

The Theory and Practice of College Students' Off-campus Practice Base Construction from the Perspective Integration of "Teaching, Discipline Competition, Innovation and Entrepreneurship"—Based on the Practical Experience in the Construction of Off-campus Practice Base of ZK College

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Abstract: Innovative practical talents with national feelings, innovative spirit, strong practical ability and other abilities can better meet the requirements of high-quality development of Chinese economy. In the process of talent training practice in application-oriented colleges and universities, there are some practical problems such as graduates' lack of practical ability, weak innovation consciousness, weak entrepreneurial ability and neglect of ideological and political guidance in practice. The research shows that it is an important starting point for universities to cultivate high-quality innovative practical talents through the continuous construction of off-campus practice bases for college students and university-enterprise joint practice bases. This paper discusses the practical significance of the construction of off-campus practice base for college students, investigates the current situation of the construction of the practice bases, draws on the experience of the construction of off-campus practice base for some colleges and universities, based on the integration theory of "Teaching, Discipline Competition, innovation and Entrepreneurship", combined with the practical experience of the construction of off-campus practice base for ZK College students and the construction of school-enterprise cooperation joint practice base, puts forward the optimization suggestions of the construction of off-campus practice base.

1. Introduction

The construction of off-campus practice bases for college students is an important part of talent training in application-oriented colleges and universities [1], and its fundamental task is to innovate

the talent training mode and collaborate with talent training [2]. In 2012, the Ministry of Education issued Several Opinions on Further Strengthening the Practical Education of Colleges and Universities and Notices on the Construction of Off-campus Practice Bases for College Students in the "Undergraduate Teaching Project", encouraging colleges and universities to explore the education mode of off-campus practice bases. In 2015, The General Office of the State Council pointed out in the Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Colleges and Universities: Explore the establishment of a new mechanism for collaborative education between schools and enterprises, schools and localities, schools and institutions... We will build a number of off-campus practice education bases for college students. In April 2017, the Ministry of Education launched the industry-university Collaborative education program, with the construction of off-campus practice bases as its key content. In October 2018, the Ministry of Education proposed in the "Opinions on Accelerating the Construction of High-level Undergraduate Education and Comprehensively Improving the Ability of Talent Cultivation" that it should build a new collaborative education mechanism featuring all-round integration of the whole process, establish a talent cultivation mechanism with closer cooperation with social employment departments, and further increase the proportion of practical teaching. Vigorously promote the construction of practice education base in industry departments and enterprises. In December 2018, it was proposed in the Action Plan of the Ministry of Education on Technological Innovation of Rural Revitalization in Colleges and Universities (2018-2022) that a practical teaching platform linking on-campus practice teaching base and off-campus practice base should be built. It can be seen that application-oriented undergraduate colleges must change their previous teaching concepts and modes, pay attention to the cultivation of students' practical abilities, establish in-school and off-campus practical teaching bases in the form of industry-university-research cooperation [3], explore the training mode of high-quality applied talents, and promote the reform and innovation of practical teaching system.

2. Current Situation of Construction of Off-Campus Practice Base in Colleges and Universities

In order to grasp the real situation of the construction of off-campus practice bases for application-oriented colleges and universities in Guangdong Province, the research group designed a questionnaire and conducted a random questionnaire survey among 545 college teachers and students by using the questionnaire Star. 522 effective questionnaires were actually recovered with an effective rate of 95.78%, among which: There are 31 college leaders and 146 college teachers, and the rest are college students or recent college graduates.

2.1. Base Construction Is a Mere Formality, and the Integration of University and Enterprise Needs To Be Deepened

Through the investigation (Table 1), it is found that only 28.74% of application-oriented universities in Guangdong Province were truly based on teaching reform and school enterprise win-win; some off-campus practice bases of universities only pay attention to the application and approval of projects or only pay attention to the signing and listing (29.50%), ignoring the in-depth mining and sustainable use of the practice base value. There are also some bases just out of the "to complete the target task" form needs (33.14%), which did not really put into the practice of teaching. Some practice bases approved for construction in the form of subject or project often terminate the cooperation between the co-builders randomly after the completion of a subject or projects, not to mention in-depth cooperation between schools and enterprises.

Table 1: Investigate the real purpose of off-campus practice base construction

	Apply for teaching and research projects	Complete the evaluation indicators	Reform of teaching	School-enterprise win-win	Other
Head count (persons)	154	173	89	61	45
Proportion (%)	29.5	33.14	17.05	11.69	8.62

2.2. Failed to Fully Release the Practice Base's Function of Educating People

The purpose of university students' off-campus practice is to cultivate high-quality applied talents with strong practical ability, innovation ability and innovation consciousness. According to the survey data in Table 2, the main functions of application-oriented colleges in Guangdong Province are limited to off-duty employment (22.80%), student skill training (20.11%), scientific research cooperation (17.81%) and practical training and practice (17.05%), while ideological and political education and labor education account for 9.39% and 12.84% respectively. It can be inferred that the off-campus practice bases of some colleges and universities fail to release the function of educating people, and graduates are not strong in practice ability, innovation consciousness, patriotism and ideology, and innovation ability.

Table 2: Investigate the actual functions of off-campus practice bases

	Ideological and political education	Skill development	Practical training practice	Expanding employment	Education in labor	Scientific research cooperation
Head count (persons)	49	105	89	119	67	93
Proportion (%)	9.39	20.11	17.05	22.8	12.84	17.81

First of all, students participating in the practice of teaching enthusiasm is not high, the effect is not ideal. As the assessment method of practice teaching in off-campus practice base of college students is mainly based on writing reports or experience, the assessment index of practice teaching is relatively simple. The research group found that some colleges and universities regard the passing rate of students in the postgraduate entrance examination and the certificate examination as an important index to evaluate the work effectiveness of secondary colleges. Secondary colleges encourage graduates or non-graduates to take the postgraduate entrance examination and the certificate examination, so many students choose to take the postgraduate entrance examination or take various qualification certificates or go abroad, resulting in low enthusiasm of students to participate in practical teaching. In addition, Students participate in the practice for a short time, usually a week, some professional cognitive practice is only half a day, graduation practice is relatively long, but close to graduation, students are focused on job hunting, eventually resulting in the practice teaching effect is not ideal.

Secondly, the competence of practical teaching teachers is not strong. First of all, some practice instructors lack the sense of innovation. The lack of teacher innovation consciousness is a common problem in Chinese education [4]. If the instructor does not have a certain sense of innovation, it is impossible to give innovative guidance to college students. Secondly, the supervisor's competence is not strong, mainly manifested in rich theoretical knowledge but lack of practical experience, or rich practical experience but lack of theoretical knowledge reserve. Due to the absence of incentive mechanisms and subsidies, teachers lack the motivation to guide students. Some teachers lead students to practice in the base, but only pay attention to whether the students obey the discipline

and do not really participate in the practice, which directly affects the teaching effect of the practice base.

Third, ideological and political guidance is ignored in practice guidance. Ideological and political education in the curriculum is an important starting point to carry out the fundamental task of cultivating morality and cultivating people. General Secretary put forward in the Accounting of Ideological and political work in National colleges and universities that ideological and political values should be guided through the whole process and every link of education and teaching, and ideological and political elements should also be incorporated into the practical guidance link, to cultivate the spiritual quality of college students' innovation and entrepreneurship [5]. The research group found that in practice teaching, teachers generally pay more attention to the cultivation of students' professional knowledge and the improvement of practical ability, but ignore the ideological guidance of students, resulting in students' weak sense of innovation and lack of spiritual calcium.

2.3. The Practice Base Lacks Supporting Policy Support for Sustainable Operation

The survey data in Table 3 reveal the main factors influencing the sustainable operation of off-campus practice based construction in Guangdong Province. Due to the lack of national policy support for the construction of off-campus practice bases, there is no guarantee for the sustainable construction of the base, and enterprises lack of internal driving force. First of all, colleges and universities in the construction of practice based actual investment, insufficient funds implementation is not in place, resulting in numerous difficulties in the follow-up operation. Through the investigation, it is found that some off-campus practice base projects have no funding or only a small amount of funding support, which makes the construction of the base difficult to operate effectively or fail to achieve the expected goals. Secondly, the country lacks of policies and measures to encourage enterprises to support the construction of practice bases. For example, in terms of tax policy, although China has introduced supporting policies to support college students' innovation and entrepreneurship, there is no preferential tax policy on the construction of college students' practice base, and enterprises lack the driving force of continuous investment.

Table 3: Investigate the factors influencing the sustainable operation of off-campus practice base construction

	Guarantee of funds	Double-skilled teachers	Lack of national policy support	Restriction of traditional ideas	College students don't cooperate	Lack of motivation
Head count (persons)	171	81	97	37	27	109
Proportion (%)	32.76	15.52	18.58	7.09	5.17	20.88

3 Practical Experience in Building Off-Campus Practice Bases of ZK College

3.1 Theoretical Basis

The integration of "teaching competition and innovation" is to skillfully integrate group activities such as innovation and entrepreneurship competition, discipline competition, college students' scientific and technological academic innovation, and social practice into the daily theoretical teaching and experimental and practical training, and take the competition process as an important means to assess and test the learning effect of college students. A talent training model that integrates teaching activities with competition projects promotes the deep integration of industry, university and research, and cultivates students' innovative spirit and entrepreneurial ability (Figure

1). As we all know, off-campus practice base is an important place for college students to combine theoretical knowledge with production practice, and an important guarantee for application-oriented colleges to cultivate students' vocational ability [3]. It can expand the development space for innovation and entrepreneurship competitions and discipline competitions.

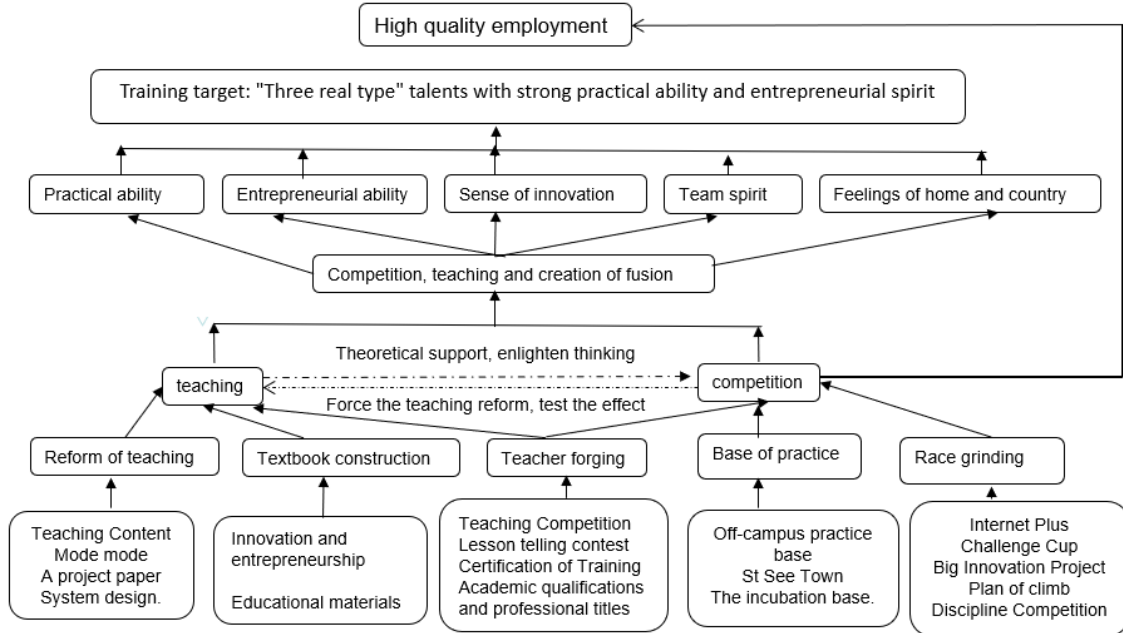


Figure 1: The relationship between the construction of off-campus practice bases for college students and the integration reform of “Teaching, Discipline Competition, Innovation and Entrepreneurship” integration

3.2. Top-Level Design and Implementation Path



Figure 2: ZK College talent training mode based on the main line of innovation and entrepreneurship education

ZK College is a local application-oriented undergraduate university. In March 2022, ZK College officially issued the Implementation Opinion on Building an Innovative and Entrepreneurial University, establishing the educational goal of building a regional, application-oriented and international private university with distinctive features of engineering, economics and management. ZK College has always paid attention to practical teaching and the construction of off-campus practice bases. Centering on the strategic goal of building a "high-level innovative and

entrepreneurial university" and based on the integration mode of "teaching, competition and innovation", ZK College has implemented innovation and entrepreneurship education as the main line in the whole process of talent training, and explored to cultivate and improve the practical and innovative ability of college students by strengthening the construction of off-campus practice bases (Figure 2).

In terms of the specific implementation path, ZK College has designed the innovation and entrepreneurship education support system in detail (Figure 3), and added the theory and practice course system of innovation and entrepreneurship education in the talent training program of 2022 edition. For example, the practice courses of innovation and entrepreneurship education for accounting, financial management, auditing and other majors cover practical courses such as enterprise tax declaration training, cost accounting training, professional cognition practice, innovation and entrepreneurship practice, second class practice and so on.

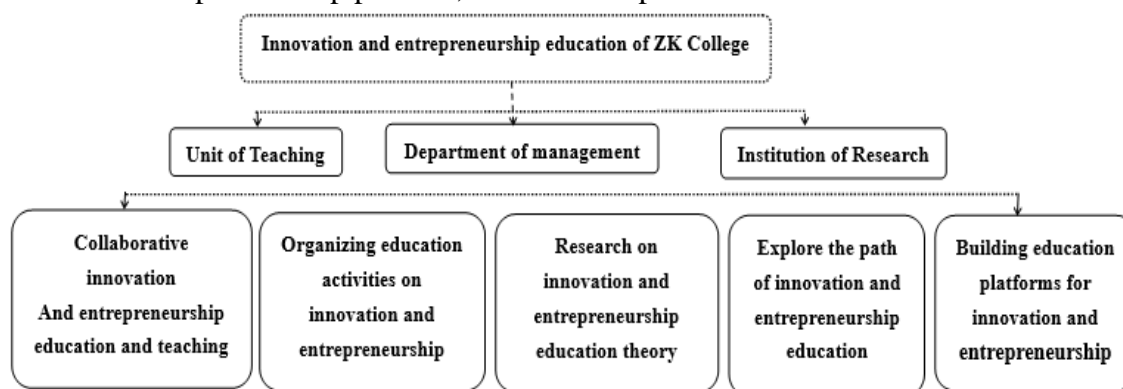


Figure 3: Implementation path of innovation and entrepreneurship education in ZK College

ZK College established an innovation training base with XiangShun Holding Group Co., LTD in April 2019, and upgraded to a social practice teaching base for college students in Guangdong Province in December 2021, mainly providing conditions for professional cognitive practice for civil engineering, engineering management, financial management, business administration, hotel management and other majors. ZK College launched the school enterprise practice Teaching base construction project with Guangdong Chigo Air Conditioning Co., LTD in August 2018, to carry out mutually beneficial cooperation in curriculum design, technology research and development, internship and employment in art design, intelligent manufacturing, financial management, business administration, marketing and other majors. Guangdong CHigo Air Conditioning Co., LTD. provides 30 internship positions for ZK College every year. The school assists enterprises to select, organize and manage students' internships, jointly trains 5 instructors, and jointly develops professional practical courses that meet the needs of enterprises to solve problems in production and management. Through the construction of the above two typical practice bases, the teaching space of ZK College is expanded, teachers and students are more fully familiar with the manufacturing production and operation process, which makes practical teaching closer to the front-line reality, promotes the school and enterprises to change their ideas, develops students' practical training ability, and cultivates application-oriented talents in line with social needs.

At the same time, ZK College budgets part of the annual funds to encourage students to participate in innovation and entrepreneurship projects, Internet + innovation and entrepreneurship competitions and discipline competitions, which are jointly guided by mentors from both sides of the base. For example, the National Undergraduate Tax Risk Control Case Competition is jointly guided by industry mentors from the off-campus practice base of ZK College and instructors from the campus. Through participating in discipline, competitions and innovation and entrepreneurship practice activities, students have cultivated innovative and entrepreneurial qualities, have critical

thinking, have full enthusiasm for the ideal and down-to-earth spirit, study and work efficiently, dare to take risks, and have a sense of responsibility. After more than one year of integrated reform of "teaching, competition and innovation", ZK College randomly conducted a questionnaire survey among 1025 students (288 sophomores, 328 juniors and 409 seniors) (see Table 4). The satisfaction of college students with off-campus practice base and awards in competition increased by 11.99% and 21.02% respectively; the results of the survey of 409 senior students showed that "college students started their own businesses", "graduates taking postgraduate entrance exams" and "high-quality employment" increased by 6.09 percent, 2.84 percent and 13.8 percent, respectively.

Table 4: ZK College's off-campus practice base construction results based on the integration of “Teaching, Discipline Competition, Innovation and Entrepreneurship”

	College students' satisfaction with the practice base	College students enter competitions and win prizes	College students start their own businesses	Graduates enter graduate school and civil service	High quality employment
Head count (persons)	975	901	60	64	321
Proportion (%)	95.22	87.95	14.75	15.79	78.59
Historical average (%)	83.23	66.93	8.66	12.95	64.79

Note: Table 4 "Historical mean" is taken from the ZK College Undergraduate Teaching Quality Report for 2019-2021, and the arithmetic mean for 3 years is calculated.

4. Suggestions on Optimization of Off-Campus Practice Base Construction

In view of the common problems in the construction of off-campus practice bases for college students, the following optimization measures are put forward in reference to the excellent experience of the construction of off-campus practice bases for college students.

4.1. Taking Multiple Measures to Promote In-Depth Cooperation between Schools and Enterprises

School-enterprise cooperation is an important measure to give full play to the function of college students' practice base. The depth of school-enterprise cooperation affects the utilization efficiency and good development of the base. In order to give full play to the functions of the base, change the practice of emphasizing construction and light operation, and take more measures to promote in-depth cooperation between schools and enterprises.

First of all, select enterprises suitable for in-depth cooperation between schools and enterprises. The selection of off-campus practice base should be based on the characteristics of industry and social needs, and the practice base is suitable for students' professional development [6]. At the same time, when choosing the practice base, we should consider the combination with the national development strategy. For example, at the present stage of promoting rural revitalization in an all-round way, local colleges and universities can build off-campus practice bases for rural revitalization college students in nearby towns and villages, to build a platform for joint education between universities and local governments.

Second, establish the concept of win-win for all stakeholders. In building a practice base, we should not only consider what the base can bring to the school and students, but also give full consideration to what the base can bring to the enterprise. That is, we must fully consider the interests of both parties in co-building the school and the enterprise and clarify their responsibilities

and tasks, to give full play to the enthusiasm of all parties. In terms of promoting school-enterprise cooperation, enterprise mentors are encouraged to participate in the formulation of talent training programs, participate in the guidance of graduates' theses, and invite enterprise leaders to the university to give lectures. The school can regularly send experts and professors to enterprises for guidance and communication, provide cutting-edge dynamic consulting [7], technical and legal counsel services, or cooperate with enterprises to carry out subject research, solve technical problems and innovative projects. The two sides jointly promote the reform of talent training mode, explore the implementation of talent training mode of order class, modern apprenticeship, "attracting enterprises to school", "introducing education to enterprise" innovation, "supporting the integration of production, teaching, research and learning" -- "learning factory" [8].

4.2. Strengthen the Practice Base's Ideological Guidance to College Students

In the stage of high-quality development of Chinese economy, the society has put forward higher requirements for talent: not only have solid theoretical knowledge and rich practical experience, but also have the consciousness of innovation, the spirit of innovation and the feelings of the country and other professional qualities. Therefore, in the guiding practice, the instructor should pay attention to the ideological and political guidance of the students, strengthen the innovation consciousness and professional quality of the students, and improve the innovation and entrepreneurship ability.

First of all, give full play to the leading role of example. Instructors communicate with students at regular times, introduce the enterprise's hard work history at appropriate times, or invite successful graduates to give lectures to tell their business stories. For example, this paper introduces how Ren Zhengfei, the founder of Huawei, overcame difficulties and insisted on independent innovation and scientific and technological innovation around major national strategies, to inspire college students to build up their will to work hard, strengthen their awareness of innovation and enhance their sense of social responsibility.

Secondly, ideological and political elements are integrated into practical teaching. For example, when guiding discipline competitions, some students may have the idea of giving up the competition midway due to various difficulties. The "women's football spirit" can be encouraged to guide college students to face difficulties and actively solve the problems. For another example, when students major in accounting practice in small and micro enterprises, they can ask themselves to think about: What preferential tax policies are enjoyed by small and micro enterprises? Why should the state vigorously support the development of small and micro enterprises? How do small and micro enterprises make full use of tax incentives for tax planning? Students can cultivate their independent thinking and problem-solving abilities and enhance their innovative practice abilities by thinking and practicing.

Third, innovate the practice assessment system for students. In order to improve the enthusiasm of students to participate in practical practice, it is necessary to innovate the practice assessment system for students and evaluate the academic performance of college students in multiple dimensions. Among them, the performance in the practice process, the ability to analyze and solve problems, and the ability to innovate can be taken as an important measurement index.

4.3. Improve the Competence of Practice Instructors

First of all, teachers are regularly arranged to participate in innovation and entrepreneurship-related training and academic seminars [9]. Teachers are encouraged to guide innovation projects, Challenge Cup, Internet + Innovation and entrepreneurship competition, etc., which can not only expand their vision, but also enhance their innovation awareness and innovation

practice ability. Secondly, teachers should be encouraged to "go out", that is, to encourage the weak or young guidance teachers in the school to actively participate in professional practical training and encourage them to practice in the practice base. By communicating with relevant experts and professors of the school, the enterprise mentors can improve their theoretical knowledge and get in touch with the latest research trends in relevant fields [3]. Finally, improve the enthusiasm of the base practice instructor. For example, corresponding subsidies will be given to practical instructors who lead students to the base for internships and practice, and financial support will be increased for guiding innovation and entrepreneurship competitions. Preferential policies will be given to those with outstanding results in job promotion, professional title evaluation and recruitment, and merit evaluation.

4.4. Establish and Improve Supporting Policies for the Sustainable Development of the Base

The perfect supporting policies and systems provide a strong guarantee for the good operation and sustainable development of the university student practice base. First, increase the financial input to the practice base. The funds can be invested in cash by both the university and the enterprise, or construction funds can be raised through project cooperation, or the funds donated by alumni and society can be accepted [10]. Second, the state has issued relevant preferential tax policies, which provide certain deductions and exemptions for cooperative enterprises in terms of value-added tax and income tax. For example, the reasonable expenditures actually incurred by enterprises due to the practice base of school-enterprise cooperation receiving students for practical training and practice are suggested to be deducted by 50%-100% when calculating the taxable income of the enterprise income tax. The practice base accepts donations from alumni and society and is exempt from corporate income tax.

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