Study on Sustainable Construction of off campus practice base for civil engineering specialty

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Abstract: As an important part of teaching work in Colleges and universities, the construction of practice base is an effective way to improve the quality of teaching, as well as a comprehensive consideration to improve the quality of students, which can effectively promote the development of the teaching mode of the combination of production, teaching and research. Practice education and practice base construction can play a positive role in teaching, information communication and other aspects. As a specialty with high practical requirements, civil engineering has higher requirements for the construction of off-campus practice base. This paper will analyze and elaborate the basic concepts and functions of learning base, analyze the problems existing in the construction of off-campus practice base, and put forward the corresponding solutions for reference.

1. The concept of practical education and practice base

With the development of social economy, the level of education has been constantly improved. In the process of College teaching, besides theoretical teaching, practical education has been paid more and more attention. The practical education of civil engineering specialty is often realized by establishing and perfecting the training base and strengthening the cooperation between schools and enterprises. Only by combining theoretical study and practical operation, can the practical operation ability of students be effectively improved and a solid foundation for future work be laid. On the basis of promoting students to master professional knowledge, practical education of civil engineering specialty can further enhance students' management level and innovation ability, improve students' ideological understanding, and ultimately achieve all-round development.

In the international community, there are many excellent examples of the establishment of practical education system, such as "cooperative education" in the United States, such as “industry-university cooperation” proposed by Japan, and “dual system” established by Germany. These cases have been tested for a long time. These cases are different from the traditional in-school training bases. They are to further improve the competitiveness of students by establishing and improving out-of-school practice bases to provide more internship opportunities for students. As an important platform for students to learn and accumulate practical experience, these off-campus practice bases enrich the form of practical education, embody a new mode of cooperation between industry, University and research, and directly affect the realization of students' overall training objectives.

2. The role of practice base

2.1 The role of practice base in student training

Through practical operation, it can improve the learning effect of theoretical study, effectively consolidate the theoretical basis, enable students to grasp the basic methods quickly, improve the basic skills level, further lay a good foundation for employment, and promote the seamless docking of internship employment. At the same time, in the process of practical education, students' non-intellectual factors can be improved, which is conducive to students to establish lofty ideals, cultivate professional habits and innovative consciousness. Under the training mode of vocational education combined with professional skills, students' will can be tempered, their
dedication and social responsibility can be laid a foundation, and their correct outlook on life and values can be established.

2.2 The role of practice base in school development

Student and teacher's evaluation of the practice base and corresponding information feedback are rare resources. Some cooperative enterprises have unique advantages in the process of students' training program and curriculum system setting, because the enterprise is the terminal of personnel training, and the needs of enterprises reflect the training direction of students majoring in civil engineering. Through information feedback, the school can timely revise the teaching content and revise the teaching plan, so as to improve the level of education and teaching quality, and then solve the problem of disconnection between school education and the actual needs of society, and shorten the distance between college education and social work.

While establishing off-campus training bases, the school can also employ engineers and technicians with rich practical experience to directly carry out teaching or lecture reports, and actively encourage senior engineers and technicians of enterprises to participate in the discussion of development planning and professional training objectives of civil engineering specialty. Finally, we will formulate a plan that is conducive to strengthening teachers' strength in schools.

2.3 The role of service enterprises

The construction of off-campus practice base for civil engineering specialty also plays an active role in the enterprise itself. It can not only provide technical support for the enterprise, but also improve the talent supply mechanism of the enterprise. At the same time, the strong scientific research ability of the school itself can solve some comprehensive design problems for enterprises, and academic resources such as university laboratories can also provide technical support for the development of enterprises.

Through the establishment of off-campus training base, the direct communication between enterprises and students increases, which helps to solve the doubts in the process of selecting suitable talents. Employers generally believe that after training and communication during the internship period, enterprises can effectively select the right employees and shorten the running-in period between employees and enterprises.

3. Sustainable construction of off campus practice base

3.1 Face up to the problems existing in the construction of off campus practice bases

Usually, the mode of school-enterprise cooperation can greatly reduce the pressure of university education funds, but the production cost of enterprises is also greatly increased. Some enterprises may come with the purpose of obtaining cheap labor through School-enterprise cooperation. The cost of training base construction inevitably hampers the enthusiasm of enterprises. Students themselves have limited abilities. Due to the lack of operational experience in arranging work, enterprises usually do not arrange students to do high-tech application homework, which also makes students feel lost in the process of internship. In the face of these problems, we can not simply avoid or ignore them. We need to face problems and solve problems directly.

3.2 Explore the new mode of school enterprise cooperation

In the construction of off-campus training base, both universities and enterprises should explore and establish a new mode of cooperation between schools and enterprises to achieve win-win cooperation while combining their long-term goals with actual needs. For example, to try the “order” oriented training mode, employers and universities need to establish a contractual relationship, integrate the teaching resources and teaching advantages of both sides, and train talents together. After students graduate, they can get employment according to the contract. When the contract between the enterprise and the university is established, the construction of off-campus practice base will no longer be empty talk, because the enterprise itself is an excellent practice platform, under the premise of a sound cooperative education system, further use the different
educational environment and resources of the school and the enterprise to create a situation of common development and win-win situation. Students majoring in civil engineering can consult their school teachers for theoretical knowledge and field engineers for personal practice in the process of field practice to further consolidate their knowledge and leave a deep impression on practice.

3.3 Strengthening the management of off campus practice bases

We should adopt flexible management system and combine the law of talent growth to build off-campus practice bases under the consciousness of students as the main body. We can try to revise the school roll management system, in the form of separate classes, combined with the existing school system to carry out training, in the first half of the school year to implement the credit system management, in the off-duty school to implement the enterprise credit system, in order to revitalize the school roll management mechanism, and even allow students to advance or postpone graduation.

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References


