

## Evaluating the Impact of Innovation and Entrepreneurship Education on Sustaining Student Entrepreneurial Intentions: A Case Study in Chongqing, China

Chen Haixia<sup>1\*</sup> and Ng Soo Boon<sup>2</sup>

<sup>1</sup>Faculty of Public Administration, Chongqing Finance and Economics College, Chongqing, China

<sup>2</sup>Faculty of Education, Languages, Psychology & Music, SEGi University, Kuala Lumpur, Malaysia

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#### \*Corresponding Author

Chen Haixia

E-mail: [17101658@qq.com](mailto:17101658@qq.com)

#### Co-Author(s):

Author 2: Ng Soo Boon

E-mail: [ngsooboan@segi.edu.my](mailto:ngsooboan@segi.edu.my)

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### ABSTRACT

**Introduction:** Innovation and Entrepreneurship Education (IEE) is a mandatory program for Finance and Economics students at a Chinese university in Chongqing, designed to foster sustainable entrepreneurial intentions (EI). Strong EI is believed to increase the likelihood of students starting their own businesses post-graduation, contributing to China's economic sustainability. This study aims to investigate the influence of IEE on EI among these students. **Methods:** A mixed-methods approach was employed. Quantitative data were collected from 827 student questionnaires, and qualitative insights were gained through interviews with 23 purposively selected students. The quantitative analysis examined the levels of IEE and EI, and their correlation. Qualitative data focused on students' perceptions of IEE teacher quality, teaching methods, and the program's relevance to different disciplines. **Results:** Quantitative analysis indicated moderate levels of IEE and EI, as well as a moderate correlation between them. Qualitative findings revealed several issues: students felt that IEE teacher quality was lacking, and that the didactic teaching methods used were not motivating. Additionally, students expressed concern that the IEE program was not tailored to the needs of different disciplines, with a one-size-fits-all approach failing to meet diverse student needs. Both data sources suggested that the IEE program should evolve with societal progress, incorporating the latest trends in the global financial industry to remain relevant and effective. **Discussion:** The study's findings suggest that the current IEE program needs significant changes to enhance its effectiveness. This includes improving teacher quality, diversifying teaching methods, and customizing the program to cater to different academic disciplines. Aligning the program content with contemporary global financial trends is also necessary. **Conclusion:** The IEE program at the Chongqing university requires a comprehensive revamp to better support the development of sustainable entrepreneurial intentions among students. This involves redesigning and enhancing the curriculum to meet current educational and industry standards.

**Keywords:** IEE; EI; Sustainability of EI; University IEE Program.

## 1. INTRODUCTION AND BACKGROUND

Globalization of business activity has created more and more entrepreneurial opportunities. The more entrepreneurial opportunities you seize, the faster the economic growth will be. Therefore, entrepreneurship plays a vital role in economic development by incubating technological innovations, increasing economic efficiency, and creating new jobs. Many researches have been conducted on entrepreneurship when its importance and contribution towards the global and domestic prosperity and stability of nations is realized. In addition, research on entrepreneurship has gained increasing attention as there is also a realization of the need for businesses and academia to work together to find effective strategies to enhance entrepreneurship. Some researchers have argued that entrepreneurship can be learned, which is crucial for economic growth. Thus, universities and colleges must provide entrepreneurship education before graduation (Abbasianchavari & Moritz, 2021; Muniem et al., 2022; Newman et al., 2019).

To get more people to start a business, the first step is to increase their entrepreneurial intentions (EI). According to Thompson (2009), EI refers to a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so now or in the future. As intention has a relatively high ability to predict actual behaviors, EI is closely relevant to entrepreneurial activities (Krueger, 2017). The younger generation is the main force of entrepreneurship, with more than half of successful entrepreneurs starting their businesses between the ages of 20 and 29. EI is one strategic factor that propels and prepares them to start a business and succeed in their college education. College students have the potential to become the main force of innovation and entrepreneurship in the future because they are perceived to have better skills in learning systematic instillation and training for innovative thinking. The younger generation usually has a more active mind, entrepreneurial skills, and high scientific and cultural qualities. Therefore, the cultivation of EI should be strengthened in universities and colleges, with specific attention given to innovation and entrepreneurship education (IEE). In this study, IEE is operationally defined as educational concepts and education models based on cultivating people's innovative spirit, entrepreneurial consciousness, and ability (Zhang & Wang, 2013).

## 2. LITERATURE REVIEW

The relationship between IEE and EI has always been the focus of IEE research. There are mainly three viewpoints in academic circles. The first is a positive correlation, the second is a negative correlation, and the third is irrelevant. Most scholars believe that IEE and EI are positively correlated. Solomon et al. (2002) and

other scholars found that greater exposure to IEE would lead to more incredible start-up ventures. Peterman and Kennedy (2003) who studied the impact of self-efficacy-based participation in business education projects on the ambition and viability of Australian entrepreneurs found that IEE helped improve EI. IEE not only cultivate students' attitudes and intentions and the founding of a new business entity, but it also improves their skills and perception of value or improves confidence (Drost, 2010; Liñán, 2008). In a nutshell, IEE can enhance EI (Maresch et al., 2016; Tao & Zi, 2019; Von Graevenitz et al., 2010). To get a more accurate result, De Clercq et al. (2013) conducted a well-designed Meta-analysis. The results showed that there is a small and positive relationship between IEE and EI, with a weighted correlation coefficient of 0.137.

On the other hand, there is a handful of other scholars who believed that IEE and EI are either not related or not related in a positive manner. In their study, Souitaris et al. (2007) discovered no significant relationship between the learning and intention of entrepreneurship education curricula. Similarly, Bae et al. (2014) obtained the same result when they compared EI before and after receiving IEE. Yet other researchers like Oosterbeek et al. (2010) even found that both IEE and EI are negatively correlated. So did Adelaja and Minai (2018) who used experimental design methods to study the changes in EI after IEE acceptance. Their research results also provided contrary evidence for the positive specification of EI changes due to IEE exposure. The relationship between IEE and EI appears to be complex. It would appear that different researchers have different views, and the jury is still out.

## 3. METHODOLOGY

The primary purpose of this study is to investigate the influence of IEE on sustainable EI among students at a university in Chongqing, China. IEE is the independent variable while EI is the dependent variable. The study also examines the influence of demographic variables of respondents on IEE and EI. Specifically, the study was conducted to fulfill the following objectives: (1) To investigate the level of IEE and EI of the undergraduates; (2) To explore the difference between IEE and EI among undergraduates of different demographics; (3) To investigate the relationship between IEE and EI among undergraduates; (4) To explore how to improve IEE to promote EI. The research questions in this study are as follows:

- (1) What is the level of IEE among undergraduates?
- (2) Do demographic variables influence IEE?
- (3) What is the level of EI among undergraduates?

- (4) Do demographic variables influence EI?
- (5) Is there any relationship between IEE and EI?
- (6) What are the perceptions of students towards IEE?
- (7) How to improve IEE and EI?

This study utilizes both qualitative and quantitative methodologies; questionnaire survey and face-to-face interviews. It is an explanatory sequential mixed-method two-phase study. The mixed method was adopted as it provides a means to understand the complexity of the research focus better.

### 3.1 Sampling

A total of one thousand and fifteen (1,015) students from the nine (9) faculties of a private university in Chongqing, China responded to the same questionnaire given to them. Subsequently, the researcher filtered the questionnaires received by discarding those who answered within 130 seconds. This time range is selected because, with sixty-five (65) questions in the questionnaire, this would mean the respondent only spent only 2 seconds answering each question on average, which is too short. The researcher also discarded entries with almost similar answers for each question. These two factors of short time range in answering almost similar answers for each item were chosen as the initial criteria for determining the validity of the questionnaires as it raises doubt of seriousness among respondents in answering this questionnaire (Yuan, 2020). Finally, only eight hundred and twenty-seven (827) questionnaires were considered to be analyzed in this study.

The selection of interviewees was mainly based on four (4) multistage criteria as follows. First, students who obtained the lowest and the highest IEE level were identified from each faculty. Second, these students with divided according to their levels of EI. Third, the distribution was made according to the demographic variables of gender, and year. Finally, twenty-three (23) students were chosen to be interviewed. They came from all the different faculties in the university, they were of mixed gender, in different years at the university, and had different levels of IEE and EI.

### 3.2 Instrumentation

Two (2) sets of questionnaires were used in this study to answer the research questions: First is the "Innovation and Entrepreneurship Education, IEE Questionnaire" adapted from Li (2013) and Huang and Huang (2019). This instrument aims to investigate undergraduates' IEE by focusing on four dimensions: students' satisfaction with IEE content, teachers' quality, school IEE practice, and student engagement

in IEE. The second instrument is the "Entrepreneurship Intentions Questionnaire", adopted by Liu (2018). The instrument aims to investigate undergraduates' EI by focusing on two dimensions: perceived desirability and perceived feasibility. A 7-point Likert scale was used for both questionnaires, which makes up a continuum from strongly disagree (1) to strongly agree (7). In this study, the 7-point Likert scale is re-classified as high, medium, and low, as shown in Table 1. Factor analysis was conducted before finalizing these items to ensure convergent validity.

## 4. RESULTS

### 4.1 The Level of IEE Among the Undergraduates

The first research question in this study is 'What is the level of IEE among undergraduates?' To answer this question, descriptive analysis was used (see Table 2). IEE was measured by 24 items from four sub-scales, as shown in Table 2. The overall mean IEE level among the students is medium ( $M = 4.57$ ). Students were most satisfied with teachers' quality ( $M = 4.69$ ) and least satisfied with student engagement in IEE ( $M = 4.10$ ).

### 4.2 Differences in IEE Level Among Students with Different Demographic Variables

The second research question is, 'Do demographic variables influence IEE?' The demographic variables collected are gender, whether they have attended the IEE course at their university, entrepreneurial family background, personal entrepreneurial experience, perception of the employment environment, and perception of the entrepreneurial environment influences IEE level. A T-test and one-way ANOVA were employed to analyze whether these demographic variables significantly influence IEE levels. The result is shown

**Table 1.** Grade division of the 7-point Likert scale

Grade	Mean Value
High	$5 \leq \text{mean} \leq 7$
Medium	$3 < \text{mean} < 5$
Low	$1 \leq \text{mean} \leq 3$

**Table 2.** Distribution of Means and Standard Deviations for Levels of IEE among the undergraduates ( $n = 827$ )

Sub-scales	No of items	Mean (M)	Std. D (SD)
Students' Content Satisfaction with School IEE	8	4.66	1.107
Teachers' Quality	6	4.70	1.117
School IEE practice curriculum	6	4.63	1.096
Student Engagement in IEE	4	4.10	1.219
Total	24	4.57	1.001

**Table 3.** Analysis of IEE Level according to Different Demographic Variables (n=827)

Demographic Variables	Items/Indicators	N	F	Sig.
Entrepreneurial Family Background	One of your parents/ one of your siblings has an entrepreneurial experience.	357	.298	.009*
	None of the parents or siblings had any entrepreneurial experience.	470		
Personal Entrepreneurial Experience	Entrepreneur	11	.158	.046*
	Non-entrepreneur	816		
Perception of the Employment Environment	Very optimistic	28	9.081	.000*
	Optimistic	192		
	General	66		
	Very pessimistic	205		
	Pessimistic	336		
Perception of Entrepreneurial Environment	Very good	25	15.767	.000*
	Good	266		
	General	432		
	Poor	91		
	Very poor	13		
Gender	Male	249	1.623	.250
	Female	578		
IEE Course	Have not Attended an IEE Course	527	1.109	.144
	Have Attend in IEE Course	300		

\*Significant at  $p < 0.05$ .

**Table 4.** Distribution of Means and Standard Deviations for the level of EP among the undergraduates (n=827)

Sub-scales	No of items	Mean (M)	Std. D (SD)
Perceived desirability	4	4.56	1.287
Perceived feasibility	3	3.73	1.242
Total	7	4.21	1.149

in Table 3. The influence of demographics of students on their level of IEE is significant in the entrepreneurial family background (Sig = .009 < .05), entrepreneurial experience (Sig = .046 < .05), perception of employment environment (Sig = .000 < .05), and perception of the entrepreneurial environment (Sig = .000 < .05). However, the other demographics such as gender, faculty, year of study, IEE course, academic performance, participation in student cadres and IEE competition are not significant in influencing IEE.

#### 4.3 The Level of EI Among the Undergraduates

The third research question in this study is 'What is the level of EI among undergraduates?' To answer this question, descriptive analysis is also used. EI is measured by two dimensions: perceived desirability and perceived feasibility. Table 4 shows the distribution of means and standard deviations for the level of EI among undergraduates. The overall level of EI ( $M = 4.21$ ) among the undergraduates is medium (refer to Table 1). Perceived desirability is much higher than perceived feasibility, with a difference of about 0.8.

#### 4.4 Differences in EI Level Based on Different Demographic Variables

The fourth research question is, 'Do demographic variables influence EI?'. It can be seen from Table 5 that the influences of gender (Sig = .012 < .05), academic performance (Sig = .029 < .05), participation in student cadres (Sig = .004 < .05), entrepreneurial family background (Sig = .000 < .05), entrepreneurial experience (Sig = .000 < .05), perception of employment environment (Sig = .000 < .05), and perception of employment environment (Sig = .000 < .05) on EI are significant. In comparison, only EI among those who have attended or not attended the IEE course is not significantly different. It is good to note that the respondents must participate in the university IEE program but not necessarily attend a designated IEE course as the IEE program also contains other IEE activities.

#### 4.5 Correlation Between IEE and EI

The fifth research question is, 'Is there any relationship between IEE and EI?'. To answer this question, a correlation coefficient score is used. The correlation coefficient  $r$  score showed the strength of the relationship, while the  $p$ -value showed the significance level. The greater the absolute value of the correlation coefficient, the stronger the correlation. The closer the correlation coefficient is to 1 or -1, the stronger the correlation degree, while the closer the correlation coefficient is to 0, the weaker the correlation degree is.

**Table 5.** *EI Level based on Different Demographic Variables (n=827)*

Demographic Variables	Items/Indicators	N	F	Sig.
Entrepreneurial Family Background	One of your parents, one of your siblings has an entrepreneurial experience.	357	.487	.000*
	None of the parents or siblings had any entrepreneurial experience.	470		
Entrepreneurial Experience	Entrepreneur	11	.155	.000*
	Non-entrepreneur	816		
Perception of the Employment Environment	Very optimistic	28	12.564	.000*
	Optimistic	192		
	General	66		
	Very pessimistic	205		
	Pessimistic	336		
Perception of Entrepreneurial Environment	Very good	25	11.409	.000*
	Good	266		
	General	432		
	Poor	91		
	Very poor	13		
Gender	Male	249	1.918	.012*
	Female	578		
IEE Course	Have not Attended an IEE Course	527	.147	.876
	Have Attended an IEE Course	300		

\*Significant at  $p < .05$ .

**Table 6.** *Implication for R-Value*

R-Value	Implication
$.8 < r < 1.0$	High correlation
$.6 < r < .8$	Strong correlation
$.4 < r < .6$	Moderate correlation
$.2 < r < .4$	Weak correlation
$.0 < r < .2$	Very weak correlation or no correlation

**Table 7.** *Pearson correlations - IEE and EI (N=827)*

Variable	IEE	EI
IEE	1	
EI	.429**	1

\*\* Correlation is significant at the .01 level (2-tailed).

According to Wu (2019), the meaning represented by the size of the  $r$  value is shown in Table 6.

Table 7 shows the correlation between IEE and EI. The overall correlation coefficient between IEE and EI is  $r = 0.429$ . The correlation is significant to the level of  $p < .01$ . This indicates a moderate positive correlation between IEE and EI. In other words, the level of IEE increases as EI increases.

#### 4.6 Perceptions of students towards IEE

The sixth research question is "What are the perceptions of students towards IEE?". To answer this, the study interviewed twenty-three (23) students who

had completed the questionnaire earlier. These students were chosen for the interview because they came from all the different faculties in the university, they were of mixed gender, in different years at the university, and had different levels of IEE and EI.

## 5. RESULTS FROM INTERVIEW

The student's responses to the interview questions were audio-taped and then transcribed verbatim. The data was then thematically analyzed. From the analysis, it was found that three themes emerged: the quality of the teachers teaching IEE, the teaching method used to teach IEE, and the mistargeting of the objective of the IEE.

### **Theme 1: Teacher quality does not meet students' expectation**

In general, students in this study felt that the teacher quality of IEE does not meet their expectations. Examples of related quotes are as follows:

*"I do not feel that the teacher is special; it is that teacher in the class teaches like chanting [talk to himself, not interactive], it is not useful." (P14)*

*"And then he[teacher] is kind of, you know, a little bit more orthodox in the way he lectures, and then boring in the relative sense. He also does not have experience of entrepreneurship" (P15)*

## Theme 2: Teaching method used to teach IEE

Most students interviewed found that the teaching method of IEE at the university was uninteresting and did not do much to raise students' interest. The following are some examples of their comments;

*"Well, I have attended the course, um, basically just [teacher provides] some theoretical knowledge, and then it is an online course, so I am not very impressed with it." (P3)*

*"Is it a career guide for innovation and entrepreneurship, or another thinking training? I think it is more of the second. I listened a little bit, and then I stopped. Too monotonous, just talk, no sense." (P11)*

## Theme 3: Mistargeting of the objective of the IEE

The majority of the students felt that the content of the IEE program was not targeted and did not align or focused with students' Majors, so it has failed to attract students' attention towards innovation and entrepreneurship.

*"Yes, I think these lectures may be that they are aimed at each college and maybe too, too unified [standardized] in content. The fact is each college and each Major is not the same. Is the unified thing the best way to do things? I think there is no great sense of that kind of guidance, we can't standardized IEE program like this." (P8)*

*"It is too generic. One set for all Majors. It feels too general for everyone. It feels the same." (P21)*

### 5.1 Suggestions to improve IEE and EI

The seventh research question is 'How to improve IEE and EI?' In this study, students were also asked to give suggestions on how to improve both IEE and EI. The following discussion revealed the suggestions given by these students.

#### 5.1.1 Teachers need to have entrepreneurship experience

From the interview, the students in this study feel that teachers of IEE need to have both genuine enthusiasm for entrepreneurship and the necessary experience of entrepreneurship. These teachers need to have profound teaching ability, good at innovation, the ability to turn entrepreneurship into reality, and personal charm to attract students. In other words, they must also display EI. The following quotes provide evidence for students' feedback:

*"Well, I think the teacher of this kind of course, first of all, has to have his ideas about entrepreneurship, he must have EI so that he can teach his ideas to students, and then his teaching style can be livelier and more interesting, so that*

*students who have not been exposed to entrepreneurship, um, have a greater interest." (P3)*

*"I think IEE teachers should have an entrepreneurial identity, entrepreneurial consciousness, and entrepreneurial intention. Well, I think it is better to have the experience of innovation and entrepreneurship because he has the kind of personal practice, and he has the kind of sharing, which is the shared knowledge, which is some practical knowledge so that students can trust more." (P12)*

*"Work and innovation experience, these two conditions are both indispensable." (P7)*

#### 5.1.2 Integrate theoretical teaching and practical exercise

The IEE program at this university was carried out as a hybrid program; partly online and partly face-to-face. Although traditional face-to-face interaction still has an absolute advantage and is irreplaceable in the whole education process, the rapid development and advancement of information technology combined with face-to-face teaching in delivering IEE is imperative. Integrating theoretical study online and practical exercise offline could be a good way forward (Zhu & Shu, 2021). Through the organic combination of the two teaching modalities, students' learning can enter the state of deep learning, helping to improve the learning effect and promote EI along the way. This is reflected in the interviews of some students as follows:

*"You can combine online and offline, you can watch videos of some IEE-related theories online, and then you can generate some practical cases for students to try physically." (P3)*

*"Well, is the combination of online and offline way should be better, during offline can organize a simulation for everyone to participate, this way gives everyone a practical experience that can affect EI." (P15)*

#### 5.1.3 Build a curriculum system deeply integrated with the Major

The IEE curriculum is fundamental for the success of a program. It is the way for colleges and universities to carry out the goal of talent cultivation. To achieve a leap in the quality of talent training, IEE should be integrated into the talent training program. One way to do that is by actively building an innovation and entrepreneurship curriculum system deeply integrated with professional education with each Major (Zhu & Shu, 2021). That is what some of the interviewees were hoping for, as cited by two of the students:

*"I think it is possible because these students, in the first two years of university, may not have too much inkling for their*

*future career path planning, the university can combine [IEE and professional course] together, to stimulate the enthusiasm of the students for entrepreneurship, never mind if they have or no future planning of entrepreneurship, I think this kind of integration that can inspire them with the idea of entrepreneurship.” (P15)*

*“The likelihood is to combine professional namely, then talk about later start a business, which area to start a business.” (P19)*

## 6. DISCUSSION

Although the government of China and in particular Chongqing University, where this study was carried out, have put great effort into planning and executing IEE, the undergraduates' IEE level is only moderate ( $M = 4.57$ ). Student engagement in IEE is the lowest ( $M = 4.10$ ). As Jin (2020) has reflected, it is unsurprising that the overall environment for IEE in universities still needs to be improved. Lin (2021) has also reiterated that although Chinese universities have gradually established a curriculum system in the field of IEE, university students still face many problems in IEE, possibly due to the monotonous teaching model and lack of entrepreneurial experience among teachers. These two factors in turn affect the effectiveness of IEE and subsequently, to a certain extent dampen the spirit of EI among students. The results from this study reflected similar problems during student interviews.

The level of EI among the undergraduates in the university is moderate ( $M = 4.21$ ). The level of perceived feasibility in EI is particularly low. Respondents might have issues related to confidence thus, they could not see the feasibility of EI. The IEE experience provided by the university is insufficient to provide students with entrepreneurial ideas and better support for students to improve their perceptions of the feasibility of entrepreneurship. This is consistent with the research findings found by Liu (2016). He surveyed two thousand and eight (2,008) graduates of different types and levels of colleges and universities in eastern, central, and western China. He found that college students' EI level was low, basically at a medium level ( $M = 3.79$ , on a 6-point Likert scale). Incidentally, another study conducted in Bangladesh revealed similar results (Rahaman et al., 2020).

In this study, the overall correlation coefficient between IEE and EI is  $r = 0.429$ . It indicates a significantly positive but moderate correlation between IEE and EI. The higher the IEE level, the higher the EI level. This indicates that IEE could promote EI. This has also been confirmed in studies by Drost (2010), Peterman and Kennedy (2003), and Solomon et al. (2002). Thus, from the data obtained in this study, it appears that

it is beneficial to enhance IEE in universities, as IEE theoretically can impact EI.

In another research, Xie (2021) found that the performance of IEE is often influenced by several factors that include the following: the government's support for innovation and entrepreneurship activities of colleges and universities, students' good entrepreneurial attitudes, and the favorable entrepreneurial environment of colleges and universities. The current study expanded this exploration to include more personal related entrepreneurial factors such as entrepreneurial family background, personal entrepreneurial experience, perception of the employment environment, and perception of the entrepreneurial environment. These factors were significant to the level of IEE in this study. However, the other demographics, such as gender and attended IEE courses, are not significant in influencing IEE. This is inconsistent with a study by Miao (2020) who found students of different genders have different cognition of innovation and entrepreneurship. This may have something to do with the type of university and characteristics of the universities. However, the research object of Miao (2020) is a public university, while the research object of this study is a private university. More studies need to be conducted to ascertain the reasons for the difference in the findings.

The influence of students' demographics on their EI level is insignificant for those who attended or did not attend IEE courses. This seems to imply that IEE is not too crucial to develop EI. This finding is contrary to other results from other studies conducted by Qian and Wei (2021) and Robert (2017). Qian and Wei (2021) who investigated students who enrolled in the elective course "Know About Business (KAB)" at Nanjing University of Chinese Medicine, found that the IEE course had positive effects on inspiring students' entrepreneurial consciousness, EI, and entrepreneurial behavior. Robert (2017) on the other hand, examined the impact of a 150-minute divergent activity training session and new venture ideation exercise on openness to ideation and entrepreneurial intent in undergraduate college students enrolled in entrepreneurship courses. He found these exercises have a positive impact on openness to ideation and EI.

Triangulation with qualitative data revealed the existing problems of IEE could have affected the promotion of EI. Interview data attested to this as problems such as teacher quality and teaching method persisted might have caused the lower average EI and IEE. Ma et al. (2020) found that college students' IEEs must be implemented based on the theoretical knowledge of their psychological cognition and creative psychological development, and use certain teaching strategies so that it can play a

good role in guiding the cultivation of innovation and entrepreneurship spirit of college students.

## 7. CONCLUSION

In conclusion, on one hand, the IEE level of the students in this university and the EI level of students is only moderate; on the other hand, IEE is correlated to EI. From the open-ended questions and interviews, it was found that the reason for the low level of EI lies in the problems of the IEE of this university, namely the low quality of teachers, the uninteresting teaching model, and the lack of targeted curriculum setting. It is suggested that sustainable EI can be developed in the future by building the capacity of teachers in entrepreneurship, skillfully combining theoretical teaching with practical exercise, and building a curriculum system deeply integrated with students' Majors.

### 7.1 Recommendations

This study recommends the following to improve IEE and increase EI among university students. Based on opinions from students regarding teacher quality, the researcher put forward a concept of "three-tier" teachers. The first-tier teacher is a basic tutor. Teachers in this study are mainly the basic tutor type; they mainly guide students on relevant knowledge. The second-tier teacher is the cultivating mentor type; these teachers have theoretical and practical knowledge; besides teaching knowledge, they can provide consultation and guidance on project planning, opening guidance, project evaluation, market analysis, operation management, financing credit, policies, regulations, etc. The third-tier teacher is the incubation mentor type. The corporate mentor is the incubation mentor who guides practical operation and troubleshooting development difficulties to help students turn their ideas into reality. University needs both the 2<sup>nd</sup> or 3<sup>rd</sup>-tier category teachers who would be better able to serve students' innovation and entrepreneurship needs.

### 7.2 Limitations of the Study

Similar to the other studies, there are several limitations that this study is subjected to such as time, energy and financial constraints. The findings from study were for this particular private university. Since this study used a mixed method, where the data were collected through questionnaires and interviews, there was no way the researcher could ensure that the respondents have given their honest opinions when answering both the questionnaire and the interview questions.

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## Biographical Statement of Author(s)

**Chen Haixia** was born in China in 1981. She received the B.E. and M.E. degrees from China Three Gorges University, Yichang, China, in 2003 and 2007, respectively. And She received her Ph.D. degree from SEGi University, Malaysia, in 2023.



From 2007 to 2014, she worked at Chongqing Institute of Foreign Studies. Since 2015, she has been working at Chongqing Finance and Economics College, where she is currently an Associate Professor.

Her main area of research interest is Innovation and entrepreneurship education. She also has passion in Entrepreneurial management.

### **Dr. Chen Haixia**

Department of Property and Health Management  
Chongqing Finance and Economics College  
China

**E-mail:** [chenhaixia19810129@126.com](mailto:chenhaixia19810129@126.com)

**Ng Soo Boon** has a Ph.D. degree in Education specializing in curriculum development as well as a Master degree in Science Education. She has vast experience in areas such as curriculum development and evaluation, STEM education, early childhood, policy implementation.



She is currently a senior lecturer in SEGi University, Malaysia. She has been actively involved in many national, global and regional research projects related to curriculum, early childhood as well as STEM.

### **Dr. Ng Soo Boon**

Postgraduate Department  
Faculty of Education, Languages, Psychology and Music  
SEGi University  
Malaysia.

**E-mail:** [ngsooboan@segi.edu.my](mailto:ngsooboan@segi.edu.my)