

## Pedagogic device of innovation and entrepreneurship education in Polytechnics of Zhejiang Province

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**Abstract:** The study was aimed at describing the phenomenon and issues of IEE in polytechnics of Zhejiang province, drawing on Basil Bernstein's pedagogic device theory, and analyzing the pedagogic device of IEE from four aspects in Zhejiang. The empirical evidence was mainly gathered from the official IEE curriculum documents, government, and existing studies in the field. The purposive sampling was utilized and an SMS was sent to 14 teachers, 25 students, and 9 graduates selected for their geographical location and the ranking of polytechnics in Zhejiang province. A semi-structured interview examined how IEE cultivated their competencies. The results find out that in instructor training, Zhejiang Department of Education invests lots of resources to train many entrepreneurial mentors. In student training, polytechnics students must complete two credits of IEE courses and can apply for Start Your Business (SYB) curriculum free of charge. After seven years of development, the popularity of innovation and entrepreneurship competition has increased, and polytechnics' participation has doubled. After a decade of exploration and development, mass innovation space has evolved from the early 1.0 hardware version, which only provided sites and equipment, to the 2.0 and 3.0 software versions with capital docking and government financial policies support.

**Keywords:** *polytechnics, innovation and entrepreneurship education, business curriculum, Bernstein's theory*

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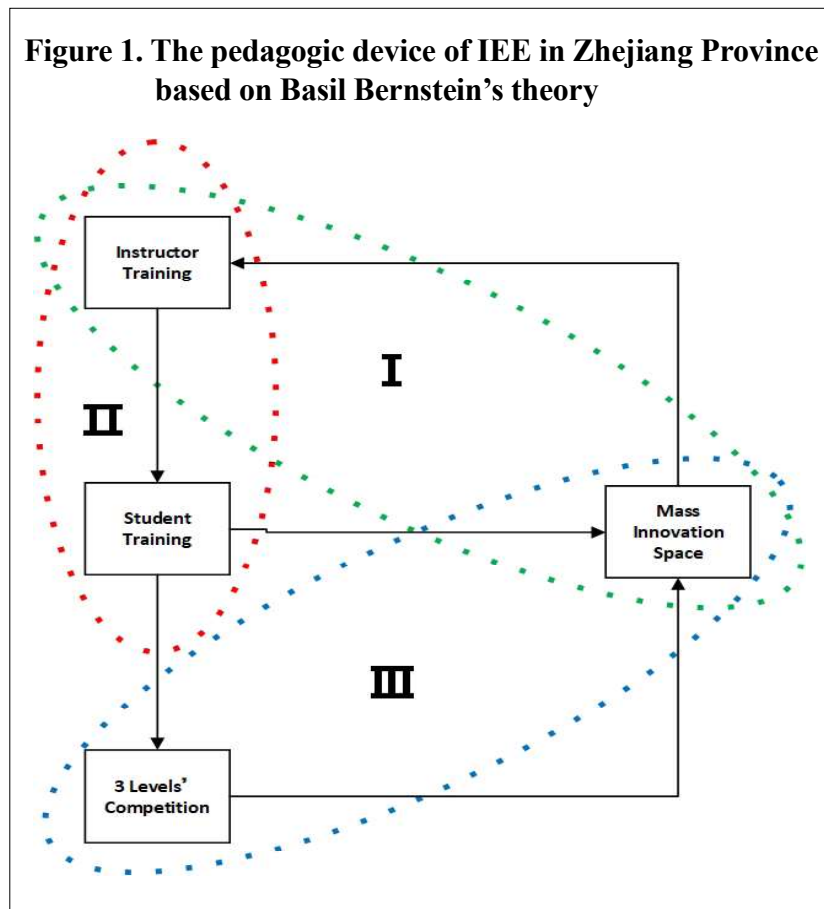
### INTRODUCTION

Different from the other three industrial revolutions, industry 4.0 is an era in which information technology is used to promote industrial transformation. Internet technology reduces the information asymmetry between production and sales, and accelerates the mutual contact and feedback between them. Faced with the challenge of industry 4.0, the role of universities has also changed, not only allowing students to study high-tech majors, but also cultivating innovation and entrepreneurship ability (Sun & Zhao, 2017). Polytechnics students have strong practical operation ability. Once systematic innovation and entrepreneurship education and training, they can quickly develop Internet business operations (Xie, 2019). In the 1950s, the United States began to implement project-based IEE. The IEE system in the United States is relatively complete, which generally includes courses such as marketing, financial management and business plan development, and links IEE with the degree. Some universities even offer bachelor's and master's degrees in innovation and entrepreneurship (Sun & Zhao, 2017; Xie, 2019).

Nevertheless, in the Chinese traditional culture, the training of applied talents only exists in polytechnics, while the education of general universities should focus on theory and strengthen the scientific research (Liu & Fu, 2018). Therefore, China's IEE started relatively late, and only in the 21<sup>st</sup> century began to pay attention to IEE, and has issued a series of policies to encourage innovation and entrepreneurship (Xie, 2019). "Mass Entrepreneurship and Innovation" comes from Premier Li Keqiang's speech at BBS summer DAVOS in September 2014 (Zhou, 2015). At the 2015 National People's Congress, the government elevated mass entrepreneurship and innovation to a new engine of economic growth (Zhou, 2017). In March 2015, the general office of the state council issued guidance opinions, which encouraged college students to carry out innovation and entrepreneurship activities (Zhou, 2015). In May 2016, the general office of the state council issued the implementation *Opinions on Building Demonstration Bases for Mass Entrepreneurship and Innovation*, and systematically deployed the construction of demonstration bases for mass entrepreneurship and innovation (General Office of State Council, 2016, p. 2). On December, 2017, the state council published *Several Opinions about Deep Integration of Industry and Education*, which means it's a positive signal to polytechnics (General Office of State Council, 2017, p. 1). On September 18, 2018, the state council issued the *Opinions on Promoting High-quality Development of Innovation and Entrepreneurship and Creating an Upgraded Version of Mass Entrepreneurship and Innovation* (State Council, 2017). Although the government has introduced a series of policies and measures, Chinese people deeply influenced by Confucian culture rarely choose to innovate and start businesses, which will face many risks and uncertainties. More and more college students prefer civil servants or stable jobs after graduation.

Zhejiang province's IEE has developed rapidly and ranked first in China. In 2018, Zhejiang department of education organized the selection of exemplary entrepreneurship polytechnics in Zhejiang, among which there were 13 polytechnics. Some of these polytechnics are setting up entrepreneurship polytechnics and some are setting up entrepreneurship parks. Most polytechnics in Zhejiang started to establish entrepreneurship polytechnics after 2010, and accordingly entrepreneurship polytechnics have issued relevant policies to encourage innovation and entrepreneurship activities, including flexible credit system and financial support policies for students' entrepreneurship. Yiwu Industrial and Commercial College is the first college to establish Entrepreneurship College since 2008 in Zhejiang. Taking Zhejiang Province as a representative case, this article analyzes the reform and pilot of IEE in recent five years, and tries to construct the pedagogic device of IEE in China.

The research of IEE is still a new research direction in China, which scholars rarely do research from the prospective of pedagogy and polytechnics. Drawing on Basil Bernstein's pedagogic device theory (Bernstein, 2000; Wang, 2018; Bertram, 2020), there are three fields: knowledge production field (I), re-contextualization field (II) and reproduction field (III). In the field of knowledge production, different groups try to turn their knowledge into thinkable knowledge. In the re-contextualization field, different groups transform thinkable knowledge into educational discourse and construct a legitimate educational practice. In the reproduction field, different groups compete to identify and realize the educational code type embodied in the legal education practice, so as to facilitate the reproduction (Bernstein, 2000; Wang, 2018). Bernstein's theory of the pedagogic device (Figure 1) provides researchers with explicit criteria/rules to describe the macro, mezzo and micro structuring of knowledge, and in particular the generative relations of power and control constituting knowledge (Singh, 2002).



This article is aimed to analyse the pedagogic device of IEE in Zhejiang province. Based on the current local government policies, it attempts to build the pedagogic device from four aspects: instructor training, student training, three levels' competitions and mass innovation space. Every field includes two parts where it's a social space of conflict and competition (Bourdieu, 1992, pp. 178-195). IEE knowledge is from industry or Mass Innovation Space specialist in highly complex symbolic forms and must be decoded or translated in order to be accessible to those outside the specialist domains. consumers. Thus, the pedagogy of knowledge is increasingly undertaken within agencies of recontextualization, like provincial education department, polytechnics and universities. Compared with curricular schemes and textbooks, IEE focus on operability in real business market. Students learn realization rules by working out the three levels' competition or success of business – what can be done, how, when, and where.

## **METHOD**

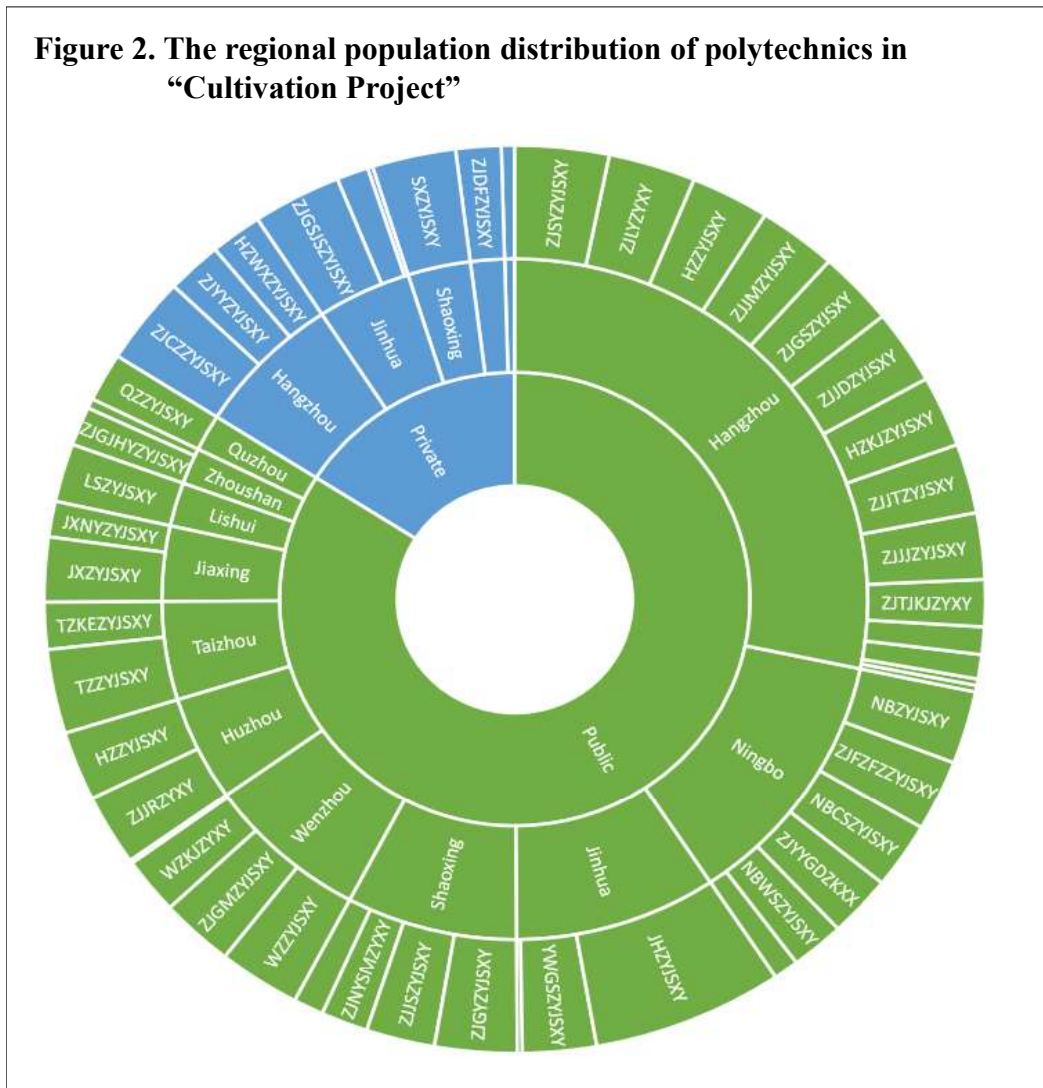
The empirical evidence is mainly gathered from the official IEE curriculum documents and government reports from each wave of reform, as well as existing studies in the field. Meanwhile, purposive sampling was utilized, and an SMS was sent to teachers (n=14), students (n=25) and graduates (n=9) selected for their geographical location and the ranking of polytechnics in Zhejiang province. A semi-structured interview, comprising five open-ended questions and probes, was used to examine how IEE cultivate their competencies. Once they indicated willingness to participate in the study, a follow up email with a consent form and a

detailed information sheet was distributed to each participant. Only teachers (n=9), students (n=23) and graduates (n=6) indicated their consent to participate. They were provisionally scheduled for a semi-structured online WECHAT interview during February-April 2020. The interviews, on consent of the participants, were recorded and each file was a password protected saved file. Notes were taken during the interview which lasted between 30 and 45 minutes. All interviews were conducted by one researcher.

## FINDING AND DISCUSSION

*Instructor Training.* Zhejiang provincial education department set up the implementation guidance office of entrepreneurship instructor cultivation project. From 2016, province will fully organize and implement “Cultivation Project” in polytechnics and universities of the whole province, according to the tasks and requirements put forward in the policy. By 2020, Zhejiang will arrange a provincial training program for 5,000 entrepreneurship instructors. There are 1737 entrepreneurship instructors from the polytechnics. The regional population distribution of polytechnics in Cultivation Project is described as Figure 2. There are two

**Figure 2. The regional population distribution of polytechnics in “Cultivation Project”**



types of entrepreneurship instructor training in polytechnics and universities. First is universal training focusing on improving the implementation of IEE. Second type is integrated training with deep professional integration. Most of the trainers are successful entrepreneurs, financial experts, management consulting experts, venture capitalists, legal experts, patent experts and so on. The training period is five fulltime days.

In this study, many of the teachers referred to achieve the latest knowledge of industry and trends of innovation from “Cultivation Project”. Teacher B referred to professionals of the project who are ‘successful entrepreneurial experience, rich practical experience, business management experience, financial investment experience’. Teacher G reiterated and commented ‘unlike previous teacher training programs, this training really learned real innovation and entrepreneur knowledge’. He outlined polytechnics and universities generally conduct fragmented methods such as symposiums, thematic sharing and entrepreneurship salons, which are usually short-term and do not improve teachers’ professional skills.

Through the Cultivation Project, Zhejiang government will foster a sufficient number of high-quality team of entrepreneurship mentors. Zhejiang try to build a long-term device of training entrepreneurship mentors, professional development, and the hiring to promote in-depth development of polytechnic students’ IEE. After setting the overall goals, it will create entrepreneurship instructors selected training device, create entrepreneurship instructor talent pool, create a group of instructor studios and instructor teams, organize activities to match the industry, carry out multiple forms of IEE training and mentoring activities, and create the management platform of instructor training and curriculum resource. According to their own actual situation, polytechnics or universities can make the implementation plans of “cultivation project”.

*Student training.* In the Chinese traditional concept, the training of applied talents only exists in polytechnics, while the education of general universities should focus on theory and strengthen the scientific research (Liu & Fu, 2018). Student C who joined in 2020 WECHAT interview, referred to the status quo, ‘the knowledge we learned is all applied, and I have no plan to further study in the future. Now it is not easy to find a stable job, with the acquisition of skills, I think starting a business would be a good choice’. Therefore, polytechnics have an earlier and stronger working institution to promote IEE. Li, Cui, Li, & Xiong (2019) found that polytechnics and universities in Zhejiang all have clear talent training goals, which are oriented to cultivating innovative and entrepreneurial talents. However, they vary according to different types and positions of schools (Li *et al.*, 2019). Most of polytechnics have established institutions such as entrepreneurship polytechnics, especially Yiwu Industrial and Commercial College, which operates in the first place, has its own faculty resources and is directly enrolled in the students. By 2020, no less than 2% of the students in all universities will receive special training on innovation and entrepreneurship every year, and the number of college students in the province will reach 20,000.

All polytechnics have curriculum in innovation and entrepreneurship. The popularity was stated by half of students, ‘my relatives and friends are all in business. although I am still a freshman, I am very interested in starting a business, so I chose two courses... Because of the limited places, none of my classmates enrolled in the course’. Two credits for required courses are included into the undergraduate training program. At the same time, polytechnics actively explore the embedded courses of knowledge based on professional knowledge (Jiang & Ke, 2019) They have not only the whole college, the basic innovation and entrepreneurship

courses, but also the unique and interdisciplinary courses of innovation entrepreneurship (Li *et al.*, 2019). Based on college of economic or management, many entrepreneurial basic courses are opened, such as management, accounting, marketing and other aspects. Based on the engineering training base, many innovative courses are opened, such as mechanical arm operation, CNC machine operation, 3D printing, and other advanced manufacturing courses. These courses aim to help students to understand the basic concept of innovation and entrepreneurship and to prepare for their next phase of future.

On the other hand, labor employment service centers of prefecture-level cities in Zhejiang province organize Start Your Business (SYB) training for polytechnics students. SYB is an urban employment training program jointly run by the international labor organization and the ministry of labor and social security of China. Since its pilot in 1998, the project has helped countless unemployed people to find their own jobs and start their own businesses (Zheng, 2005). SYB training has three textbooks: Entrepreneurship Awareness Training Booklet, Entrepreneurship Plan Training Booklet and Business Plan (Yu, 2014). These training courses integrates the entrepreneurial process into ten steps, adopts the teaching method of participatory classroom, and enables students to improve their business plan through complete and systematic practical training as a hypothetical entrepreneur, so as to establish and maintain a profitable enterprise (Sun, 2019).

The SYB training program consists of ten steps and is divided to two parts (Ren & Sun, 2005; Fei *et al.*, 2007). *First*, SYB entrepreneurship training (two steps). Student K referred to initial part, ‘young people are interested in all kinds of entrepreneurial projects, but we don’t know which ones are right for us’. It educates participants on the characteristics of successful entrepreneurs and the risks involved in starting a business; evaluate their suitability to start small businesses; estimate the resources needed to start a small business. Student P commented ‘it helps us choose a project that suits ourself’. *Second*, SYB business plan training (the rest eight steps). The complexity was stated by most of students, ‘It’s a long job. It includes market research and forecasting, corporate recruitment and team building...formulation of cost, profit and cash flow plans...It took our team a whole month to finish the business plan’.

*Scholastical, provincial and national competitions.* China ‘Internet +’ College Students’ Innovation and Entrepreneurship Competition (IEC) is a national entrepreneurship competition under the guidance of the Ministry of Science and Technology, the Ministry of Finance, the Ministry of Education, the Cyberspace Administration of China and the All-China Federation of Industry and Commerce since 2015. The IEC adopts the three levels’ competition system of school-level preliminary competition, provincial-level semi-final competition and national finals. The school-level preliminary competition shall be organized by polytechnics and universities. Provincial second round shall be organized by all provinces. National final shall be selected and recommended by all provinces according to the quota which is determined by the competition committee which is described in Table 1. This committee allocates the quota of the national finals, taking into account the number of teams from different provinces, the number of participating polytechnics and universities, the development of IEE and so on. In the first session, more than 57,000 teams from 1,878 universities signed up for the competition, submitted more than 36,000 projects, and attracted more than 200,000 students (Wu, Hou, Hao, Zhan, & Wang, 2017).

To out the participation of Zhejiang province in IEC, Table 2 is described the amount of college students over 5 years. The first China “Internet +” college students’ IEC was

**Table 1. China ‘Internet +’ college students’ IEC system over five years**

Year	2015	2016	2017	2018	2019
Host University	Jilin University (North China)	Huazhong University of Science and Technology (Centre China)	Xidian University (West China)	Xiamen University (South China)	Zhejiang University (East China)
Project Field	‘Internet +’ Traditional Industry, New Form of Industry, Public Service, Technical Support Platform	‘Internet +’ Modern Agriculture, Manufacturing Industry, IT Service, Technical Support Platform, Commercial Service, Public Service, Social Entrepreneurship	‘Internet +’ Modern Agriculture, Manufacturing Industry, IT Service, Cultural and Creative Service, Public Service, Social Entrepreneurship	‘Internet +’ Modern Agriculture, Manufacturing Industry, IT Service, Cultural and Creative Service, Social Entrepreneurship	‘Internet +’ Modern Agriculture, Manufacturing Industry, IT Service, Cultural and Creative Service, Social Service
Objects Type Participated	Creative Group, Practice Group	Creative Group, Start-up Group, Growth Group	Creative Group, Start-up Group, Growth Group, Employment-oriented Entrepreneurship Group	Creative Group, Start-up Group, Growth Group, Employment-oriented Entrepreneurship Group	Creative Group, Start-up Group, Growth Group, teacher-student co-creation group
Quota of Final	300	600	600	600	1200

Retrieved from the notices of annual IEC announced by Ministry of Education.

**Table 2. Zhejiang province IEC results over five years**

Year	2015	2016	2017	2018	2019
Universities Participated	-	97	-	99	107
Projects Declared	-	2033	4488	7452	27410
Projects of Final	-	139	200	214	667

Retrieved from the results of annual IEC announced by Zhejiang education department

held in 2015. However, local provinces did not know the competition system and there was no precedent to follow, so provincial education departments did not openly organize provincial competitions in that year. Teacher E referred to the dilemma, ‘At the first session, the IEC was an experiment, and every province was watching, but lots of universities signed up for the first session’. In 2016, the education department of Zhejiang province began to hold the first “Internet +” college student IEC, with 97 participating universities, including all undergraduate and polytechnics. With the promotion of the popularity of the competition, the average annual growth rate of the declared projects is as high as 93.40%. Similarly, universities do not know the provincial competition system, so they did not officially organize the university-level competition until 2017. Taking the number 1 vocational college in Zhejiang province as an example, the average annual growth rate

**Table 3. Jinhua polytechnic college IEC results over five years**

Year	2015	2016	2017	2018	2019
Students Participated	-	-	500	1270	6100
Projects Declared	-	-	100	200	900
Projects of Final	-	-	-	17	31

Gathered from the interviews of teachers in Jinhua polytechnic college.

of the declared projects is as high as 225%, which is much higher than the average level of the whole province.

Jinhua polytechnic college participation in Innovation and Entrepreneurship Competition (IEC) over five years from 2015 to 2019 exceptionally increase (Table 3). There were no students participating in IEC in 2015 and 2016. However, started from 2017, there were 500 students participated and 100 projects declared. Since then, there were 1270 and 6100 students participated (2018 and 2019 respectively), and 200 and 900 projects declared (2018 and 2019 respectively). Furthermore, in 2018 and 2019, there were 17 and 31 projects of final which are selected and promoted to participate in national competition.

**Table 4. The construction and evolution of China’s mass innovation space ecosystem**

IEE Institutions	Incubator	University Science Park	Accelerator	Entrepreneurship Nursery	Mass Innovation Space
Year	1987	2000	2007	2009	2015
Phases	Introduction period	Growing period, maturation period	Maturation period, decline period	Initial period	Full period

Collated from Xie & Liu (2018, p. 581)

*Mass innovation space.* China’s IEE service institutions were first established in the 1980s starting from an incubator program in the university and finally became a mass innovation space (Table 4). There were incubators, university science parks, accelerators, entrepreneurship nursery and so on, which formed a service mode dominated by entrepreneurship incubation (Xie & Liu, 2018). The mass innovation space is a new word extracted by the ministry of science and technology after conducting research on the maker space, incubator base and other IEE service institutions in Beijing, Shenzhen, and other cities. In terms of expression, mass innovation space is a word with Chinese characteristics, which can also be said to be the product of local maker space. Different from the traditional maker space, it is mainly reflected in the enhancement of entrepreneurship incubation function. Therefore, it can be understood that mass innovation space = maker space + entrepreneurship incubation (Wang & Ye, 2015).

In Zhejiang province at present, there are two modes of mass innovation space. One is Characteristic Village, which is rooted in the local original characteristic industry base and to build a complete industrial ecosystem, such as Hangzhou dream village, cloud village, Shaoxing rice wine village, E-games village (Chen, Xiang, & Yu, 2015). Different from internationally renowned towns such as Beppu in Japan and Silicon Valley in the United



States, although Characteristic Villages are named after towns, but they are not first-level administrative divisions. Characteristic Villages are municipal development platforms based on economic goals and resource endowment (Chen & Huang, 2016). The other is the incubator model, build by the venture capital institutions (such as Silicon Paradise, Puhua Capital, and Zheshang VC), well-known enterprises (such as Alibaba, Netease), and universities (Chen *et al.*, 2015). Taking Zhejiang Industry Polytechnic College (ZJIPC) as an example, it built a provincial mass innovation space-Yue Mass Innovation Space, which is based on the campus of the national demonstration public training venues and teachers' resources. In the early stage, students from the school of design and art, the school of mechanical engineering, the school of electronic engineering and the school of transportation, were mainly provided with industrial robot, PLC control system, CNC machine tools and other instruments, so as to provide the students' innovative and entrepreneurial team with the opportunity to develop experimental products. At the same time, students can also apply for the computer workstation in the training site of the school of design and the school of business, to promote and display products and teams. Graduate A referred to the status quo, 'After graduation, I continued to stay in Yue Mass Innovation Space. Because the rent here is free for three years, and the price of water and electricity is much lower than outside office buildings. There are 49 teachers in ZJIPC who have participated in Zhejiang cultivation project and can provide consulting services such as road show, company registration and capital docking. More and more companies are teacher-student co-created, 'Meishan Studio was originally founded by me and teacher. With the good operation of the company and the financial situation from loss to profit, teacher chose to quit the team. At present, the company is co-owned by me and three alumni' stated by Graduate E.

Thus, it can be seen that the development mode of mass innovation space mainly has three levels. *First*, the primary mode of version 1.0: build physical space that can promote communication and realize technology sharing by integrating idle resources, and provide hardware support mainly for entrepreneurs' office space. *Second*, the upgrading mode of version 2.0: except hardware support, also provide software support, such as to conduct entrepreneurship education and training guidance, capital docking services and so on. The profit model of this version is relatively single, and the profit cycle is long. *Third*, the 3.0 version with comprehensive entrepreneurial ecosystem: mainly guided by government support and operated in the way of corporate management, relying on university parks or industrial bases. It provides supporting services of various preferential policies and one-stop services for start-up enterprises, and has its own resource advantages and service features to build an entrepreneurial ecosystem (Lu, 2018).

## CONCLUSION

The per capita income of Zhejiang province has reached the standard of middle developed countries. And, the development of each industry also tends to reach mature period. How to conduct industrial upgrading and transformation? How to join the list of developed countries? The reserve of innovative talents is the key, especially for college students. The government invests a huge amount of money to push the cultivation project, which aims to help college teachers realize the importance of IEE for social development, and make vocational education closer to the actual needs of the industry. In the form of IEE, all sectors of society are involved and make concerted efforts to put the reserve of innovative talents into practice. After the instructor training, teachers are able to develop the IEE curriculum inserted to the specialty

courses and conduct the SYB training. Students choose IEE courses according to personal interests, organize team and submit business plan to IEC. Excellent and award-winning teams can also apply mass innovation space, obtain various resources inside and outside the university, and smoothly carry out the commercial operation of their project. Finally, the Basil Bernstein's pedagogic device theory is realized by appointing the well-run project leader as the lecturer in the cultivation project.

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### REFERENCES

- Bernstein, B. (2000). *Pedagogy, symbolic control and identity*. Rowman & Littlefield, p. 116.
- Bertram, C. (2020). Remaking history: The pedagogic device and shifting discourses in the south African school history curriculum. *Yesterday & Today*, 23, 1-29.
- Bourdieu, P. (1992). *Language and symbolic power*. Polity Press.
- Chen, S., Xiang, L. Y., & Yu, R. J. (2015). Co-maker space entrepreneurship ecosystem: Features, structure, mechanism and strategy—Case study on Hangzhou dream town. *Journal of Business Economics*, 289(11), 35-43.
- Chen, Y. F., & Huang, G. (2016). Zhejiang practice of supply-side structural reform with characteristic town layout, *Journal of Zhejiang provincial party school of CPC*, 5, 28-32.
- Fei, L. Y., Fan, M. Y., & Huang, H. (2007). A Probe into the SYB project and its implementation in college. *Journal of Jiaxing University*, 19(4), 63-67.
- General Office of State Council. (2016). *Opinions on building a demonstration base for mass entrepreneurship and innovation*. State Council of Beijing.
- General Office of State Council. (2017) *Opinions on deepening the integration of industry and education*. State Council of Beijing.
- Li, L. J., Cui, W. J., & Li, F. (2019). A brief analysis on the path research of innovation and entrepreneurship talent cultivation in China Three Gorges University- Based on the investigation report of six university, including Zhejiang University. *Education Teaching Forum*, 5, 85-86.
- Liu, Z. X., & Fu, M. L. (2018). Construction and development of innovation and entrepreneurship education ecosystem in universities with industry characteristics - Taking Zhejiang University of Communication as an example. *Higher Education Forum*, 6, 86-89.
- Lu, Q. P. (2018). The research on the “Three in One” model of college entrepreneurship education—Based on the viewpoint of the development for the maker space in Zhejiang, *Special Zone Economy*, 352(5), 54-56.
- Jiang, Y. F., & Ke, Y. N. (2019). Entrepreneurship education –The remarkable mystery of Zhejiang University. *China Education Daily*, 01, 1-2.

- Ren, H. Q., & Sun, S. M. (2005). Student employment and SYB training. *Chinese Vocational and Technical Education*, 217, 53-55.
- Singh, P. (2002). Pedagogising knowledge: Bernstein's theory of the pedagogic device. *British Journal of Sociology of Education*, 23(4), 571-582.
- State Council. (2017). *Promoting high-quality development of innovation and entrepreneurship and upgrading mass entrepreneurship and mass entrepreneurship*. State Council of Beijing.
- Sun, T., & Zhao, Y. H. (2017). The innovation and entrepreneurship curriculum system in American polytechnics and universities: Construction and enlightenment. *Vocational Education Research*, 8, 82-86.
- Sun, Y. (2019). A study on the optimization of SYB training mode in polytechnics. *Journal of Zhenjiang College*, 32(2), 63-66.
- Wang, J. H. (2018). Pedagogic discourse and practices: The study of Basil Bernstein's pedagogic device. *Sociology of Education in Taiwan*, 18(1), 1-39.
- Wang, Y. M., & Ye, A. M. (2015). From maker space to crowd maker space: Function model and service path based on innovation2.0. *E-education Research*, 271(11), 5-12.
- Wu, A. H., Hou, Y. F., Hao, J., Zhan Y., & Wang, K. (2017). The reform of innovation and entrepreneurship education in polytechnics and universities with the Internet + entrepreneurship and innovation competition. *China University Teaching*, 1, 23-27.
- Xie, X. F., & Liu, Q. L. (2018) Ecological model of mass-innovation space in the era of innovation2.0: Comparison and enlightenment at home and abroad. *Studies in Science of Science*, 36(4), 577-585.
- Xie, Y. H. (2019). Research on the course system construction of innovation and entrepreneurship education in Polytechnics of Zhejiang Province. *Science Tribune*, 11, 31-32.
- Yu, J. P. (2014). Research on the significance and countermeasures of SYB training for college students. *Journal of Changchun Education Institute*, 30(5), 120-121.
- Zheng, X. G. (2005). The development of entrepreneurship training in China. *Chinese Technological Research*, 5, 114-118.
- Zhou, N. (2015). Li Keqiang urged mass entrepreneurship and innovation. *Xin Hua Net*. [http://www.gov.cn/xinwen/2015-09/10/content\\_2928395.htm](http://www.gov.cn/xinwen/2015-09/10/content_2928395.htm).
- Zhou, Y. (2017). Mass entrepreneurship and innovation to drive economic transformation and upgrading. *China Economic Times*, Eight 9, 2017. [http://www.gov.cn/xinwen/2017-08/09/content\\_5216891.htm](http://www.gov.cn/xinwen/2017-08/09/content_5216891.htm).