Analysis on the Coordination Mechanism of the First Class and the Second Class in Higher Vocational Colleges

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Abstract. The traditional classroom teaching mode cannot stimulate students’ interest and initiative in learning. Introduce the second classroom to complement and extend the first classroom. It will improve the comprehensive quality of students. This article analyzes how to achieve synergy between these in order to improve the contribution of the second classroom in talent training.

1. Introduction
Higher vocational colleges are an important type of higher education schools and an important part of vocational education. They are responsible for the mission of cultivating high-skilled and applied professionals for the first-line needs of production, construction, service, and management. Vocational students should have a certain theoretical foundation. They also have strong practical technical ability and can connect with work skills after entering the society. But at present, in higher vocational education, it often appears that students are not deep enough in theoretical knowledge and technical ability cannot be closely connected with actual work. It is difficult to achieve the improvement of students’ skills by relying on traditional classroom teaching mode. This article aims to put forward effective countermeasures for the synergy between the first classroom and the second classroom based on the analysis of the current education mode, so as to comprehensively strengthen student’s Theoretical knowledge and practical skills.

2. Disadvantages of traditional classroom teaching mode

2.1. Poor enthusiasm for active learning
The traditional classroom teaching mode is mainly based on the teacher's lectures. Students passively learn knowledge, and the learning effect is often not satisfactory. The main reasons for the summary are as follows: no interest in professional knowledge; failure to develop good learning habits; teachers' teaching methods are dull and so on.

2.2. The knowledge base is outdated
The knowledge that students learn in school classrooms is generally biased towards basic applications, and due to the backwardness of teachers and teaching materials knowledge, they usually cannot be used directly in employment positions, and it takes time to relearn relevant knowledge and skills. At the same time, it also increases the additional cost and time for cultivating new employees [1].
3. The importance of synergy between the first classroom and the second classroom

The second classroom is an effective supplement and extension of the first classroom, with various forms of participation and a high degree of openness and tolerance. Specifically, it can be divided into the following forms: club activities; various competition activities; innovation and entrepreneurship activities; voluntary services and social practice activities.

As the promoter of campus culture and the leader of college style, student associations are an indispensable part of the second classroom activities [2]. The clubs are divided into humanities, art, sports, and technology. The rich activities of clubs provide an important platform for students to communicate and learn from each other in their spare time.

In student associations, actively encourage and support the establishment and development of professional associations. Taking Yunnan Vocational and Technical College as an example, with the joint efforts of teachers and students in the electrical engineering teaching and research section, the electrical intelligence innovation club was established in 2018. So far, it has organized many professional and technical special activities, such as universal meter welding competition, heart-shaped water lamp welding, Motor drive training teaching, power supply and distribution training teaching, etc.

During the study period, members of the community benefited a lot, and their enthusiasm for learning was high. During the learning process, they took the initiative to learn professional frontier knowledge, and checked the lack of classroom teaching knowledge. Guided by clubs, led students to win the second and third prizes of Yunnan Vocational Skills Competition and the first prize of Yunnan University Science and Technology Festival in various competitions, innovation and entrepreneurship activities, voluntary services and social practice activities. In the innovation and entrepreneurship activities, he won the silver prize of Yunnan Province "Internet +" competition.

The increase in the proportion of students awarded has greatly stimulated the initiative of students in learning, directly promoted the improvement of the style of study, and laid a solid foundation for the construction of a good style of study. Figure 1 shows the comparison of the number of participants and the number of award winners after the second classroom activities in the past three years.

![Figure 1. The number of participants and the number of winners after the second classroom activities in the past three years.](image)

4. Problems in the connection between the first classroom and the second classroom

4.1. Distribution and sharing of teaching resources

4.1.1. Faculty resources. The number of professional teachers is small, and the first classroom teaching tasks and scientific research tasks are heavy, and professional teachers can guide students for a short
time. At the same time, there is no corresponding reward mechanism to quantify the workload of professional teachers in guiding students to compete or study.

4.1.2. **Training equipment resources.** When engineering students participate in the second classroom learning, they inevitably need to use some experimental training equipment in teaching. The use, loss or damage of equipment during this non-first classroom time is not easy to manage. However, the purchase of special second classroom training equipment may cause the problem of low resource utilization.

4.2. **Course content does not match**
If the activities carried out in the second classroom have a low degree of matching with the professional knowledge of the first classroom, the complementary role of the first classroom and the second classroom will be weakened. Only when the content of the second classroom activities are matched with the first classroom can the content of the first classroom be sublimated. The second classroom must avoid "formalism", it is only carried out for the purpose of carrying out activities, abandoning the guidance of the first classroom, deviating from the original goal of talent training, and also weakening the enthusiasm of students to participate.

4.3. **The evaluation criteria are not relevant**
In the first class, generally the final exam results are used to determine the learning situation, and certain credits will be obtained after passing. But in the second class, it is more difficult to determine the degree of completion and what kind of evaluation to give after participating in the activity. Most of the time, the end of the course or activity is used as the assessment standard, and only subjective perceptual evaluation is used as the assessment result. Ignore the improvement of the comprehensive quality of the students in the second classroom, and ignore the influence or depth of the curriculum [3]. At the same time, if the comprehensive evaluation of students at the school level and at the enterprise level is based on the performance of the first class, or even completely ignores the second class, the second class will also lack an incentive mechanism for students.

5. **Construction of coordination mechanism**
The construction of the second classroom requires the coordination and cooperation of various departments of the school, and the establishment of related management mechanisms to ensure the smooth development of departmental work. Figure 2 shows the collaborative construction of departments and mechanisms.

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**Figure 2.** Diagram of the collaborative construction of departments and mechanisms.
5.1. Construction of management mechanism
In the actual implementation of the first classroom and the second classroom, a management mechanism must be established at the school level to fully affirm the second classroom activities to encourage students to actively participate in the activities. At the same time, fully mobilize the enthusiasm of teachers in guiding activities, recognize the achievements of teachers in guiding the second classroom activities, and give certain performance rewards. Raise teachers to the same height in teaching, scientific research, and second classroom guidance, and reflect them as teachers in terms of job title declaration and workload calculation.

5.2. Integration of talent training programs
In the talent training plan, increase the matching degree with the content of the second classroom curriculum and professional knowledge and skills education, and at the same time benchmark the requirements of enterprises, so that students can achieve "zero docking" during class study, after-class exercise, and work. Fully mobilize students’ subjective initiative, organically combine the theoretical knowledge learned in the first classroom with practical applications, and truly realize the trinity of "ethics, skills, and strength". When designing talent training programs and second classroom activities, it is necessary to fully consider the complementarity of theories and second classroom activities, without repetition and connection, and integrate the first classroom knowledge into the second classroom.

5.3. Evaluation linkage mechanism
The smooth development of the second classroom is closely related to the determination of the credits of the second classroom activities. To improve the overall quality of students as a guide, improve the credit recognition method, and at the same time suggest that the second classroom credits be included in the compulsory credits, and the process of evaluating whether to participate in activities and the specific circumstances of participating in the activities should be carried out. When determining the comprehensive results, the second classroom transcript can be considered as appropriate, and the notion of transcript only can be discarded to stimulate more possibilities in the study of students.

5.4. Strengthen school-enterprise cooperation
Putting the second classroom in the company to complete it not only allows students to learn cutting-edge knowledge and exercise practical skills, but also provides more opportunities for companies to select talents in the later stage and achieve a win-win situation. Introduce excellent social resources to participate in the construction of the second classroom, actively explore and form a diversified talent training model [4]. Enterprises occupy a dominant position, and the construction of second classroom activities in accordance with the technical capabilities of the market demand can achieve better talent training effects. Companies also have more channels to learn about students who have performed well in activities, and provide channels for future selection of employees.

5.5. Optimize second classroom activities
In the design of second classroom activities, more attention should be paid to the content and form of their activities, focusing on enhancing their innovation, interaction and diversity. In order for the second classroom to achieve better teaching results, it must be a course or activity that students love, so that in the process of participation, it can arouse students’ interest in learning and guide them to explore new knowledge and new skill.

At present, the trial results of the electrical major of Yunnan Transportation Vocational and Technical College show that it is a better second classroom activity for students to participate in the competition. In the process of preparing for the competition, students independently search for relevant materials and documents and learn related software independently. And knowledge, complete self-learning under the guidance of self-drive, thereby enhancing the first-class learning results, forming good learning habits, exercising autonomous learning ability, and possessing the ability of knowledge transfer.
6. Conclusion
In my country's higher vocational education, the second classroom is an effective and innovative talent training model, based on the first classroom, but different from the first classroom, the two complement each other and are indispensable.

For the second classroom to be successfully implemented and achieve certain results, multiple departments must coordinate the development of operating mechanisms, and provide support in multiple dimensions at the school level, teacher level, and student level. The second classroom is conducive to stimulating students' desire for innovation and potential, while improving the atmosphere of learning and teaching, enhancing students' self-confidence, and cultivating outstanding talents for enterprises and society. The promotion of the second classroom education model has far-reaching significance for deepening the reform of education and teaching.

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