to gain a comprehensive understanding of the subject (LI D, 1995).

Set intermediate milestones or checkpoints to track your progress. Celebrate achieving each milestone as it motivates you to keep going. Identify areas where you need more improvement and allocate extra time to study those subjects or practice those skills. Regularly review and revise the material you have covered to reinforce your understanding and retention of the content. Incorporate practice exams or mock tests into your routine to assess your knowledge and exam readiness. Practice exams help you get accustomed to the test format and improve time management (Wang S, 2005).

Continuously evaluate your progress against your study goals. If necessary, adjust your study plan to address any challenges or areas that need improvement. Stay motivated by reminding yourself of your goals and the benefits of achieving them. Surround yourself with positive influences and supportive peers. Be

flexible in your study plan to accommodate unexpected events or changes in your schedule. Adaptability is crucial for maintaining consistency in your study routine. Reach out to mentors, tutors, or study groups for support and guidance. Engaging with others can provide new perspectives and additional learning opportunities (Lin W & Luo S, 2021).

Remember that a comprehensive study plan and practice routine is not a one-size-fits-all approach. Customize your plan to suit your learning style, strengths, and weaknesses. Consistency, dedication, and discipline are key to making your study plan and practice routine successful in achieving your goals.

Verification and evaluation of the costume designer qualification examination system

1. Certification bodies and organizations in the fashion industry

Accreditation and recognition of qualification tests are crucial factors in ensuring the credibility and value of these assessments. Accreditation refers to the formal recognition of a qualification test by a reputable accrediting body or organization. Recognition, on the other hand, is the acknowledgment and acceptance of the qualification test within the industry or relevant field. Here's why accreditation and recognition are essential for qualification tests:

Accreditation by a recognized authority provides assurance that the qualification test meets specific standards of quality and rigor. It ensures that the assessment is fair, reliable, and valid in evaluating the skills and knowledge of candidates. Accredited qualification tests are more likely to be accepted and recognized by employers, educational institutions, and industry organizations. They carry weight and value in the job market and professional settings. Accredited qualification tests may be eligible for credit transfer or advanced standing in formal education systems, allowing candidates to use their qualifications to further their academic pursuits (Chan, C. K. Y., & Auk, L. Y. Y., 2021).

Employers tend to have more confidence in candidates with qualifications from accredited tests, as it demonstrates a standardized level of competence and expertise. Accreditation often provides international recognition, making qualifications

from accredited tests valuable in various countries and markets (Loden, K., Hall, S., Defy, E., Le win, J., Elliot, D., & Le win, J., 2011).

Accredited qualification tests are designed to adhere to industry-specific standards and best practices, ensuring alignment with industry needs and expectations. Accredited tests are developed using standardized procedures and undergo rigorous validation processes, ensuring fairness and equity in the evaluation of candidates (Robert K. Yin, 2004).

Accreditation may be required for qualification tests in certain fields or industries to comply with legal or regulatory standards. Accredited qualification tests may be a prerequisite for obtaining professional licenses or certifications required in specific professions or industries. Accredited qualification tests may be eligible for funding or financial support from government agencies, institutions, or employers (Wang Y, 2005).

It's essential for candidates and stakeholders to verify the accreditation status of a qualification test before investing time and resources. Reputable accrediting bodies and organizations may vary based on the field of study or industry, so candidates should research and ensure that the qualification test they pursue is recognized and valued within their desired career path. Additionally, regular reviews and updates of accreditation processes help maintain the relevance and quality of qualification tests over time.

2. Importance of recognized qualification tests for professional growth

Recognized qualification tests play a significant role in supporting and fostering professional growth for individuals in various fields. These tests are designed to assess a candidate's skills, knowledge, and expertise, and their recognition by reputable accrediting bodies or organizations adds to their importance and value. Here are some key reasons why recognized qualification tests are essential for professional growth:

Recognition of qualification tests validates an individual's competence and proficiency in a specific area. This validation provides confidence to employers, clients, and colleagues that the individual possesses the necessary skills and

knowledge to excel in their profession. Obtaining recognized qualifications opens doors to advancement opportunities within an organization or industry. It demonstrates the individual's commitment to continuous learning and professional development, making them eligible for promotions and higher-level responsibilities (Zhang L & Liu S., 2005).

In competitive job markets, recognized qualifications give candidates a competitive edge over others with similar qualifications. Employers often prioritize candidates with accredited credentials as they can be assured of their competence. Recognized qualification tests enhance an individual's professional credibility. It serves as proof of their expertise and specialization in a particular domain, establishing them as a reputable and knowledgeable professional (Chan, C. K. Y., Bong, E. T. Y., Auk, L. Y. Y., & Ho, R. 2017).

Accredited qualifications offer greater flexibility and mobility in the job market. Professionals with recognized qualifications can explore career opportunities in different companies, industries, or even countries with their standardized and respected credentials. Professionals with recognized qualifications may command higher salaries and remuneration packages, as their credentials are valued by employers and clients. Recognition by industry-specific accrediting bodies ensures that the qualifications are aligned with industry standards and practices. This recognition enhances the qualifications' relevance and acceptance within the specific field (Wang W, 2023).

Being part of a community of professionals who hold recognized qualifications can lead to networking opportunities and connections within the industry. This network can provide access to new opportunities, collaborations, and mentorship. Pursuing recognized qualification tests encourages individuals to engage in lifelong learning and continuous professional development. This commitment to growth helps professionals stay relevant and adapt to the evolving demands of their industry. Some recognized qualification tests have global recognition, enabling professionals to work and excel in various international markets, expanding their horizons and potential career options Song Y & Wang Y (2008).

In conclusion, recognized qualification tests are indispensable for professional growth. They validate competence, offer career advancement opportunities, provide a competitive edge, and enhance professional credibility. By obtaining recognized qualifications, professionals can elevate their career trajectory, stay relevant in their industry, and position themselves as valuable assets in the job market.

3. Evaluating the credibility and relevance of qualification tests.

Evaluating the credibility and relevance of qualification tests is essential to ensure that candidates and stakeholders can trust the validity and value of the credentials being offered. Here are some key factors to consider when assessing the credibility and relevance of qualification tests:

Check if the qualification test is accredited by a reputable accrediting body or recognized by relevant industry organizations. Accreditation ensures that the test meets specific standards and is valued within the industry. Review the content and objectives of the qualification test to ensure that it aligns with the skills and knowledge needed in the specific field. The test should cover relevant and up-to-date topics, reflecting the demands of the profession (Du N & Wang E., 2008).

Assess whether the qualification test was developed and reviewed by subject matter experts or professionals in the field. Expert involvement ensures that the test is relevant, accurate, and comprehensive. Investigate the pass rates of the qualification test and seek feedback from individuals who have completed it. High pass rates and positive success stories indicate that the test is fair, well-designed, and capable of assessing candidates effectively. Investigate the recognition of the qualification test within the industry and its acceptance by employers. A qualification test that is highly recognized and valued by employers can significantly enhance candidates' employment ability (Zhang M & Tao J., 2012).

Check for independent reviews or evaluations of the qualification test conducted by reputable educational or industry organizations. These reviews can provide insights into the test's credibility and effectiveness. Ensure that the qualification test's administration process is transparent, and information about the

test is readily accessible to candidates. Transparent processes build trust and confidence in the test's fairness (Du S & Wang Y, 2008).

Assess the validity and reliability of the qualification test. A valid test accurately measures the skills it intends to assess, while a reliable test consistently produces consistent results. Check if the qualification test is part of a broader CPD program that encourages candidates to engage in continuous learning and professional growth. Seek feedback from industry professionals or organizations regarding their perception of the qualification test. Positive endorsements from industry leaders can indicate its relevance and credibility (Li H., 2015).

Consider the cost of taking the qualification test and evaluate the potential return on investment in terms of career advancement and opportunities. Ensure that the qualification test adheres to ethical standards and does not engage in unethical practices, such as unfair bias or discrimination.

By thoroughly evaluating these factors, candidates and stakeholders can make informed decisions about the credibility and relevance of qualification tests. Choosing reputable and relevant qualifications ensures that candidates' efforts are recognized and valued, leading to meaningful career growth and professional success (Zou Q. & Qiao X., 2005).

Chapter 3
Research Methodology

The purpose of this study is to provide a basis for the selection of excellent fashion designers in fashion enterprises, to provide a reference for the ability requirements of fashion design graduates to engage in the work of fashion designers, and to help the graduates of fashion design graduates find employment smoothly.

The researcher started the study with the three research objectives.

1. To study the requirements of qualification in the career for fashion designer for higher education fashion design majors.

2. To develop a qualification examination system for graduates of costume design majors in colleges and universities.

3. To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions.

Object 1 : To study the requirements of qualification in the career for fashion designer for higher education fashion design majors, the researchers have the following procedures;

The population/Sample Group

The Population

Since June 2023, 50 enterprises have continued to recruit positions online and offline in Jiangxi Institute of Fashion Technology.

The Sample Group

HR of 21 garment design recruitment enterprises.

Research Instruments

This paper mainly adopts the method of literature review and the method of expert interview for investigation and research.

Literature method, also known as historical literature method, is a method to classify, organize and study valuable literature according to the research goal of the subject, so as to achieve the goal of research. In today's era of information expansion, it is important to select the data suitable for the research of the target subject and summarize the useful reference data when using the literature method. The thesis literature search method mainly uses CNKI full-text database, EBSCO full-text database, CNKI Excellent doctoral dissertation database, Textile Technology Complete (TTC) academic database, Springer full-text database and google academic search engine. In terms of paper literature, I mainly read books. In addition to consulting and summarizing information, the recruitment requirements of enterprises are constantly consulted, compared, analyzed and summarized with mature relevant literature, and especially the latest achievements of relevant research are studied and used for reference. Finally, the ideas for solving problems are formed, from which the existing problems are sought to solve and the framework of this research is constructed.

The expert interview method is a highly structured interview mode to conduct behavior review survey method, which is recognized as the most complex and effective means to summarize personal characteristics in the process of model building. It is necessary for experts skilled in interview techniques to understand the key events and success factors of the key issues in the work of the interviewees, collect their past behaviors and real thoughts, and discover valuable personal potential characteristics from them.

Data Collection

Through the literature review, the following independent variables were identified: learning ability, practical ability, ability to apply, adaptability, innovation ability. In order to make the recruitment requirements as detailed and accurate as possible, this paper selects the real recruitment data of 50 enterprises that continue to recruit positions online and offline in Jiangxi Institute of Fashion Technology from June 2023 to now. In order to make the selected data more convincing, 7 large, medium and small enterprises were selected respectively from 50 recruitment enterprises according to the size of the enterprises, and a total of 21 enterprises were selected. Data analysis and comparison were carried out through the literature research method, and experts were interviewed by sending questionnaires to 21 HR personnel to extract the relevant elements of employment ability requirements in the recruitment needs of enterprises.

Step 1: Through searching the literature, the relevant elements of the professional qualification of fashion designers are obtained.

Step 2: Designs survey questions: 1. What qualities do fashion designers need to meet? 2. What ability does a fashion designer need? 3. What expertise does a fashion designer need?

Step 3: Conduct IOC evaluation and modify the survey questionnaire based on expert suggestions.

Step 4: Distribute 21 questionnaires for reliability testing.

Step 5: Obtain occupational qualification element data.

Data Analysis

Analyze the collected data of fashion designers' competence requirements, check their integrity, and analyze the valid data. Expert to have the following results, independent variables were identified: academic qualifications and certifications, skills and ability assessments, and industry-specific tests.

Object 2: To develop a qualification examination system for graduates of costume design majors in colleges and universities., the researchers have the following procedures;

The population / Sample Group

The Population

21 garment enterprises CEO, 21 garment enterprises HR, Jiangxi Institute of Fashion Technology senior professional teachers 10 people.

The Sample Group

There are 7 CEO of 3 large enterprises, 2 medium-sized enterprises and 2 small enterprises, 7 HR personnel of 3 large enterprises, 2 medium-sized enterprises and 2 small enterprises, and 7 garment teachers with more than 10 years of teaching experience in Jiangxi Institute of Fashion Technology. The HR and CEO of 2 groups of 3 large enterprises, 2 medium-sized enterprises and 2 small enterprises selected from 21 enterprises must come from different enterprises respectively. The full-time teachers of 1 group of 7 people with more than 10 years of teaching experience must be garment teachers with rich teaching experience.

Research Instruments

The Delphi method is mainly used in the research.

Delphi is named after the ancient Greek story of Apollo, the sun god, who was said to be able to foresee the future, hence the name Delphi. "Delphi Method (Delphi method), also known as the expert prescribed procedure survey method, the method is mainly by the investigator to draw up a questionnaire, in accordance with established procedures, in the form of letters to the members of the expert group to consult; The members of the expert group submitted their opinions in an anonymous way (by letter), and through several rounds of repeated investigations, everyone's opinions gradually became concentrated, and the opinions agreed by the majority of people were formed, and the consultation procedure was completed.

Data Collection

The data collected from research objective 1 were used to develop test questions, which were distributed to a 21-member expert group. Through the Delphi method, in accordance with the established procedures, the expert group members were consulted separately by E-mail; The members of the expert group submitted their opinions anonymously (by email), and through several rounds of repeated surveys, everyone's opinions gradually converged and formed an opinion that most people agreed with. The data of the questionnaire were analyzed by means of median, mode and quartile, and more than 75% of the data of the final result was used for the production of the next test system.

Step 1: Design the expert consultation form and determine the list of 21 experts who can participate. From 21 enterprises, 2 groups of 3 large enterprises, 2 medium-sized enterprises and 2 small enterprises were selected, with a total of 7 ceos and 7 HR personnel. A group of 7 full-time garment teachers with more than 10 years of teaching experience were selected.

Step 2: The data from Objective 2 were used to design a seven-part test bank and distributed to 21 experts

Step 3: Implement three rounds of expert opinion survey and feedback.

Step 4: Expert opinion analysis. After each round of expert feedback, opinions are collected according to the contents of the expert consultation form. After repeated collection of opinions, a consensus was finally reached.

Data Analysis

The basic employment ability factors are removed from the results, the discriminative employment ability factors are summarized, the importance of each employment ability factor is obtained, and the relevant elements of employment ability questions are constructed and the questions are developed.

Object 3: To evaluate the qualification examination system for graduates of fashion design majors in higher education institutions, the researchers have the following procedures;

The population / Sample Group

The Population

10 teachers with more than 15 years of teaching experience in Jiangxi Institute of Fashion Technology.

The Sample Group

5 teachers with more than 15 years of teaching experience in Jiangxi Institute of Fashion Technology.

Research Instruments

The research is mainly carried out by expert evaluation method.

Expert evaluation, also known as expert survey, is an important research tool, especially in areas that require deep expertise and experience. The core of this method is to use the knowledge and experience of experts to conduct detailed analysis and evaluation of specific problems or phenomena. Expert assessment has been widely used in many fields, including but not limited to science and technology, economy, society, environment and so on.

Data Collection

The developed test questions are distributed to a panel of 5 experts. The CIPP expert assessment is conducted in accordance with the established procedures, and the assessment is drawn, interpreted and completed.

Data Analysis

Through data analysis, the final opinions of the expert group are analyzed, compared and summarized, and the evaluation of the employment ability test system for student fashion designers majoring in fashion design is completed.

Chapter 4

Results of Analysis

This study takes the costume designer qualification examination system for graduates of colleges and universities in Jiangxi Province as the research object. The purpose of this study is :(1) To study the requirements of qualification in the career for fashion designer for higher education fashion design majors. (2) To develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities.; (3) To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions.

The results of data analysis are as follows:

1. Symbols and abbreviations
2. Data analysis demonstration
3. Data analysis results

The details are as follows.

Symbol and abbreviations

n	refers to the sample
MD	refers to the Median
MO	refers to the Mode
IQR	refers to the Inter-Quartile Range
S	refers to student

Presentation of data analysis

Part 1: Literature review on the core competence and skills of fashion designers

Part 2: Analysis results of respondents' personal information, classified by gender, years of work, company size and company type. Researchers provide data by frequency and percentage.

Part 3: Using the method of text statistics to analyze the interview data of the professional ability required by enterprises for fashion designers.

Part 4: Using the median method, mode method and quartile difference method to analyze the questionnaire data of the professional ability requirements required by enterprises.

Part 5: The analysis results of the data of the costume designer qualification examination system in colleges and universities.

Part 6: The analysis results of the verification data of the costume designer qualification examination system in colleges and universities.

Part 7: The results of the implementation and analysis of the qualification examination system for garment designers in colleges and universities.

Results of Data Analysis

1. To study the requirements of qualification in the career for fashion designer for higher education fashion design majors.

The researcher analyzed the data in 7 parts as follows.

Part 1: Literature review on the core competence and skills of fashion designers

Table 4.1 Core competence and skills of fashion designer

Author	Core competence of fashion designer
Xia F, 2013	Costume painting, actual materials, creative ideas
Chen X, 2018	Garment design and production, display design, clothing digital technology, practical operation ability. Moral quality cultivation
Zhou C, 2011	Research market control traits, ability traits, artistic traits, character traits
Liao J, 2015	Practical ability, adaptability, working attitude, learning ability and cultivation potential
Industrial employer	Technical skills, communication and interpersonal skills, critical thinking, problem solving
490 ICT companies in Australia	Management and communication skills
Japanese engineering graduate	Initiative and problem-solving skills
Wang Y, 2008	Fast access to information and fashion analysis ability, fabric knowledge, dough supplier resources, writing skills, language communication skills, team spirit, fashion personality, hand drawing or computer drawing ability, pattern knowledge, process innovation ability
Zhou Q, 2008	Personality charm, professional ability, brand operation ability, team spirit, product innovation ability
Fu Q, 2014	creativity
Zhang H, 2014	Excellent creative ability

According to Table 4.1, the above literature review data show that the core competence of fashion designers covers a variety of abilities, including the ability to master design innovation and creative conception, professional skills, and practical ability. They also need to understand the knowledge of fabrics, the resources of dough suppliers, and the knowledge of industry trend analysis. Working attitude, learning ability and cultivation potential are equally important. Clothing designer's personal moral cultivation, personality charm, artistic characteristics, personality traits, teamwork ability, human-land communication ability are indispensable.

Part 2: Analysis results of the respondents' personal information

Table 4.2 Enterprise survey of professional ability of fashion designer

Item	Type	Quantity	Percentage
Type of company	Private enterprise	19	90.47
	Foreign-funded enterprise	1	4.76
	Other enterprises	1	4.76
Company size	large-scale	7	33.33
	middle-sized	7	33.33
	Minor	7	33.33
Years of expert service	3-5	4	19.05
	6-9	9	42.86
	More than 10	8	38.10
Gender	male	8	38.10
	female	13	61.90
Total		**21**	

According to Table 4.2, based on the literature review analysis in Table 4.1, the researcher interviewed HR personnel of 21 enterprises to understand the professional ability requirements of enterprises for the position of fashion designer.

The researcher selected HR personnel of 7 large, medium and small enterprises for interview, accounting for 33.33% of each type, including 19 private enterprises (90.47%), 1 foreign enterprise (4.76%) and 1 other enterprise (4.76%). There were 21 experts who participated in the interview, among whom 8 were male, accounting for 38.10% of the interviewees, and 13 were female, accounting for 61.90% of the interviewees. The working life of experts is divided into three stages, 4 people working 3-5 years, accounting for 19.05%, 9 people working 6-9 years, accounting for 42.86%, and 8 people working more than 10 years, accounting for 38.10%.

Part 3 : Enterprise requirements clothing designers need to have professional ability requirements interview data analysis.

Table 4.3 Professional qualification requirements for fashion designers

Total=21 Experts

Items	High	Median	Low	Unspecified
Fashion designers are required to obtain an academic degree	19 90.48%	1 4.76%	1 4.76%	0 0.00%
Costume designers need to be proficient in all types of costume making techniques	1 4.76%	1 4.76%	2 9.52%	18 85.71%
Costume designers are required to obtain certification	15 71.43%	3 14.29%	1 4.76%	2 9.52%
Fashion designers need to assess their design skills	18 85.71%	2 9.52%	1 4.76%	0 0.00%
Fashion designers need to be evaluated for creativity	19 90.48%	1 4.76%	1 4.76%	0 0.00%
Fashion designers need to have strong language skills	0 0.00%	1 4.76%	1 4.76%	19 90.48%
Fashion designers need to assess technical proficiency	16 76.19%	4 19.05%	1 4.76%	0 0.00%

Table 4.3 (Continued)

Total=21 Experts

Items	High	Median	Low	Unspecified
The fashion designer needs to evaluate the pattern making	17 80.95%	3 14.29%	1 4.76%	0 0.00%
Fashion designers need to evaluate three-dimensional cutting	19 90.48%	1 4.76%	1 4.76%	0 0.00%
Fashion designers need to carry out structural assessment	19 90.48%	1 4.76%	1 4.76%	0 0.00%
Fashion designers need to be proficient in strict budget management	0 0.00%	1 4.76%	1 4.76%	19 90.48%
Fashion designers need to understand industry trends	17 80.95%	3 14.29%	1 4.76%	0 0.00%
Fashion designers need to understand materials and sustainable practices	16 76.19%	3 14.29%	2 9.52%	0 0.00%
Fashion designers need business and marketing skills	15 71.43%	4 19.05%	1 4.76%	1 4.76%
Fashion designers need to master the qualities that college graduates should possess	21 100.00%	0 0.00%	0 0.00%	0 0.00%

According to Table 4.3, the results of interviews conducted by the researcher on HR from 21 enterprises show that question 1 has been answered: Vocational qualification requirements for clothing designers in higher education. Among the professional ability requirements of garment designers, 90.48% are required to obtain academic degree certificates, 71.43% are required to obtain certification certificates, 85.71% are required to evaluate design skills, 90.48% are required to evaluate creativity, 76.19% are required to evaluate technical proficiency, and 80.95% are required to evaluate plate making. The need for three-dimensional cutting evaluation accounted for 90.48%, the need for structural evaluation of clothing designers

accounted for 90.48%, the need to understand industry trends accounted for 80.95%, the need to understand materials and sustainable development practices accounted for 76.19%, the need to master business and marketing skills accounted for 71.43%, the need to master the qualities of college graduates accounted for 100.00%. 85.71% did not mention that fashion designers need to be proficient in all types of clothing production technology, 90.48% did not mention that fashion designers need to have strong language ability, 90.48% did not mention that fashion designers need to be proficient in strict budget management.

After analyzing the results of valid data, a 6-question interview was conducted on the professional qualification requirements required by fashion designers. 1. What qualifications, degrees and certifications are required for fashion designers? 2. What are the ways to assess fashion design skills, creativity and technical proficiency of a fashion designer? 3. What are the ways in which fashion designers make plates, cut and evaluate structures? 4. What do fashion designers need to know about industry trends, materials and sustainable development? 5. What business and marketing skills do fashion designers need to know? 6. What knowledge, abilities and qualities do fashion designers need that graduates should acquire?

Table 4.4 What qualifications, degrees and certifications are required for fashion designers?

1. What qualifications, degrees and certifications do fashion designers need to obtain?	
1. Fashion designers need to have a bachelor's degree	9.Fashion designers need to have a professional certification in fashion related disciplines: textile technology certification
2. Fashion designers need to have a master's degree	10. Fashion designers need to have a professional certification in fashion related disciplines: fashion marketing certification
3. Fashion designers need to have a bachelor's degree	11.Fashion designers need to have a professional certification in fashion related disciplines: fashion photography certification
4. Fashion designers need to have a postgraduate degree	12.Fashion designers need to have professional certification in fashion related disciplines: Fashion Business management certification
5. Fashion designers need to have a professional certification in fashion related disciplines: sustainable fashion certification	13.Fashion designers need to have a professional certification in a fashion related discipline: Fashion technology certification
6. Fashion designers need to have a professional certification in fashion related disciplines: luxury fashion certification	14.Fashion designers need to have a professional certification in fashion related disciplines: sportswear design certification
7. Fashion designers need to have professional certification in fashion related disciplines: Fashion modeling certification	15.Fashion designers must have a professional certification in a fashion related discipline: Fashion film and media certification
8. Fashion designers need to have professional certification in fashion related disciplines: Fashion illustration certification	16.Fashion designers need to have professional certification in fashion related disciplines: plate making and three-dimensional cutting certification

According to Table 4.4, the researcher conducted statistical analysis on the interview results of 21 HR employees from enterprises, and the interview results of experts show that question 1. What qualifications, degrees and certifications are required for fashion designers? Experts mentioned that fashion designers need to have a bachelor's degree, a master's degree, a bachelor's degree, a graduate degree, and a professional certification in fashion related disciplines: Sustainable Fashion Certification, Luxury Fashion Certification, Fashion Styling Certification, Fashion Illustration Certification, Textile Technology Certification, Fashion Marketing Certification, Fashion Photography Certification, Fashion Business Management Certification, Fashion Technology Certification, sportswear Design certification, Fashion Film and Media certification, Plate making and three-dimensional cutting certification.

Table 4.5 What are some ways to assess a fashion designer's fashion design skills, creativity, and technical proficiency?

2. What are the ways to assess fashion design skills, creativity and technical proficiency of a fashion designer?	
1. Methods for evaluating fashion design skills, creativity and technical proficiency of fashion designers include: portfolio review	6. Methods of assessing fashion design skills, creativity and technical proficiency of fashion designers include: collaborative projects
2. Methods to evaluate fashion design skills, creativity and technical proficiency of fashion designers are: design challenge	7. Methods for assessing fashion design skills, creativity and technical proficiency of fashion designers include: prototyping and testing
3. Methods to evaluate fashion design skills, creativity and technical proficiency of fashion designers include: technical exercises	8. The methods of evaluating fashion design skills, creativity and technical proficiency of fashion designers are: educational background

Table 4.5 (Continued)

2. What are the ways to assess fashion design skills, creativity and technical proficiency of a fashion designer?	
4. Methods of assessing fashion design skills, creativity and technical proficiency of fashion designers include: fashion show or presentation	9. The methods of evaluating fashion design skills, creativity and technical proficiency of fashion designers are: industry experience
5. The methods of evaluating fashion design skills, creativity and technical proficiency of fashion designers are: interview and discussion	10. The fashion design skills, creativity and technical proficiency of fashion designers are evaluated by: reputation and recognition

According to Table 4.5, the researcher conducted statistical analysis on the interview results of 21 HR employees from enterprises, and the interview results of experts show that question 2. What are the design skills, creativity, and technical proficiency assessments required of fashion designers? Methods cited by experts to assess fashion design skills, creativity, and technical proficiency of fashion designers include portfolio reviews, design challenges, technical exercises, fashion shows or presentations, interviews and discussions, collaborative projects, prototyping and testing, educational background, industry experience, and reputation and recognition.

Table 4.6 What are the ways in which fashion designers make plates, cut and evaluate structures?

3. What are the ways in which fashion designers make plates, cut and evaluate structures?	
1. The methods of printing, three-dimensional cutting and garment structure evaluation are: pattern drafting exercises	7. Printing, three-dimensional cutting and clothing structure evaluation methods are: make sample clothing
2. The printing, three-dimensional cutting and clothing structure evaluation methods are: grading and sizing	8. The printing, three-dimensional cutting and clothing structure evaluation methods are: technical drawings and notes
3. Printing, three-dimensional cutting and clothing structure evaluation methods are: pattern manipulation	9. Printing, three-dimensional cutting and clothing structure evaluation methods are: real world projects
4. Printing, three-dimensional cutting and clothing structure evaluation methods are: three-dimensional cutting technology	10. Printing, three-dimensional cutting and clothing structure evaluation methods are: regular evaluation
5. Printing, three-dimensional cutting and clothing structure evaluation methods are: creative draping	11. The printing, three-dimensional cutting and clothing structure evaluation methods are: documents and portfolios
6. Printing, three-dimensional cutting and clothing structure evaluation methods are: sewing practice	12. The printing, three-dimensional cutting and clothing structure evaluation methods are: peer and teacher evaluation

According to Table 4.6, the researcher conducted statistical analysis on the interview results of 21 HR employees from enterprises, and the interview results of experts show that question 3. What are the ways in which fashion designers make plates, cut and evaluate structures? Methods cited by experts to assess a fashion designer's ability in patterning, stereoscopic cutting, and garment construction

include: pattern drafting exercises, pole splitting and sizing, pattern manipulation, stereoscopic cutting techniques, creative draping, sewing exercises, making sample garments, technical drawings and notes, real-world projects, timed assessments, documentation and portfolios, and peer and teacher evaluations.

Table 4.7 Fashion designers need to know what industry trends, materials, and sustainable development concepts

4. What do fashion designers need to know about industry trends, materials and sustainable development?	
1. Fashion designers need to understand industry trends	7. Fashion designers need to understand innovative materials and technologies in the fashion industry
2. Fashion designers need to understand materials and fabrics	8. Fashion designers need to understand consumer behavior, preferences and needs
3. Fashion designers need to be well-versed in sustainable materials, environmentally friendly production processes and ethical supply chains to reduce the environmental impact of their designs	9. Fashion designers need knowledge of fashion history and iconic designs
4. Fashion designers need to understand circular fashion concepts such as upcycling, recycling and waste reduction	10. Fashion designers need to understand global fashion market trends and regional differences
5. Clothing designers need to understand environmentally friendly dyeing and printing technology to minimize the impact of fabric color application on the environment	11. Fashion designers need to master brand recognition
6. Fashion designers need to understand ethical fashion standards and fair labor practices	

According to Table 4.7, the researcher conducted statistical analysis on the interview results of 21 HR employees from enterprises, and the interview results of experts show that question 4. What do fashion designers need to know about industry trends, materials and sustainable development? Experts mentioned that evaluating clothing designers requires knowledge of industry trends, materials and fabrics, proficiency in sustainable materials, environmentally friendly production processes and ethical supply chains, knowledge of circular fashion concepts, environmentally friendly dyeing and printing techniques, knowledge of ethical fashion standards and fair labor practices, a need to understand innovative materials and technologies in the fashion industry, a need to understand consumer behavior, preferences and needs, and fashion history Knowledge of iconic design, global fashion market trends and regional differences require brand recognition.

Table 4.8 What business and marketing skills do fashion designers need to know?

5. What business and marketing skills do fashion designers need to know?	
1. Business and marketing skills that fashion designers need to understand: business planning	7. Fashion designers need to build strong industry connections and networks with suppliers, retailers, influencers and media
2. Clothing designers need to understand business and marketing skills: financial management	8. Fashion designers need to be familiar with intellectual property, trademarks, Copyrights and the laws of the fashion industry
3. Clothing designers need knowledge of supply chain management, production processes and purchasing materials	9. Fashion designers need to have a sense of social and environmental responsibility
4. Fashion designers need to be proficient in e-commerce platforms, digital marketing, social media and online customer engagement	10. Fashion designers need to engage in effective public relations and media campaigns

Table 4.8 (Continued)

5. What business and marketing skills do fashion designers need to know?	
5. fashion designers need to conduct market research to understand consumer preferences, trends and needs	11. Fashion designers need strong negotiation and communication skills
6. Fashion designers need to develop effective retail and sales strategies	12. Fashion designers need to be adaptable and flexible

According to Table 4.8, the researcher conducted statistical analysis on the interview results of 21 HR employees from enterprises, and the interview results of experts show that question 5. What business and marketing skills do fashion designers need to know? Experts mentioned business and marketing techniques that fashion designers need to know include: Business planning, financial management, supply chain management, knowledge of production processes and sourcing materials, need to be proficient in e-commerce platforms, digital marketing, social media and online customer engagement, need to conduct market research, need to develop retail and sales strategies, need to establish strong industry contacts and networks with suppliers, retailers, influencers and media, Knowledge of intellectual property, trademark, copyright and fashion industry law is required, awareness of social and environmental responsibility is required, participation in effective public relations and media campaigns is required, strong negotiation and communication skills are required, adaptability and flexibility are required.

Table 4.9 What knowledge, abilities and qualities do fashion designers need that graduates should acquire?

6. What knowledge, abilities and qualities do fashion designers need that graduates should acquire?	
1. The moral cultivation of fashion designers is very important	6. Fashion designer's communication is very important
2. The professional knowledge of fashion designer is very important	7. Fashion designer's ability to work in a team is very important
3. The practical ability of fashion designers is very important	8. A fashion designer's international perspective is very important
4. The application ability of fashion designers is very important	9. The learning and development ability of fashion designers is very important
5. Fashion designer's information ability is very important	

According to Table 4.9, the researcher conducted statistical analysis on the interview results of 21 HR employees from enterprises, and the interview results of experts show that question 6. What knowledge, abilities and qualities do fashion designers need that graduates should acquire? Experts mentioned nine aspects of fashion designers are very important: fashion designers' moral cultivation, professional knowledge, practical ability, application ability, information ability, communication and expression ability, teamwork ability and learning and development ability.

Part four: Using the median method, mode method and quartile difference method to analyze the questionnaire data of the professional ability requirements required by enterprises.

Based on the interview data of experts, the variables of the professional qualification requirements of fashion designers were proposed, and an expert survey was conducted in the form of a questionnaire. The questionnaire was assessed as

feasible by IOC experts and sent to 21 HR enterprises for filling in, and the questionnaire data was collected for analysis.

Part 4: Using the median method, mode method and quartile difference method to analyze the questionnaire data of the professional ability requirements required by enterprises.

Table 4.10 Results for Academic Qualifications and Certifications

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
1. Academic Qualifications and Certifications					
1	Bachelor's Degree in Fashion Design	4	4	2.00	71.43
2	Master's Degree in Fashion Design	3	3	0.50	23.81
3	Certificate/Diploma in Fashion Design	4	4	1.00	90.48
4	Textile and Apparel Certifications	3	3	0.50	23.81
5	Sustainable Fashion Certification	4	3	2.00	57.14
6	Luxury Fashion Certification	3	3	1.50	47.62
7	Fashion Styling Certification	4	3	2.00	57.14
8	Fashion Illustration Certification	3	3	1.50	47.62
9	Textile Technology Certification	4	3	2.00	52.38
10	Fashion Merchandising Certification	3	3	1.00	47.62
11	Fashion Photography Certification	3	3	1.00	33.33
12	Fashion Business Management Certification	3	3	1.00	42.86
13	Couture Techniques Certification	4	4	2.00	66.67
14	Active and Sportswear Design Certification	3	3	1.00	33.33
15	Fashion Film and Media Certification	3	3	1.00	28.57
16	Pattern Making and Draping Certification	4	5	2	71.43

According to Table 4.10, based on the questionnaire of 21 HR participants, the questionnaire results show that there are one high values, Certificate/Diploma in Fashion Design accounting for 90.48%.

Table 4.11 Results for Skills and Competency Assessments

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
2. Skills and Competency Assessments					
1	Portfolio Review	4	5	2.00	71.43
2	Design Challenges	4	5	1.00	76.19
3	Technical Exercises	5	5	1.00	80.95
4	Fashion Shows or Presentations	4	5	2.00	71.43
5	Interviews and Discussions	4	4	1.00	80.95
6	Collaborative Projects	4	5	1.00	80.95
7	Prototyping and Testing	4	5	1.00	80.95
8	Educational Background	4	4	1.00	80.95
9	Industry Experience	4	4	1.00	90.48
10	Reputation and Recognition	4	4	1.50	76.19

According to Table 4.11, based on the questionnaire of 21 HR employees, the questionnaire results show that Industry experience. the highest score, accounting for 90.48%. Technical Exercises Interviews and Discussions Collaborative Projects Prototyping and testing, Educational Background accounting for 80.95%. Design Challenges Reputation and Recognition score is 76.19%.

Table 4.12 Results for Type, cut and structure

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
3. Type, cut and structure					
1	Pattern Drafting Exercises	4	4	1.50	76.19
2	Grading and Sizing	4	4	1.00	80.95
3	Pattern Manipulation	4	4	1.50	76.19
4	Draping Techniques	4	4	1.00	80.95
5	Creative Draping	4	4	2.00	71.43
6	Sewing Exercises	4	4	1.50	71.43
7	Constructing Sample Garments	4	4	1.50	76.19
8	Technical Drawings and Annotations	4	4	1.00	80.95
9	Real-World Projects	4	4	1.50	66.67
10	Timed Assessments	4	4	1.50	76.19
11	Documentation and Portfolios	4	4	2.00	71.43
12	Peer and Instructor Reviews	4	4	1.00	66.67

According to Table 4.12, based on the questionnaire of 21 HR employees, the questionnaire results show that Grading and Sizing Draping Techniques Technical Drawings and Annotations accounting for 80.95%, Pattern Drafting Exercises Pattern Manipulation Constructing Sample Garments Timed Assessments accounting for 76.19%.

Table 4.13 Results for Industry-Specific Tests

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
4. Industry-Specific Tests					
1	Industry Trends	5	5	1.00	90.48
2	Materials and Fabrics	5	5	1.00	95.24
3	Sustainability Practices	4	5	1.00	85.71
4	Circular Fashion Concepts	4	4	1.00	90.48
5	Eco-Friendly Dyeing and Printing Techniques	4	4	1.00	85.71
6	Ethical Fashion Standards	4	4	1.50	76.19
7	Innovative Materials and Technologies	5	5	1.00	95.24
8	Consumer Behavior	5	5	1.00	90.48
9	Fashion History	5	5	1.00	80.95
10	Global Market Trends	5	5	1.00	90.48
11	Brand Identity	5	5	1.00	95.24

According to Table 4.13, based on the questionnaire of 21 HR employees, the questionnaire results show that Materials and Fabrics Innovative Materials and Technologies Brand Identity accounting for 95.24%, Industry Trends Circular Fashion Concepts Consumer Behavior Global Market Trends accounting for 90.48%, Sustainability Practices Eco-Friendly Dyeing and Printing Techniques accounting for 85.71%, Fashion History accounting for 80.95%, Ethical Fashion Standards accounting for 76.19%.

Table 4.14 Results for Business and marketing skills

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
5. Business and marketing skills					
1	Business Planning	4	4	1.00	85.71
2	Financial Management	4	3	1.00	52.38
3	Supply Chain and Production Management	4	4	1.00	85.71
4	Inventory Management	4	3	1.00	52.38
5	E-commerce and Online Marketing	4	4	1.00	61.90
6	Branding and Positioning	5	5	1.00	80.95
7	Market Research and Consumer Insights	5	5	1.00	90.48
8	Retail and Sales Strategies	4	3	1.50	61.90
9	Networking and Relationship Building	4	3	1.50	57.14
10	Intellectual Property and Legal Considerations	4	4	1.00	85.71
11	Social and Environmental Responsibility	4	4	1.00	80.95
12	Public Relations and Media Relations	4	3	2.00	61.90
13	Negotiation and Communication Skills	4	3	1.50	52.38
14	Adaptability and Resilience	4	4	1.50	76.19

According to Table 4.14, based on the questionnaire of 21 HR employees, the questionnaire results show that Market Research and Consumer Insights accounting for90.48%, Business Planning Supply Chain and Production Management Intellectual Property and Legal Considerations accounting for 85.71%, Branding and Positioning Social and Environmental Responsibility accounting for 80.95%, Adaptability and Resilience accounting for 76.19%.

Table 4.15 Results for Knowledge, abilities and qualities to be acquired by graduates

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
6. Knowledge, abilities and qualities to be acquired by graduates					
1	Character and Virtue	4	5	2.00	71.43
2	Professional knowledge	5	5	1.00	85.71
3	Practical Ability	5	5	1.00	90.48
4	Application Ability	5	5	1.50	76.19
5	Information ability	4	5	1.00	85.71
6	Communication	4	5	1.00	85.71
7	Teamwork	4	5	1.00	85.71
8	International Perspective	4	4	1.00	85.71
9	Learning Development	5	5	1.00	90.48

According to Table 4.15, based on the questionnaire of 21 HR employees, the questionnaire results show that Practical Ability Learning Development accounting for 90.48%, Professional knowledge Information ability Communication Teamwork International Perspective accounting for 85.71%, Application Ability accounting for 76.19%.

Table 4.16 Results for Graduate Costume Designer Professional Qualification Requirements

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
1	Materials and Fabrics	5	5	1	95.24
2	Innovative Materials and Technologies	5	5	1	95.24
3	Brand Identity	5	5	1	95.24
4	Certificate/Diploma in Fashion Design	4	4	1	90.48
5	Industry Experience	4	4	1	90.48
6	Industry Trends	5	5	1	90.48
7	Circular Fashion Concepts	4	4	1	90.48
8	Consumer Behavior	5	5	1	90.48
9	Global Market Trends	5	5	1	90.48
10	Market Research and Consumer Insights	5	5	1	90.48
11	Practical Ability	5	5	1	90.48
12	Learning Development	5	5	1	90.48
13	Sustainability Practices	4	5	1	85.71
14	Eco-Friendly Dyeing and Printing Techniques	4	4	1	85.71
15	Business Planning	4	4	1	85.71
16	Supply Chain and Production Management	4	4	1	85.71
17	Intellectual Property and Legal Considerations	4	4	1	85.71
18	Professional knowledge	5	5	1	85.71
19	Information ability	4	5	1	85.71
20	Communication	4	5	1	85.71
21	Teamwork	4	5	1	85.71
22	International Perspective	4	4	1	85.71
23	Technical Exercises	5	5	1	80.95
24	Interviews and Discussions	4	4	1	80.95
25	Collaborative Projects	4	5	1	80.95

Table 4.16 (Continued)

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
26	Prototyping and Testing	4	5	1	80.95
27	Educational Background	4	4	1	80.95
28	Grading and Sizing	4	4	1	80.95
29	Draping Techniques	4	4	1	80.95
30	Technical Drawings and Annotations	4	4	1	80.95
31	Fashion History	5	5	1	80.95
32	Branding and Positioning	5	5	1	80.95
33	Social and Environmental Responsibility	4	4	1	80.95
34	Design Challenges	4	5	1	76.19
35	Reputation and Recognition	4	4	1.5	76.19
36	Pattern Drafting Exercises	4	4	1.5	76.19
37	Pattern Manipulation	4	4	1.5	76.19
38	Constructing Sample Garments	4	4	1.5	76.19
39	Timed Assessments	4	4	1.5	76.19
40	Ethical Fashion Standards	4	4	1.5	76.19
41	Adaptability and Resilience	4	4	1.5	76.19
42	Application Ability	5	5	1.5	76.19
43	Bachelor's Degree in Fashion Design	4	4	2	71.43
44	Pattern Making and Draping Certification	4	5	2	71.43
45	Portfolio Review	4	5	2	71.43
46	Fashion Shows or Presentations	4	5	2	71.43
47	Creative Draping	4	4	2	71.43
48	Sewing Exercises	4	4	1.5	71.43
49	Documentation and Portfolios	4	4	2	71.43
50	Character and Virtue	4	5	2	71.43
51	Couture Techniques Certification	4	4	2	66.67

Table 4.16 (Continued)

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	Percentage
52	Real-World Projects	4	4	1.5	66.67
53	Peer and Instructor Reviews	4	4	1	66.67
54	E-commerce and Online Marketing	4	4	1	61.9
55	Retail and Sales Strategies	4	3	1.5	61.9
56	Public Relations and Media Relations	4	3	2	61.9
57	Sustainable Fashion Certification	4	3	2	57.14
58	Fashion Styling Certification	4	3	2	57.14
59	Networking and Relationship Building	4	3	1.5	57.14
60	Textile Technology Certification	4	3	2	52.38
61	Financial Management	4	3	1	52.38
62	Inventory Management	4	3	1	52.38
63	Negotiation and Communication Skills	4	3	1.5	52.38
64	Luxury Fashion Certification	3	3	1.5	47.62
65	Fashion Illustration Certification	3	3	1.5	47.62
66	Fashion Merchandising Certification	3	3	1	47.62
67	Fashion Business Management Certification	3	3	1	42.86
68	Fashion Photography Certification	3	3	1	33.33
69	Active and Sportswear Design Certification	3	3	1	33.33
70	Fashion Film and Media Certification	3	3	1	28.57
71	Master's Degree in Fashion Design	3	3	0.5	23.81
72	Textile and Apparel Certifications	3	3	0.5	23.81

According to Table 4.16, the results of the questionnaire survey on the HR of 21 enterprises show that 42 of the 72 data have a value greater than 75%, which is highly recognized by experts, so they are retained and the questions of the garment designer vocational qualification examination system are compiled according to the retained data. 30 data items with low values are not retained.

2. To develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities

Part 5: The analysis results of the data of the costume designer qualification examination system in colleges and universities.

On the basis of literature review, expert interview, questionnaire and practical experience, a seven-part costume designer qualification examination system question bank was formed. DELPHI method was used to conduct multiple rounds of questionnaire consultation with 21 garment industry experts from various provinces and cities to determine the key contents and weights of indicators.

Table 4.17 Results for Round1 Part One results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part One: Portfolio review, PPT report	agree
The score is worth 10 points	agree
Takes 20 minutes	agree

According to Table 4.17, It can be seen from the Table that experts agree with the design of the content, score and time of the questions in the first part.

Table 4.18 Results for Round1 Part two results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Two: Interview questions and answers	agree
The score is worth 10 points	agree
Takes 20 minutes	agree
1. Briefly describe your previous fashion design projects, which ones you are most proud of, and explain why.	1. The fashion design projects you have participated in before, in which you were mainly responsible for completing the work?
2. What do you think is the most important thing in fashion design? Why?	2. What are the key skills and qualities required for a successful fashion designer?
3. How to balance creative and commercial needs in design?	3. How do you balance business needs with design innovation?
4. How do you stay on top of fashion trends and industry developments?	4. What is your ability to connect and predict fashion trends? How do you apply these trends to your design?
5. How do you solve problems and challenges during the design process?	5. How have you handled and responded to design challenges and changes in your past work?
6. How do you work with manufacturers and suppliers to ensure quality and consistency in your design throughout the production process?	delete
7. Where do you usually draw inspiration from when designing a new collection?	delete
8. How do you handle the transformation of design inspiration into a practical fashion design?	8. How do you deal with sources of inspiration in the fashion design process?

Table 4.18 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
	9. Have you ever participated in a fashion show or competition? Please share your experience.
10. What do you see as your role and contribution in a team?	10. What is your role in teamwork? What successful team design experience have you had?
	11. What is your vision for the future development of the fashion industry?
	12. Describe a time when you have failed or been frustrated in the design process and what you have learned from it.
	13. Do you have any personal design style or signature elements? Please explain.
	14. How do you evaluate the success of your design work?
15. When designing a fashion collection, how do you ensure that the overall style and theme are consistent?	delete
16. How do you handle pressure and urgent tasks at work?	16. Do you have experience dealing with unexpected design problems? Can you share a case that solved this problem?
	17. What do you do when a design director (or a company executive) conflicts with your design ideas?
	18 If you are given a design project, how do you plan it as a designer?

Table 4.18 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
	19. As a designer, what aspects do you think must be paid attention to in order to deal with the relationship between the designer and the designer?

According to Table 4.18, experts agree with the title, time and score design of the second part, and put forward modification opinions on 8 questions including 1.2.3.4.5.8.10.16 out of 19 questions, add 3 questions to the design, delete 3 questions, and agree with the expression of 5 questions including 9.11.12.13.14.

Table 4.19 Results for Round1 Part III Results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Three: Industry trends and sustainable development practices	agree
The score is worth 10 points	The score is worth 5 points
Takes 5 minutes	agree
Briefly describe the major current trends in the fashion industry and how your design work fits into these trends.	agree

According to Table 4.19, experts agree with the category and question design of the third part, and agree with the answering time, but they agree that the score value of this part is too high, and suggest modification.

Table 4.20 Results for Round1 Part IV results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Four: Business and marketing skills	agree
The score is worth 10 points	The score is worth 5 points
Takes 10 minutes	agree
Select a clothing brand, describe the brand's target market and positioning, and propose a fashion collection design plan suitable for the brand.	Select a clothing brand and describe the brand's target market and positioning

According to Table 4.20, experts agree with the categories and answering time of the fourth part, and think that this part is only used as a reference in the selection process of fashion designers, and the score is modified. In terms of question design, experts think that 10 minutes cannot complete the answers to the questions given, and only require the respondents to complete the expression of the target market and positioning of the brand.

Table 4.21 Results for Round1 Part V results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part 5: Design skills and creativity	agree
The score is worth 10 points	The score is worth 40 points
It takes 90 minutes	It takes 180 minutes
1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's, dress, etc., is relaxed or fashionable), and include a description of the design concept and key elements.	1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's, dress, etc., no restrictions on style) style design novel and chic, beautiful and generous, proportional coordination, and write the design description.
2. Requirements:	agree
1) The production of inspiration version is clear, the extraction of popular elements is accurate, and it is in line with the theme design intention;	agree
2) The renderings are complete, with clear theme design elements, and can reflect the principles of series design;	2) The renderings are complete, with clear theme design elements, and can reflect the principles of clothing design;
3) Harmonious color matching, complete accessories, pattern element design can highlight the theme style;	3) Harmonious color matching, the design should include accessories suitable for the overall style, such as hats, shoes, bags and other accessories are complete, and the design of pattern elements can highlight the theme style

Table 4.21 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
4) The proportion of style drawing is accurate, highlighting the clothing structure and process expression;	agree
5) The proportion of clothing modeling is accurate, the characters are dynamic and harmonious, and the fabric texture is exquisite;	agree
6) The size of the canvas is A3, the image resolution is 300dpi, the picture composition is beautiful, and it is saved as JPEG format.	agree
7) Layout treatment (size A3), and in the style board attached not less than 100 words of design description.	7) Layout treatment (size A3), with a design description of not less than 100 words on the style board. The design description can clearly express the inspiration source of the design, the design style, the application of popular elements and the characteristics of the style, structure and process.
3. Scoring points and criteria:	agree
1) The design meets the requirements of the question, and the inspiration version is beautiful (10 points);	agree
2) The dress line draft is clearly expressed, the fabric application is reasonable, the texture is good, the dynamic proportion of the human body in the effect picture is accurate, the dress effect is harmonious and the performance is	agree

Table 4.21 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
complete (25 points);	
3) The clothing is colorful and in line with the fashion trend, the color coordination is reasonable, and the accessories are complete (15 points);	agree
4) The front and back of the style drawing are complete, the proportion is accurate, and the lines are smooth (30 points);	agree
5) Layout design, composition and layout beautiful (10 points);	agree
6) The design description is written reasonably, and the document storage is standard (10 points).	agree

According to Table 4.21, experts agree with the categories of the fifth part and believe that the evaluation of the professional ability of fashion designers should focus on design skills and creativity, raise the score of this part from 10 points to 40 points, adjust the time from 90 minutes to 180 minutes considering the long time spent in this part, and modify the survey questions and answer requirements of article 2.3.7. Other response requirements, grading points and grading criteria indicate agreement.

Table 4.22 Results for Round1 Part VI results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part VI: Technical proficiency	agree
The score is worth 15 points	agree
Takes 3 hours	agree
1. Topic:	agree
Please complete the structure drawing and garment production according to the design effect drawing in the first part.	agree
2. Requirements:	agree
1) According to the design of the effect drawing, complete the drawing of the complete set of clothing structure according to the specific specifications and dimensions (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A);	agree
2) Select suitable surface accessories for clothing, complete and suitable materials;	agree
3) All parts of the garment are accurate and fit;	agree
4) Make a clear statement on the process design of the overall clothing style;	agree
5) Complete the production of a set of garments and take photos (front, side, back and detail display);	agree
6) Arrange the above content on A3 answer sheet, print and submit.	agree
3. Scoring points and criteria:	agree
1) Reasonable and comprehensive selection of garment surface accessories (10 points);	agree
2) The clothing style name is detailed, the size of each part is accurate and fit (style name 1 point, size 1 point, each part size 1 point) (a total of 10 points);	agree

Table 4.22 (Continued)

Questions, requirements, scoring criteria, score value, time before	after
3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (8 points for the front piece structure, 8 points for the back piece structure, 4 points for the correct structure and appropriate and reasonable proportion) are clear and standardized (20 points in total);	agree
4) The description of clothing process design is clear and accurate (10 points);	agree
5) The front, side, back and details of the garment are clearly displayed (collar, sleeve width and width are consistent and straight 10 points, craft sewing appearance is beautiful, plain clothes, left and right symmetry 10 points, back seam flat clothes 10 points), craft production is smooth (a total of 30 points).	agree

According to Table 4.22, It can be seen from the Table that the experts agree with the categories, questions, scores, time, answering requirements, scoring points and scoring criteria of the sixth part.

Table 4.23 Results for Round1 Part VII results

Questions, requirements, scoring criteria, score value, time before	after
Part 7: Submit the interview report and make a brief introduction	agree
The score is worth 15 points	agree
It takes 30 minutes	agree

According to Table 4.23, It can be seen from the Table that experts agree with the categories, scores and time used in the seventh part.

Based on the opinions of 21 experts, the questions of the professional qualification examination for fashion designers were reorganized and sent to 21 experts for the second round of questionnaire consultation.

Table 4.24 Results for Round2 Part One results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part One: Portfolio review, PPT report	agree
The score is worth 10 points	agree
Takes 20 minutes	Takes 15 minutes

According to Table 4.24, experts agree with the categories and scores of the first part. Considering the time spent on other parts, the review time of this part is adjusted from 20 minutes to 15 minutes.

Table 4.25 Results for Round 2 Part Two results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Two: Interview questions and answers	agree
The score is worth 10 points	agree
Takes 20 minutes	20 minutes (choose 4 questions, 5 minutes each)
1. Tell me about the fashion design projects you have participated in before, in which you were mainly responsible for completing the work?	agree

Table 4.25 (Continued)

Questions, requirements, scoring criteria, score value, time before	**After**
2. What are the key skills and qualities required for a successful fashion designer?	agree
3. How do you balance business needs with design innovation?	agree
4. What is your ability to connect and predict fashion trends? How do you apply these trends to your design?	agree
5. How have you handled and responded to design challenges and changes in your past work?	agree
6. How do you deal with sources of inspiration in the fashion design process?	agree
7. Have you ever participated in a fashion show or competition? Please share your experience.	agree
8. What is your role in teamwork? What successful team design experience have you had?	agree
9. What is your vision for the future development of the fashion industry?	agree
10. Describe a time when you have failed or been frustrated in the design process and what you have learned from it.	agree
11. Do you have any personal design style or signature elements? Please explain.	agree
12. How do you evaluate the success of your design work?	agree
13. Do you have experience dealing with unexpected design problems? Can you share a case that solved this problem?	agree

Table 4.25 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
14. What do you do when a design director (or a company executive) conflicts with your design ideas?	agree
15. If you were given a design project, how would you plan it as a designer?	agree
16. As a designer, in order to deal with the relationship between the designer and the designer, what aspects do you think must be paid attention to?	agree
	18. What are your favorite brands?
	19. What kind of clothes do you like?
	20. Which do you think is more important as a qualified designer, creativity or practice?

According to Table 4.25, It can be seen from the Table that experts agree with the categories and scores of the questions in the second part. Considering the answering time of the question bank and the questions that need to be involved, the question bank of this part is adjusted, and the answering method is adjusted accordingly from 20 minutes to 20 minutes to choose 4 questions, and 4 questions are added for the interview to choose from while the original questions remain unchanged.

Table 4.26 Results for Round 2Part III Results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Three: Industry trends and sustainable development practices	Part Three: Understanding and exploration of industry trend, fashion trend and fabric trend.
The score is worth 5 points	The score is worth 15 points
Takes 5 minutes	Takes 10 minutes
Briefly describe the major current trends in the fashion industry and how your design work fits into these trends.	agree

According to Table 4.26, considering that the cognition of the trend of clothing fabrics plays an extremely important role in the selection of clothing designers, the experts modified the categories of the third part of the questions. According to the importance of this category, the total value of this part in the question bank was increased from 5 points to 15 points, and the answering time was also adjusted from 5 minutes to 10 minutes.

Table 4.27 Results for Round 2 Part IV results

Questions, requirements, scoring criteria, score value, time **before**	**after**
Part Four: Business and marketing skills	agree
The score is worth 5 points	agree
Takes 10 minutes	agree
Select a clothing brand and describe the brand's target market and positioning	agree

According to Table 4.27, It can be seen from the Table that the experts agree on the categories, scores and time of the questions in the fourth part.

Table 4.28 Results for Round1 Part V Results

Questions, requirements, scoring criteria, score value, time **before**	**Result** **after**
Part 5: Design skills and creativity	agree
The score is worth 40 points	agree
It takes 180 minutes	agree
1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's, dress, etc., no restrictions on style) style design novel and chic, beautiful and generous, proportional coordination, and write the design description.	agree
2. Requirements:	agree
1) The production of inspiration version is clear, the extraction of popular elements is accurate, and it is in line with the theme design intention;	agree
2) The renderings are complete, with clear theme design elements, and can reflect the principles of clothing design;	agree

Table 4.28 (Continued)

Questions, requirements, scoring criteria, score value, time before	**Result after**
3) Harmonious color matching, the design should include accessories suitable for the overall style, such as hats, shoes, bags and other accessories are complete, and the design of pattern elements can highlight the theme style;	agree
4) The proportion of style drawing is accurate, highlighting the clothing structure and process expression;	agree
5) The proportion of clothing modeling is accurate, the characters are dynamic and harmonious, and the fabric texture is exquisite;	agree
6) The size of the canvas is A3, the image resolution is 300dpi, the picture composition is beautiful, and it is saved as JPEG format.	agree
7) Layout treatment (size A3), and in the style board attached not less than 100 words of design description. The design description can clearly express the inspiration source of the design, the design style, the application of popular elements and the characteristics of the style, structure and process.	agree
3. Scoring points and criteria:	agree
1) The design meets the requirements of the question, and the inspiration version is beautiful (10 points);	agree
2) The dress line draft is clearly expressed, the fabric application is reasonable, the texture is good, the dynamic proportion of the human body in the effect picture is accurate, the dress effect is harmonious and the performance is complete (25 points);	agree
3) The clothing is colorful and in line with the fashion trend, the color coordination is reasonable, and the accessories are complete (15 points);	agree
4) The front and back of the style drawing are complete, the proportion is accurate, and the lines are smooth (30 points);	agree
5) Layout design, composition and layout beautiful (10 points);	agree
6) The design description is written reasonably, and the document storage is standard (10 points).	agree

According to Table 4.28, It can be seen from the Table that the experts agree on the categories, scores and time of the questions in the fifth part.

Table 4.29 Results for Round1 Part VI Results

Questions, requirements, scoring criteria, score value, time **before**	**after**
Part VI: Technical proficiency	agree
The score is worth 15 points	agree
Takes 3 hours	agree
1. Topic:	Agree
Please complete the structure drawing and garment production according to the design effect drawing in the first part.	agree
2. Requirements:	agree
1) According to the design of the effect drawing, complete the drawing of the complete set of clothing structure according to the specific specifications and dimensions (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A);	agree
2) Select suitable surface accessories for clothing, complete and suitable materials;	agree
3) All parts of the garment are accurate and fit;	agree
4) Make a clear statement on the process design of the overall clothing style;	agree
5) Complete the production of a set of garments and take photos (front, side, back and detail display);	agree
6) Arrange the above content on A3 answer sheet, print and submit.	agree
3. Scoring points and criteria:	agree
1) Reasonable and comprehensive selection of garment surface accessories (10 points);	agree
2) The clothing style name is detailed, the size of each part is accurate and fit (style name 1 point, size 1 point, each part size 1 point) (a total of 10 points);	agree

Table 4.29 (Continued)

Questions, requirements, scoring criteria, score value, time before	after
3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (8 points for the front piece structure, 8 points for the back piece structure, 4 points for the correct structure and appropriate and reasonable proportion) are clear and standardized (20 points in total);	agree
4) The description of clothing process design is clear and accurate (10 points);	agree
5) The front, side, back and details of the garment are clearly displayed (collar, sleeve width and width are consistent and straight 10 points, craft sewing appearance is beautiful, plain clothes, left and right symmetry 10 points, back seam flat clothes 10 points), craft production is smooth (a total of 30 points).	agree

According to Table 4.29. It can be seen from the Table that the experts agree on the categories, scores and time of the questions in the sixth part.

Table 4.30 Results for Round2 Part VII results

Questions, requirements, scoring criteria, score value, time before	after
Part 7: Submit the interview report, model try on the garment and make a brief introduction	agree
The score is worth 15 points	agree
It takes 30 minutes	agree

According to Table 4.30, experts have no objection to the test content, score and answering time of the seventh part.

Table 4.31 Results for Round3 Part One results

Questions, requirements, scoring criteria, score value, time before	**after**
Part One: Portfolio review, PPT report	Part One: Portfolio review
The score is worth 10 points	agree
It takes 15 minutes	Takes 10 minutes
Please complete the structure drawing and garment production according to the design effect drawing in the first part.	agree
2. Requirements:	agree
1) According to the design of the effect drawing, complete the drawing of the complete set of clothing structure according to the specific specifications and dimensions (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A);	agree
2) Select suitable surface accessories for clothing, complete and suitable materials;	agree
3) All parts of the garment are accurate and fit;	agree
4) Make a clear statement on the process design of the overall clothing style;	agree
5) Complete the production of a set of garments and take photos (front, side, back and detail display);	agree
6) Arrange the above content on A3 answer sheet, print and submit.	agree
3. Scoring points and criteria:	agree
1) Reasonable and comprehensive selection of garment surface accessories (10 points);	agree
2) The clothing style name is detailed, the size of each part is accurate and fit (style name 1 point, size 1 point, each part size 1 point) (a total of 10 points);	agree

Table 4.31 (Continued)

Questions, requirements, scoring criteria, score value, time before	**after**
3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (8 points for the front piece structure, 8 points for the back piece structure, 4 points for the correct structure and appropriate and reasonable proportion) are clear and standardized (20 points in total);	agree
4) The description of clothing process design is clear and accurate (10 points);	agree
5) The front, side, back and details of the garment are clearly displayed (collar, sleeve width and width are consistent and straight 10 points, craft sewing appearance is beautiful, plain clothes, left and right symmetry 10 points, back seam flat clothes 10 points), craft production is smooth (a total of 30 points).	agree

According to Table 4.31, based on the content of the seven-part fashion designer professional qualification examination system, experts suggest that the PPT report of this part be integrated into the seventh part, agree with the score of the first part, and adjust the time of this part from 15 minutes to 10 minutes accordingly.

Table 4.32 Results for Round3 Part Two Results

Questions, requirements, scoring criteria, score value, time **before**	**after**
Part Two: Interview questions and answers	agree
The score is worth 10 points	The score is worth 15 points
Takes 20 minutes	Take 25 minutes (choose 5 questions, 5 minutes each)
1. Tell me about the fashion design projects you have participated in before, in which you were mainly responsible for completing the work?	agree
2. What are the key skills and qualities required for a successful fashion designer?	agree
3. How do you balance business needs with design innovation?	agree
4. What is your ability to connect and predict fashion trends? How do you apply these trends to your design?	agree
5. How have you handled and responded to design challenges and changes in your past work?	agree
6. How do you deal with sources of inspiration in the fashion design process?	6. How do you translate design inspiration into fashion design?
7. Have you ever participated in a fashion show or competition? Please share your experience.	agree
8. What is your role in teamwork? What successful team design experience have you had?	agree
9. What is your vision for the future development of the fashion industry?	agree

Table 4.32 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**after**
10. Describe a time when you have failed or been frustrated in the design process and what you have learned from it.	agree
11. Do you have any personal design style or signature elements? Please explain.	11. Do you have any personal design style or signature elements? Please clarify.
12. How do you evaluate the success of your design work?	Agree
13. Do you have experience dealing with unexpected design problems? Can you share a case that solved this problem?	agree
14. What do you do when a design director (or a company executive) conflicts with your design ideas?	agree
15. If you were given a design project, how would you plan it as a designer?	agree
16. As a designer, in order to deal with the relationship between the designer and the designer, what aspects do you think must be paid attention to?	agree
17. With the increasing importance of technology in fashion design, some technology application questions can be added to examine designers' familiarity with emerging technologies (such as 3D printing, virtual reality, etc.) and their applications.	agree
18. What are your favorite brands?	agree
19. What kind of clothes do you like?	agree
20. Which do you think is more important as a qualified designer, creativity or practice?	agree

Table 4.32 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
	21. Take a well-known brand and analyze its style positioning and target customer characteristics 22. Do you consider environmental sustainability in your design process? From what perspective? 23. From the perspective of the enterprise, in the design process, what aspects will you consider to save costs?

According to Table 4.32, the expert suggested that the test method should be changed from 20 minutes to 25 minutes to answer 4 optional questions. Due to the increase in the number of questions answered, the score should be adjusted from 10 points to 15 points accordingly. At the same time, the two questions 6.11 were modified, and the three questions 21.22.23 were added for selection, and the total question pool was increased from 20 to 23 questions.

Table 4.33 Results for Round3 Part III Results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Three: Understanding and exploration of industry trend, fashion trend and fabric trend.	agree
The score is worth 15 points	The score is worth 20 points
Takes 10 minutes	It takes 15 minutes
Briefly describe the major current trends in the fashion industry and how your design work fits into these trends.	agree

According to Table 4.33, experts believe that fashion designers' sensitivity to fashion is very important, and it is very important to examine this part of the content. Experts suggest that the score should be raised from 15 points to 20 points, and the time should be adjusted from 10 minutes to 15 minutes, with the category and test content unchanged.

Table 4.34 Results for Round3 Part IV Results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Four: Business and marketing skills	agree
The score is worth 5 points	agree
Takes 10 minutes	agree
Select a clothing brand and describe the brand's target market and positioning	agree

According to Table 4.34, experts have no objection to the content, score and answering time of the fourth part.

Table 4.35 Results for Round3 Part V Results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part 5: Design skills and creativity	agree
The score is worth 40 points	The score is worth 20 points
It takes 180 minutes	It takes 100 minutes
1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's, dress, etc., no restrictions on style) style design novel and chic, beautiful and generous, proportional coordination, and write the design description.	1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's wear, dress, etc., no restrictions on style), make effect drawings and style drawings, style design is novel and chic, beautiful and generous, proportional coordination, and write the design description.
2. Requirements:	agree
1) The production of inspiration version is clear, the extraction of popular elements is accurate, and it is in line with the theme design intention;	agree
2) The renderings are complete, with clear theme design elements, and can reflect the principles of clothing design;	agree
3) Harmonious color matching, the design should include accessories suitable for the overall style, such as hats, shoes, bags and other accessories are complete, and the design of pattern elements can highlight the theme style;	agree

Table 4.35 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**after**
4) The proportion of style drawing is accurate, highlighting the clothing structure and process expression;	agree
5) The proportion of clothing modeling is accurate, the characters are dynamic and harmonious, and the fabric texture is exquisite;	agree
6) The size of the canvas is A3, the image resolution is 300dpi, the picture composition is beautiful, and it is saved as JPEG format.	agree
7) Layout treatment (size A3), and in the style board attached not less than 100 words of design description. The design description can clearly express the inspiration source of the design, the design style, the application of popular elements and the characteristics of the style, structure and process.	the application of popular elements and the characteristics of the style, structure and process.
3. Scoring points and criteria:	agree
1) The design meets the requirements of the question, and the inspiration version is beautiful (10 points);	agree
2) The dress line draft is clearly expressed, the fabric application is reasonable, the texture is good, the dynamic proportion of the human body in the effect picture is accurate, the dress effect is harmonious and	2) The dress line draft is clearly expressed, the fabric application is reasonable, the texture is good, the dynamic proportion of the human body in the effect picture is accurate, the

Table 4.35 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**after**
the performance is complete (25 points);	dress effect is harmonious and the performance is complete (20 points);
3) The clothing is colorful and in line with the fashion trend, the color coordination is reasonable, and the accessories are complete (15 points);	3) The clothing is colorful and in line with the fashion trend, the color coordination is reasonable, and the accessories are complete (10 points);
4) The front and back of the style drawing are complete, the proportion is accurate, and the lines are smooth (30 points);	4) The front and back of the style drawing are complete, the proportion is accurate, and the lines are smooth (20 points); 5) The proportion of clothing modeling is accurate, the characters are dynamic and harmonious, and the fabric texture is exquisite (20 points); 6) The production of canvas size and image resolution standards, beautiful picture composition, file storage standards (10).
7) The design description is written reasonably, and the document storage is standard (10 points).	7) Reasonable design description (10 points).

According to Table 4.35, experts think that the design skills and creativity test of fashion designers account for too high a score and takes too long in the test, so the score is adjusted from 40 points to 20 points and the time is adjusted from 180 minutes to 100 minutes, the test questions are improved, and the expression of

Article 7 of the test requirements is modified. The score points and the score value of Article 2.3.4 of the scoring criteria are modified and article 5.6 is added.

Table 4.36 Results for Round 3 Part VI Results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part VI: Technical proficiency	agree
The score is worth 15 points	agree
Takes 3 hours	Takes 100 minutes
1. Topic: Please complete the structure drawing and garment production according to the design effect drawing in the first part.	agree According to the design effect drawing of the first part, please complete the structure drawing and embryo production.
2. Requirements:	agree
1) According to the design of the effect drawing, complete the drawing of the complete set of clothing structure according to the specific specifications and dimensions (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A);	1) For the design of the effect drawing, according to the specific specifications and sizes (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A, children's clothing 120, 130, 140) to complete the complete set of clothing structure drawing (three-dimensional cutting method);
2) Select suitable surface accessories for clothing, complete and suitable materials;	Delete
3) All parts of the garment are accurate and fit;	3) The size of each part of the embryo is accurate and integrated;
4) Make a clear statement on the process design of the overall clothing style;	Agree

Table 4.36 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
5) Complete the production of a set of garments and take photos (front, side, back and detail display); 6) Arrange the above content on A3 answer sheet, print and submit.	5) Complete the production of a set of embryonic samples, and take photos (front, side, back and detail display); agree
3. Scoring points and criteria:	agree
1) Reasonable and comprehensive selection of garment surface accessories (10 points);	Delete
2) The clothing style name is detailed, the size of each part is accurate and fit (style name 1 point, size 1 point, each part size 1 point) (a total of 10 points);	2) Detailed clothing style name, accurate size of each part, fit (a total of 25 points);
3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (8 points for the front piece structure, 8 points for the back piece structure, 4 points for the correct structure and appropriate and reasonable proportion) are clear and standardized (20 points in total);	3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (front piece structure, back piece structure, sleeve piece, correct structure, appropriate and reasonable proportion) are clear and standardized (25 points in total);
4) The description of clothing process design is clear and accurate (10 points);	4) The description of clothing process design is clear and accurate (20 points);

Table 4.36 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**After**
5) The front, side, back and details of the garment are clearly displayed (collar, sleeve width and width are consistent and straight 10 points, craft sewing appearance is beautiful, plain clothes, left and right symmetry 10 points, back seam flat clothes 10 points), craft production is smooth (a total of 30 points).	5) The positive, side, back and details of the embryo are clearly displayed (collar, sleeve width and width are consistent and straight, the process of sewing is beautiful, plain clothes, left and right symmetry, the back is flat), and the process is smooth (a total of 30 minutes).

According to Table 4.36, considering that this part of the selection conditions for clothing designers is not much content, and the proportion of answering time is too high, experts suggest that the time should be adjusted from 3 hours to 100 minutes, and the questions, requirements and scoring criteria should be adjusted accordingly, and the answer requirement 1.3.5 should be modified, and the fourth point should be deleted. The grading points and grading criteria 2.3.4.5 are revised and the first point is deleted to ensure that students can normally complete the answers within the specified time.

Table 4.37 Results for Round3 Part VII results

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part 7: Submit the interview report, model try on the garment and make a brief introduction	Part seven: Submit the interview report, try the clothes and make a brief introduction
The score is worth 15 points	agree
It takes 30 minutes	agree

According to Table 4.37, the expert comprehensively considered the whole, made corresponding modifications to the sixth part, integrated the report content of the first part into this part, and correspondingly increased the test answering time of this part.

Table 4.38 Results for Round4

Questions, requirements, scoring criteria, score value, time **before**	**after**
Part One: Portfolio review	agree
The score is worth 10 points	agree
Takes 10 minutes	agree
Part Two: Interview questions and answers	agree
The score is worth 15 points	agree
Take 25 minutes (choose 5 questions, 5 minutes each)	agree
1. Tell me about the fashion design projects you have participated in before, in which you were mainly responsible for completing the work?	agree
2. What are the key skills and qualities required for a successful fashion designer?	agree
3. How do you balance business needs with design innovation?	agree
4. What is your ability to connect and predict fashion trends? How do you apply these trends to your design?	agree
5. How have you handled and responded to design challenges and changes in your past work?	agree
6. How do you translate design inspiration into fashion design?	agree
7. Have you ever participated in a fashion show or competition? Please share your experience.	agree
8. What is your role in teamwork? What successful team design experience have you had?	agree
9. What is your vision for the future development of the fashion industry?	agree

Table 4.38 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**after**
10. Describe a time when you have failed or been frustrated in the design process and what you have learned from it.	agree
11. Do you have any personal design style or signature elements? Please clarify.	agree
12. How do you evaluate the success of your design work?	agree
13. Do you have experience dealing with unexpected design problems? Can you share a case that solved this problem?	agree
14. What do you do when a design director (or a company executive) conflicts with your design ideas?	agree
15. If you were given a design project, how would you plan it as a designer?	agree
16. As a designer, in order to deal with the relationship between the designer and the designer, what aspects do you think must be paid attention to?	agree
17. With the increasing importance of technology in fashion design, some technology application questions can be added to examine designers' familiarity with emerging technologies (such as 3D printing, virtual reality, etc.) and their applications.	agree
18. What are your favorite brands?	agree
19. What kind of clothes do you like?	agree
20. Which do you think is more important as a qualified designer, creativity or practice?	agree
21. Take a well-known brand and analyze its style positioning and target customer characteristics	agree
22. Do you consider environmental sustainability in your design process? From what perspective?	agree
23. From the perspective of the enterprise, in the design process, what aspects will you consider to save costs?	agree

Table 4.38 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**after**
Part Three: Understanding and exploration of industry trend, fashion trend and fabric trend.	agree
The score is worth 20 points	agree
It takes 15 minutes	agree
Briefly describe the major current trends in the fashion industry and how your design work fits into these trends.	agree
Part Four: Business and marketing skills	agree
The score is worth 5 points	agree
Takes 10 minutes	agree
Select a clothing brand and describe the brand's target market and positioning	agree
Part 5: Design skills and creativity	agree
The score is worth 20 points	agree
It takes 100 minutes	agree
1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's wear, dress, etc., no restrictions on style), make effect drawings and style drawings, style design is novel and chic, beautiful and generous, proportional coordination, and write the design description.	agree
2. Requirements:	agree
1) The production of inspiration version is clear, the extraction of popular elements is accurate, and it is in line with the theme design intention;	agree
2) The renderings are complete, with clear theme design elements, and can reflect the principles of clothing design;	agree
3) Harmonious color matching, the design should include accessories suitable for the overall style, such as hats, shoes, bags and other accessories are complete, and the design of pattern elements can highlight the theme style;	agree

Table 4.38 (Continued)

Questions, requirements, scoring criteria, score value, time	
before	**after**
4) The proportion of style drawing is accurate, highlighting the clothing structure and process expression;	agree
5) The proportion of clothing modeling is accurate, the characters are dynamic and harmonious, and the fabric texture is exquisite;	agree
6) The size of the canvas is A3, the image resolution is 300dpi, the picture composition is beautiful, and it is saved as JPEG format.	agree
7) Beautiful layout (A3 size), style plate with not less than 100 words of design description. The design description can clearly express the inspiration source of the design, the design style, the application of popular elements and the characteristics of the style, structure and process.	agree
3. Scoring points and criteria:	agree
1) The design meets the requirements of the question, and the inspiration version is beautiful (10 points);	agree
2) The dress line draft is clearly expressed, the fabric application is reasonable, the texture is good, the dynamic proportion of the human body in the effect picture is accurate, the dress effect is harmonious and the performance is complete (20 points);	agree
3) The clothing is colorful and in line with the fashion trend, the color coordination is reasonable, and the accessories are complete (10 points);	agree
4) The front and back of the style drawing are complete, the proportion is accurate, and the lines are smooth (20 points);	agree
5) The proportion of clothing modeling is accurate, the characters are dynamic and harmonious, and the fabric texture is exquisite (20 points);	agree
6) The production of canvas size and image resolution standards, beautiful picture composition, file storage standards (10).	agree
7) Reasonable design description (10 points).	agree

Table 4.38 (Continued)

Questions, requirements, scoring criteria, score value, time **before**	**after**
Part VI: Technical proficiency	agree
The score is worth 15 points	agree
It takes 100 minutes	agree
1. Topic:	agree
According to the design effect drawing of the first part, please complete the structure drawing and embryo production.	agree
2. Requirements:	agree
1) For the design of the effect drawing, according to the specific specifications and sizes (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A, children's clothing 120, 130, 140) to complete the complete set of clothing structure drawing (three-dimensional cutting method);	agree
2) The size of each part of the embryo is accurate and integrated;	agree
3) Make a clear statement of the process design of the overall clothing style;	agree
4) Complete the production of a set of embryonic samples, and take photos (front, side, back and detail display);	agree
5) Arrange the above content on A3 answer sheet, print and submit.	agree
3. Scoring points and criteria:	agree
1) Detailed clothing style name, accurate size of each part, fit (a total of 25 points);	agree
3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (front piece structure, back piece structure, sleeve piece, correct structure, appropriate and reasonable proportion) are clear and standardized (25 points in total);	agree
2) The description of clothing process design is clear and accurate (20 points);	agree

Table 4.38 (Continued)

Questions, requirements, scoring criteria, score value, time **before**	**after**
3) The positive, side, back and details of the embryo are clearly displayed (collar, sleeve width and width are consistent and straight, the process of sewing is beautiful, plain clothes, left and right symmetry, the back is flat), and the process is smooth (a total of 30 minutes).	agree
Part seven: Submit the interview report, try the clothes and make a brief introduction	agree
The score is worth 15 points	agree
It takes 30 minutes	agree

According to Table 4.38, after the first three rounds of modification, 21 experts reached a consensus on the categories, questions, score values, time, requirements, scoring points and scoring standards of the seven-part costume designer professional qualification test question bank at the fourth round of modification, and agreed to all the contents of the seven-part costume designer professional qualification test.

3. To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions.

Part 6: The analysis results of verification data of the costume designer qualification examination system in colleges and universities.

Table 4.39 Results for Round4 Expert evaluation

	Expert1	Expert2	Expert3	Expert4	Expert5	Total
C	√	√	√	√	√	5
I	√	√	√	√	√	5
P	√	√	√	√	√	5
P	√	√	√	√	√	5

According to Table 4.39, 5 associate professor experts with more than 15 years of teaching experience agree with the background evaluation, input evaluation, process evaluation and achievement evaluation of the costume designer qualification examination system in colleges and universities.

Part 7: The implementation and analysis of the costume designer qualification examination system in colleges and universities

Table 4.40 Results for Implementation data analysis of vocational qualification examination system for garment designers in colleges and universities

(S=student)

	Part 1	Part 2	Part 3	Part 4	Part 5	Part 6	Part7	Total
scores	10	15	20	5	20	15	15	100
S1	8	12	16	4	16	12	13	81
S2	9	14	18	5	18	14	14	86
S3	7	10	15	3	15	10	12	72
S4	10	15	20	5	20	15	15	95
S5	8	13	17	4	17	13	14	84
S6	6	11	14	3	14	11	11	70
S7	9	14	19	4	19	14	13	87
S8	7	10	15	3	15	11	12	73
S9	10	15	20	5	18	14	15	92

Table 4.40 (Continued)

(S=student)

	Part 1	Part 2	Part 3	Part 4	Part 5	Part 6	Part7	Total
S10	8	12	16	4	17	13	14	84
S11	6	10	14	3	14	10	11	68
S12	9	14	18	4	19	14	14	87
S13	7	11	15	3	15	11	12	74
S14	10	15	20	5	20	15	15	95
S15	8	13	17	4	18	13	14	87
S16	6	10	14	3	14	10	11	68
S17	9	14	19	4	19	14	14	88
S18	7	11	15	3	15	11	12	74
S19	10	15	20	5	18	14	15	92
S20	8	12	16	4	17	13	14	84

The results of the implementation data are divided into four equal grades, which are excellent 90 points or more, very good 80 points to 90 points, good 70 points to 80 points, and pass 60 points to 70 points. The test results of 20 students were excellent and very good 13 people, accounting for 65% of the total number of students who participated in the test

According to Table 4.40, the test results of 20 undergraduate and senior clothing major students selected by the researchers show that the seven-part test questions of the test system can better help enterprises select excellent students to serve as clothing designers

Chapter 5
Discussion Conclusion and Recommendations

The aims of the present study include 1. To study the requirements of qualification in the career for fashion designer for higher education fashion design majors.2. To develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities.3. To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions.

The details are as follows.

Conclusion

1. Conclusion of the first research objective: To study the requirements of qualification in the career for fashion designer for higher education fashion design majors.

Part 1: Literature review on the core competence and skills of fashion designer data show that covers a variety of abilities, including the ability to master design innovation and creative conception, professional skills, and practical ability. They also need to understand the knowledge of fabrics, the resources of dough suppliers, and the knowledge of industry trend analysis. Working attitude, learning ability and cultivation potential are equally important. Clothing designer's personal moral cultivation, personality charm, artistic characteristics, personality traits, teamwork ability, human-land communication ability are indispensable.

Part 2: Analysis results of respondents' personal information, classified by gender, years of work, company size and company type. Researchers provide data by frequency and percentage. the researcher interviewed HR personnel of 21 enterprises to understand the professional ability requirements of enterprises for the position of fashion designer. The researcher selected HR personnel of 7 large, medium and small enterprises for interview.

Part 3: Using the method of text statistics to analyze the interview data of the professional ability required by enterprises for fashion designers.

Among the professional ability requirements of garment designers, obtain Academic Qualifications and Certifications, Skills and Competency Assessments, Type, cut and structure, Industry-Specific Tests, Business and marketing skills, Knowledge, abilities and qualities to be acquired by graduates.

Part 4: Using the median method, mode method and quartile difference method to analyze the questionnaire data of the professional ability requirements required by enterprises.

After analyzing the results of valid data, a 6-question interview was conducted on the professional qualification requirements required by fashion designers. 1. What qualifications, degrees and certifications are required for fashion designers? 2. What are the ways to assess fashion design skills, creativity and technical proficiency of a fashion designer? 3. What are the ways in which fashion designers make plates, cut and evaluate structures? 4. What do fashion designers need to know about industry trends, materials and sustainable development? 5. What business and marketing skills do fashion designers need to know? 6. What knowledge, abilities and qualities do fashion designers need that graduates should acquire?

2. Conclusion of the second research objective: To develop a qualification examination system for costume designer graduates of costume design majors in colleges and universities.

Part 5: The analysis results of the data of the costume designer qualification examination system in colleges and universities.

After the first three rounds of modification, 21 experts reached a consensus on the categories, questions, score values, time, requirements, scoring points and scoring standards of the seven-part costume designer professional qualification test question bank at the fourth round of modification, and agreed to all the contents of the seven-part costume designer professional qualification test.

3. Conclusion of the third research objective: To evaluate the qualification examination system for fashion designer for graduates of fashion design majors in higher education institutions.

Part 6: The analysis results of the verification data of the costume designer qualification examination system in colleges and universities.

Part 7: The results of the implementation and analysis of the qualification examination system for garment designers in colleges and universities.

Results of Data Analysis 5 associate professor experts with more than 15 years of teaching experience agree with the background evaluation, input evaluation, process evaluation and achievement evaluation of the costume designer qualification examination system in colleges and universities.

The test results of 20 undergraduate and senior clothing major students selected by the researchers show that the seven-part test questions of the test system can better help enterprises select excellent students to serve as clothing designers.

Discussion

1. Success stories of fashion designers who benefited from qualification tests.

While specific success stories may vary, there are many fashion designers who have benefited from qualification tests and certifications in their careers. Here are a few examples of successful fashion designers whose qualification tests played a significant role in their journeys:

Stella McCartney is a renowned British fashion designer known for her sustainable and animal-friendly fashion designs. She graduated from Central Saint Martins in London, one of the prestigious fashion schools, where she refined her skills and received formal qualifications in fashion design.

Tom Ford is an American fashion designer, filmmaker, and former creative director of Gucci and Yves Saint Laurent. He completed his studies at Parsons School of Design in New York City, where he honed his design skills and gained valuable industry knowledge.

Alexander Wang is an American fashion designer known for his urban and edgy designs. He studied at Parsons School of Design in New York and participated in various design competitions and showcases, which helped establish his reputation as a young talent in the fashion industry.

Phoebe Philo is a British fashion designer known for her minimalist and chic designs. She studied at Central Saint Martins and later worked at Chloe and Celine, where her qualifications and expertise in design were instrumental in shaping her successful career.

Virgil Abloh is an American fashion designer, DJ, and founder of the fashion brand Off-White. He holds a master’s degree in architecture from the Illinois Institute of Technology and a Bachelor's degree in civil engineering. His educational background has influenced his innovative and boundary-pushing approach to design.

Roksanda Ilincic is a Serbian-born fashion designer based in London, known for her vibrant and elegant designs. She studied architecture and applied arts in Serbia and later pursued a Master's degree in Womenswear at Central Saint Martins, which provided her with the technical skills and industry exposure.

Gareth Pugh is a British avant-garde fashion designer known for his experimental and theatrical designs. He studied at Central Saint Martins, where he explored unconventional materials and techniques that shaped his unique design aesthetic.

These success stories illustrate how qualification tests and formal education in fashion design have played a significant role in shaping the careers of many renowned fashion designers. The knowledge, skills, and industry recognition gained through these qualifications have helped these designers stand out in a competitive field and establish themselves as influential figures in the fashion industry.

2. Advantages of securing employment in reputable fashion houses.

Securing employment in reputable fashion houses offers numerous advantages for fashion professionals. Reputable fashion houses are well-known, established, and respected within the industry, making them highly desirable places to work. Here are some key advantages of working in such fashion houses:

Prestige and Recognition: Reputable fashion houses are recognized globally for their design excellence and contributions to the fashion world. Being associated with a prestigious brand enhances an individual's professional image and credibility.

Industry Exposure: Working in a reputable fashion house exposes individuals to top-notch industry professionals, influencers, and celebrities. This exposure can lead to valuable networking opportunities and collaborations.

Skill Development: Fashion houses with a strong reputation often have high standards for design and craftsmanship. Employees have the chance to work on challenging projects that help them develop and refine their skills.

Creativity and Innovation: Reputable fashion houses are known for their creativity and innovation. Working in such an environment can inspire and push employees to think outside the box and explore new design concepts.

Access to Resources: Established fashion houses typically have access to abundant resources, such as top-quality materials, cutting-edge technology, and state-of-the-art facilities. This enables designers to create high-quality and cutting-edge designs.

Collaborations and Projects: Reputable fashion houses often collaborate with other influential brands, artists, and organizations. Employees may have the opportunity to work on exciting collaborative projects, broadening their horizons and creative experiences.

Career Advancement: Successful employment in a reputable fashion house can significantly boost an individual's career advancement prospects. Experience gained in such environments is highly regarded by other industry players.

Global Reach: reputable fashion houses have an extensive global reach through their retail stores, e-commerce platforms, and international fashion shows. Working with them allows individuals to have their designs seen and appreciated worldwide.

Mentorship and Guidance: Employees in reputable fashion houses often receive mentorship and guidance from experienced industry professionals. This

mentorship can be invaluable in honing their skills and navigating the fashion industry.

Financial Stability: Reputable fashion houses are generally financially stable and have a solid business foundation. This stability provides job security and a comfortable working environment.

Brand Association: Being associated with a well-established brand can positively impact an individual's personal brand and marketability. It can open doors to other career opportunities and collaborations.

Access to Influential Clients: Reputable fashion houses often attract high-profile clients and celebrities. Designers may have the chance to work on custom designs for influential figures, gaining exposure and recognition in the process.

Securing employment in reputable fashion houses is highly competitive, but the advantages it offers in terms of career growth, exposure, and skill development can be invaluable for fashion professionals looking to make a significant impact in the industry.

3. International opportunities and collaborations.

Working in a reputable fashion house can indeed open doors to a wide range of international opportunities and collaborations. Here are some ways in which employment in a renowned fashion house can lead to international exposure and partnerships:

Global Presence: Reputable fashion houses often have a strong global presence with stores, boutiques, and showrooms in major fashion capitals around the world. As an employee, you may have the opportunity to travel and work in different international locations, gaining exposure to diverse markets and fashion scenes.

International Fashion Weeks: Established fashion houses participate in major international fashion weeks, such as New York, London, Milan, and Paris Fashion Weeks. Working on runway shows in these iconic events can connect you with international media, buyers, and influencers.

Collaborations with International Brands: Reputable fashion houses frequently collaborate with other prestigious brands, both within and outside the fashion industry. These collaborations often have a global reach, allowing designers to showcase their work to a broader audience.

Celebrity and Influencer Endorsements: Working in a renowned fashion house can attract the attention of celebrities and social media influencers. Custom designs for high-profile individuals can lead to international exposure and media coverage.

International Media Coverage: Fashion houses with a strong reputation receive extensive media coverage in various countries. Being part of a successful collection launch or major fashion event can lead to features in international fashion publications and websites.

Access to Global Buyers: Reputable fashion houses have a network of international buyers and retailers who stock their collections. Designers working in such houses can connect with buyers from different parts of the world and potentially secure international distribution for their designs.

Cross-Cultural Design Inspiration: Exposure to a multicultural and diverse work environment in a reputable fashion house can inspire designers to incorporate cross-cultural elements into their creations, making their designs more appealing to a global audience.

Participation in International Exhibitions and Trade Shows: Fashion houses often participate in international exhibitions and trade shows to showcase their collections to buyers and industry professionals from all over the world. This provides an excellent opportunity for designers to connect with potential partners and clients.

Global Brand Affiliation: Being associated with a reputable international fashion house adds value to your personal brand as a designer. It signals to potential collaborators and employers that you have the skills and experience needed to work on an international scale.

Networking Opportunities: Working in a prestigious fashion house opens doors to networking events, seminars, and conferences where designers can connect with industry leaders and influencers from various countries.

Overall, employment in a reputable fashion house can provide fashion professionals with a springboard to the global stage. It offers exposure to international markets, connections with influential figures, and the chance to collaborate on projects that transcend geographical boundaries. This exposure can lead to exciting international opportunities and establish designers as globally recognized names in the fashion industry.

Recommendations

Implications (How the findings can be applied to implementations by the related persons agency)

1. Critiques on the limitations and biases of some tests.

While qualification tests can be valuable tools for assessing skills and knowledge, they are not without limitations and biases. It's essential to acknowledge and address these critiques to ensure that the testing process remains fair and accurate. Here are some common limitations and biases associated with certain tests:

Cultural Bias: Some qualification tests may contain cultural references or language that is more familiar to certain groups of people, potentially disadvantaging candidates from different cultural backgrounds.

Gender Bias: Certain tests may inadvertently reflect gender stereotypes or favor specific gender-related skills, leading to unfair outcomes for test takers.

Socioeconomic Bias: Some tests may assume prior access to resources or experiences that candidates from disadvantaged socioeconomic backgrounds may not have had, affecting their performance.

Language Proficiency: Tests conducted in a language that is not the test taker's first language can negatively impact results, particularly if language barriers hinder comprehension.

Test Format: The format of a test (e.g., multiple-choice, essay, practical) may not fully capture a candidate's true abilities, limiting the scope of assessment.

Standardized Test Limitations: Standardized tests might not fully represent an individual's unique talents and strengths, as they often focus on specific academic areas and neglect other skills.

Test Anxiety: Test anxiety can influence performance and hinder candidates from showcasing their true abilities during the test.

Preparation Disparities: Some candidates may have access to better preparation resources and test coaching, giving them an advantage over others with limited resources.

Skill vs. Knowledge Assessment: Some tests might focus more on rote memorization and knowledge recall rather than assessing practical skills and real-world application.

Overemphasis on Speed: Tests that prioritize speed in completing tasks may not accurately measure the depth of a candidate's understanding or problem-solving abilities.

Lack of Real-World Context: Some qualification tests might not adequately reflect real-world scenarios and challenges faced by professionals in the field.

Lack of Diversity in Test Development: The absence of diverse perspectives and experiences in the development of tests can result in biased content and assumptions.

2. Addressing these limitations and biases requires ongoing efforts to enhance the validity and fairness of qualification tests. Test developers and administrators can take various measures to mitigate these issues:

Conducting thorough item analyses to identify and eliminate biased or irrelevant test items.

Utilizing diverse test development teams to ensure a broader representation of perspectives and experiences.

Implementing accommodations for candidates with language barriers or disabilities to create a more inclusive testing environment.

Providing test preparation resources to all candidates, regardless of their background or socioeconomic status.

Offering alternative testing formats that assess practical skills and problem-solving abilities effectively.

Regularly reviewing and updating test content to reflect current industry standards and best practices.

By acknowledging and actively working to address these limitations and biases, qualification tests can become more reliable, equitable, and valuable tools for evaluating candidates' skills and knowledge.

Future Researches

1. Addressing issues of accessibility and inclusivity.

Addressing issues of accessibility and inclusivity is crucial to ensure that qualification tests are fair, equitable, and inclusive for all candidates, regardless of their backgrounds or circumstances. Here are some strategies to promote accessibility and inclusivity in qualification tests:

Offering Accommodations: Provide accommodation for candidates with disabilities or special needs, such as extended time, assistive technology, or alternative formats for test materials. This ensures that candidates can participate in the testing process on an equal basis.

Multilingual Testing: Offer qualification tests in multiple languages to cater to candidates from diverse linguistic backgrounds. This helps eliminate language barriers and ensures that candidates can demonstrate their skills and knowledge effectively.

Diverse Test Development Teams: Ensure that test development teams include members from diverse backgrounds and perspectives. This can help identify potential biases and ensure that the test content is relevant and representative of different cultural contexts.

Reviewing Test Items: Regularly review test items to identify and eliminate any potential bias or culturally specific content. Test items should be free from stereotypes and should not disadvantage candidates from particular groups.

Providing Test Preparation Resources: Offer accessible and affordable test preparation resources to all candidates. This helps level the playing field and provides equal opportunities for test preparation.

Online and Remote Testing: Offer online and remote testing options to accommodate candidates who may have difficulty accessing physical test centers or who prefer the flexibility of remote testing.

Outreach and Awareness: Conduct outreach and awareness campaigns to promote the availability and benefits of qualification tests among diverse communities. This can help increase participation from underrepresented groups.

Collaboration with Educational Institutions: Collaborate with educational institutions and organizations to offer test preparation workshops and support for candidates from marginalized backgrounds.

Transparent Policies: Ensure that the testing process and policies are transparent and well-communicated to all candidates. Transparency helps build trust and confidence in the fairness of the qualification tests.

Feedback Mechanisms: Establish feedback mechanisms for candidates to provide input on the accessibility and inclusivity of the test process. Regularly gather and analyze feedback to make improvements as needed.

Training for Test Administrators: Provide training to test administrators and proctors on handling diverse candidates and ensuring an inclusive testing environment.

Continuous Improvement: Regularly evaluate the effectiveness of accessibility and inclusivity measures and make continuous improvements based on feedback and data.

By actively addressing issues of accessibility and inclusivity, qualification tests can become more inclusive, welcoming, and fair for all candidates. Promoting diversity and inclusivity in the testing process not only benefits individual candidates but also contributes to the overall quality and validity of the assessment.

2. Opportunities for improvement and evolution in qualification tests

Qualification tests play a critical role in assessing skills and knowledge, and there are several opportunities for improvement and evolution to make them more effective and relevant. Here are some key areas where qualification tests can be enhanced:

Embracing Technology: Incorporate technology and innovative assessment methods to create more dynamic and interactive tests. This could include virtual simulations, gamified assessments, and adaptive testing that tailors' questions based on the candidate's performance.

Competency-Based Assessments: Shift towards competency-based assessments that focus on real-world skills and application rather than rote memorization. These assessments should align with the specific requirements of the industry or profession being tested.

Diverse Question Formats: Use diverse question formats, including scenario-based questions, open-ended responses, and practical demonstrations. This allows for a more comprehensive evaluation of a candidate's abilities and critical thinking skills.

Inclusive Content Development: Ensure that the test content is culturally sensitive and free from biases. Involve diverse subject matter experts in the development of test items to ensure inclusivity and relevance.

Personalized Learning Paths: Offer personalized learning paths and targeted study recommendations based on a candidate's performance in practice assessments. This approach helps address individual knowledge gaps and provides focused preparation.

Continuous Assessment: Move towards continuous assessment models rather than relying solely on one-time, high-stakes tests. Continuous assessment provides a more accurate picture of a candidate's progress and growth over time.

Remote Testing Options: Expand remote testing options to provide flexibility for candidates who may face geographical or accessibility challenges in reaching physical test centers.

Digital Credentials and Portfolios: Consider adopting digital credentials and portfolios to showcase a candidate's skills and achievements beyond just test scores. Digital badges and portfolios can provide a more holistic view of a candidate's capabilities.

Collaboration with Industry Experts: Collaborate with industry experts and professionals to ensure that the content of qualification tests remains relevant and up to date with current industry practices and trends.

Feedback and Iterative Improvement: Implement feedback loops and regular reviews to continuously improve the quality and relevance of qualification tests based on candidate feedback and industry demands.

Ethical Considerations: Address ethical considerations, such as privacy and data security, in the administration of qualification tests, particularly in online and remote testing formats.

Bridging Skills Gap: Design qualification tests to bridge the skills gap and address emerging needs in the job market, ensuring that candidates are equipped with the right skills for the evolving professional landscape.

By embracing these opportunities for improvement and evolution, qualification tests can better serve candidates, employers, and industries. Continuous advancements in assessment methodologies will ensure that these tests accurately measure candidates' abilities, promote inclusivity, and align with the demands of the modern workplace.

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Appendices

Appendix A

List of Specialists and Letters of Specialists Invitation

for IOC Verification

List of Specialists and Letters of Specialists Invitation for IOC Verification

No.	Experts	Experience (Years)	Professional Title	Work Unit
1	Luo Mi	19	Assoc Prof.	Jiangxi Institute of Fashion Technology
2	Chen Xiaoling	22	Assoc Prof.	Jiangxi Institute of Fashion Technology
3	Zhong Xing	14	Assoc Prof.	Jiangxi Institute of Fashion Technology
4	Hu Yanli	26	Prof.	Jiangxi Institute of Fashion Technology
5	Wen ShuLi	22	Assoc Prof.	Jiangxi Institute of Fashion Technology

Appendix B

Official Letter

Ref.No. MHESI 0643.14/๒๗๗

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

16 February 2024

RE: Invitation to validate research instrument

Dear Assoc.Prof.Zhong Xing, Jiangxi Institute of Fashion Technology

Mrs. Zhou Hongying is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Graduate costume designer qualification examination system of colleges and universities in Jiangxi"

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 instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. 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
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/ 278

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

16 February 2024

RE: Invitation to validate research instrument

Dear Assoc.Prof.Chen Xiaoling, Jiangxi Institute of Fashion Technology

Mrs. Zhou Hongying is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Graduate costume designer qualification examination system of colleges and universities in Jiangxi"

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 instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. 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
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/๒๗๑

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

16 February 2024

RE: Invitation to validate research instrument

Dear Assoc.Prof.Dr.Wen ShuLi, Jiangxi Institute of Fashion Technology

Mrs. Zhou Hongying is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Graduate costume designer qualification examination system of colleges and universities in Jiangxi"

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 instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. 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
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Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

16 February 2024

RE: Invitation to validate research instrument

Dear Prof.Hu Yanli, Jiangxi Institute of Fashion Technology

Mrs. Zhou Hongying is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Graduate costume designer qualification examination system of colleges and universities in Jiangxi"

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 instrument.

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

Sincerely,

(Assistant Professor Akaranun Asavarutpokin)
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Ref.No. MHESI 0643.14/ 240

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

16 February 2024

RE: Invitation to validate research instrument

Dear Assoc.Prof.Dr.Luo Mi, Jiangxi Institute of Fashion Technology

Mrs. Zhou Hongying is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitle "Graduate costume designer qualification examination system of colleges and universities in Jiangxi"

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 instrument.

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

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(Assistant Professor Akaranun Asavarutpokin)
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Appendix C

Research Instrument

The Consistency of research Tools (IOC)

Items	Graduate Costume Designer Professional Qualification Requirements	Experts					IOC	Validity
		No1.	No2.	No3.	No4.	No5.		
1.Academic Qualifications and Certifications								
1	Bachelor's Degree in Fashion Design	1	1	1	0	1	0.8	Valid
2	Master's Degree in Fashion Design	1	0	1	0	1	0.6	Valid
3	Certificate/Diploma in Fashion Design	1	1	1	1	1	1	Valid
4	Textile and Apparel Certifications	1	1	1	0	1	0.8	Valid
5	Sustainable Fashion Certification	0	1	1	0	1	0.6	Valid
6	Luxury Fashion Certification	1	0	1	0	1	0.6	Valid
7	Fashion Styling Certification	1	1	1	1	0	0.8	Valid
8	Fashion Illustration Certification	0	1	1	1	0	0.6	Valid
9	Textile Technology Certification	1	0	1	1	1	0.8	Valid
10	Fashion Merchandising Certification	1	0	1	1	1	0.8	Valid

The Consistency of research Tools (IOC) (continued)

Items	Graduate Costume Designer Professional Qualification Requirements	Experts					IOC	Validity
		No1.	No2.	No3.	No4.	No5.		
11	Fashion Photography Certification	1	1	1	0	1	0.8	Valid
12	Fashion Business Management Certification	0	1	0	1	1	0.6	Valid
13	Couture Techniques Certification	1	1	1	0	1	0.8	Valid
14	Active and Sportswear Design Certification	1	1	0	1	0	0.6	Valid
15	Fashion Film and Media Certification	1	0	1	1	1	0.8	Valid
16	Pattern Making and Draping Certification	0	1	1	1	1	0.8	Valid
2. Skills and Competency Assessments								
17	Portfolio Review	1	1	1	1	1	1	Valid
18	Design Challenges	1	1	0	1	1	0.8	Valid
19	Technical Exercises	1	1	1	0	1	0.8	Valid
20	Fashion Shows or Presentations	1	0	1	1	1	0.8	Valid
21	Interviews and Discussions	1	1	0	1	1	0.8	Valid
22	Collaborative Projects	1	1	1	1	1	1	Valid
23	Prototyping and Testing	1	1	1	1	1	1	Valid
24	Educational Background	1	1	1		1	0.8	Valid
25	Industry Experience	1	1	1	0	1	0.8	Valid
26	Reputation and Recognition	1	1	1	1	0	0.8	Valid

The Consistency of research Tools (IOC) (continued)

Items	Graduate Costume Designer Professional Qualification Requirements	Experts					IOC	Validity
		No1.	No2.	No3.	No4.	No5.		
3.Type, cut and structure								
27	Pattern Drafting Exercises	1	1	0	1	1	0.8	Valid
28	Grading and Sizing	1	1	1	1	1	1	Valid
29	Pattern Manipulation	1	0	1	1	1	0.8	Valid
30	Draping Techniques	1	1	1	0	1	0.8	Valid
31	Creative Draping	1	0	1	1	1	0.8	Valid
32	Sewing Exercises	1	1	1	1	1	1	Valid
33	Constructing Sample Garments	1	1	1	1	1	1	Valid
34	Technical Drawings and Annotations	1	0	1	1	1	0.8	Valid
35	Real-World Projects	1	1	1	0	1	0.8	Valid
36	Timed Assessments	1	1	1	1	1	1	Valid
37	Documentation and Portfolios	1	1	1	1	1	1	Valid
38	Peer and Instructor Reviews	1	1	1	0	1	0.8	Valid
4.Industry-Specific Tests								
39	Industry Trends	1	1	1	1	1	1	Valid
40	Materials and Fabrics	1	1	1	1	1	1	Valid
41	Sustainability Practices	1	1	1	1	1	1	Valid
42	Circular Fashion Concepts	1	1	1	1	1	1	Valid
43	Eco-Friendly Dyeing and Printing Techniques	1	0	1	1	1	0.8	Valid
44	Ethical Fashion Standards	1	0	1	1	1	0.8	Valid

The Consistency of research Tools (IOC) (continued)

Items	Graduate Costume Designer Professional Qualification Requirements	Experts					IOC	Validity
		No1.	No2.	No3.	No4.	No5.		
45	Innovative Materials and Technologies	1	1	1	0	1	0.8	Valid
46	Consumer Behavior	1	1	1	1	1	1	Valid
47	Fashion History	1	0	1	1	1	0.8	Valid
48	Global Market Trends	1	1	1	0	1	0.8	Valid
49	Brand Identity	1	1	1	1	1	1	Valid
5.Business and marketing skills								
50	Business Planning	1	1	1	1	1	1	Valid
51	Financial Management	1	0	1	0	1	0.6	Valid
52	Supply Chain and Production Management	1	1	1	0	1	0.8	Valid
53	Inventory Management	0	1	0	1	1	0.6	Valid
54	E-commerce and Online Marketing	1	0	1	1	1	0.8	Valid
55	Branding and Positioning	1	1	1	1	1	1	Valid
56	Market Research and Consumer Insights	1	1	1	0	1	0.8	Valid
57	Retail and Sales Strategies	1	1	0	1	0	0.6	Valid
58	Networking and Relationship Building	1	0	1	0	1	0.6	Valid
59	Intellectual Property and Legal Considerations	1	0	1	0	1	0.6	Valid
60	Social and Environmental Responsibility	0	1	1	1	1	0.8	Valid
61	Public Relations and Media	1	0	1	1	0	0.6	Valid

The Consistency of research Tools (IOC) (continued)

Items	Graduate Costume Designer Professional Qualification Requirements	Experts					IOC	Validity
		No1.	No2.	No3.	No4.	No5.		
	Relations							
62	Negotiation and Communication Skills	1	1	1	0	1	0.8	Valid
63	Adaptability and Resilience	1	0	1	1	1	0.8	Valid
6. Knowledge, abilities and qualities to be acquired by graduates								
64	Character and Virtue	1	1	1	1	1	1	Valid
65	Professional knowledge	1	0	1	1	1	0.8	Valid
66	Practical Ability	1	1	1	1	1	1	Valid
67	Application Ability	1	1	1	0	1	0.8	Valid
68	Information ability	1	1	1	1	0	0.8	Valid
69	Communication	1	0	1	1	1	0.8	Valid
70	Teamwork	1	1	1	0	1	0.8	Valid
71	International Perspective	1	1	1	1	1	1	Valid
72	Learning Development	1	1	1	1	1	1	Valid

Appendix D

The Results of the Quality Analysis of Research Instruments

List of survey experts

Research title survey on vocational qualifications

of college graduates fashion designers

No.	Experts	Experience (Years)	Professional Title	Work Unit
1	Zhao Congyang	15	HR	Zhejiang Xige Industrial Co., LTD
2	Miss Lin	8	HR	Guangzhou Honglitai Industrial Co., LTD
3	Yuan Hao	7	HR	Zhejiang Qiaoton clothing Co., LTD
4	Sun Yan	9	HR	Guizhou Xinzhiya clothing Co., LTD
5	Zhou Junfang	16	HR	Ningbo Hengyuan Garment Co., LTD
6	Wang Ruyi	7	HR	Seven men's wear
7	Miss Su	9	HR	Suzhou set world Technology Co., LTD
8	Miss Xian	6	HR	Guangdong Yida Textile Co., LTD
9	Chen Yanyi	9	HR	Hunan Fox Xuan clothing Co., LTD
10	Zhang Bin	10	HR	Jiangsu Hongdou Industrial Co., LTD
11	Hu Yanjun	8	HR	Guangdong Bolun Electronics Co., LTD
12	Luo Shanli	10	HR	Guangzhou Chuangxing Clothing Group Co., LTD

List of survey experts

Research title survey on vocational qualifications

of college graduates fashion designers (continued)

No.	Experts	Experience (Years)	Professional Title	Work Unit
13	Liu Dekai	10	HR	Shenzhen Huicheng Shang Culture Co., LTD
14	Hu Ke	11	HR	Dongguan tide painting clothing Co., LTD
15	Qian Yimin	16	HR	Hangzhou Lawei cultural creative design Co., LTD
16	He Fang	12	HR	Wujiang Sangshang Silk Co., LTD
17	Hou Tingting	5	HR	Delta China Security Protection Co., LTD
18	Wu Xuejuan	7	HR	Jiangsu Haichen smart clothing Co., LTD
19	Li Yu	5	HR	Quanzhou Shengke shoes and clothing Co., LTD
20	Chen Nan	4	HR	Summation network
21	mei	5	HR	E-commerce clothing

Open Ended Interview on vocational qualifications of college graduates fashion designers

Explanation:

This study aims to understand the requirements of enterprises on the professional qualification of fashion designers for graduates from colleges and universities in Jiangxi.

Please describe the qualification requirements of fashion designers for fashion design graduates from Jiangxi universities according to the actual situation of your enterprise, and answer the 6 interview questions. Please do your best to answer the questions, either in complete sentences or words, or in multiple forms for each question.

Thank you very much for your support.

Zhou Hongying

Ph. D. student, BansomdejChaopraya Rajabhat University

Open Ended Interview on vocational qualifications of college graduates fashion designers

Items	High	Median	Low	Unspecified	Total
Fashion designers are required to obtain an academic degree					
Costume designers need to be proficient in all types of costume making techniques					
Costume designers are required to obtain certification					
Fashion designers need to assess their design skills					
Fashion designers need to be evaluated for creativity					
Fashion designers need to have strong language skills					
Fashion designers need to assess technical proficiency					
The fashion designer needs to evaluate the pattern making					
Fashion designers need to evaluate three-dimensional cutting					
Fashion designers need to carry out structural assessment					
Fashion designers need to be proficient in strict budget management					

Open Ended Interview on vocational qualifications of college graduates fashion designers (continued)

Items	High	Median	Low	Unspecified	Total
Fashion designers need to understand industry trends					
Fashion designers need to understand materials and sustainable practices					
Fashion designers need business and marketing skills					
Fashion designers need to master the qualities that college graduates should possess					

Open Ended Interview on vocational qualifications
of college graduates fashion designers

Interview Question
1. What qualifications, degrees and certifications do fashion designers need to obtain?
2. What are the ways to assess fashion design skills, creativity and technical proficiency of a fashion designer?
3. What are the ways in which fashion designers make plates, cut and evaluate structures?
4. What do fashion designers need to know about industry trends, materials and sustainable development?
5. What business and marketing skills do fashion designers need to know?
6. What knowledge, abilities and qualities do fashion designers need that graduates should acquire?

Questionnaire on vocational qualifications of college graduates fashion designers

Explanation:

This survey aims to understand the requirements of enterprises on the professional qualification of fashion designers for graduates from colleges and universities in Jiangxi. This survey is divided into two parts. The first part is the personal and organizational information of the people who fill in the survey, with five questions. The second part is the Professional qualification requirements for clothing designers, with 70 questions.

Please tick √ to the status quo that you think is most true based on your knowledge of the actual situation. Please refer to the following criteria to choose.

A score of 5 represents complete agreement, the highest level of status quo.

A score of 4 represents some agreement, indicating a high level of development status.

A score of 3 represents general agreement, indicating a moderate level of development status.

A score of 2 represents a slight disagreement, indicating a low level of development status.

A score of 1 represents complete disagreement, indicating the lowest level of development status.

Thank you very much for your support.

Zhou Hongying

Ph. D. student, BansomdejChaopraya Rajabhat University

Research Survey using questionnaire

Part: Respondent Status (Personal information)

Problem
1. Gender ☐male ☐female
2. The name of your company_____
3. Nature of your company ☐Foreign-funded enterprise ☐Sino-foreign joint venture ☐Public institution ☐State enterprise ☐Private enterprise ☐other
4. Size of your company ☐large-scale ☐middle-sized ☐Minor
5. Your work experience ☐3-5 years ☐6-9 years ☐More than 10 years

part II: Questionnaire

The Professional qualification requirements for clothing designers. Please select the survey options that best fit the actual situation of your campus and tick "√" below the box of "5 strongly agree, 4 somewhat agree, 3 generally agree, 2 somewhat disagree, 1 strongly disagree".

Likert Level scale Questionnaire

No.	Graduate Costume Designer Professional Qualification Requirements	5	4	3	2	1
1. Academic Qualifications and Certifications						
1	Bachelor's Degree in Fashion Design					
2	Master's Degree in Fashion Design					
3	Certificate/Diploma in Fashion Design					
4	Textile and Apparel Certifications					
5	Sustainable Fashion Certification					
6	Luxury Fashion Certification					
7	Fashion Styling Certification					
8	Fashion Illustration Certification					
9	Textile Technology Certification					
10	Fashion Merchandising Certification					
11	Fashion Photography Certification					
12	Fashion Business Management Certification					
13	Couture Techniques Certification					
14	Active and Sportswear Design Certification					
15	Fashion Film and Media Certification					

Likert Level scale Questionnaire (continued)

No.	Graduate Costume Designer Professional Qualification Requirements	5	4	3	2	1
16	Pattern Making and Draping Certification					
2. Skills and Competency Assessments						
17	Portfolio Review					
18	Design Challenges					
19	Technical Exercises					
20	Fashion Shows or Presentations					
21	Interviews and Discussions					
24	Educational Background					
25	Industry Experience					
26	Reputation and Recognition					
3.Type, cut and structure						
27	Pattern Drafting Exercises					
28	Grading and Sizing					
29	Pattern Manipulation					
30	Draping Techniques					
31	Creative Draping					
32	Sewing Exercises					
33	Constructing Sample Garments					
34	Technical Drawings and Annotations					
35	Real-World Projects					

Likert Level scale Questionnaire (continued)

No.	Graduate Costume Designer Professional Qualification Requirements	5	4	3	2	1
36	Timed Assessments					
37	Documentation and Portfolios					
38	Peer and Instructor Reviews					
3. Industry-Specific Tests						
39	Industry Trends					
40	Materials and Fabrics					
41	Sustainability Practices					
42	Circular Fashion Concepts					
43	Eco-Friendly Dyeing and Printing Techniques					
44	Ethical Fashion Standards					
45	Innovative Materials and Technologies					
46	Consumer Behavior					
47	Fashion History					
48	Global Market Trends					
49	Brand Identity					
5. Business and marketing skills						
50	Business Planning					
51	Financial Management					
52	Supply Chain and Production Management					
53	Inventory Management					
54	E-commerce and Online Marketing					

Likert Level scale Questionnaire (continued)

No.	Graduate Costume Designer Professional Qualification Requirements	5	4	3	2	1
55	Branding and Positioning					
56	Market Research and Consumer Insights					
57	Retail and Sales Strategies					
58	Networking and Relationship Building					
59	Intellectual Property and legal considerations					
60	Social and Environmental Responsibility					
61	Public Relations and Media Relations					
62	Negotiation and Communication Skills					
63	Adaptability and Resilience					
6.Knowledge, abilities and qualities to be acquired by graduates						
64	Character and Virtue					
65	Professional knowledge					
66	Practical Ability					
67	Application Ability					
68	Information ability					
69	Communication					
70	Teamwork					
71	International Perspective					
72	Learning Development					

Modified Likert Scale Questionnaire

Explanation:

According to the data of the last round, the researchers inserted the median, crowd number and quartile values in the data of this round of enterprises. Please ask HR to score the Likert scale again on the professional qualification requirements of fashion designers. Please refer to the following criteria to choose.

A score of 5 represents complete agreement, the highest level of status quo.

A score of 4 represents some agreement, indicating a high level of development status.

A score of 3 represents general agreement, indicating a moderate level of development status.

A score of 2 represents a slight disagreement, indicating a low level of development status.

A score of 1 represents complete disagreement, indicating the lowest level of development status.

Thank you very much for your support.

Zhou Hongying

Ph. D. student, BansomdejChaopraya Rajabhat University

Modified Likert Scale Questionnaire

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	5	4	3	2	1
1.Academic Qualifications and Certifications									
1	Bachelor's Degree in Fashion Design	4	4	2.00					
2	Master's Degree in Fashion Design	3	3	0.50					
3	Certificate/Diploma in Fashion Design	4	4	1.00					
4	Textile and Apparel Certifications	3	3	0.50					
5	Sustainable Fashion Certification	4	3	2.00					
6	Luxury Fashion Certification	3	3	1.50					
7	Fashion Styling Certification	4	3	2.00					
8	Fashion Illustration Certification	3	3	1.50					
9	Textile Technology Certification	4	3	2.00					
10	Fashion Merchandising Certification	3	3	1.00					
11	Fashion Photography Certification	3	3	1.00					
12	Fashion Business Management Certification	3	3	1.00					
13	Couture Techniques Certification	4	4	2.00					
14	Active and Sportswear Design Certification	3	3	1.00					
15	Fashion Film and Media Certification	3	3	1.00					
16	Pattern Making and Draping Certification	4	5	2					
2. Skills and Competency Assessments									
17	Portfolio Review	4	5	2.00					
18	Design Challenges	4	5	1.00					
19	Technical Exercises	5	5	1.00					
20	Fashion Shows or Presentations	4	5	2.00					
21	Interviews and Discussions	4	4	1.00					
22	Collaborative Projects	4	5	1.00					

Modified Likert Scale Questionnaire (continued)

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	5	4	3	2	1
23	Prototyping and Testing	4	5	1.00					
24	Educational Background	4	4	1.00					
25	Industry Experience	4	4	1.00					
26	Reputation and Recognition	4	4	1.50					
3.Type, cut and structure									
27	Pattern Drafting Exercises	4	4	1.50					
28	Grading and Sizing	4	4	1.50					
29	Pattern Manipulation	4	4	1.00					
30	Draping Techniques	4	4	1.50					
31	Creative Draping	4	4	1.00					
32	Sewing Exercises	4	4	2.00					
33	Constructing Sample Garments	4	4	1.50					
34	Technical Drawings and Annotations	4	4	1.50					
35	Real-World Projects	4	4	1.00					
36	Timed Assessments	4	4	1.50					
37	Documentation and Portfolios	4	4	1.50					
38	Peer and Instructor Reviews	4	4	2.00					
4.Industry-Specific Tests									
39	Industry Trends	5	5	1.00					
40	Materials and Fabrics	5	5	1.00					
41	Sustainability Practices	4	5	1.00					
42	Circular Fashion Concepts	4	4	1.00					
43	Eco-Friendly Dyeing and Printing Techniques	4	4	1.00					
44	Ethical Fashion Standards	4	4	1.50					
45	Innovative Materials and Technologies	5	5	1.00					
46	Consumer Behavior	5	5	1.00					

Modified Likert Scale Questionnaire (continued)

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	5	4	3	2	1
47	Fashion History	5	5	1.00					
48	Global Market Trends	5	5	1.00					
49	Brand Identity	5	5	1.00					
5.Business and marketing skills									
50	Business Planning	4	4	1.00					
51	Financial Management	4	3	1.00					
52	Supply Chain and Production Management	4	4	1.00					
53	Inventory Management	4	3	1.00					
54	E-commerce and Online Marketing	4	4	1.00					
55	Branding and Positioning	5	5	1.00					
56	Market Research and Consumer Insights	5	5	1.00					
57	Retail and Sales Strategies	4	3	1.50					
58	Networking and Relationship Building	4	3	1.50					
59	Intellectual Property and Legal Considerations	4	4	1.00					
60	Social and Environmental Responsibility	4	4	1.00					
61	Public Relations and Media Relations	4	3	2.00					
62	Negotiation and Communication Skills	4	3	1.50					
63	Adaptability and Resilience	4	4	1.50					
6.Knowledge, abilities and qualities to be acquired by graduates									
64	Character and Virtue	4	5	2.00					
65	Professional knowledge	5	5	1.00					
66	Practical Ability	5	5	1.00					
67	Application Ability	5	5	1.50					
68	Information ability	4	5	1.00					
69	Communication	4	5	1.00					

Modified Likert Scale Questionnaire (continued)

No.	Graduate Costume Designer Professional Qualification Requirements	MD	MO	IQR	5	4	3	2	1
70	Teamwork	4	5	1.00					
71	International Perspective	4	4	1.00					
72	Learning Development	5	5	1.00					

List of experts in Delphi

No.	Experts	Experience (Years)	Professional Title	Work Unit
1	Miss Zhou	12	CEO	Guangzhou Honglitai Industrial Co., LTD
2	Hayimu	18	CEO	Zhejiang Qiaoton clothing Co., LTD
3	Yang Xia	8	CEO	Guizhou Xinzhiya clothing Co., LTD
4	Dong Wenhua	15	CEO	Suzhou set world Technology Co., LTD
5	Guo Wei	14	CEO	Shenzhen Huicheng Shang Culture Co., LTD
6	Qiu Risheng	18	CEO	Dongguan tide painting clothing Co., LTD
7	rookie	17	CEO	Quanzhou Shengke shoes and clothing Co., LTD
8	Wang Ruyi	7	HR	Seven men's wear
9	Zhao Congyang	15	HR	Zhejiang Xige Industrial Co., LTD
10	Zhou Junfang	16	HR	Ningbo Hengyuan Garment Co., LTD
11	Chen Yanyi	9	HR	Hunan Fox Xuan clothing Co., LTD
12	Zhang Bin	10	HR	Jiangsu Hongdou Industrial Co., LTD
13	Hu Yanjun	8	HR	Guangdong Bolun Electronics Co., LTD
14	Qian Yimin	16	HR	Hangzhou Lawei cultural creative design Co., LTD
15	Luo Guilan	20	Associate	Jiangxi Institute of Fashion

No.	Experts	Experience (Years)	Professional Title	Work Unit
			professor	Technology
16	Zhou Pingzhen	18	Lecturer	Jiangxi Institute of Fashion Technology
17	Huang Chunlan	27	Professor	Jiangxi Institute of Fashion Technology
18	Fu Jie	21	Associate professor	Jiangxi Institute of Fashion Technology
19	Yu Jiangling	20	Lecturer	Jiangxi Institute of Fashion Technology
20	Xuan Zhen	22	Associate professor	Jiangxi Institute of Fashion Technology
21	Yu Peng	20	Lecturer	Jiangxi Institute of Fashion Technology

Enterprise selection of clothing designer test question bank

Questions, requirements, scoring criteria, score value, time	Result
Part One: Portfolio review, PPT report	
The score is worth 10 points	
Takes 20 minutes	
Part Two: Interview questions and answers	
The score is worth 10 points	
Takes 20 minutes	
1. Briefly describe your previous fashion design projects, which ones you are most proud of, and explain why.	
2. What do you think is the most important thing in fashion design? Why?	
3. How to balance creative and commercial needs in design?	
4. How do you stay on top of fashion trends and industry developments?	
5. How do you solve problems and challenges during the design process?	
6. How do you work with manufacturers and suppliers to ensure quality and consistency in your design throughout the production process?	
7. Where do you usually draw inspiration from when designing a new collection?	
8. How do you handle the transformation of design inspiration into a practical fashion design?	
9. Have you ever participated in a fashion show or competition? Please share your experience.	
10. What do you see as your role and contribution in a team?	
11. What is your vision for the future development of the fashion industry?	
12. Describe a time when you have failed or been frustrated in the design process and what you have learned from it.	
13. Do you have any personal design style or signature elements? Please explain.	

Questions, requirements, scoring criteria, score value, time	Result
14. How do you evaluate the success of your design work?	
15. When designing a fashion collection, how do you ensure that the overall style and theme are consistent?	
16. How do you handle pressure and urgent tasks at work?	
Part Three: Industry trends and sustainable development practices	
The score is worth 10 points	
Takes 5 minutes	
Briefly describe the major current trends in the fashion industry and how your design work fits into these trends.	
Part Four: Business and marketing skills	
The score is worth 10 points	
Takes 10 minutes	
Select a clothing brand, describe the brand's target market and positioning, and propose a fashion collection design plan suitable for the brand.	
Part 5: Design skills and creativity	
The score is worth 10 points	
It takes 90 minutes	
1. Title: Please use computer aided design software to design a set of fashion (men's, women's, children's, dress, etc., is relaxed or fashionable), and include a description of the design concept and key elements.	
2. Requirements:	
1) The production of inspiration version is clear, the extraction of popular elements is accurate, and it is in line with the theme design intention;	
2) The renderings are complete, with clear theme design elements, and can reflect the principles of series design;	
3) Harmonious color matching, complete accessories, pattern element design can highlight the theme style;	
4) The proportion of style drawing is accurate, highlighting the clothing structure and process expression;	
5) The proportion of clothing modeling is accurate, the characters are	

Questions, requirements, scoring criteria, score value, time	Result
dynamic and harmonious, and the fabric texture is exquisite;	
6) The size of the canvas is A3, the image resolution is 300dpi, the picture composition is beautiful, and it is saved as JPEG format.	
7) Layout treatment (size A3), and in the style board attached not less than 100 words of design description.	
3. Scoring points and criteria:	
1) The design meets the requirements of the question, and the inspiration version is beautiful (10 points);	
2) The dress line draft is clearly expressed, the fabric application is reasonable, the texture is good, the dynamic proportion of the human body in the effect picture is accurate, the dress effect is harmonious and the performance is complete (25 points);	
3) The clothing is colorful and in line with the fashion trend, the color coordination is reasonable, and the accessories are complete (15 points);	
4) The front and back of the style drawing are complete, the proportion is accurate, and the lines are smooth (30 points);	
5) Layout design, composition and layout beautiful (10 points);	
6) The design description is written reasonably, and the document storage is standard (10 points).	
Part VI: Technical proficiency	
The score is worth 15 points	
Takes 3 hours	
1. Topic:	
Please complete the structure drawing and garment production according to the design effect drawing in the first part.	
2. Requirements:	
1) According to the design of the effect drawing, complete the drawing of the complete set of clothing structure according to the specific specifications and dimensions (male coat 170/88A, bottom 170/78A, female coat 160/84A, bottom 160/68A);	

Questions, requirements, scoring criteria, score value, time	Result
2) Select suitable surface accessories for clothing, complete and suitable materials;	
3) All parts of the garment are accurate and fit;	
4) Make a clear statement on the process design of the overall clothing style;	
5) Complete the production of a set of garments and take photos (front, side, back and detail display);	
6) Arrange the above content on A3 answer sheet, print and submit.	
3. Scoring points and criteria:	
1) Reasonable and comprehensive selection of garment surface accessories (10 points);	
2) The clothing style name is detailed, the size of each part is accurate and fit (style name 1 point, size 1 point, each part size 1 point) (a total of 10 points);	
3) The garment structure drawing is accurate, the layout is beautiful, and the drawing lines and symbols of each part (8 points for the front piece structure, 8 points for the back piece structure, 4 points for the correct structure and appropriate and reasonable proportion) are clear and standardized (20 points in total);	
4) The description of clothing process design is clear and accurate (10 points);	
5) The front, side, back and details of the garment are clearly displayed (collar, sleeve width and width are consistent and straight 10 points, craft sewing appearance is beautiful, plain clothes, left and right symmetry 10 points, back seam flat clothes 10 points), craft production is smooth (a total of 30 points).	
6) Garment ironing (20 minutes).	
Part 7: Submit the interview report, model try on the garment and make a brief introduction	
It takes 30 minutes	

Appendix E

Certificate of English

BANSOMDEJCHAOPRAYA RAJABHAT UNIVERSITY

This is to certify that

Mrs. Zhou Hongying

Achieved BSRU English Proficiency Test (BSRU-TEP) level

C1

Given on 22nd August 2021

(Assistant Professor Dr Kulsirin Aphiratvoradej)

Director

Appendix F

The Document for Acceptance Research

ที่ อว ๐๖๔๓.๐๓/๐๐๕๓

สำนักวิทยบริการและเทคโนโลยีสารสนเทศ
มหาวิทยาลัยราชภัฏบ้านสมเด็จเจ้าพระยา
๑๐๖๑ ถนนอิสรภาพ แขวงหิรัญรูจี
เขตธนบุรี กรุงเทพฯ ๑๐๖๐๐

๗ สิงหาคม ๒๕๖๗

เรื่อง ตอบรับการลงตีพิมพ์บทความในวารสารเทคโนโลยีสารสนเทศและนวัตกรรม

เรียน Hongying Zhou

ตามที่ Hongying Zhou, Nainapas Injoungjirakit, Prapai Sridama, Apinya Noomee, Sombat Teekasap ขอเสนอบทความวิจัยเรื่อง Graduate Costume Designer Qualification Exit Examination System of Colleges and Universities in Jiangxi เพื่อลงตีพิมพ์ในวารสารเทคโนโลยีสารสนเทศและนวัตกรรม ปีที่ ๒๓ ฉบับที่ ๒ กรกฎาคม-ธันวาคม ๒๕๖๗ ของสำนักวิทยบริการและเทคโนโลยีสารสนเทศ มหาวิทยาลัยราชภัฏบ้านสมเด็จเจ้าพระยา ซึ่งได้ผ่านการรับรองคุณภาพจากศูนย์ดัชนีการอ้างอิงวารสารไทย (TCI) ในกลุ่มที่ ๒ นั้น

ในการนี้ กองบรรณาธิการวารสารสารสนเทศและคณะกรรมการกลั่นกรองผลงานได้พิจารณาเรียบร้อยแล้ว เห็นสมควรตีพิมพ์บทความดังกล่าวในวารสารเทคโนโลยีสารสนเทศและนวัตกรรม ปีที่ ๒๓ ฉบับที่ ๒ กรกฎาคม-ธันวาคม ๒๕๖๗ เพื่อเผยแพร่ให้เกิดประโยชน์ในเชิงวิชาการต่อไป

จึงเรียนมาเพื่อโปรดทราบและขอขอบคุณมา ณ โอกาสนี้

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.วิมล อุทานนท์)
กองบรรณาธิการบริหาร
Signature Code : ๕๓EB๔OfDfwecDFm๐Dm๐h

สำนักวิทยบริการและเทคโนโลยีสารสนเทศ
โทร ๐๒-๔๗๓-๗๐๐๐ ต่อ ๑๗๐๐
โทรสาร ๐๒-๔๖๖-๔๓๔๒

Research Profile

Name-Surname: Mrs. Zhou Hongying

Birthday: July 27, 1980.

Place of Birth: Nanchang, Jiangxi, China

Educational background:

- Doctor of Philosophy Program in Digital Technology Management for Education, Bansomdejchaopraya Rajabhat University, in 2024
- Master of Engineering degree in Software Engineering, Yunnan University, In 2014
- Graduated from Jiangxi Science and Technology Normal University in 2012, majoring in Education management

Work experience:

- Management of Fashion Design College, Jiangxi Institute of Fashion Technology, December 2020 to the present
- Management of the Personnel Section of the Human Resources Department, Jiangxi Institute of Fashion Technology, March 2012 to December 2020

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