RESEARCH ON THE PRACTICE EDUCATION PATTERN OF INNOVATIVE ENTREPRENEURSHIP IN COLLEGES IN THE INTERNET PLUS ERA

LI ZHUANG*AND LIN ZHU†

Abstract. Under the background of Internet plus, the innovative entrepreneurship practice education pattern (IEPEP) in colleges aims to enhance students' basic literacy and independent innovation ability of IE. The single form of PEP in IEPEP only focuses on theoretical education, lacking practical exercises. The teachers of IE courses are mainly part-time, lacking professional teaching team and sufficient teachers. Written evaluation is used as the IEPEP evaluation standard. This lack of practical exercises leads to an imperfect evaluation model. For this reason, the overall idea in this paper is constituted from raising questions to theoretical research to model construction and then to empirical analysis. By constructing three patterns to optimize the talent training mechanism of IE. The first is to construct IEPE curriculum pattern through literature, investigation and data analysis. The second is to construct IEPE activity pattern through expert guidance, in-depth exchanges, and case studies. The third is to construct IEPE evaluation pattern through questionnaire surveys, online assessments, counseling talks, and data analysis. Based on the systematic sampling method, 398 valid questionnaires are analyzed for data based on the questionnaires filled by the categorized 560 students and with the help of SPSS 22.0 and AMOS 26.0 software. A conclusion that IEPEP has a significant positive impact on entrepreneurial intention and ability is confirmed through empirical analysis. This effectively guarantees the quality of IE talents, and provides IE talents for society and enterprises.

Key words: Internet plus, innovative entrepreneurship (IE), practice, education system

1. Introduction. The Outline of the Medium and Long-Term Education Reform and Development Plan of the People's Republic of China (PRC) (2010-2020) clearly proposes to innovate the talent training pattern [1, 2, 3, 4]. The 20th National People's Congress of the Communist Party of China also makes important arrangements for the cultivation of innovative entrepreneurial (IE) talents, and puts forward clear and specific requirements for strengthening IE education. As a university, the cultivation of college students' innovative ability, entrepreneurial ability, and practical ability needs to be paid attention to. As China's higher education enters the stage of mass education, college students face unprecedented challenges in entrepreneurship and employment. How to train students to be capable of IE would become an urgent problem for colleges [5, 6, 7, 8].

Paper [4] examines the effectiveness of using a mobile learning platform for the improvement of students' entrepreneurial skills. The platform used allows users to post assignments, exchange ideas, generate photo and video content, etc. The average entrepreneurial competence assessment results of the experiment group are slightly higher than those of the control group, which are 4.5 points against 4.0 points, respectively. The results of the study are generalizable to educators and administrators of educational institutions or those involved in creating and conducting entrepreneurship training programs. On the basis of summarizing the innovation of practice and entrepreneurship integration system and pattern in colleges and universities, and combining the experience of IE education in Beijing Institute of Fashion, the proposal of constructing the practice and entrepreneurship integration system construction is put forward [5]. The practice and innovation fusion talent cultivation system is constructed from four aspects: cultivation goal, curriculum system, teaching system and guarantee mechanism. Paper [6] proposes a ranking refinement method based on optimal weighting model and determines the optimal weights using back propagation neural network. Results indicate that the number of employed people is always lower than the number of graduates, suggesting that it is difficult to find employment. In this case, many college graduates choose to start their own business, but the success rate of entrepreneurship is very low (only about 3%). This shows that the IE ability of university graduates is not high. Therefore, there

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*School of Electronics and Computer Engineering, Southeast University Chengxian College, Nanjing 210088, China (`Corresponding Author: Li_Zhuang2023@outlook.com`)

†School of Electronics and Computer Engineering, Southeast University Chengxian College, Nanjing 210088, China

is a need to improve this ability and conduct self-assessment. An often-overlooked career pathway is medical device innovation, which can be mutually beneficial to both physicians and the industry. To this end, paper [8] explores a novel career path for early career physicians in the field of medical device IE, which provides a promising reference for expanding the field of IE.

There are three issues that need to be focused on.

1. For single form of IE practice education pattern (IEPEP) [9, 10]: IEPEP focuses on theoretical teaching and only offers courses related to IE. For example, courses such as career planning and employment guidance for college students and entrepreneurship education are offered. Since there is no practical teaching system corresponding to these courses, students are unable to apply the theory to practice in the learning process. It is found that theoretical education accounts for 80-90% of students' IE education. On the one hand, this method does not meet market demand. On the other hand, by combining the application-oriented undergraduate talent training program and integrating IEP into the classroom teaching process, this makes IEPE not diversified enough.

2. For insufficient teaching staff for IE talent cultivation [11, 12, 13, 14]: The education for IE talents in colleges only comes from school teachers (they make up about 90-96% of the faculty of the IE teacher team), but no experts are hired from society and enterprises to educate them. A professional team of IE teachers is also missing. This makes the teaching staff not sufficient enough, and has no experience in IE. Once educating students, teachers only have theoretical knowledge and no practical operation, which is not exemplary.

3. For imperfection of evaluation pattern for IE education [15, 16, 17, 18]: The evaluation pattern enables to evaluate the results of IE education. The existing evaluation patterns of IE education, such as course examinations and essay writing, are not scientific enough. About 50% of colleges and universities use course examinations, about 30% use essay writing, and the remaining 20% use a combination of the two. There is no reasonable evaluation index and system for students' IE ability so it is impossible to evaluate students accurately.

In general, in view of the obvious problems of single form, insufficient teachers, and imperfect evaluation model in IEPE pattern (IEPEP), this paper makes a qualitative and quantitative assessment of the basic elements contained in this pattern by analyzing and defining the relevant core concepts, based on the background of the Internet plus era. After IEPEP framework in colleges is initially constructed, the validity of the proposed pattern is demonstrated in depth by using the methods of design scales, questionnaire surveys, and data analysis. The form and composition of the proposed pattern are not found in existing work. Finally, a comprehensive analysis is made on demonstration results, and the opportunities and challenges in the future work are stated.

2. Significance of IEPEP in colleges in the Internet plus era.

2.1. A new pattern construction by taking the times as the background and changing education concepts. A new IEPEP aims to achieve high-quality employment for graduates and promote higher education to serve economic and social development. With IEPE as the theoretical guidance, and with the background of Internet plus, it finally builds an IEPE system [18, 19, 20, 21]. Through the combination of Internet plus, IEPE system is further constructed, and the construction of IE training base is further improved. Meanwhile, IE training program for college students is implemented, and the training plan for IE talents is formulated. In addition, IE training content is integrated into professional classrooms. A new IEPEP is finally constructed.

2.2. A scientific pattern construction by using practice as a guide and innovating the curriculum system. PEP significance is to apply theory to practice. For IEPEP, it mainly includes awareness training, ability improvement, environmental cognition and practice simulation. Aiming at these parts, IEPE system in colleges is constructed through methods such as literature, investigation and data analysis. Among them, the links of innovative thinking training, entrepreneurial ability training and entrepreneurial practice need to be strengthened, and the elective courses of IE training need to be increased. This aims to enlighten students' innovative consciousness and entrepreneurial spirit, analyze and cultivate students' critical thinking, insight, decision-making ability, organizational coordination ability and leadership and other innovative and entrepreneurial qualities. By guiding students to understand the current enterprise and industry environment,
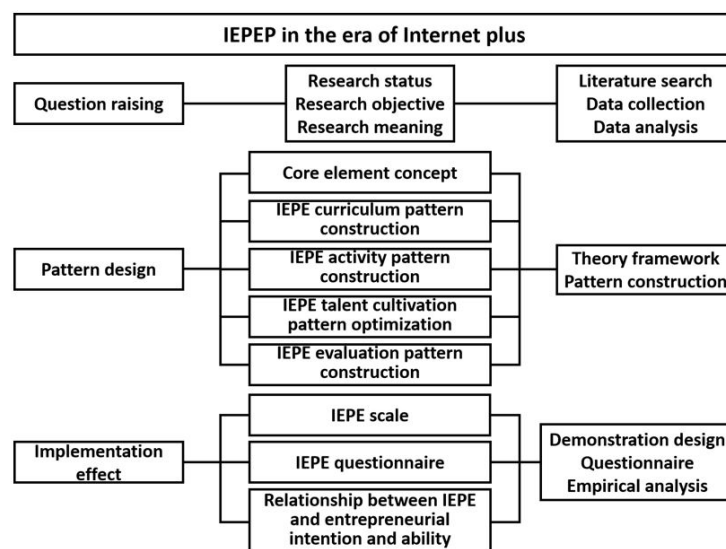
Fig. 3.1: A theoretical framework for IEPEP.

and encouraging students to experience all aspects of entrepreneurial preparation, their own IE capabilities are improved.

2.3. A education platform construction by taking cooperation as the basis and improving school-enterprise cooperation. The main bodies of the school-enterprise collaborative education platform are universities and enterprises. Through the combination of university leadership, enterprise participation and student training, the platform construction is perfected. IE platform is needed for social development, so it needs to be combined with the needs of social enterprises to highlight students' practical ability. The Outline of the Medium and Long-Term Education Reform and Development Plan of the People's Republic of China (PRC) (2010-2020) points out that it is necessary to implement the talent training mode of combining work and learning, school-enterprise cooperation, and internship. Through school-enterprise cooperation projects, the construction of entrepreneurship training projects is promoted. The information exchange between the school and the enterprise would hopefully realize the sharing of entrepreneurial information and create a good environment for IE. This helps the smooth project implementation, improve the quality of college students' personnel training, enhance the competitiveness of college students, and thus contribute to better serving the society.

2.3.1. A evaluation system construction by taking effects as guides and formulating evaluation indicators. The purpose of constructing a IEPEP in colleges based on the Internet plus era is to improve students' IE abilities, improve the quality of those with IE abilities, and provide innovative talents for social development. The evaluation system can be used to achieve timely feedback on educational effects, providing a scientific basis for further improving IE education pattern and cultivating IE talents.

3. Construction of IEPEP in colleges in the Internet plus era.

3.1. Theoretical framework. Figure 3.1 presents the overall theoretical framework of this paper, involving pattern design, theory framework, pattern construction, implementation effect, and so on.

3.2. Pattern construction.

3.2.1. Curriculum pattern construction in IE Education. Whether the curriculum pattern of IE education is constructed reasonably affects the implementation and basic guarantee effect of IE education [22, 23]. Through expert guidance, in-depth communication, case studies and other methods, we explore how
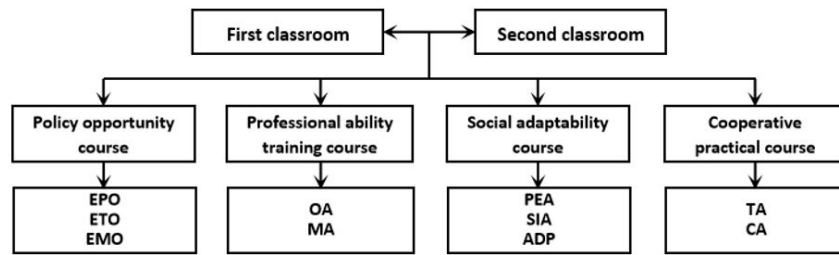
Fig. 3.2: A framework for IE curriculum pattern.

to create a IEPE system in colleges. The curriculum pattern of IE education is the basis for the realization of IE education. A large number of literatures are reviewed and the first classroom and the second classroom are combined to build this pattern. The pattern is validated by analyzing data from a questionnaire survey conducted with students. At the same time, the pattern is improved by modifying the existing problems. According to the talent training plan, the course system is divided into general education course, professional course, and entrepreneurship course platforms. On the basis of completing general courses and professional courses, the curriculum pattern of IE education is constructed (Figure 3.2). The teaching session is designed to connect the first and the second classrooms. The design concept is in line with the law of entrepreneurship education, so that students have sufficient time and space to absorb and digest the knowledge they have learned, and apply what they have learned through practical activities. A complete course model is divided into basic experiment, creative experiment, sociology practice, and cooperative practice teachings. On the basis of optimizing the training pattern of IE talents, colleges should use Internet plus thinking to establish a multi-integrated and dynamically optimized curriculum system. This not only reflects the professional characteristics, but also reflects the integration of professional and IE education. Meanwhile, this not only has a higher professional vision, but also improves IE quality.

In Figure 3.2, EPO, ETO, EMO, OA, MA, PEA, SIA, ADP, TA, and CA respectively represent entrepreneurial policy opportunity, entrepreneurial technology opportunity, entrepreneurial market opportunity, operation ability, management ability, psychological endurance ability, social interaction ability, ability to deal with people, teamwork ability and communication ability.

The framework of IE curriculum system is mainly divided into two parts. The first part is the integration of the first and the second classrooms. The second part is about the four types of courses involved. They are policy opportunity, professional ability training, social adaptability and cooperative practical courses. The policy opportunity course mainly helps students analyze the current policy, technology, and market opportunities for entrepreneurship, and provides relevant guidance so that students can understand the advantages brought about by entrepreneurship. The professional ability training course mainly helps students to cultivate the operation and management abilities in the entrepreneurial process, so that students can have the operation and management ability needed in the entrepreneurial process. The social adaptability course mainly cultivates students' psychological endurance, social communication and ability to deal with others. Cooperative practical courses are mainly to cultivate students' teamwork and communication abilities. Through the teaching guidance of social adaptability and cooperative practical courses, the basic emotional intelligence that students need to possess in the process of starting a business can be improved.

The first classroom is to equip students with the basic IE knowledge and ability, while the second classroom is to practice these abilities for students. Based on various subject competitions, the first and the second classrooms are integrated to achieve the implementation of students' IE education. For example, the Internet Plus Innovation and Entrepreneurship Competition integrates IE classroom system into it. By participating in such competitions, students acquire the practical operation ability, so as to flexibly use the basic IE knowledge and ability. This provides practical experience for future IE.
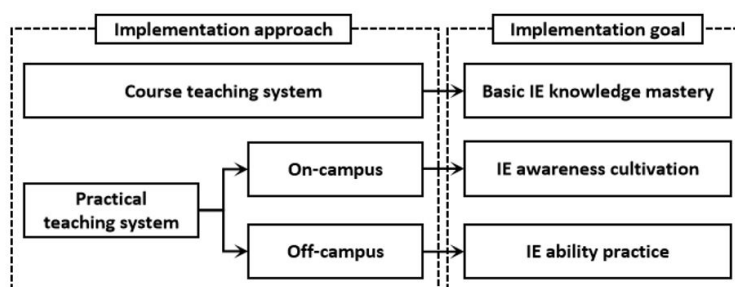
Fig. 3.3: A framework for IE education activity pattern

3.2.2. Activity pattern construction in IE Education. IE education activity pattern is an important platform for applying theory to practice. Using methods such as in-depth communication among school, enterprises and students, the objectives of IE education activity pattern are gradually realized through curriculum and practice. This pattern is validated using case study research. Eventually, the feasibility of the pattern is evaluated through case studies combined with expert guidance to develop the pattern.

From the perspective of curriculum setting, it is necessary to strengthen the cultivation of students' innovative spirit and entrepreneurial awareness, so that students have IE knowledge and ability. The curriculum system is mainly designed in accordance with the training direction of insight, thinking, understanding and innovation and entrepreneurship, and is combined with the actual situation of the enterprise. It involves the basic IE knowledge, such as Design and Management of Product Supply Chain. Such courses have been better used in IE process.

From the perspective of practical teaching, there are two parts that need to be paid attention to. One is the on-campus practice platform, whose main purpose is to cultivate students' IE awareness. The on-campus practice platform is to build a platform for students to practice IE, such as office hardware conditions. Various national policies are adopted to provide an environment for IE, or cooperate with enterprises to build a platform for students to innovate and start businesses. In addition, relevant subject competitions, such as college students' innovation and entrepreneurship competitions, college students' practical innovation training programs, etc., can be used to strengthen students' IE capabilities. In this case, a variety of ways is used to make the platform system of IE on campus an incubator for students' IE education activities. The second is on-campus and off-campus practice projects, which are mainly for the IE transformation and breakthrough. The off-campus practice project realizes school-enterprise cooperation by introducing enterprise projects. Through practical projects, students' IE ability can be further trained, and resources can be provided to enable students to participate in the entrepreneurial process independently, so as to realize practical IE teaching outside the school. The realization of IE education activity pattern is mainly composed of curriculum and practice. The realization goal is composed of the mastery of basic IE knowledge, the cultivation of initial IE awareness, and the practice of IE ability. After gradual improvement, the cultivation of IE talents is finally realized. Figure 3.3 illustrates an activity pattern in IE Education.

Through the development of various IE project activities, the first and second classrooms are integrated. Based on a variety of forms such as IE competitions, exchange meetings, and lectures, IE education courses are implemented to activate the campus IE atmosphere. Based on the school's IE competition projects, students are actively supported and encouraged to apply for national, provincial and school-level IE plan projects, and professional instructors are assigned to give them special guidance to form a diversified IE practice activity. At the same time, it is necessary to fully develop, integrate and make good use of internal and external resources, attract social resources to invest in IE talent training and social practice, and actively promote collaborative education and collaborative innovation inside and outside the school. According to the concept of Internet plus, a batch of convenient and open crowd-creation spaces combining IE, online and offline, incubation and investment are built through marketization.
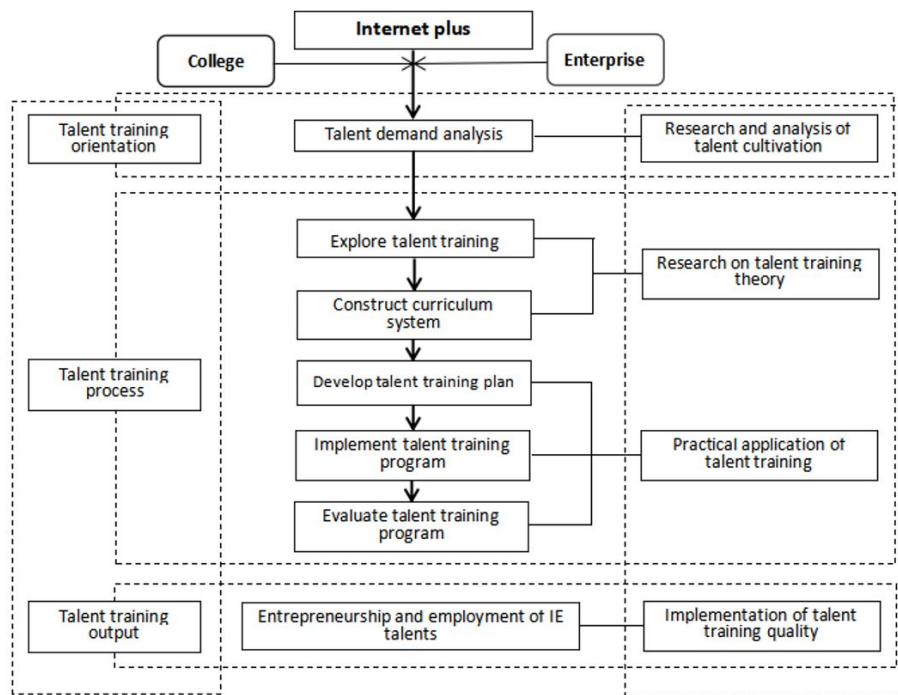
Fig. 3.4: A flowchart of talent cultivation under the Internet plus background

3.2.3. Training pattern optimization of IE talents. In view of the existing problems in the cultivation of IE talents, colleges need to use scientific methods to optimize the training pattern of IE talents [24, 25, 5] (Cai 2021; Yang & Luo 2020; Li & Li 2023). Under this pattern, a staged and progressive training method is adopted, and the roles of universities, students and enterprises are fully utilized to improve the talent training mechanism and ensure the quality of talent training. The optimized pattern is shown in Figure 3.4.

IE talent cultivation is divided into three parts: orientation, process and output. In terms of talent training orientation, through enterprise research and visits, we can understand the needs of society and enterprises for IE talents. Talent training is analyzed according to the analysis of talent needs, and the direction of IE talent training is provided. In terms of the talent training process, a scientific talent training plan is formulated to explore the talent training pattern, according to the talent training orientation generated by the talent demand analysis.

While social needs and enterprise needs are integrated into IE talent training pattern, IE education is integrated into the professional education teaching plan and curriculum system to build an IE talent training curriculum system. Enterprise experts are invited to guide and analyze the curriculum system, and how to combine the cultivation of students' IE ability with professional education is given priority consideration in order to formulate IE talent training programs.

According to the established IE talent training curriculum system, IE talent training program is formulated. In this process, different grades need to be considered to guide students to develop in different directions. Among them, first- and second-year students are mainly guided by ideas to let students understand what IE education is. Certain basic knowledge is mastered, and preliminary ideology is formed. This is also a kind of guidance for students' IE thinking in the future, so as to avoid the ideological deviation after failure due to insufficient IE ability in the later stage. Students in the second and third grades are mainly used in practical operations. Through the development of IE activities in the second classroom, such as IE lectures, IE competitions, etc., to cultivate students' practical experience in IE, so that students can understand how to use the professional knowledge in IE process. The third and fourth grade students are more focused on the guidance of the project.

By joining IE projects of enterprises, IE ability can be improved, students' interest in entrepreneurship can be stimulated, and finally college students can be encouraged to start their own businesses. Through the guidance of different grades, the cultivation of IE talents is realized.

According to the training plan for IE talents formulated, it will be implemented and applied among students. During this process, a guarantee mechanism needs to be formulated to ensure the effectiveness of the implementation process and the quality of IE talent training. The assessment methods for the cultivation of IE talents need to be changed. It is suggested that heuristic, discussion and participatory teaching methods be adopted to strengthen students' independent learning, cultivate students' critical and creative thinking, and stimulate innovation and entrepreneurship inspiration. At the same time, it is necessary to increase the proportion of experiments, practical training, and practical teaching, and pay attention to cultivating students' ability to solve practical problems. In addition, through the establishment of an online education platform, online education for minor majors, second majors and other course systems has been actively developed. Through the recognition of credits, teaching workload and teaching performance incentives, and the evaluation mechanism of undergraduate teaching work of departments, teachers and students are encouraged to actively participate in the teaching and learning of online courses.

After implementing the talent training plan, the feedback from all parties is summarized to understand the rationality and scientific of the development of IE talent training. It mainly evaluates and gives feedback through subject competition results, classroom teaching feedback, IE platform construction, and IE talent training assessment mechanism. The suitability of professional training programs, curriculum system settings and training objectives, the integration of IE education concepts in the training system, the cultivation of practical ability, the construction of teachers and teaching teams, the reform of teaching models and the improvement of learning effects, the quality of student training and IE needs to be evaluated with emphasis. In this way, the insufficient part of IE talent training program can be well adjusted.

3.2.4. Evaluation pattern construction of IE education. The evaluation pattern of IE education in the Internet plus era is mainly divided into the guarantee, construction evaluation and achievement evaluation patterns of IE education. A questionnaire is used to find out what kind of effect students expect IE education to achieve. Then, the online evaluation is used to understand the students' innovative consciousness and entrepreneurial ability after IE education. Based on the evaluation results, a sample of students are interviewed to refine and validate the results. Finally, all the data are analyzed and summarized to achieve scientific evaluation of the implementation effects of IE education.

IE education guarantee pattern includes the management institution, management system and funding.

1. Management institution: IE education is not only between schools and students, but also all aspects of schools, society, enterprises, and students. Therefore, it is necessary to establish an IE education management agency to coordinate various issues in the process of IE education and to manage IE education in an orderly manner. Schools should set up an IE education steering committee to guide the curriculum system, activity system, and talent training system in the process of IE education, and formulate relevant implementation policies and evaluation standards to ensure the cultivation of IE talents. As a link between society, enterprises and students, the school provides a communication platform for IE to ensure the sustainable development of IE education.

2. Management system: According to the spirit of the document issued by the Ministry of Education of PRC on Vigorously Promoting IE Education in Colleges and College Students' Independent Entrepreneurship Work (JGB [2010] No. 3) and the notice issued by the General Office of the Ministry of Education of PRC on the Issuance of Basic Requirements for Entrepreneurship Education Teaching in Ordinary Undergraduate Schools (for trial implementation) (JGB [2012] No. 4), the guiding ideology, objectives and implementation principles of IE education needs to be clarify, and the requirements and related countermeasures for IE education are put forward [27, 28]. Universities need to formulate IE education training programs, establish IE education curriculum systems, and formulate IE education quality evaluation systems based on their actual conditions. The quality of IE education system is guaranteed through the formulation of relevant management and the implementation of policies and regulations.

3. Fund setting: The school needs to set up special funds, such as college students' IE training programs,

subject competitions and awards, Internet plus college students' IE competitions, and entrepreneurship simulation training funds. According to the level and type of subject competition, credits will be awarded to students, and bonuses will be awarded to instructors and participating students. Through the investment of funds, the subject competitions, invention patents and scientific inventions of college students are effectively guaranteed.

The evaluation pattern of IE education construction includes soft and hard environment, teaching staff, curriculum system and scientific research construction evaluation [29, 30].

Evaluation of soft and hard environment. The evaluation of hardware environment is mainly aimed at the practice platform and related facilities (such as IE base for college students) required in the process of IE education practice. Colleges can provide students with funds for IE, and can also cooperate with enterprises to build industry-university-research cooperation bases as the environment for IE. The evaluation of soft environment is mainly aimed at the construction of campus IE, such as the launch of IE related forums, the holding of IE lectures, the formulation of various IE incentive policies, the publicity effect on IE campus, and the establishment of IE groups.

Evaluation of the teaching staff. It is done from the aspects of teachers' IE ability, IE teaching links, and IE teaching effects.

Curriculum system evaluation. The construction of IE talent training curriculum system needs to add IE courses, entrepreneurship education lectures, etc., and take relevant courses as compulsory courses and include them in the corresponding teaching plan. Meanwhile, IE education is integrated into the talent training program to realize the cultivation of IE talents. Based on the curriculum system of IE education, the relevant courses offered whether meet the objectives of cultivating IE talents, whether meet the talent needs of enterprises, and whether comprehensively improve students' IE capabilities are evaluated.

Evaluation of scientific research construction. It includes the evaluation of teachers' and students' scientific research construction. While it is necessary to evaluate the scientific research ability and academic level of teachers, it is also necessary to evaluate the ability of students to participate in scientific research projects. For example, in the practical innovation training project for college students every year, many students use the project to develop results and publish related papers. There are also students who have achieved core theses and patents. With the improvement of the scientific research ability of students and teachers, a number of scientific research achievements have been promoted, and the evaluation results of IE education are generally good.

The evaluation pattern of IE education achievements includes IE achievements and enterprise evaluation.

1. Evaluation of IE achievements: It mainly includes students' learning attitudes, assessment results of IE courses, participation in various IE activities, IE competition results, innovative works, participation in IE projects, etc.

2. Enterprise evaluation: According to the questionnaire filled out by the enterprise, the enterprise can track and manage the graduates and make a comprehensive evaluation while the feedback from the enterprise to the students is known. When the questionnaire is designed, it is necessary to reflect the application of students' IE abilities in enterprises, the degree to which units attach importance to students' IE abilities, and other evaluation information. This helps to understand the quality of IE talent training.

4. IEPEP implementation effects. Based on IEPE theory, this section dissects the connotation and divides the dimensions of key variables. By combining the actual situation of universities, rigorous logical reasoning is carried out, and the research model is further constructed with the proposed research hypothesis, based on the existing researches.

4.1. Argument design. IE education refers to a new type of education that takes into account both innovation and entrepreneurship education. By referring to the maturity scale and combining with the reality of this research, this article draws on the scale compiled by Frank & Luthje (2004) and Wang (2016) to measure IEPEP effects from the perspective of theoretical and practical education [31, 32]. Theoretical IE education includes classroom courses, lectures and competitions, while practical education includes entrepreneurial practice, communication, training or simulation. See Table 4.1 for the specific scale.

Table 4.1: An IEPE scale.

No.	Content
1	Classrooms and courses in IE education
2	Lectures and activities in IE education
3	Competition in IE education
4	Entrepreneurial practice
5	Entrepreneurial communication
6	Entrepreneurship training
7	Personal experience
8	Entrepreneurship intention
9	Entrepreneurship ability

4.2. Questionnaire. The questionnaire design needs to go through the following five steps. The first step is to preliminarily determine the problems to be solved in this questionnaire by reading relevant literature through databases such as China National Knowledge Infrastructure. The second step is to discuss the selection of variables and determine the feasible research plan. The third step is to process the survey questionnaire and process the sample data to ensure the reliability and validity of the scale. The fourth step is to interview the students and experts. After adjusting some of the questions, the final questionnaire is formed. The fifth step is to issue questionnaires on communication platforms such as WeChat and Tencent through Questionnaire Star.

The questionnaire in this paper includes research background introduction, personal information and main topics.

Background introduction includes research purpose, use, privacy protection commitment, author's acknowledgment and answering time. Its purpose is to emphasize the importance and privacy of this questionnaire, so that the students surveyed can answer the questionnaire more seriously and with confidence.

The personal information is about the demographic characteristics of the students surveyed. It includes gender, education, grade, major, academic performance ranking, student cadre experience and part-time jobs during school.

The main items of the questionnaire mainly involve 8 items of IEPE, 3 items of entrepreneurship intention, and 9 items of entrepreneurship ability.

This study adopts a systematic sampling method, and the surveyed subjects are undergraduate students from the school, including all grades and majors. These students are divided into different samples based on grade and major (for example, 20 freshmen majoring in computer science are taken as a sample). The 560 survey questionnaires distributed are divided into 28 groups of samples. A total of 503 questionnaires are recovered, of which 398 are valid, reaching an effective rate of 79.13%. Generally speaking, the sample size of this survey is relatively large and widely distributed, which is of reference value.

4.3. Empirical analysis. According to the results of the questionnaire, the collected sample data are processed and analyzed based on the principles of statistics, and with the help of SPSS 22.0 and AMOS 26.0 analysis software. First, the validity analysis is carried out to test whether the questionnaire design is reliable and effective. In the questionnaire survey, 398 questionnaires with effective answers are screened out according to the students' answers. Then, the difference analysis is carried out to examine whether there are differences among the variables. Based on the basic situation of the students in the questionnaire survey, the analysis is conducted. For example, in terms of gender, boys and girls account for 68% and 32% respectively. The answers to the questions of innovation and entrepreneurship in the questionnaire are similar, so there is no bias in the analysis of the questionnaire. Finally, the statistical results of the data are used to verify the research hypothesis. According to the results of student feedback for each question, the analysis and statistics are implemented to form the final data and graphs.

The results of the questionnaire survey show that IEPE can directly and significantly predict college students' entrepreneurial intentions, and the significance shows an increasing trend. There is a certain relationship between the strong entrepreneurial intention of students and the practice education of IE they receive, that

Table 4.2: Research Conclusions

No.	Research Content	Conclusion
1	IEPEP has a significant positive impact on entrepreneurial intention.	Support
2	IEPEP has a significant positive impact on entrepreneurial ability.	Support

is, when students receive more practical education on IE, their entrepreneurial intention will be stronger. The electives of IE classroom courses, and the participation of relevant lectures and competitions can enrich students' entrepreneurial knowledge and accumulate entrepreneurial experience. However, participation in entrepreneurial practice, exchanges and training will further strengthen students' entrepreneurial awareness and interest. This enables the theoretical IE study to be introduced into practice. The questionnaire survey also shows that IEPE can directly and significantly predict the entrepreneurial ability of college students, and the level of significance shows an increasing and steep trend. The entrepreneurial intention shown by students who received more practical education in IE is much higher than that of students with less education.

The above analysis shows that IEPE plays a significant moderating role in the relationship between entrepreneurial ability and intention. That is to say, when students receive more practical education on IE, their entrepreneurial ability is gradually improved, which makes it easier for students to generate entrepreneurial intentions.

4.4. Analysis conclusion. There is a significant relationship between IE theory education and college students' entrepreneurial intention, so it is necessary and significant to impart IE theory knowledge and experience. Meanwhile, the entrepreneurial practice education also plays a positive role in entrepreneurial intention to play a certain stimulating role. The empirical research illustrates that the participation of entrepreneurial competitions and other activities, the application of entrepreneurial practice platform and entrepreneurial theory can improve individual entrepreneurial skills, and to some extent stimulate students' entrepreneurial will. When receiving IEPE, college students can understand entrepreneurship at a deeper level by studying professional courses, signing up for relevant lectures and competitions, communicating with entrepreneurship patterns, visiting entrepreneurship bases, and conducting entrepreneurship simulation, which makes entrepreneurship intention enhanced.

Through IEPE, the entrepreneurial ability can be improved to enhance the individual's willingness to start a business. By making up for the gaps in the knowledge system, the entrepreneurial skills required for individual entrepreneurship are trained. This fills the vacancy of their own entrepreneurial practical experience, and thus has a complete entrepreneurial system. After combining IEPE with professional education, it helps educates improve their entrepreneurial ability and realize entrepreneurial behavior. This education also helps college students understand entrepreneurial laws and regulations and supporting policies more effectively and systematically, cultivate basic entrepreneurial skills such as planning, marketing, decision-making, and risk assessment that students need in practice, and encourage them to be willing, daring, and courageous to participate entrepreneurial activity refer Table 4.2.

Meanwhile, this study finds that the participation of entrepreneurial process and business management has the greatest impact on college students' entrepreneurial intentions, followed by entrepreneurial courses and lectures. Entrepreneurial practice helps to directly enhance college students' feelings, experiences and skills towards entrepreneurship, which significantly improves students' entrepreneurial intentions. However, entrepreneurship courses and lectures more indirectly teach entrepreneurship knowledge and skills, and can also improve students' entrepreneurial intentions. In contrast, some entrepreneurial competitions are only a formality, with heavy commercial publicity and utilitarianism, so the impact on college students is not obvious. This is a question that must be paid attention to when choosing a university and an entrepreneurial education method.

When carrying out the argument design, the entrepreneurial intention is mainly taken as the survey results, and no further research is done on entrepreneurial behavior. In the process of transforming entrepreneurial intention into final entrepreneurial behavior, there are many uncertain factors. As for how much can be converted into entrepreneurial behavior and how much entrepreneurial rate is, it needs further exploration. In

future research, it is necessary to conduct in-depth investigation and analysis on the entrepreneurial intention and entrepreneurial behavior of college students after receiving IE education. A more specific example is given here. Student San Zhang is a freshman computer science student. During his career planning education at school, he put forward the idea of starting his own business. However, he did not take any action at a later stage. If he had followed the proposed pattern, he would have had a clear entrepreneurial idea in the second half of his freshman year. In his second year, he started to contact his classmates around him and organized himself effectively according to his own conditions. By his third year, he had a preliminary business plan and was working effectively to implement it. By the time he reached his senior year, he was able to carry out simple entrepreneurial activities with a team of up to 10 people.

5. Discussion. On the theoretical level, this research helps to further improve the research on IEPE. IEPE course in colleges is taken as the research object of this research, instead of just presenting this course as a fragmented and fragmented part of the research on IE education. It mainly analyzes the relevant constituent elements of IEPE courses, and continuously expands the relevant theoretical research results. Based on the corresponding theoretical basis and elements, the optimization and reform of IE education curriculum system in colleges is promoted, thereby further enriching and deepening the research on IEPEP construction [33, 34]. This provides a valuable reference for future work.

On the practical level, this research is conducive to improving the quality of IEPE courses in colleges. With the goal of transforming college students' IE thinking consciousness, enriching professional IE knowledge, and enhancing IE ability, it systematically and step by step connects the practical education curriculum system with IE attributes in a deep and effective manner [34, 35]. In addition, the innovation in education and teaching methods has brought the effectiveness of talent cultivation into full play. Through the research and analysis of relevant practical education and its constituent elements, as well as the internal logical relationship between each element, the shortcomings in the actual construction of the university curriculum system are discovered. Based on the theoretical framework that has been summarized and established, suggestions for IEPEP improvement are proposed with a view to promoting certain improvements and assisting in the exploration of effective curriculum reform and construction paths [36, 37].

When drawing on the conclusions of this study, it is important to note that:

1. the conclusions are based on students' entrepreneurial intentions and abilities, so they do not fully guarantee the success of students' entrepreneurship. Students will encounter many problems in the process of entrepreneurship. It is necessary to analyze them according to specific problems;
2. entrepreneurial activities or practical education need to be carried out based on the characteristics of students in a particular school. Different schools have different training goals, so it is necessary to carry out activities or practical education on entrepreneurship according to the training goals of each school in order to improve the chances of students' entrepreneurial success;
3. the use of the evaluation model needs to pay attention to the combination of school and business evaluation. Schools focus on assessing students' innovation and entrepreneurial ability, while enterprises focus on assessing the effectiveness of students' entrepreneurial implementation. Only the full combination of the two can help students succeed in entrepreneurship more effectively.

The topic of this research focuses on the development of IE education in China, and it is necessary to strengthen the combination of practice and increase practical education courses [38, 39]. Therefore, while achieving the entrepreneurship education goal, it helps to achieve the quality education goal and solve the dilemma of insufficient entrepreneurship education in China. In addition, based on the literature collection and organization, the research results related to this research are obtained to construct the curriculum, activity, and evaluation patterns of IE education, through the analysis and understanding of IEPEP development and integration in colleges. On this account, IE talent cultivation pattern is also optimized. However, the applicability of the established pattern to different countries and regions needs to be further studied [40, 41, 42]. Different education and teaching methods in different countries and regions also put forward higher requirements for IEPEP. Meanwhile, using the results of this research can stimulate students' entrepreneurial intentions and enhance their entrepreneurial abilities, which provides students with the necessary conditions to start their own business. Students first need to have the idea of starting a business, and secondly, they need to have the ability to start a business in order to really implement the business plan. However, there are various risks in

the process of starting a business, such as national policies, market economy, industry development prospects, and marketing barriers. All of these will play an important role in the success of the business. Therefore, it is important for students to have sufficient abilities to better cope with various types of risks and to survive them. This study simulates the possible risks involved in entrepreneurship and gives examples of how to apply what they have learned to deal with them.

On the one hand, this research provides an effective reference case for the development of entrepreneurship courses in colleges. Compared with the existing work, this research takes college's IEPEP as the research object. Through the research on IEPE curriculum pattern in colleges, the detailed and real situation of the current college IEPE pattern is mastered and understood. On the other hand, this provides reliable data for the relevant research on IEPE courses and helps to build a more valuable curriculum system that deeply integrates IE and professional education.

6. Concluding remarks. The research on IEPEP construction in colleges under the Internet plus era can give full play to the optimization and integration of the Internet in the IEPE system, and can also realize the practical education activities based on cultivating students' innovative spirit and entrepreneurial ability. It is based on a sound IE education system, guaranteed by a sound IE education mechanism, and aims to enhance students' basic literacy of IE and their ability to innovate independently. By combining the country's needs for IE talents and the professional characteristics of students, it promotes the maximum development of students in society, and ultimately improves the chances of students' entrepreneurial success. The conclusion confirms that the IEPEP under Internet plus can enhance students' entrepreneurial intention and strengthen their entrepreneurial ability, providing guidance and guarantee for their future entrepreneurial success. Under the Internet plus era, IE education for college students is a long-term and complex project. Such an Internet plus action plan plays a positive role in promoting IE education in colleges. As the main body of college students' IE education, colleges need to actively carry out this education. This plays an important role in promoting college graduates' entrepreneurship, improving employment rate and employment quality, building a harmonious society, and boosting sustainable social and economic development.

Appendix: Questionnaire on the Impact of xx School IEPE on College Students' Entrepreneurship.

Dear Alumni:

Hello! Thank you for participating in this questionnaire survey. This survey focuses on the impact of IEPE on the entrepreneurship of college students in xx school, and its purpose is to promote the further improvement and development of IEPE in this school. We promise that this questionnaire is completely anonymous and confidential, and the results are only used for academic research, which will not affect you in any way. Please fill in the questionnaire according to your actual situation and feelings. We sincerely appreciate your support and cooperation!

Note that it takes about 3-5 minutes to complete this questionnaire!

1. What is your gender? [Single choice]
   - Male
   - Female

2. What is your education? [Single choice]
   - Undergraduate
   - Master
   - Ph.D.
   - Postdoctoral

3. What grade are you in? [Single choice]
   - 1st grade
   - 2nd grade
   - 3rd grade

- 4th grade
- 5th grade

4. What is your major? [Single choice]
   - Economics and management
   - Art
   - Science and engineering
   - Medicine
   - Others

5. How is your academic performance ranked in the grade? [Single choice]
   - Before 3
   - 3
   - 10
   - After 50

6. Have you ever had student cadre experience? [Single choice]
   - Yes
   - No

7. Have you ever had part-time job experience during school? [Single choice]
   - Yes
   - No

8. The status of receiving IE education during school: [Single choice]:

	1	2	3	4	5
Classes and courses in IE education	○	○	○	○	○
Lectures and activities in IE education	○	○	○	○	○
Competitions in IE Education	○	○	○	○	○
Entrepreneurship practice	○	○	○	○	○
Entrepreneurship communication	○	○	○	○	○
Entrepreneurship training	○	○	○	○	○

9. Regarding the entrepreneurship intention, have you ever had the following ideas? [Single choice]:

	1	2	3	4	5
1) If there is a suitable opportunity, I am willing to suspend my studies and start a business, and take the risk of postponing my graduation	○	○	○	○	○
2) The possibility of starting a business while I am in school is very high	○	○	○	○	○
3) Within three years after graduation, there is a great possibility that I can start a business	○	○	○	○	○

10. Through IE education, how has your entrepreneurship ability been improved? [Single choice]:

	1	2	3	4	5
I am satisfied with the availability and sharing of resources needed to complete team tasks	○	○	○	○	○
Available resources increase the overall effectiveness of my team	○	○	○	○	○
I am satisfied with resource management across the organization	○	○	○	○	○
I think I can easily recruit like-minded partners with similar value orientation	○	○	○	○	○
I have the ability to make a scientific and reasonable design for the rights, responsibilities and equity of all stakeholders	○	○	○	○	○
I can promptly discover conflicts and contradictions within the team and resolve them effectively	○	○	○	○	○
I can mobilize my parents to solve my entrepreneurial funding problem	○	○	○	○	○
I can use my social network to solve venture capital	○	○	○	○	○
I can find suitable venture capitalists or well-funded partners through roadshows, conferences, etc.	○	○	○	○	○

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