

Research on the Cultivation of College Students' Scientific Research and Innovation Ability

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Abstract: The cultivation of innovative talents in secondary colleges and universities is one of the core tasks of the current reform and development of our society and country. The training of innovative ability plays a vital role in the cultivation of students' innovative thinking consciousness and practical ability. It plays an obvious role in promoting the educational concept, training mode, innovative atmosphere, improving the guiding role of relevant instructors, and establishing an efficient student scientific research team.

Keywords: Two universities of scientific research and innovation

At present, the first class courses for students in the two colleges and universities are mainly divided into relevant general education courses, basic courses, professional basic courses, professional education courses, etc. each course is also divided into courses of different nature. Different courses have different nature, and different majors and colleges have specific and different requirements for the credits occupied by various types of courses, Generally, the total credits are required to reach 170 points to complete the relevant training objectives.^[1]

1. Set up relevant second class courses

In the process of constructing the curriculum system, there are no specific and unified requirements for cultivating students' relevant scientific research and innovation ability in professional basic courses and public basic courses. It is mainly based on the basic courses of students' professional learning. Among the relevant public elective courses, the elective courses of humanities generally have a practical course of humanities competition; In the setting of elective courses of self heating science, there is generally a course such as natural subject competition. As shown in Table 1

Table 1. Curriculum category and credit requirements

| Course category | Course nature | Credit requirement |
|-------------------------------|---|------------------------------|
| General education Curriculum | Freshman seminar course | 4 |
| General basic Courses | Public basic courses General basic courses | ≤2 |
| Professional teaching courses | Professional compulsory courses Professional elective courses | Credits required by Colleges |
| Open elective courses | Public elective courses Interdisciplinary elective courses | Credits required by Colleges |
| | total | 160 |

In the process of constructing the second classroom system, college students should pay attention to the characteristics of students and meet their characteristics, and set up some relatively novel courses. The purpose is to further develop relevant students' knowledge and enrich their spiritual world, so that students can have a more relaxed and free environment to stimulate their potential and cultivate their own innovative consciousness and spirit. For their own professional elective courses, the situation of each school and each college is different, but there are relatively few scientific research methods in the course. We should cultivate the current curriculum system of students' basic professional ability and students' thinking. Therefore, in the curriculum plan of College Students' innovation and entrepreneurship training, the credits in innovation should be included in their own curriculum credits, so as to encourage and encourage them to complete the curriculum and cultivate their own ability.^[2]

2. Strengthen student credit management

In order to strengthen the cultivation of students' practice and innovation ability and their comprehensive quality, and encourage their students in various majors to actively participate in discipline competitions and innovation competitions with their own professional characteristics, general regulations on the recognition of undergraduate innovation and entrepreneurship credits should be promulgated. In the regulations, the fundamental purpose must be to cultivate students' innovation and practice ability, The innovation credits are the corresponding credits obtained by undergraduate students participating in their own professional discipline competitions and recognized by the students themselves, secondary colleges and departments and educational administration departments.^[3]

Table 2. Curriculum category and credit requirements

| Course category | Course nature | Corresponding score (points) |
|--|------------------------|------------------------------|
| National discipline competition | Grand Prize | 100 |
| | First prize | 97 |
| | Second prize | 95 |
| | Third prize | 90 |
| Provincial discipline competition | Grand Prize | 95 |
| | First prize | 90 |
| | Second prize | 91 |
| National innovation and entrepreneurship training program for College Students | Third prize | 92 |
| | Excellent | 95 |
| | Qualified | 85 |
| Provincial College Students' innovation and entrepreneurship training program | Excellent | 85 |
| | Qualified | 84 |
| Published in core or provincial journals | Core 1 or provincial 2 | 91 |
| Follow up research materials of academic reports | Reviewed and Approved | 90 |

At present, the scope of innovation and entrepreneurship credit determined by each school is distributed in various disciplines, especially the Internet plus, innovation and entrepreneurship, Challenge Cup, and academic papers published in domestic and foreign publications. The corresponding elective credits should be calculated into the school level public elective courses and their own professional elective courses. It is best that the accumulated innovation and entrepreneurship credits should not exceed a certain score. In addition, in each major project, it should also specify the different award levels for students and the relevant course scores that students can obtain, ranging from 80 to 100, as shown in Table 2.

3. Strengthen the cultivation of students in scientific research and innovation practice.

When selecting topics for graduation of relevant undergraduate majors, students themselves should first guide them to choose topics in line with the characteristics of the times from the school level. Of course, they should combine their own interests and hobbies. Only in this way can they mobilize the enthusiasm and initiative of all students to participate in innovation and Entrepreneurship, encourage and guide students to read more foreign literature, Strengthen their ability in literature retrieval and cultivate their ability to cultivate and analyze relevant academic problems. Many students of the second university mainly focus on their own scientific research and learning methods, such as learning under the guidance of teachers in class, self-study after class, and guidance of their own instructors, With the help of a series of instruments and other equipment provided by the school to meet their own needs for innovation and entrepreneurship.

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