# Practical Research on the Construction of Second Classroom Education System

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**Keywords:** physical education, cultivate

**Abstract:** With the development of society, higher requirements have been put forward for the quality of talents. As the expansion and extension of the first classroom, the second classroom is the general name of a series of educational activities to cultivate college students'professional quality, improve their comprehensive quality and enhance their social competitiveness. This paper explores the construction and guarantee of the physical education system in the second classroom in order to promote the further development of the physical education system in the second classroom.

# 1. The Practical Significance of Developing Second Classroom Education

The second classroom, as its name implies, is different from classroom teaching in schools. It is an educational model based on extracurricular practice. It is the expansion and extension of the first classroom, the cultivation of College Students'professional quality [1], the improvement of College Students' comprehensive quality, and the enhancement of College Students'social competitiveness. It is the general name of a series of educational activities. It is an educational position and channel established between tangible education and intangible education. It is more open in time and space and can carry more colorful forms and contents of education. It is not only a supplement to classroom teaching, an important carrier for the development of students'quality, but also an important link for universities to achieve the goal of personnel training.

The first classroom education is the main channel for teachers to impart knowledge. It has always been attached great importance to. It is "teachers'speaking and students' listening", almost all of which are theoretical knowledge. With the new requirements of the society for the quality of talents, we should not only understand the knowledge of textbooks, but also master the combination of theory and production practice, and have a certain practical operation ability and ability to solve practical problems, and have a certain sense of innovation and entrepreneurship. The second classroom in Colleges and universities has become an important carrier of quality development. Its prominent role is to shape personality, stimulate potential and cultivate innovative consciousness. As a typical demonstration University of the top 50 in employment and innovation and entrepreneurship in China, our school has attached great importance to the students'second classroom education for a long time, and constructed a second classroom sports system with a series of contents, such as cultural education, social practice, scientific and technological innovation, innovation and entrepreneurship, and achieved good results.

#### 2. Second Classroom Physical Education System

# 2.1 Platform for Ideological and Cultural Education

Schools f Schools focus on political guidance and value guidance, follow the objective law of young students'growth and ideological education guidance, and build ideological and cultural education platform. In recent years, the school has held such activities as "celebrity lecture hall", "youth typical forum" and "excellent writers'reading and sharing". It invites the representatives of the

19th National Congress of the CPC, the well-known young people, Olympic champions, famous writers, CCTV hosts and other celebrities to give lectures, lectures, reading and sharing meetings on campus. We should do a good job in guiding students'thinking. The platform of Ideological and cultural education makes the majority of students receive good edification, forming a positive atmosphere. According to the idea of "highlighting science and technology type, strengthening volunteer service type, optimizing style and art type, encouraging interest and hobby type", we should manage the campus associations. In line with the principle that each associations has "one instructor, one affiliated unit, one characteristic activity, and certain financial guarantee", we should build the "Four Ones" student associations. At present, there are five types of student associations: public welfare service, theoretical and academic, innovative and innovative industries, literature and art, and sports.

The school insists on the brand leading effect of elegant art entering campus. Every year, more than 10 elegant arts of different categories at the national and provincial levels are introduced into the campus, benefiting teachers and students, and building a healthy and upward campus culture, which includes ideological and political education in cultural activities. In 2017, combined with the true stories of Yuchuan students in our school, it took half a year to compile the college students'own campus drama Da Ai Ruchuan, which won the Excellent Organizing Unit Award and Excellent Drama Award of the Sixth University Drama Festival in Liaoning Province. More than 10 performances were held inside and outside the school. More than 120 college students took the initiative to participate in the choreography and performance. Moving undergraduates to learn from examples through artistic forms arouses strong repercussions from students around them, and vigorously creates a new campus atmosphere of meeting the wise and thinking alike. This activity won the second prize for outstanding achievements in campus culture construction, the top ten key tasks of the Communist Youth League of Shenyang, and the 9th National Outstanding Achievement Award for Campus Culture Construction of Universities by the Ministry of Education in 2017.

#### 2.2 Social Practice Education Platform

In accordance with the working objectives of "year-round layout, full participation, whole-process guidance" and the working principles of "segmented implementation, classified project establishment and hierarchical guarantee", the social practice education platform for college students in our university is built. Over the years, the school has carried out social practice activities covering summer vacation, daily vacation, winter vacation and special "multi-in-one" activities. College students can go deep into cities and towns, villages, streets, factories and enterprises to carry out practical research. In recent years, college students'social practice has been awarded more than 50 awards in social activities of the whole country, League provinces and municipal committees.

# 2.3 Educational Platform for Scientific and Technological Innovation

In order to encourage students to actively participate in teachers'scientific research projects and give full play to students' spirit of scientific and technological innovation, a resource bank of teachers outside the school is established. Using both resources inside and outside the school, the school specially creates a platform for scientific and technological innovation education. On the platform of scientific and technological projects, tutors and students can be selected from each other, and off-line project teams of teachers and students can carry out the project. Daily scientific research practice. In recent years, the enthusiasm of students to participate in scientific and technological activities has increased significantly, and a number of good scientific research results have emerged, which has effectively promoted the learning of professional knowledge. The school Vigorously supports all kinds of innovative entrepreneurship competitions at all levels, build a three-level competition system in schools, establish the "One College One Competition" innovative entrepreneurship competition management system at school level, and organize more than 20 school-level double entrepreneurship competitions every year. In the past three years, it has won 468 national third-class and provincial second-class awards. The student team has successfully entered the finals of the International Sun Competition, won the first prize of the National Network Business Competition, the first prize of the National Mathematical Modeling Competition, the second prize of the National Embedded Competition and the second and third prizes of the National University Students' Challenge Cup Academic and Scientific Works Competition. The school won the National "Challenge Cup" Competition Excellent Organizational Award, Liaoning Province Electronic Competition Excellent Organizational Award, Computer Competition Excellent Organizational Award and other awards.

# 2.4 Innovation and Entrepreneurship Education Platform

In order to cultivate college students'innovative spirit, entrepreneurial consciousness and enhance their innovative and entrepreneurial ability, innovative and entrepreneurial education should be integrated into the whole process of talent cultivation, and a platform for innovative and entrepreneurial education should be built in conjunction with the key work of school transformation and development, so as to make it an effective way to implement innovative and entrepreneurial education. Through the three important links of "professional practice, scientific research practice and social practice", students are encouraged to participate in the practice of innovation and entrepreneurship by enhancing their innovation and entrepreneurship abilities in practical activities. In 2017, the school implemented the "practical credit system of innovation and entrepreneurship education for undergraduates" in undergraduates. Credit practice is a necessary condition for the examination of students' graduation qualifications. "Innovation and Entrepreneurship Practice Week" and "Shenyang Engineering College Student Growth Service Platform" were officially launched in November 2017. All the students in the school registered for use. Students participating in innovation and entrepreneurship project training, innovation and entrepreneurship competitions, innovation research, entrepreneurship practice and skills training will acquire corresponding accumulation after the platform has been certified. Scores have greatly promoted the development of College Students's econd classroom activities.

Actively promote students'scientific and technological innovation and entrepreneurship, and strengthen students' innovation and entrepreneurship training. In recent years, there are 853 scientific research projects, 317 provincial projects and 145 national projects. Nearly 10,000 students have participated in innovation and entrepreneurship training projects. In the past two years, 307 teachers'scientific research projects have involved students, 1232 graduates have participated in teachers' scientific research projects, more than 100 students have successfully started their own businesses or participated in Entrepreneurship under the leadership of teachers; students have applied for 30 patents, published 82 papers, developed 96 physical prototypes, and developed 40 software development and application platforms. Item, 192 scientific and technological achievements of student team, breakthroughs in research achievements of student solar team, and the project has been promoted to the finals of international competitions.

### 2.5 Practical Credit

According to the actual situation of our school, we have constructed a practical education and training system for applied talents, which integrates innovation and entrepreneurship ability, application and practice ability and quality development ability. The training of innovation and entrepreneurship practical ability is divided into five modules: innovation and entrepreneurship project training, innovation and entrepreneurship competition, innovation research, entrepreneurship practice, skill training and capital. Qualification certificate; Applied practical ability training is set up as a single labor training week, which is divided into two modules: post labor ability and post application ability; quality development ability training is divided into three modules: social practice and voluntary service, sports art and physical and mental development, community activities and social work. Freshmen and sophomores focus on quality development ability training, aiming at cultivating students'innovative spirit and entrepreneurial consciousness. Junior and senior students focus on innovation and entrepreneurship project training and entrepreneurship incubation training, aiming at improving students' innovation and entrepreneurship ability. All students should take part in post application practice ability training and strive to become excellent. Good application-oriented talents.

In order to better promote the implementation of the applied talents training program in our

school, we should take the second classroom as an effective extension and supplement of the first classroom, incorporate the practical credit into the graduation qualification examination, change the advocacy soft index into the hard index that students must complete, and students are completing all kinds of personnel training programs. On the basis of the credit requirement of platform course, according to the relevant requirements, we can use the credit of innovation and entrepreneurship practice course to study in school, and only after four credits can we graduate. The assessment criteria for the credits of innovation and entrepreneurship practical ability training (Table 1), applied practical ability training (Table 2) and quality development ability training (Table 3) are formulated.

Table 1. Criteria for Credit Assessment of Innovation and Entrepreneurship Practice Ability
Training

| Course Name                                 | Course Content  | Activity Level and Award<br>Level  | Credit      | Recognition<br>Department                       |
|---|---|--|-------------|---|
| Innovation and entrepreneurship training    | Concluding the Project of<br>Innovation and<br>Entrepreneurship Plan for<br>College Students  | National/provincial/school<br>level  | 1.5/1/0.5   |   |
|   | Innovation and entrepreneurship incentives  | National/provincial/municipa<br>l/school level   | 2/1.5/1/0.5 |   |
| Innovation and Entrepreneurship Competition | Subject competitions<br>sponsored by the Ministry of<br>Education, the Department of<br>Education or schools are<br>awarded within the ranks. | National/provincial/school<br>level  | 2/1.5/0.5   | Educational<br>Administration/                  |
|   | Discipline competitions sponsored by industries, enterprises, societies, associations, etc. are awarded within the ranks.                     | provincial/school level  | 1/0.5       | nnovation and Entrepreneurship Education Center |
|   | Research project  | Presiding/Participating  | 1/0.5       |   |
|   | Publishing Academic<br>Theories in Public   | First Author Core Periodicals/General Periodicals/Second Author Core Periodicals/General Periodicals   |             |   |
| Innovation research                         | Publishing publications   | First Author/Second Author/Third Author and Later  | 1.5/1/1/0.5 |   |
|   | Obtaining Patent Certificate for Invention/Software Copyright   | First/Second/Third Inventor  | 2/1/0.5     |   |
|   | Participation in academic activities  | Selection of papers for off-campus academic activities/report of the conference/report of the conference of academic activities at the school level/report of the conference of academic activities at the college level | 1/1.5/1/0.5 | Science and<br>Technology<br>Department         |
|   | Participation in Teachers'Scientific Research Projects  |  | 0.5         |   |
| Practical training of entrepreneurship      | Enterprises registered for<br>Industry and Commerce<br>carry out entrepreneurship<br>practice and operate for more<br>than one year           |  | 0. 5        | Educational<br>Administration/                  |
| p   | Innovation and Entrepreneurship Training  |  | 2-3         | nnovation and<br>Entrepreneurship               |

|                     | Course                    |                            |         | Education Center |
|---------------------|---------------------------|----------------------------|---------|------------------|
| Skills Training and | Entrepreneurship training |                            | 0.5     |                  |
| Qualification       | Vocational Qualification  | Advanced/Intermediate/Prim | 2/1/0.5 |                  |
| Certificate         | Certificate               | ary                        | 2/1/0.3 |                  |

Table 2. Credit Assessment Criteria for Applied Practical Ability Training

| Course Name                          | Course Content    | Completion time             | Credit | Recognition       |  |
|--------------------------------------|-------------------|-----------------------------|--------|-------------------|--|
|                                      |                   |                             |        | Department        |  |
| Post Practical                       | On-the-job labour | Labor week, 8:00-10:00 a.m. | 0.3    | Students' Affairs |  |
| Ability Training                     | training          | Labor week, 8.00-10.00 a.m. |        | Division          |  |
| Post Application<br>Ability Training | Practical English | Labor Week, Tuesday         |        | Public Foreign    |  |
|                                      | Competence        | afternoon and Thursday      | 0.2    | Language Teaching |  |
|                                      | Training          | afternoon 1:30-3:50         |        | Department        |  |
|                                      | Post Assistant    | Labor Week,                 | 0.5    | Secondary College |  |
|                                      | Training          |                             |        |                   |  |

Table 3. Credit Assessment Criteria for Quality Development Ability Training

| Course Name  | Course Content  | Activity Level and Award Level             | Credit      | Recognition<br>Department                              |
|--|---|--|-------------|--|
| Stylistic Art<br>and Physical<br>and<br>Psychological<br>Development | Participate in and win<br>awards for large-scale<br>literary, sports and art<br>activities inside and<br>outside the school   | National/provincial/municipal/school level | 2/1.5/1/0.5 | Youth League Committee and Physical Education Teaching |
| Social<br>Practice and<br>Social<br>Investigation                    | Awards for social practice (including survey reports, advanced individuals, advanced collective leaders, etc.)  Social Survey |  | 1.5/1/0.5   | Youth  |
| Volunteering<br>and Social<br>Work                                   | Volunteering for social<br>work or large-scale<br>activities at or above the<br>municipal level                               | Award-winning or participation             | 1/0.5       | League<br>Committee                                    |

# 3. Second Classroom Guarantee Measures

# 3.1 Institutional and Organizational Guarantees

The school promulgated the "Thirteenth Five-Year Plan" for Campus Culture Construction of Shenyang Engineering College and the "Opinions on Strengthening College Students'Volunteer Service" and other documents, and formulated the "Credit Recognition System of College Students' Volunteer Service into Professional Talents Training Plan, and the experience of volunteer service as the rigidity of College Students'organizational development and employment of student cadres." Conditions, college students'voluntary service archives into the registration archives and other safeguards; formulated "Shenyang Engineering College students' innovation and entrepreneurship education extracurricular training plan assessment methods (trial implementation)" and other documents. In the aspect of innovation and entrepreneurship, the school has set up the "Leading Group of Innovation and Entrepreneurship" and the Second-level College has set up the Leading Group of Innovation and Entrepreneurship, with the dean as the chairman. Innovation and entrepreneurship training should be included in the training programs of various professionals to ensure the effective implementation of the relevant content of the second classroom, and obtain the corresponding credits, which are linked to the graduation of students.

#### 3.2 Base and Funds Guarantee

The school has set up a "three places and one garden" education base for college students'innovation and entrepreneurship. The "pre-incubator" of "three places for innovation and entrepreneurship" focuses on the practice of innovation and entrepreneurship education. The "post-incubator" of "one garden" for innovation and entrepreneurship focuses on the transformation of achievements and the growth of enterprises. According to the relevant provisions of "Management Measures for Innovation and Entrepreneurship Base of College Students of Shenyang Engineering College" and "Implementation Measures of Preferential Policies for College Students of Shenyang Engineering College", the school gives priority support to the selected projects of College Students'innovation and entrepreneurship. There are university student activity centers, provincial and municipal key scientific research laboratories, and teaching laboratories in secondary teaching departments. In order to give full play to the resource advantages of our laboratories, promote the full opening of laboratories, improve the efficiency of the use of instruments and equipment, and realize the sharing of resources, according to the requirements of auditing and evaluation and the Laboratory of Shenyang Institute of Engineering. Open Use Guidelines These platforms are perennially open to students.

Over the past three years, the school has invested more than 3 million yuan in innovative venture capital, 5 million yuan in Seed Fund for innovative venture capital, and 10 million yuan in Seed Fund for innovative venture capital with the Shenbei New Area Government and various outstanding enterprises.

# 4. Achievements

In recent years, nearly 10,000 students in our university have participated in the innovation and entrepreneurship training program for college students. There are 396 provincial projects and 195 national projects. Students applied for 30 patents, published 82 papers, developed 96 prototypes, 40 software development application platforms and 192 scientific and technological achievements of student teams. The research results of student solar teams have made breakthroughs, and the projects have been promoted to the finals of international competitions. The research results have been applied in the national prestige. More than 100 students are in the middle of the project. Under the leadership of teachers, the school has successfully started or participated in entrepreneurship, and won the top 50 national model universities of employment innovation and entrepreneurship.

# Acknowledgments

This work was financially supported by Subsidized Project of School Teaching and Research Program of Shenyang Institute of Engineering in 2018 (Project No. 2018013)

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