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The Learning Needs of Art and Design Students in Chinese Vocational Colleges for Entrepreneurship Education: From the Perspectives of Theory of Entrepreneurial Thought and Action

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Abstract: Entrepreneurship education in Chinese colleges and universities began in the early 21st century. After more than 20 years of development, it has reached an unprecedented scale. At present, there are many studies on entrepreneurship education for undergraduates in Chinese colleges and universities, but only a few general studies on entrepreneurship education in higher vocational education. Particularly, the analysis of the status quo of students' entrepreneurship education and the research on the improvement of entrepreneurship education has not yet been widely discussed. This research adopted the semi-structured interview method and used purposive sampling to select 8 students with entrepreneurial willingness in lower grades and 8 in upper grades of higher vocational art and design in the Guangzhou area, as well as 8 students who have succeeded in entrepreneurship after graduation, giving a total of 24 students. The interview was designed based on the concept of Entrepreneurial Thought and Action (ET&A) entrepreneurship education. The interview outline was derived from the three aspects of learning, action, and creation. After the interviews were conducted, coding and qualitative analysis were performed to identify the knowledge and skills required by art students in higher vocational colleges to establish a business, and the problems encountered by successful students in entrepreneurship that might be encountered in the future. Based on the conclusions, the method and content of entrepreneurship education in schools could be improved. In addition, the research results showed that to fulfill the aim of entrepreneurship, art and design students in higher vocational colleges need to learn knowledge and skills such as entrepreneurial courses, professional knowledge, and entrepreneurial skills (competition, training, simulation, practice, etc.). Meanwhile, students who had succeeded in entrepreneurship believed that it was necessary to improve the entrepreneurship education curriculum system, pay attention to entrepreneurship practice teaching, and strengthen the linkage between home, school, and enterprise to promote entrepreneurship learning, thereby enhancing innovation and entrepreneurship ability.

Keywords: art design; entrepreneurship education; entrepreneurial practice; entrepreneurial skills; higher vocational colleges; innovation and entrepreneurship ability; learning needs

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1. Introduction

Entrepreneurship is an emerging field of research that has received growing attention worldwide in the past few decades [1]. Entrepreneurship is also recognized as a hot topic that is widely discussed in practice and academia [2]. Entrepreneurship education is considered to be one of the key means of increasing entrepreneurial intention and activity [3]. In the late 1970s, scholars in the United States and Europe began systematic research and development on entrepreneurship and entrepreneurship education, and the government

also issued policy supporting entrepreneurship. The research on entrepreneurship education in China was relatively late compared to Europe and the United States; scholars in China began to discuss entrepreneurship-related issues in the early 1990s [4].

Nevertheless, entrepreneurship research in China only focused on the basis of the theory and practice of entrepreneurship education in European and American countries instead of the territory. Strongly influenced by the existing U.S. and European entrepreneurial knowledge system, there is a well-established learning framework and a fairly good knowledge dissemination infrastructure in the form of journals and conferences, etc. for Chinese scholars to study [4]. After more than 20 years of development, entrepreneurship education in Chinese universities has reached an unprecedented number and scale [5]. In particular, the "Mass Entrepreneurship and Innovation" agenda, launched in 2014, highlighted the role of entrepreneurship in China's development, and various policies to further support entrepreneurship education in higher education. Since then, China's entrepreneurship and innovation education has reached a new level.

In the art design industry, the innovation and entrepreneurship of professionals has become an important trend in the future design industry and development of creativity. With the rapid development of the digital industry, the industrial structure has also undergone great changes. The objects of artistic design have also expanded from traditional physical products to the combination of software and hardware, service design, user experience design, etc. [6]. These changes have brought new opportunities and great challenges to the innovation and entrepreneurship of design talents. Bui et al. realized that the creative economy has become a powerful force of reform in the world, which not only means that art and design major students face huge development potential, but also allows higher vocational colleges to focus on practical application ability training to inspire their innovation and entrepreneurship [7].

Levick-Parkin's study showed that the creative and digital fields offer a great number of opportunities for real-world benefits [8]. As the world economic environment becomes more challenging, people should pay more attention to innovation, and strengthen innovation education to adapt to new economic developments. The Ministry of Culture and Tourism of China officially released the "Guangdong-Hong Kong-Macao Greater Bay Area Cultural and Tourism Development Plan," which clearly supports Guangzhou's development of creative design industry clusters, and provides innovative and entrepreneurial opportunities for students majoring in art and design in higher vocational colleges in Guangzhou; for example, by providing a good platform for students to represent their works. According to the analysis of the China Research Institute of Puhua Industry, the scale of China's cultural and creative industry market value increased from 3.5 trillion RMB in 2017 to nearly 4.4 trillion RMB in 2019, and the scale of the industry has continued to increase.

Kim et al. stated that modern design creators must possess business and management capabilities because these capabilities enable them to upgrade the environment for design creation and enjoyment to cope with the diversification of design organizations and the transformation of industrial structures [9]. Ip [10] found that the flexibility of design to fulfill consumers' changing needs and market trends enables individual designers with creative and planning skills to engage in entrepreneurship, which is very different from other traditional or standard entrepreneurship. Boubker et al. proposed a practical approach to entrepreneurship education based on learning by doing [11]. Durão et al. found that experiential entrepreneurship education learning methods made an important contribution to the development of entrepreneurship and management skills in cultural and creative industries [12]. Gangi also believed that providing entrepreneurial knowledge and skill training is an essential solution to the employment problem of art college students in the future [13]. Huang et al. [14] believe that encouraging professional entrepreneurship is an important way to improve student satisfaction. However, for entrepreneurship education in art and design, there is still no accepted theory or effective practice in this field [15].

Students in many art schools in China have participated in various entrepreneurship activities related to their majors while studying in school. Most students choose creative

industries such as advertising design, media, film and television, art photography, and creative product development [16]. However, domestic research on entrepreneurship education for college students in higher vocational art and design has not yet produced systematic research results, and there is no unified understanding of the research on entrepreneurship education for higher vocational art and design students. Due to its own particularity, art and design students in higher vocational colleges face difficulties and obstacles in receiving entrepreneurship education which directly hinder the development of entrepreneurship education in higher vocational art and design majors.

Therefore, carrying out research, analyzing the current situation of entrepreneurship education, seeking better guidance, and finding suitable solutions for higher vocational art and design students will help students to expand their entrepreneurial education knowledge and skills. Eventually, the entrepreneurial willingness and ability of art and design students will be enhanced to the upper level.

1.1. Research Purposes

Comparing the current characteristics and environment of China's innovation and entrepreneurship education with China's entrepreneurship education research, the literature on entrepreneurship education and entrepreneurial literacy domestically and internationally is discussed. Based on the concept of Entrepreneurial Thought and Action (ET&A) entrepreneurship education, a semi-structured interview was conducted involving lower grade students, higher grade students, and students who had established businesses after graduating from school. The interviews focused on three aspects: learning, action, and creation. The study focused on the needs of students' entrepreneurship education and their impact on entrepreneurial willingness. Understanding entrepreneurship education can improve the quality of entrepreneurship education for art and design majors in higher vocational colleges, and further provide a decision-making basis for enhancing students' entrepreneurial willingness. This study provides direction for innovation and entrepreneurship teaching reform in the field of art design. The study results also provide references for other applied majors that focus on cultivating innovation.

1.2. Research Questions

Based on the relevant literature review and survey data, this study proposed the following main research questions: What is the current teaching of entrepreneurship for art and design majors in higher vocational colleges? Are there differences between grades and after graduation? What kind of knowledge and skills do students who are about to start a business think they need to start a business? When difficulties such as innovative ability, resource acquisition, etc., in entrepreneurship are encountered, which aspects of entrepreneurship education do schools need to strengthen for students who have already started a business?

2. Theory of Entrepreneurial Thought and Action (ET&A)

The theory of Entrepreneurial Thought and Action (ET&A) is a method for promoting students to create, discover, and exploit opportunities. This method is based on theories such as the entrepreneurial model of Timmons [17], emphasizing the whole process of the "learning by doing" practice concept, constructing the trinity of entrepreneurship teaching practice of learning (Learn), action (Act), and creation (Build). By stimulating internal ideas, applying ideas to practice, and then reconstructing on the basis of actions, new thinking patterns are stimulated, and a circularity of entrepreneurial thinking and action is gradually formed. Currently, the most successful entrepreneurial education using entrepreneurial thought and action theory is Babson College in the United States [18]. The entrepreneurial curriculum system established based on the theory of Entrepreneurial Thought and Action is the key to the smooth transfer of relevant knowledge and entrepreneurial education in Babson Business School.

2.1. Learning

Kirzner conducted research on the concept of entrepreneurial knowledge [19]. He distinguished entrepreneurial knowledge from general knowledge, and regarded it as the knowledge to acquire and allocate information, resources, or general knowledge. Although his definition of entrepreneurial knowledge is relatively abstract, it also serves as a guide for future generations to understand entrepreneurial knowledge as a solid foundation. Alvarez and Busenitz made an in-depth summary of the connotation and function of entrepreneurial knowledge based on resource-based theory [20]. They argued that entrepreneurial knowledge represents how to use conceptual and abstract knowledge to discover and acquire potentially valuable resources, integrate and utilize those resources, and find ways for entrepreneurs to efficiently allocate proprietary knowledge and exploit market opportunities to generate profits and method capability.

Alvarez and Barney used the concept of "economic rent" to further explore the internal mechanism of entrepreneurial knowledge in the process of new enterprise creation. With the deepening of entrepreneurship education, the research on the role of entrepreneurial knowledge in entrepreneurship education has attracted a growing number of scholars to carry out research [21]. Roxas believed that entrepreneurial knowledge is a summary of the understanding and knowledge of entrepreneurial practice, which shows the invisible ability and intrinsic motivation of entrepreneurs to identify and take advantage of opportunities to launch a business [22]. Liberona et al. found that one of the main reasons for entrepreneurial failure is the lack of entrepreneurial knowledge and entrepreneurial skills of entrepreneurs and their partners [23].

2.2. Action

"Action" mainly refers to providing students with entrepreneurial practice opportunities, encouraging students to apply the entrepreneurial knowledge and skills they have learned to actual entrepreneurial decision-making so as to exercise their leadership and teamwork skills, cultivate their sense of ethics and social responsibility, and guide them to self-examine, which can lead to success [18].

According to the existing research results on entrepreneurship education, it is generally believed that the entrepreneurial ability of college students should be a concept from multiple perspectives. A collection of various kinds of knowledge, abilities, and entrepreneurial qualities are required.

Entrepreneurship is considered a practical tool and is defined as a set of underlying characteristics such as general and specific knowledge, motivations, traits, self-image, social roles, and skills [24]. Lans et al. defined entrepreneurial ability as the ability to identify and pursue entrepreneurial opportunities in a specific position and context [25]. Their research proposed that entrepreneurial ability should include opportunity grasping, social communication ability, business operation ability, industry-specific business ability, and self-efficacy as five key elements of competence and self-efficacy. The latest study found that entrepreneurship education can significantly improve students' entrepreneurial ability [26]. In 2016, EU scholars released the EU's Entrepreneurship Competency Framework (EntreComp: The Entrepreneurship Competency Framework) through the accumulation of long-term experience. It used a combination of qualitative and quantitative research methods to define the connotation and structural elements of entrepreneurial ability from a multi-dimensional perspective, and comprehensively constructed three "gradient-advanced" cores from "ideas and opportunities," "resources," and "actions."

The dimension fully reflected the transformation process of value proposition, value creation, and value output of entrepreneurship. Some scholars have conducted in-depth research on China's higher vocational entrepreneurship education. By studying the scope of procedural and experiential courses that higher vocational entrepreneurship education should involve, they have organized and constructed an entrepreneurship education curriculum based on the structural model from cognitive ability to non-cognitive ability [27].

2.3. Creation

ET&A theory emphasizes the creation process of the unity of knowledge and action [18]. Babson Business School emphasizes the unity of knowledge and action. Abundant extracurricular activities provide many programs, resources, and consultations for students that give them the opportunity to learn by doing. Various large-scale academic conferences provide students with opportunities to share and discuss entrepreneurial issues and solve entrepreneurial problems so that students can improve their entrepreneurial ideas. Various project-supporting plans of the school also provide students with entrepreneurial funds, etc. [28].

2.4. Feedback

Through learning, action, and creation, students can reflect and analyze whether entrepreneurship education can enhance their willingness to start a business. Bird first proposed the concept of entrepreneurial intention that refers to the individual taking a series of practical actions to achieve a certain goal [29]. Later scholars also argued that entrepreneurial intention is defined as an individual's self-confessed belief in establishing a new enterprise, and a conscious plan to do so at some point in the future [30]. In addition, many researchers have found that entrepreneurship education has a significant impact on entrepreneurial intention [31,32].

Mei et al. found that entrepreneurial education, risk-taking ability, and family and friends (including mentors) are factors which significantly influence study participants' entrepreneurial intentions [33]. The more entrepreneurship education students receive in colleges and universities, the stronger their entrepreneurial intentions. Entrepreneurship education in the form of practical training seems to have a greater impact on students' entrepreneurial intentions than participation in practice [33]. Entrepreneurship educators need to provide students with a variety of learning and practical opportunities to improve the entrepreneurial willingness of individuals. In terms of how to improve the entrepreneurial willingness of art and design students, Liang et al. believed that schools should establish courses or modules to teach the latest design software technology and entrepreneurship to develop students' knowledge of design technology, entrepreneurship, and marketing strategies [34]. These are the keys to whether art and design students have strong entrepreneurial willingness and entrepreneurial success.

3. Research Design

3.1. Research Methods and Procedure

This study was mainly based on the ET&A theory, to construct systematic entrepreneurship education for art and design majors in higher vocational colleges, and to explore the connotation development and actual situation of entrepreneurship education by sorting and summarizing relevant literature on entrepreneurship education. Then, semi-structured interviews were conducted with students. Through entrepreneurial learning, action, creation, and other aspects combined with grounded theory, an entrepreneurial education guidance model for students majoring in art and design in higher vocational colleges was formulated.

Generally speaking, the measurement methods of entrepreneurship education can be divided into two categories. The first is to measure students' perceived value and level of support for entrepreneurship education, which is a subjective evaluation [35]. The second is to record facts objectively, including asking students about their experiences in entrepreneurship education. This is usually measured by asking whether students have participated in an entrepreneurship education program [36]. In this study, the second measurement method was adopted, and the respondents were asked about their intuitive feelings about entrepreneurship education through interviews. Data were collected and summarized.

For the purpose of the interviews in this paper, the study team used a semi-structured interview approach in designing the interviews, as interviews allow a person to learn about educational issues based on personal experiences [37]. Interviewees were recruited using convenience sampling. The interview time for each interviewee was about 60 min, and

the individual in-depth conversation lasted for 80 min. The interview questions could be revised based on the interviewee's answers during the interview process.

3.2. Research Framework

Based on the theory of Entrepreneurial Thought and Action (ET&A), this study conducted research on the needs and problems of entrepreneurship education implementation in Chinese higher vocational art and design majors, which corresponded to the main categories of theoretical analysis. Secondly, learning, action, creation, and feedback in the Entrepreneurial Thought and Action Education process corresponded to subcategories of the theory, as shown in Figure 1.

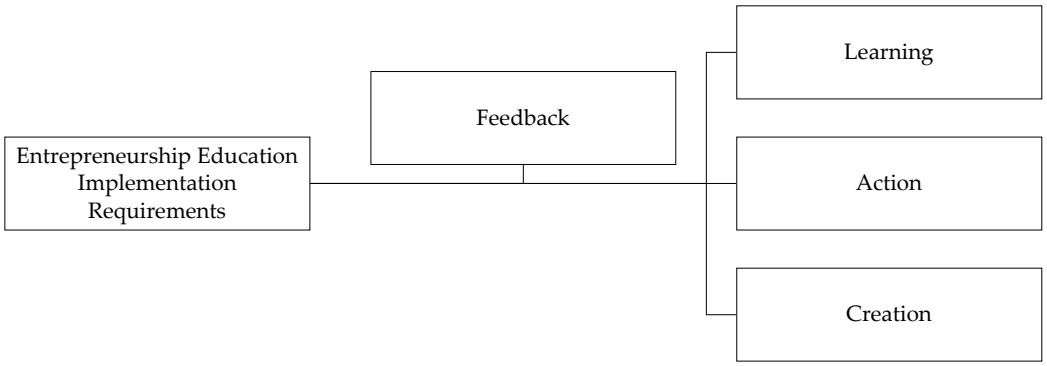

Figure 1. Research framework.

3.3. Research Participants

Guangdong Province is a major province of vocational education in China and has ranked first in the country in the scale of higher vocational education for six consecutive years (Guangdong Provincial Department of Education). The number of students majoring in art and design has greatly increased in recent years, and the number of graduates who choose to start their own businesses is also increasing yearly (Guangdong Province Higher Vocational Education Quality Annual Report). Art and design students have a certain degree of creative thinking. Through entrepreneurship education in school, students can cultivate their sense of innovation, stimulate their creative potential, and better equip themselves to serve society. Therefore, it is necessary to take entrepreneurship education as a special research object.

The higher vocational colleges in Guangdong Province are mainly concentrated in Guangzhou, so the selection of art and design majors in some higher vocational colleges in Guangzhou as the research object is representative. The interview data for this study were collected by the research team from April to September 2022, using purposive sampling [38] by which we recruited eight students from the 2021 art design majors in Guangzhou higher vocational colleges, eight students from the 2020 art design major college students, and eight students who had succeeded in starting a business after graduation to take part in the interviews. According to Morse's [39] theory, the sample size for interview purposes should be greater than 12. This study obtained 24 valid interviews, which met the sample requirements for qualitative research.

3.4. Interview Outlines

According to the educational practice system of Babson College [18] and the whole-process innovation and entrepreneurship education and practice system of Chinese colleges and universities launched by Liu et al. [40], the interview outline for each topic mainly included entrepreneurship education courses, entrepreneurship simulation experiments, successful entrepreneurs' entrepreneurship lectures, innovation and entrepreneurship competitions, college students' innovation and entrepreneurship training programs, school system support, and entry into campus entrepreneurship incubation bases. In sum, the

interview outline for this study was mainly conducted around the following questions, as shown in Table 1:

Table 1. Interview outline.

No.	Questions
1.	Could you please talk about the school's arrangement for learning about entrepreneurship?
2.	Could you please talk about the learning of professional courses and the learning of general courses of innovation and entrepreneurship; how can they help students to start a business?
3.	Could you please talk about the situation of the seminars on entrepreneurship knowledge organized by the school? How do you think it will help students start a business?
4.	Have you ever participated in a design competition in a school or social organization? Do you think it is helpful for students to start a business?
5.	Have you participated in the entrepreneurial planning training (entrepreneurship simulation) in the entrepreneurship course in school? How do you think the simulated entrepreneurship competition can help students start their own businesses?
6.	Do you know about innovation and entrepreneurship competitions such as "Internet +" and "Challenge Cup" for college students? Do you have competition experience? How do you think participating in such competitions will help students to start their own businesses?
7.	Have you ever visited any alumni startup companies? Do you think alumni business entrepreneurship inspires you?
8.	Have you ever participated in any entrepreneurial practice? Do you consider entrepreneurial practice to be helpful for you to start your own business?
9.	Could you please talk about what courses and practices the school has in business incubation as far as you know?
10.	Do you or any of your friends have the idea of starting your own business or setting up a registered company? What are the difficulties in registering a business?
11.	Do you understand the role of school–enterprise cooperation in the process of entrepreneurship? What kind of help do you think school–enterprise cooperation can bring to students' entrepreneurship?
12.	What do you think helped you the most in your entrepreneurial journey? What is the biggest obstacle you encountered?

3.5. Data Analysis

Grounded theory is a bottom-up qualitative research method which does not set theoretical assumptions in advance, but merely relies on original data to induce, generalize, and refine concepts and categories, and then gradually builds corresponding theories. This method is very suitable for the analysis of interview data [41]. The main purpose of the theory is to analyze and derive core concepts or "essences" from empirical data. Initially, there are no theoretical assumptions. Researchers start mining and analyzing the original text data to obtain certain initial concepts and empirical generalizations, and then integrate these initial concepts, consider their relationships in more detail, and connect them. After continuous improvement and modification by scholars, it has commonly been recognized as an effective way to construct localization with theory. This exploratory research process fits well with the direction of this study.

The data of this study came from the semi-structured interviews. The research team conducted interviews with 24 students from different grades of different vocational colleges and graduate students from June to October 2022, as shown in Table 2. The interview method was one-on-one, and the interview time was controlled within 1 hour. The interviewers were trained before conducting the interviews. After data collection, the original interview text was coded word by word using the NVivo 11 analysis tool based on grounded theory. The first-level coding is open coding. A total of 24 classmates were recruited via purposive sampling to collect interview data for coding, six of whom were used to verify saturation. The collected interview data were compared in detail to obtain semantic concepts and form the original code. Then, the original code was continuously compared and inductively analyzed to condense the most frequent, important, or most relevant codes. A total of 223 original sentences were obtained by sorting out the sentences of the original data.

Table 2. Interviewee's profiles.

Code Name	Gender (M/F)	Class Year	Major	Interview Time
A1	F	2021	Art design	57
A2	F	2021	Art design	65
A3	F	2021	Art design	55
A4	M	2021	Art design	52
A5	M	2021	Product art design	66
A6	M	2021	Product art design	51
A7	M	2021	Jewelry design	64
A8	F	2021	Product art design	56
B1	F	2022	Art design	48
B2	F	2022	Art design	53
B3	M	2022	Art design	63
B4	F	2022	Art design	61
B5	M	2022	Product art design	62
B6	M	2022	Product art design	55
B7	F	2022	Jewelry design	65
B8	M	2022	Jewelry design	66
C1	F	Startup after graduation	Art design	62
C2	F	Startup after graduation	Product art design	73
C3	M	Startup after graduation	Art design	73
C4	M	Startup after graduation	Art design	82
C5	M	Startup after graduation	Art design	85
C6	M	Startup after graduation	Art design	70
C7	M	Startup after graduation	Art design	89
C8	M	Startup after graduation	Art design	65

4. Research Results and Discussion

4.1. Reliability and Validity Test

To improve the validity and reliability of the study, we also conducted interviewee checks by sending research findings and preliminary conclusions to a subset of interview participants whose constructive feedback helped to improve the overall analysis and conclusions. In addition, using triangulation to increase the authenticity of the findings, informal interviews were conducted with relevant groups from entrepreneurship education and professional education in art and design to further clarify the various perspectives and interpretations formulated throughout the data collection process [42].

4.2. Coding Results

The 223 original sentences were conceptualized, and 14 primary categories were formed. During the secondary coding, the connections between categories or between categories and concepts were continuously explored, and the 14 primary categories were continuously summarized and compared. Four thematic categories: entrepreneurial knowledge, entrepreneurial ability, entrepreneurial characteristics, and entrepreneurial willingness, were narrowed down. Based on the theory of Entrepreneurial Thought and Action (ET&A), a three-level encoding (core code) of learning, action, and creation was formed. The specific codes are shown in Table 3.

Table 3. Coding table.

No.	Three-Level Encoding (Core Code)	Two-Level Encoding	Single-Level Encoding
1	Learning	Entrepreneurial knowledge	Entrepreneurship courses Professional knowledge Entrepreneurship lectures Design competitions
2	Action	Entrepreneurial ability	Entrepreneurship competitions Entrepreneurship simulation Entrepreneurship practice School–enterprise cooperation Alumni enterprise
3	Creation	Entrepreneurial characteristics	School support Innovative mind Entrepreneurship risks
		Entrepreneurial willingness	Entrepreneurial vision Partnerships

4.3. Interview Results

4.3.1. The Importance of Learning Entrepreneurial Knowledge

It was found that most of the students who participated in the interviews believed that the learning of entrepreneurial knowledge could bring great help to entrepreneurship. The students who had already started their own businesses after graduation (C) emphasized that if they had not acquired entrepreneurial knowledge, they might not have started a business. This was consistent with Wu et al., Liberona et al., and others' research which found that entrepreneurial knowledge has a positive impact on entrepreneurship [23,43].

Lower grade students (A, B) who were new to entrepreneurship courses believed that the course had little effect on their future entrepreneurship and provided more theoretical knowledge. However, students who had started their own businesses after graduation confirmed that the study of entrepreneurship courses enlightenment them to start their own businesses; they would not have started a business without this course.

> *The study of entrepreneurship courses gave me a certain understanding of what entrepreneurship was. I think it will be very helpful if I want to start a business in the future (A1).*

> *It should be said that the Entrepreneurship Course was the enlightenment course to start my business. I think if there was no Entrepreneurship Course, I would not have been able to start a business (C5).*

In addition to the learning of design-industry professional knowledge, most of the respondents stated that relevant entrepreneurship courses improved their innovative thinking, and also played a good guiding role for future professional entrepreneurship. Zhao et al. found that students in many art schools tried various types of entrepreneurship related to their majors during their school days, and most students chose the creative industry [16]. This is consistent with the research in this study.

> *Professional learning should still be useful for entrepreneurship. If I start a business related to art and design after graduation, I think I will utilize professional knowledge right away. Professional competition can give me more ideas, which I may use in future startups (B1).*

> *The learning of professional knowledge was the foundation of my entrepreneurial success. In fact, no matter what kind of industry we are engaged in the future, the professional knowledge of art and design can cultivate our sense of innovation, and can often help us find new inspiration in the process of starting a business. The competition of professional knowledge will let us know the needs of society, which may be quite different from our*

classroom connection in school, and can also provide a reference for the entrepreneurial needs of customers (C7).

There were certain different cognitions between the students in the lower grades and the students who had started their own businesses after graduation regarding professional competitions, lectures, etc. Interviewees at different levels had different understandings of entrepreneurial knowledge learning, which was consistent with the research of Chen et al., Sun, and other scholars [44,45].

I think the entrepreneurship lectures are still very good; at least they let me understand what entrepreneurship is, and I also feel that entrepreneurship is not so simple and requires a lot of effort, so as for whether to start a business in the future, I think listening to more lectures will give me a clear understanding (B3).

I think it is really good that the school can arrange entrepreneurship lectures. Although I have learned some knowledge in the entrepreneurship course, how to start a business, what conditions are needed, and how to go through the relevant procedures, the course was still not very clear. Through the lectures, we can have a good understanding of the specific ideas and methods of entrepreneurship (C6).

4.3.2. The Improvement in Entrepreneurial Ability Requires Action

According to the interviews, almost all the interviewees mentioned that they had deepened their understanding of entrepreneurship, the entrepreneurial process, the registration of entrepreneurial enterprises, etc., through entrepreneurial competitions, entrepreneurial simulations, and entrepreneurial practices. With a clear understanding, it was agreed that education of this content greatly promoted their entrepreneurial ideas and increased their entrepreneurial ability. Brush also emphasized that students need to apply the entrepreneurial knowledge and skills they have learned to actual entrepreneurial decision-making, so as to improve their entrepreneurial ability [18]. Cascavilla et al.'s study found that practice-oriented entrepreneurship courses seemed more effective than theory-oriented entrepreneurship courses [46]. Motta and Galina also believed that experiential learning as a method of entrepreneurship education had a positive impact on entrepreneurial intention and the development of entrepreneurial skills and competencies [47].

I personally think that entrepreneurship simulation was the most practical part of entrepreneurship education. It allowed us to free ourselves from boring theoretical knowledge and truly understand what entrepreneurship was and how to start a business in combination with reality. The entrepreneurship competition allowed me to see the innovative thinking and ideas of the participating college students, and combine the problems I saw with their majors or others to build an entrepreneurial framework and put them into practice, which had a good demonstration and leading role for our future entrepreneurship (A4).

Since I was exposed to entrepreneurial knowledge in the first grade, I wanted to start my own business after graduation. After studying in school, I had accumulated some entrepreneurial knowledge and ability, but at that time, there was still a lack of enthusiasm for starting a business. I needed more passion! It was not until one day that the teacher took us to visit the alumni's company, and the alumni unreservedly told us about their experience from having an idea, to starting a company and expanding the market. Only they realized that there were still some problems in their own business. It has helped me a lot with my current business. In addition, I feel that entrepreneurial simulation and practice are as important as entrepreneurial knowledge, and both are indispensable. Without certain simulation and practice, I think entrepreneurship may not be successful (C7).

4.3.3. The Influence of Entrepreneurial Traits and Entrepreneurial Intention on Entrepreneurship

Through the interviews, it was found that the senior and post-graduate students who started their own businesses believed that the school's support and strength of entrepreneurship greatly affected their decision to start a business. In terms of registered

enterprises, most of the students (excepting the lower grade students) had a clear understanding; however, they still had doubts when entering the actual operation, and hoped to have more specific training and operation guides. Most of the respondents believed that innovation awareness, entrepreneurial vision, and access to resources were very helpful to entrepreneurial success. In the interviews, most students said that entrepreneurial risk was the issue that must be considered before starting a business, and the concerns of family and friends about starting a business were also a major obstacle in the process of starting a business. Meanwhile, the ability of partners was also related to whether the entrepreneurial project was successfully operated. Othman et al. argued that risk control was an important part of entrepreneurship education and should be emphasized in the curriculum [48].

> *The risk of starting a business Is something I must consider. The conditions at home are not very good, so the risk of starting a business is still relatively high. In addition, good partners and access to high-quality resources are also critical. Without the support of these two aspects, starting a business will be even more difficult. It would help if the school could add entrepreneurial risks, entrepreneurial partner selection, and entrepreneurial ideas into entrepreneurship education to form some modular courses (B6).*

> *In fact, whether to start a business and what project to choose to start a business, in addition to the learning and training of entrepreneurial knowledge and ability, the schoo"s support for entrepreneurship, family support, alumni resources, etc. (C4).*

4.3.4. Awareness Differences between the Three Groups

From the interviews, it was concluded that there were certain differences in the understanding of entrepreneurial knowledge, entrepreneurial ability, entrepreneurial characteristics, entrepreneurial willingness, etc., between current students (especially lower grade students) and students who started their own businesses after graduation. Students in the lower grades paid more attention to the learning of theoretical knowledge, and students in the upper grades and post-graduation entrepreneurship believed that entrepreneurial practice was more important.

> *If the theoretical knowledge of entrepreneurship in the freshman year was the door to entrepreneurship, then the subsequent entrepreneurship competitions, entrepreneurship simulations, and the entrepreneurial practice of senior companies really allowed me to touch the key points of entrepreneurship, which had a great impact on future entrepreneurship with help (B5).*

> *It is necessary to study the theoretical knowledge of entrepreneurship, and every entrepreneurial student needs to understand some concepts related to entrepreneurship. But from my personal point of view, the school's entrepreneurship simulation, entrepreneurial practice, and alumni enterprise learning are more helpful for me to start a business in the future. These are the key parts that are applied to practice. The school can focus on strengthening the education such as content of entrepreneurship training and practice (C8).*

4.4. Discussion

The purpose of this study was to enhance and improve the quality of entrepreneurship education for art and design majors in higher vocational colleges by understanding the current situations of entrepreneurship education among current entrepreneurial students in higher vocational art and design so as to provide a decision-making basis for improving students' willingness to start a business. The guiding question of this study was as follows: What knowledge and skills do students who are preparing to start a business think they need to start a business? By understanding the problems and difficulties encountered by entrepreneurial students in entrepreneurship, it is possible to know what aspects of the school's entrepreneurship education need to be improved.

4.4.1. Entrepreneurial Knowledge and Skills

There are some differences in the definitions of entrepreneurial knowledge and skills in the existing literature. In this study, "entrepreneurship knowledge" and "entrepreneurial ability" were unified as the essentials that entrepreneurs should master. Therefore, it was concluded that entrepreneurial knowledge includes both professional knowledge and vocational skills, and is a comprehensive quality. In the study, both students in school and students who had already started a business believed that the learning of entrepreneurial theory knowledge, entrepreneurial training, simulation, practice, and other entrepreneurial abilities were very helpful for starting a business. This is basically the same knowledge and skills that students of other majors need to start a business. Brush [18] argued that domain aspects of entrepreneurship education should widely include curriculum, extracurricular activities, research, and outreach, which is consistent with the findings of this study. In addition, through entrepreneurship education, students' cognition of the concept of entrepreneurship and specific implementation methods was deepened, and their willingness to start a business was significantly enhanced. It was also concluded by other scholars that entrepreneurship education has a significant impact on entrepreneurial intention [31,32], which was further demonstrated in this study.

4.4.2. Entrepreneurship Education Improvement

The external environment of entrepreneurship (school and family) is crucial for entrepreneurship. Nevertheless, there are few entrepreneurship education courses offered by schools, and there is a lack of effective entrepreneurial project guidance and entrepreneurial practice opportunities. Furthermore, lack of financial support, information asymmetry, and lack of knowledge all have a great impact on students' entrepreneurial willingness. In this study, school policies, support from family and friends, and resource acquisition (including financial support) are all suffering points and difficulties encountered by students in the process of entrepreneurship. Therefore, it is necessary to improve the curriculum system of entrepreneurship education and focus on entrepreneurship practice teaching. Secondly, it is necessary to strengthen the linkage between home, school, and enterprise to promote entrepreneurial learning and enhance innovation ability. Liao et al. found that role models and entrepreneurship education play a key role in driving entrepreneurial intention [49], while Mei et al., in their research, found that entrepreneurship education and family and friends (including mentors) are the key factors that can significantly influence entrepreneurs, which was further confirmed in this study [32]. Careful consideration should also be given to embedding entrepreneurial concepts and mindsets into existing curricula. It can also be achieved by co-teaching with trained entrepreneurship professors, or by training art and design teachers in the fundamentals of art entrepreneurship education [50].

4.4.3. Creative Consciousness of Art and Design Students

In the art design industry, the innovation and entrepreneurship of professionals has become an important trend in the design industry and its creative development. Art and design students have a good sense of innovation. In this study, most of the students believed that the learning of professional knowledge gave them a better sense of innovation, which was very helpful for them to start a business. There are many innovative and creative courses in the teaching of art and design majors, which makes them more innovative than other majors. They have received systematic training in design thinking and design methods, and have certain design innovation capabilities. Therefore, art and design students have certain advantages in innovation and entrepreneurship [51]. Moreover, Bui et al. realized that the creative economy has become a powerful global force for change [7]. Ip found that enabling individual designers with creative and planning abilities to engage in entrepreneurship has very different results to other traditional or standard forms of entrepreneurship [10]. However, they also have some disadvantages in the entrepreneurial process [6].

5. Conclusions and Suggestions

5.1. Conclusions

This study described the current state of entrepreneurship of art and design students in higher vocational colleges, analyzed the entrepreneurial knowledge and abilities that students need from the perspective of entrepreneurship, and also put forward suggestions for improving entrepreneurship education in higher vocational art and design majors. The main research data were derived from interviews with students majoring in art and design in higher vocational colleges in Guangzhou. Based on the theoretical framework of Entrepreneurial Thought and Action Theory (ET&A), this study found that: (1) Entrepreneurial courses, professional knowledge, entrepreneurial practice, and innovative awareness are all entrepreneurial qualities that art and design students need; (2) Design expertise and competitions effectively improve students' innovative awareness and ability. China promotes innovation and entrepreneurship education in the field of higher education, placing "innovation" before "entrepreneurship," emphasizing the direction of entrepreneurial behavior in the digital age, and illustrating the importance of innovation ability of design and art majors; (3) School policies and family support have a greater impact on students' willingness to start a business; (4) Meanwhile, students who plan to start a business after graduation should strengthen the content of their entrepreneurial training and practice, and integrate entrepreneurial risks, partner selection, entrepreneurial ideas, and other content into the entrepreneurship education module.

5.2. Contribution

First, based on ET&A theory, this study discussed how to help college students master entrepreneurial knowledge, cultivate entrepreneurial spirit, improve their entrepreneurial skills, enrich the theoretical research results of entrepreneurship education, and promote the reform and development of entrepreneurship education. This study also conducted research on entrepreneurial knowledge, entrepreneurial ability, entrepreneurial characteristics, and entrepreneurial willingness through interviews, and put forward the knowledge and abilities that students need to start a business, providing theoretical significance and practical contribution for guiding art and design students to start their own businesses.

In terms of practical contributions, the following three points were made: (1) by analyzing the obstacles encountered by students in the process of entrepreneurship, the study provides practical significance for improving the methods and content of entrepreneurship education; (2) this study also provides a feasible direction for building a training system for innovative and entrepreneurial talents in art design that adapts to the transformation and upgrading of the design industry, and also points out a directional reference for the reform of education and teaching structure; (3) finally, the study results can be promoted in related or similar majors, making innovation and entrepreneurship education in colleges and universities more professional, stimulating students' entrepreneurial awareness, and improving students' innovation and entrepreneurship ability.

In terms of theoretical contributions, the following two points were made: (1) this study aimed to analyze the whole process of entrepreneurship education according to the teaching practice of learning, action, and creation, emphasizing the integration of theory, practice, and reflection in entrepreneurship education, and enriching entrepreneurial thinking and action entrepreneurship education theory in the research findings on educational needs in China; (2) promotions and improvements of the adaptability of entrepreneurial thought and action entrepreneurial education theory in China's entrepreneurial education were considered.

5.3. Research Suggestions

Entrepreneurship education needs to strengthen school–enterprise cooperation, and both parties can effectively benefit from the sharing of resources and results. Students can learn and understand the business operation mode, business content, business management, and other aspects of knowledge in the school–enterprise cooperation, which has played an

important role in promoting students' future entrepreneurship. In addition, enterprises can also benefit from the rich creativity of students in cooperation with schools, and promote the transformation of achievements such that enterprises can always maintain professional creative advantages and enhance market competitiveness. Enterprises can also train and reserve skilled professionals while cooperating with schools. More importantly, an entrepreneurial feedback mechanism can be established between schools and enterprises.

Students in design and art schools should start learning about entrepreneurship at the university level and improve their entrepreneurial abilities. Schools should set up different levels of entrepreneurship education curriculum systems according to students' characteristics and training goals, create an entrepreneurial environment and atmosphere so as to enhance students' entrepreneurial motivation and confidence, achieve sustainable development, and form a virtuous circle. Entrepreneurship courses need to be closely integrated with professional knowledge, make use of professional characteristics, strengthen the cultivation of innovative consciousness, and take professional entrepreneurship as the main channel for art and design students to start their own businesses. Entrepreneurship education practices should also strengthen students' innovative and entrepreneurial skills through case studies, entrepreneurial practices through simulated entrepreneurship (such as role-playing), and the creation of new businesses through networking with others who have started or are running businesses. In innovation and entrepreneurship education, schools should set up innovation and entrepreneurship education courses, actively and effectively guide students to participate in professional and technological entrepreneurship competitions, conduct entrepreneurship knowledge lectures, and provide basic information on entrepreneurial enterprises.

5.4. Limitations and Recommendations for Future Research

In this study, the knowledge and skills that art and design students need to acquire in entrepreneurship were analyzed only through interviews. More detailed and complete entrepreneurship education counseling content could not be constructed due to the time limitations. Further clarification and in-depth research are needed in the follow-up research. Students from other Chinese regions or different cultural regions can be invited to complete the questionnaire in the future, and quantitative research and data analysis can be performed to verify the arguments proposed in this study.

In this study, students in different grades had different opinions and views on the knowledge and ability of entrepreneurship education. The impact of entrepreneurship education on the entrepreneurial intention of art and design students of different grades needs to be further studied in the future as the world changes.

This research only studied the content of entrepreneurship education for art and design students in higher vocational colleges, and did not conduct research on general education or professional education. Students' general education content and professional education content will definitely affect their entrepreneurship education. We did not conduct a detailed study of the relationship between general education, professional education, and entrepreneurship education. Therefore, the results of this study can only be used to compare with the results of entrepreneurship education research involving vocational students in other majors.

In future research, researchers need to pay attention to how to teach sustainable development and social responsibility in entrepreneurship education. In addition, according to China's policy goals, it is also possible to explore effective teaching methods or curriculum design that can effectively combine ideological and political education with entrepreneurship education. At the same time, follow-up research can also explore how to promote the construction of an ecological civilization in entrepreneurship education, realize the dual improvement of students' moral ability, and achieve the goal of cultivating people through virtue. The influence of general education and professional education on entrepreneurship education can be enacted and further examined, and the research object can be chosen from a wider area in order to observe the practicality of entrepreneurship education content.

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References

1. Hindle, K.; Moroz, P. Indigenous entrepreneurship as a research field: Developing a definitional framework from the emerging canon. *Int. Entrep. Manag. J.* **2010**, *6*, 357–385. [CrossRef]
2. Potishuk, V.; Kratzer, J. Factors affecting entrepreneurial intentions and entrepreneurial attitudes in higher education. *J. Entrep. Educ.* **2017**, *20*, 25–44.
3. Thomas, O. Entrepreneurship education: Which educational elements influence entrepreneurial intention? *Ind. High. Educ.* 2022, *in press*. [CrossRef]
4. Jing, S.; Qinghua, Z.; Landström, H. Entrepreneurship Research in three regions-the USA, Europe and China. *Int. Entrep. Manag. J.* **2015**, *11*, 861–890. [CrossRef]
5. Li, W.; Li, C.; Du, X. Ten years of entrepreneurship education at Chinese universities: Evolution, problems, and system building. *Chin. Educ. Soc.* **2016**, *49*, 198–216. [CrossRef]
6. Hu, W.; Hu, Y.; Lyu, Y.; Chen, Y. Research on integrated innovation design education for cultivating the innovative and entrepreneurial ability of industrial design professionals. *Front. Psychol.* **2021**, *12*, 693216. [CrossRef]
7. Bui Hoai, S.; Hoang Thi, B.; Nguyen Lan, P.; Tran, T. A bibliometric analysis of cultural and creative industries in the field of arts and humanities. *Digit. Creat.* **2021**, *32*, 307–322. [CrossRef]
8. Levick-Parkin, M. Creativity, the muse of innovation: How art and design pedagogy can further entrepreneurship. *Ind. High. Educ.* **2014**, *28*, 163–169. [CrossRef]
9. Kim, B.; Kim, H.; Jeon, Y. Critical success factors of a design startup business. *Sustainability* **2018**, *10*, 2981. [CrossRef]
10. Ip, C.Y.; Liang, C. In search of keys to unlock young design entrepreneurship. *Des. J.* **2021**, *24*, 1043–1063. [CrossRef]
11. Boubker, O.; Naoui, K.; Ouajdouni, A.; Arroud, M. The effect of action-based entrepreneurship education on intention to become an entrepreneur. *MethodsX* **2022**, *9*, 101657. [CrossRef] [PubMed]
12. Durão, M.; Nogueira, S.; Fernandes, S.; Neves, A. Entrepreneurship Learning: Applying a Revised Experiential Learning Model to Cultural and Creative Industries. In *Perspectives and Trends in Education and Technology*; Springer: Singapore, 2023; pp. 153–163. [CrossRef]
13. Gangi, J. The synergies of artistic and entrepreneurial action. *J. Arts Manag. Law Soc.* **2015**, *45*, 247–254. [CrossRef]
14. Huang, Y.; Liu, L.; An, L. Are the teachers and students satisfied: Sustainable development mode of entrepreneurship education in Chinese universities? *Front. Psychol.* **2020**, *11*, 1738. [CrossRef] [PubMed]
15. White, J.C. A theory of why arts entrepreneurship matters. *J. Arts Entrep. Educ.* **2021**, *3*, 2.
16. Zhao, H.; Li, S.; Xu, H.; Ye, L.; Chen, M. The influence of educational psychology on modern art design entrepreneurship education in colleges. *Front. Psychol.* **2022**, *13*, 843484. [CrossRef] [PubMed]
17. Timmons, J.A. *The Entrepreneurial Mind, Andover, Mass*; BrickHouse Publishing: Baltimore, MD, USA, 1989.
18. Brush, C.G. Entrepreneurship education ecosystems: The case of Babson College. In *Innovation in Global Entrepreneurship Education*; Neck, H.M., Timmons, J.A., Liu, Y., Eds.; Edward Elgar Publishing: Cheltenham, UK, 1989; pp. 1–17.
19. Kirzner, I.M. *Perception, Opportunity, and Profit*; Chicago University Press: Chicago, IL, USA, 1983.
20. Alvarez, S.A.; Busenitz, L.W. The entrepreneurship of resource-based theory. *J. Manag.* **2001**, *27*, 755–775. [CrossRef]
21. Alvarez, S.A.; Barney, J.B. Organizing rent generation and appropriation: Toward a theory of the entrepreneurial firm. *J. Bus. Ventur.* **2004**, *19*, 621–635. [CrossRef]

22. Roxas, B. Effects of entrepreneurial knowledge on entrepreneurial intentions: A longitudinal study of selected South-east Asian business students. *J. Educ. Work.* **2014**, *27*, 432–453. [CrossRef]
23. Liberona, D.; Kumaresan, A.; Valenzuela, L.; Rojas, C.; Ferro, R. Entrepreneurship knowledge insights in emerging markets using a SECI model approach. In *Knowledge Management in Organizations*; Uden, L., Ting, I.-H., Corchado, J.M., Eds.; Springer: Berlin/Heidelberg, Germany, 2019; pp. 36–47. [CrossRef]
24. Bird, B. Toward a Theory of Entrepreneurial Competency. In *Seminal Ideas for the Next Twenty-Five Years of Advances in Entrepreneurship, Firm Emergence and Growth*; Katz, J.A., Corbet, A.C., Eds.; Emerald Publishing Limited: Bingley, UK, 2019; Volume 21, pp. 115–131. [CrossRef]
25. Lans, T.; Blok, V.; Wesselink, R. Learning apart and together: Towards an integrated competence framework for sustainable entrepreneurship in higher education. *J. Clean. Prod.* **2014**, *62*, 37–47. [CrossRef]
26. Do Nguyen, Q.; Nguyen, H.T. Entrepreneurship education and entrepreneurial intention: The mediating role of entrepreneurial capacity. *Int. J. Manag. Educ.* **2023**, *21*, 100730. [CrossRef]
27. Zeng, X.Z.; Li, Y.X.; Wang, B. Construction and innovative practice of "double innovation" curriculum system in higher vocational colleges-based on the analysis of constructivism. *Vocat. Tech. Educ. Forum* **2021**, *6*, 71–77.
28. Li, J.L. Enlightenment of the ET&A concept of entrepreneurship education and the construction of curriculum ecosystem in Babson Business School to China. *High. Educ. Explor.* **2019**, *2019*, 54–60. [CrossRef]
29. Bird, B. Implementing entrepreneurial ideas: The case for intention. *Acad. Manag. Rev.* **1988**, *13*, 442–453. [CrossRef]
30. Tomy, S.; Pardede, E. An entrepreneurial intention model focussing on higher education. *Int. J. Entrep. Behav. Res.* **2020**, *26*, 1423–1447. [CrossRef]
31. Hahn, D.; Minola, T.; Van Gils, A.; Huybrechts, J. Entrepreneurial education and learning at universities: Exploring multilevel contingencies. *Entrep. Reg. Dev.* **2017**, *29*, 945–974. [CrossRef]
32. Jang, Y. Modeling student entrepreneurship: A longitudinal study. *J. Entrep. Educ.* **2013**, *16*, 93.
33. Mei, H.; Lee, C.H.; Xiang, Y. Entrepreneurship education and Students' entrepreneurial intention in higher education. *Educ. Sci.* **2020**, *10*, 257. [CrossRef]
34. Liang, C.; Liang, C.T.; Ip, C.Y. Tenacity in design entrepreneurship: How to stimulate entrepreneurial intention. *Int. J. Technol. Des. Educ.* **2020**, *32*, 717–734. [CrossRef]
35. Hou, F.; Su, Y.; Lu, M.; Qi, M. Model of the entrepreneurial intention of university students in the pearl river delta of china. *Front. Psychol.* **2019**, *10*, 916. [CrossRef] [PubMed]
36. Naia, A.; Baptista, R.; Januário, C.; Trigo, V. A Systematization of the literature on entrepreneurship education: Challenges and emerging solutions in the entrepreneurial classroom. *Ind. High. Educ.* **2014**, *28*, 79–96. [CrossRef]
37. Seidman, I. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*; Teachers College Press: New York, NY, USA, 2019.
38. Gill, S.L. Qualitative sampling methods. *J. Hum. Lact.* **2020**, *36*, 579–581. [CrossRef] [PubMed]
39. Morse, J.M. Determining sample size. *Qual. Health Res.* **2000**, *10*, 3–5. [CrossRef]
40. Liu, Y.; Wang, J. Research on the integration of professional and general education in colleges and universities under the background of innovation-entrepreneurship education. *Theory Pract. Innov. Entrep.* **2021**, *4*, 52–55.
41. Glaser, B.; Strauss, A. Grounded theory: The discovery of grounded theory. *Sociol. J. Br. Sociol. Assoc.* **1967**, *12*, 27–49.
42. Kaman, Z.; Othman, Z. Validity, reliability and triangulation in case study method: An experience. In Proceedings of the Qualitative Research Conference, Vienna, Austria, 13–15 April 2016; Ayoup, H., Hsbollah, H.M., Ahmad, H.N., Saad, N., Abdullah, Z., Eds.; Universiti Utara Malaysia: Bukit Kayu Hitam, Malaysia, 2016; Volume 2016, pp. 24–26.
43. Wu, W.Y.; Chang, M.L.; Chen, C.W. Promoting innovation through the accumulation of intellectual capital, social capital, and entrepreneurial orientation. *R&D Manag.* **2008**, *38*, 265–277. [CrossRef]
44. Chen, W.; Weng, C.S.; Hsu, H. A study of the entrepreneurship of Taiwanese youth by the Chinese Entrepreneur Aptitude Scale. *J. Technol. Manag. China* **2010**, *5*, 26–39. [CrossRef]
45. Sun, X. Exploration and practice of "Internet+ Maker education" university innovative entrepreneurship education model from the perspective of positive psychology. *Front. Psychol.* **2020**, *11*, 891. [CrossRef] [PubMed]
46. Cascavilla, I.; Hahn, D.; Minola, T. How You Teach Matters! An Exploratory Study on the Relationship between Teaching Models and Learning Outcomes in Entrepreneurship Education. *Adm. Sci.* **2022**, *12*, 12. [CrossRef]
47. Motta, V.F.; Galina SV, R. Experiential learning in entrepreneurship education: A systematic literature review. *Teach. Teach. Educ.* **2023**, *121*, 103919. [CrossRef]
48. Othman, N.H.; Othman, N.; Juhdi, N.H. Does Entrepreneurship Education Affect Pre-start-up Behavior in Malaysia? A Multi-Group Analysis Approach. *Front. Psychol.* **2022**, *13*, 376. [CrossRef]
49. Liao, Y.K.; Nguyen VH, A.; Yeong, H.Y.; Hong Vu, V.T.; Trinh, H.T. Unraveling the effects of entrepreneurial passion and entrepreneurship education on entrepreneurial intention: The moderating role of demographic characteristics. *Glob. Bus. Organ. Excell.* **2022**, *in press*. [CrossRef]

50. Van Horne, C.; Dutot, V.; Castellano, S.; Sosa, M.; Ahmad, L. Integrating entrepreneurship into the design classroom: Case studies from the developing world. *J. Knowl. Econ.* **2020**, *12*, 56–72. [CrossRef]
51. He, T.; Lin, S.; Chen, X. Research on the training mode of innovative and entrepreneurial thinking of design talents—A case study of digital media arts. In *Education and Awareness of Sustainability: Proceedings of the 3rd Eurasian Conference on Educational Innovation, Ha Long Bay, Vietnam, 5–7 February 2020*; Tijus, C., Meen, T.-H., Chang, C.-Y., Eds.; World Scientific: Singapore, 2020; pp. 677–680. [CrossRef]