

Research on the Cultivation of College Students' Innovation Ability Based on the Second Classroom

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Abstract: Compared with the first classroom teaching, the second classroom in colleges and universities refers to all kinds of educational practice activities carried out by students outside the first classroom teaching time. It includes all practical activities inside and outside the teaching course that runs through the whole talent cultivation process. Colleges and universities should pay enough attention to it and equip the second classroom with corresponding resources, so as to promote students to carry out rich and colorful practical activities. Based on the author's knowledge and teaching experience, this work first analyzed the role of the second classroom in cultivating students' innovative ability in colleges and universities, and then put forward the ways to cultivate students' innovative ability with the help of the second classroom. The research results of this work are helpful to give full play to the characteristics and advantages of the second classroom and improve the extracurricular practice level and innovation ability of college students.

1. Introduction

The second classroom in colleges and universities is not only the extension and supplement of the first classroom, but also the important carrier of quality education, and the core component of the talent cultivation system, so it is as important as the first classroom education. The content of the second classroom is extensive and rich, which can be divided into ideological and political education, campus culture, sports and art activities, academic science and technology, community activities, and voluntary service. Its core and essence is to cultivate the innovative ability of college students. Compared with the first classroom, the second classroom has flexible teaching organization, management and development, diversified forms and reasonable resource allocation. Students can freely and voluntarily choose to participate in the second classroom according to their interests, hobbies, abilities and specialties [1]. The second classroom has its unique advantages: first, the content is interesting, independent and creative, which is in line with the ability level and thinking characteristics of college students, and is conducive to the full play of individual quality; second, the diversity of forms and the richness and comprehensiveness of contents can not be replaced by the first classroom, which is of great help to improve the comprehensive quality of college students; third, practicality, combined with rational perception and perceptual acquisition, is conducive to enhancing the cultivation of college students' innovation ability.

2. The Role of the Second Classroom in Cultivating the Innovative Ability of College Students

2.1. The second classroom is an effective way to broaden the scope of knowledge

In colleges and universities, students can not only accept formal classroom teaching activities, but also carry out social interaction and communication. Specifically, formal classroom teaching activities are carried on by the first class, in which students receive basic knowledge and professional knowledge, so as to lay a solid foundation in knowledge. But in the second classroom, the students' personality and positive performance are brought into full play, since the second classroom has rich content and flexible form, which can improve the students' comprehensive quality and supplement the deficiency of the first classroom teaching. Extensive knowledge is the key condition to determine the degree of innovation ability and an indispensable part to achieve the

purpose of academic innovation. First, the second classroom has many new types of activities, which can be recognized by students. In addition, the second classroom usually has broader identity requirements for participants than the first classroom. The first classroom usually takes classes in units, but the activities in the second classroom usually do not need to set the major, grade, and number of participants in the activity, as long as they have the same interests, they can participate in it. The relationship between participants is equal, which helps students to develop their own abilities. Students who participate in various activities can not only show their professional qualities to others, but also learn a lot of things they do not understand from others, communicate with each other, learn from each other and make progress, so that students broaden their horizons. In addition, many activities in the second classroom are not held only in schools, but also in society, even in companies, and the corresponding organizations have more advantages, such as more flexibility and autonomy [2]. These advantages let many activities in the second classroom go out of the classroom, enter the society, break the limitation of space, attach importance to communication with society and company. Therefore, college students are usually attracted by the various contents and unique forms of the second classroom and are willing to actively participate in the activities.

2.2. The second classroom is conducive to the cultivation of students' practical ability

In order to cultivate students' practical ability, first of all, it can neither lack the systematic training of the first classroom teaching, nor the technical training brought by the activities in the second classroom. The learning content should be applied into the practice of the second classroom, so as to use flexibly and verify the true knowledge with practice. In the second class, the activities in the form of school-enterprise cooperation and school-government cooperation combine classroom learning with extracurricular practice, which is helpful to improve students' practical ability. Through the practical ability of the second classroom, students can not only consolidate the knowledge learned in the first classroom, but also combine the two closely, and have a deeper understanding of the content learned in the first classroom.

2.3. The second classroom is conducive to the cultivation of students' innovative interest

The level of innovation is closely related to the personality of college students. Students' interest can make them active in seeking knowledge and full of motivation for learning. The activities of the second class are chosen by the students themselves. According to their hobbies and personality characteristics, students can spontaneously participate in various activities and participate in various associations. Moreover, the types of these activities are very rich, which are in line with the development of the era. The boring classroom lectures can be transformed into novel and interesting activities, which can give full play to students' initiative and creativity. For example, in the scientific research project of the second classroom, students can open up their horizons, contact the latest science and technology, master the development process of the subject and grasp the opportunity of innovation according to the guidance of teachers, so that students can greatly enhance their interest in learning, creating a virtuous circle of research and learning. Compared with classroom teaching, the activities of the second classroom are more abundant and flexible, so that students are not restricted by traditional classroom, and they are more free to choose courses. This kind of classroom activity is designed according to the students' hobby or the specific subject of scientific research. It concentrates students with the same hobbies, which helps to produce and maintain their hobbies, and improve their learning enthusiasm and innovation ability [3].

3. The Way of Cultivating Students' Innovation Ability with the Help of Second Classroom

3.1. Clarify the functional orientation of the second classroom

As an important part of the talent cultivation system in colleges and universities, the second classroom is irreplaceable and has a unique role in cultivating students' comprehensive quality and innovative ability. The educational managers in colleges and universities should further renew the concept of innovative educational management, put the second classroom in the same important

position as the first classroom, and plan and design the two as a whole. The first classroom should be taken as the basis of the second classroom activities to extend and expand on the basis of the first classroom teaching. Combining professional characteristics and students' interests and hobbies, activities can be designed with professional characteristics, so as to improve students' hands-on ability and the ability to analyze and solve problems, and truly play the role of the second classroom in cultivating students' innovative ability.

3.2. Construct a practical platform of scientific and technological innovation for college students

Colleges and universities should actively build scientific and technological innovation practice platforms such as academic reports, scientific research and training, and subject competitions. Colleges and universities should regularly invite experts and scholars from relevant disciplines at home and abroad to come to the school to carry out academic reports, introduce the current situation and trends of professional development, the research results achieved and the new fields worth studying, so as to attract students' attention, and stimulate their desire to explore and create enthusiasm. Colleges and universities should establish scientific research training and subject competition management mechanism to attract students to participate in scientific research training and subject competition. Different from the teacher-centered classroom teaching, scientific research and training is an autonomous inquiry learning. The instructor can let students set up scientific research teams, design scientific research projects in combination with their professional knowledge and subject development. Students collect data by themselves, design experimental schemes, carry out symposiums, make comment on each other, further modify and improve the existing problems, and gradually verify them.

3.3. Strengthen cooperation between schools and enterprises and build a social practice base for schools and enterprises

Social practice is the largest second classroom activity in colleges and universities and an important channel for cultivating students' practical ability and innovation ability. Through the cooperation between schools and enterprises, both schools and enterprises can make full use of their own advantages and jointly establish innovative talent training platform. For example, they can jointly develop new projects, lead students to participate in project research, and improve students' scientific research ability. Students can make full use of the practical advantages of enterprises and extend the theoretical knowledge learned in the classroom to the extracurricular, which can not only enhance the understanding and mastery of the knowledge learned, but also understand the problems existing in the production of enterprises and participate in the solution of some technical problems, so as to enhance their ability to solve practical problems with knowledge. It can also rely on enterprise resources to carry out curriculum design, graduation design, and select topics for hot and difficult problems in enterprise production, which can not only help enterprises solve difficult problems, but also enhance students' practical training, and provide conditions for students to innovate and cultivate their practical ability.

3.4. Establish the evaluation incentive mechanism of the second classroom

In order to fully mobilize the enthusiasm of teachers and students to participate in the second classroom activities, colleges and universities should carry out practical work in combination with the second classroom, and establish a diversified evaluation mechanism. Teachers should pay more attention to the students' participation in the second class, the interaction with the team and teachers, and the psychological growth process, and emphasize the evaluation of students' thinking ability and practical ability. Teachers should adhere to the combination of result-oriented evaluation and process-oriented evaluation, which should not only give material rewards and commendations to teachers and students who have achieved achievements, but also give hierarchical recognition and rewards to students who actively participate in the innovation practice activities of the second classroom, so as to better mobilize the enthusiasm of teachers and students to participate in the second class and jointly promote the construction of the second class [4].

4. Summary

The second classroom is the second major carrier of education for college students besides the classroom. It is an important channel to improve the comprehensive quality and practical ability of college students. It can not only effectively expand the content of classroom education, but also be the basic way to implement quality education in an all-round way. "The second classroom" is a kind of practical learning activity with the connotation of quality education, and it is also an effective supplement and extension to the first classroom, and a sublimation to the first classroom. How to effectively use the second classroom, and how to let students integrate specialty and inquiry, knowledge and popular science, hobby and innovation, theory and skill, first classroom and second classroom, integrate the second classroom activities of college students into the whole educational and teaching project reasonably and scientifically, and then play the unique role of the second classroom in the improvement of college students' comprehensive quality and ability, is the problem that every teacher needs to think seriously.

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