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Research on the Path of Innovation and Entrepreneurship Education in Local Applied Universities under the "Cloud" Mode

Guoqing Xu[*1,2], Huihui Chen[1,3], Gladiolus Gatdula[1], Zhi Wang[1,4] & Xi Liu[1,5]
[1]*De La Salle University-Dasmarinas , Philippines*
[2]*School of Resources and Civil Engineering, Suzhou University, China*
[3]*International College of Zhengzhou University， China*
[4]*Harbin Finance University, China*
[5]*School of Chemistry and Chemical Engineering, Suzhou University, China*

Abstract: The "cloud" model is one of the important exploration directions of innovation and entrepreneurship education（"Innovation And Entrepreneurship Education" can be written as I&EE） in universities. Local applied universities are constantly trying to reform the I&EE model. This study aims to explore the path of I&EE in local applied universities under the "cloud" model, in order to improve the effectiveness and effectiveness of I&EE. Through the practical case and qualitative analysis of I&EE in universities, this study deeply analyzes the practical achievements and bottlenecks of I&EE in local applied universities under the "cloud" mode. On the basis of summarizing, this paper puts forward the practical mode of I&EE path in local applied universities under the "cloud" mode with "production, teaching, research and social service" as the fulcrum, that is, through the development of productive practice projects, promote the differentiated development of students, and solve the problem of combining teaching practice and entrepreneurship by means of school-enterprise cooperation.This research has important practical significance for promoting the continuous innovation and upgrading of I&EE in universities.

Keywords: cloud model; local application-oriented universities; I&EE; productive practice projects; university-enterprise cooperation

1. Introduction

In recent years, the "cloud" model has become a hot topic in the field of higher education. Local applied universities are an important member of higher education in China, and their emphasis on cultivating practical and applied abilities has been recognized by more and more students and parents. (Liu & Jia, 2022) However, there are still significant problems and challenges in I&EE in local applied universities. Therefore, this article will conduct detailed research and discussion on the path of I&EE in local applied universities under the "cloud" model.

Local application-oriented universities have the characteristics of the era of "applicability and locality", emphasizing the cultivation of students' practical and practical abilities, and have very important social and economic significance. However, due to the rapid changes and development of modern society, local applied universities still have many shortcomings in I&EE. These universities have already achieved initial results in their practice of I&EE, such as vigorously promoting the reform of I&EE, and establishing an I&EE system. (Min, 2018) However, due to the complexity and diversity of I&EE, local applied universities still encounter a series of problems and challenges in practice, such as unreasonable curriculum design for innovation and

Corresponding Author: Guoqing Xu
De La Salle University-Dasmarinas , Philippines; School of Resources and Civil Engineering, Suzhou University, China
Email: 416141367@qq.com

entrepreneurship, and imperfect teacher team construction. By building a Q&A platform and promoting school enterprise cooperation, local applied universities have begun to practice I&EE under the "cloud" model. Moreover, these practices and innovations also provide more ideas and directions for the development of I&EE paths in local applied universities under the "cloud+" model in the future.

2. Characteristics and Current Situation of Local Applied Higher Education Institutions

2.1. Introduction and classification of local applied universities

Local applied universities refer to the general higher education institutions invested and built by local governments with applied technology and practical education as their main characteristics. These universities are mainly oriented to the economic construction and social needs of the region, aiming at cultivating applied, compound and innovative talents, and are committed to creating a technological innovation platform that integrates "production, learning and research". According to the regional characteristics and different scales of schooling, local applied universities can be divided into undergraduate colleges, universities, with undergraduate universities as the leading ones.

In terms of I&EE in local applied universities, the analysis of the current situation shows that although such universities have their own characteristics, there are common problems such as single innovation and entrepreneurship curriculum, shortage of practical teaching resources, and insufficient construction of innovation and entrepreneurship culture. At the same time, the fast-developing technology and Internet fields also bring great challenges to the teaching mode of traditional universities (Guo, 2017).

In order to cope with this challenge, local applied universities have started to draw on the educational concepts and technologies under the "cloud" mode to enrich the form and content of I&EE through online platforms, live video broadcasting, remote interaction and other means. For example, through the construction of Q&A platform, innovation and entrepreneurship courses are online, which allows students to access teaching resources through the network at anytime and anywhere, and interact with teachers and classmates, so as to improve the teaching effect. In addition, the construction and implementation of productive practice projects in the "cloud" mode can also allow students to fully experience the operation and management of enterprises, so as to fully prepare for future employment.

In the future, the "cloud +" mode will gradually become the development direction of I&EE in local applied universities. Therefore, it is necessary to improve and implement the policy and regulation system, strengthen the guidance of the government, and promote the development of I&EE platform to the "cloud +" mode, so that more students can benefit. At the same time, it is necessary to strengthen the cultivation of students' practical ability and cultivate their ability to face the challenges and opportunities of the Internet era, so as to meet the social demand for application-oriented talents.

2.2. Analysis of the current situation of I&EE in local applied universities

I&EE in local applied universities is one of the important contents in college education. From the analysis of the current situation, the I&EE of local applied universities has made certain achievements, and the schools have launched some I&EE projects one after another. However, there are still some problems and challenges. Firstly, the match between the personalised direction of students' development and their disciplines needs to be improved. Secondly, the cultivation of students' practical ability and teamwork ability also needs to be strengthened correspondingly. Finally, the insufficient construction of the teacher team for I&EE is also an urgent problem to be solved (Fu et al., 2022).

Therefore, in the practice of I&EE under the "cloud" mode, it is necessary to explore new education concepts and explore new education modes. In the construction of the platform, we can take advantage of network technology to build a multimedia education platform, which promotes the combination of theory and practice and improves students' innovative and entrepreneurial thinking

through public courses and practice projects. At the same time, the productive practice project is also a model that can be learnt from, which allows students to exercise their real-world skills in actual production. School-enterprise alliance in the "cloud" mode can also develop more cooperation and win-win strategy, more thinking in the exploration, theory and practical operation have a closer combination.

In the future, the path of I&EE in local applied universities under the "cloud +" mode is worth looking forward to and exploring in depth. It is necessary to do a good job in the construction of policy and regulation system to provide better policy support for colleges and enterprises, and guide universities to explore and innovate in the field of I&EE. At the same time, it is also necessary to cooperate with the development of social economy and organically combine students' learning with social demand, so that students can better experience the charm of innovation and entrepreneurship in social practice.

In short, focusing on the personalised development of students, strengthening the construction of teachers, focusing on cross-disciplinary innovation and other measures, we can explore the future of I&EE from the practice under the "cloud" mode.

2.3. Problems and challenges of I&EE in local applied universities

Local applied colleges face a series of problems and challenges in I&EE. The first is that the setting of disciplines and majors is not perfect, and the I&EE in many applied universities lacks effective professional support. Secondly, the employment situation of graduates is grim, and many graduates have difficulties in finding suitable jobs, thus affecting their entrepreneurial enthusiasm and innovative spirit. Thirdly, it is the problem of lack of resources, many applied universities' I&EE lacks sufficient educational resources and support, such as scientific and technological resources, investment and financing resources, and human network resources, etc. Finally, it is the lack of enterprise cooperation and practice opportunities. The I&EE of many applied universities only stays on the theory, and lacks real practice support and innovation and entrepreneurship opportunities close to enterprises. Therefore, these problems and challenges need to be addressed in depth when promoting I&EE in local applied universities.

3. Practice of I&EE in the "Cloud" Mode

3.1. Construction of Q&A platform for I&EE in "cloud" mode

With the rapid development of information technology, I&EE in universities is gradually transforming from traditional classroom teaching to "cloud" mode. In view of the practical problems of I&EE in local applied universities, the establishment of a Q&A platform for I&EE under the "cloud" mode is a very important initiative. Through this kind of Q&A, it can promote the communication and interaction among students, help students better master the basic theory and operation skills of innovation and entrepreneurship, and at the same time, it can also strengthen the communication and exchange between teachers and students, optimise the problems in the teaching process of teachers and improve the teaching effect (Li, 2018).

As to how to establish this kind of Q&A platform, we can learn from the existing excellent cases at home and abroad, and firstly, we need to determine the user groups and functional modules of the platform. Secondly, artificial intelligence technology can be introduced to provide students and teachers with more accurate answers to questions and resource recommendations. In addition, in the operation of the platform, it is also necessary to strengthen the audit and management of the platform content to ensure the authenticity and reliability of the content, as well as to protect the privacy of users.

Overall, the construction of I&EE Q&A platform under the "cloud" mode is an important part of I&EE practice in local applied universities. (Jiao, 2016) In this way, it can improve the interactive experience between students and teachers, promote the teaching effect, and inject new vitality into the development of I&EE in local applied universities.

3.2. Construction and implementation of productive practice projects under the "cloud" mode

In recent years, with the in-depth promotion of

"Internet+", "cloud" mode has become one of the important ways of I&EE. Under the "cloud" mode, there are new changes and breakthroughs in the construction and implementation of productive practice projects. Firstly, schools can provide rich practice resources and case sharing through the establishment of the "cloud" platform to guide students to actively participate in innovation and entrepreneurship practice. Secondly, schools can cooperate with enterprises to put the practice projects "on the cloud", which is not limited by time and space, and realises the real "combination of reality and reality". Finally, schools need to strengthen the guidance and counselling of students, encourage students to try new innovation modes, to achieve win-win development on the "cloud" platform. Under the "Cloud+" mode, local applied universities can further improve the policy and regulation system of I&EE, and enhance the sustainability of the school.

3.3. Co-operation and win-win strategy of university-enterprise alliance under the "cloud" model

Under the "cloud" mode, I&EE in local applied universities needs to be more closely connected with enterprises to achieve more efficient education goals. In this context, university-enterprise alliance has become a new mode of cooperation. Under the "cloud" mode, university-enterprise alliance can achieve more flexible forms of cooperation, more extensive resource integration, more efficient resource sharing, and thus achieve more win-win strategies (Jiang, 2020).

Specifically, university-enterprise collaboration can realise real-time information sharing and collaboration with the help of collaboration tools on the "cloud" platform, so as to enhance the efficiency and accuracy of collaboration. In addition, school-enterprise cooperation can jointly carry out productive practice projects, through which students' understanding of enterprises and practical ability can be strengthened, and their innovative and entrepreneurial ability can be enhanced. At the same time, university-enterprise cooperation can also explore a more in-depth mode of cooperation between industry, academia and research, using "cloud" technology to jointly carry out scientific research projects and promote the promotion and application of industrial technology.

At the same time, the university-enterprise cooperation also faces some challenges under the "cloud" mode. Firstly, the university-enterprise collaboration needs to build a perfect trust mechanism to break down the barriers between the university and enterprises, and realise the effective transmission and sharing of information. Secondly, the university-enterprise collaboration needs to coordinate the needs of different stakeholders to achieve common development. Finally, school-enterprise alliance needs to explore more innovative ways of cooperation and adapt to the changing market demand (Ji et al., 2016).

To sum up, the cooperation and win-win strategy of university-enterprise alliance in the "cloud" mode is facing both opportunities and challenges. Only by giving full play to the advantages of all parties and establishing a sound cooperation mechanism can we realise the true value of university-enterprise cooperation, promote the continuous improvement of students' I&EE ability, and inject new impetus into the development of local applied universities.

4. Future Development Direction and Suggestions

4.1. Path of I&EE in local applied universities under the "cloud +" mode

With the continuous development and popularisation of information technology, the new economic pattern represented by "Internet+" has become a new driving force for economic development. Under this background, I&EE in "cloud" mode has also emerged. (Tang, 2017) In local applied universities, the I&EE path of "cloud" mode is gradually being widely used.

In the era of "cloud+", the I&EE path of local applied universities needs multi-dimensional support. Firstly, a complete and rigorous Q&A platform for I&EE needs to be built to provide real-time services and answer questions for students. (Tan & Zhao, 2021) Secondly, it is necessary to explore the construction and implementation of productive practice projects in the "cloud" mode, forming a new practice mode and system. Finally, it is necessary to

achieve joint collaboration and development through joint cooperation and win-win strategy between universities and enterprises.

In the future, local applied universities should make use of information technology and big data to create an innovative and entrepreneurial education path under the "cloud+" mode. At the same time, government departments should also give more inclination and support in the construction and implementation of policies and regulations. Only in this way can we promote the I&EE of local applied universities to a more mature and perfect development path.

4.2. Improve and implement the policy and regulation system of local applied universities under the "cloud +" mode

For the study of I&EE path in local applied universities under the "cloud" mode, the improvement and implementation of policies and regulations is a very crucial point. With the continuous promotion of the "cloud +" model, the relevant policies and regulations also need to be updated and improved. Firstly, it is necessary to establish basic policies and regulations, such as the implementation rules and guidelines on I&EE under the "cloud +" mode. Secondly, it is also necessary to improve the implementation of policies and regulations, including specific implementation measures within the relevant government departments and universities to ensure that the policies are put into practice. Finally, it is also necessary to strengthen the supervision and evaluation of policies and regulations, so that problems can be found in time and measures can be taken for improvement. (Liu & Xu, 2016) Only by improving and implementing the policy and regulation system can we better promote the development of I&EE in local applied universities under the "cloud +" mode and lay a solid foundation for cultivating more innovative talents.

5. Conclusion

The development of I&EE in local applied universities under the "cloud" mode has become a necessary trend. This new education model has advantages in many aspects, although there are also corresponding problems and challenges. Schools should actively take relevant measures to improve their I&EE, enhance the quality of teaching, and realize the social and personalised education mode. (Chen et al., 2018) While establishing the I&EE path of local applied universities under the "cloud+" mode, the policy and regulation system should be further improved to give full play to the advantages of the "cloud+" mode and to promote the in-depth development of I&EE in local applied universities.

Conflict of Interest

The authors declare that they have no conflicts of interest to this work.

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