

Strengthening the innovative education, improving the quality of talent cultivation

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Abstract. Improving the quality of talent cultivation is an eternal subject of higher education, “the college students’ innovative experiment project” is a vital component of “quality project”, and a specific reform measure to promote innovative talent cultivation. Based on forestry college of NEFU as an example, the paper illustrates how to strengthen the practical teaching reform and to make the major breakthroughs in aspects of radiating and driving the construction of study style, to improve the students’ comprehensive practical ability and innovation ability of science and technology greatly, and to become the effective carrier of innovative talent cultivation, making the college students’ innovative experiment project as the carrier.

The basic task of higher education is cultivating talents. Enhancing the level of talent cultivation must pay attention to the whole advancement, insist cultivating people oriented, and firmly establish the talent cultivation as the center position in each work of the school, while regard the undergraduate teaching as the foundation position in university education. “Undergraduate teaching quality and teaching reform project of higher school” is another important project in the field of higher education in our country after “211 project” and “985 project”, and also a significant measure to improve the quality of undergraduate teaching in higher school. “The college students’ innovative experiment project” is a vital component of “quality project”, a specific reform measure to promote innovative talent cultivation, and an academic research project which is directly to college students, pay attention to cultivate students’ autonomy, exploratory, collaborative.

1. Enough attention, effective coordination, and providing the omni-directional safeguard for college students’ innovative experiment projects.

Starting from improving the quality of undergraduate teaching, strengthening the scientific practical ability of undergraduate students and cultivating the innovative spirit, bringing the college students’ innovative experiment project into the center work of college, the party leaders of college highly value and coordinate the progress of project in person, to make the teaching and scientific research, students work closely mate and coordinate. The college leaders in charge of teaching work manage the project, and timely follow up the progress of it. In order to ensure the whole process management of project, school specially sets up the forestry college students’ innovative experiment center, and provides the powerful organization guarantee for smoothly carrying out the project.

In addition, strengthening the team construction. We propagandize and guide in the teachers and students, school leaders coordinate and mobilize in person to make sure that every grade has a large number of students team who have a clear understanding and interest in the innovative project and a team of dedicated teachers. Teachers of college have numerous of scientific research workload, while to undergraduate students, professional knowledge reserve is relatively insufficient, and scientific research ability is rather weak. So it need cost a lot of energy for teachers to guide undergraduate innovative experiment project. Input is far greater than output. Therefore, school

leaders would set an example for others, the heads for each major and academic leaders would also take part in it, they should guide 1-2 undergraduate innovative projects every year, effectively promote a dedicated teacher team for innovation project who are willing to bear to provide the necessary personnel security for the project.

In order to encourage students' enthusiasm to participate in innovation projects, instead of the selection at the country and school level, college has also established a group of funding projects which is built by school-college and college every year. College allocates special funds to support every year, and also gives the key funds to the particular projects. For the past 5 years, total investment has reached 147,000 yuan. It provides enough policy guarantee to smoothly carry out the project.

2. Perfecting the mechanism, vigorously promoting the implementation, and strengthening the procedural management to college students' innovation projects

In order to carry out college students' innovative experiment orderly, according to the spirit of school's relevant documents, in combination with the practical situation of college, we should make strict procedural management in the aspects of project application, project, intermediate inspection, concluding and acceptance.

Firstly, expanding the influence of innovation project through the extensive publicity. Relying on college students' innovative experiment project management center, we insist on the cultural construction of scientific and technological innovation, make a propaganda in the forms of brief report, exchange of experience, typical recognition and achievement exhibition, and create strong academic atmosphere in scientific and technological innovation. Meanwhile, we also introduce the situation of college students' innovative experiment project to the students, and hold a special mobilization meeting to stimulate students' enthusiasm.

Secondly, strengthening the guidance and specifying the requirements. The subsidized objects of college students' innovative experiment project are the students who are excellent in character and learning, good at independent thinking, and have spare capacity in learning, strong interest in scientific research and innovation, basic quality and potential in scientific research. We generally start from junior school year, and implement the body of project in senior school year. College holds the special guidance and training according to the declaration and implementation of the project every year. Students would finish filling in the project book preparedly, designedly, and purposely under the guidance of experts, and college organizes the formal pre-answering of project declaration in the scope of college to make the students can be guided in the beginning of project declaration and benefit from it.

Finally, making strict process management, to ensure the project can be executed as plan. After the completion of the project, the excellent projects would be commended and encouraged based on experts' judgment, then we should reach the effect of accumulation and radiation through the academic report, results display. As a consequence, making the innovation project process management normalized, meticulous and scientific

3. Emphasizing the connotation, paying attention to practice, to make college students' innovative experiment project deeply promote the teaching reform.

The implementation of the college students' innovative experiment project, aims to explore and establish a teaching pattern which regards problems and issues as the core, promotes innovative experiment reform which treats the undergraduate students as main body, mobilizes the students' initiative, enthusiasm and creativity, stimulates students' creative thinking and innovative consciousness, then gradually masters the methods of thinking, problem solving, and improves the innovative practice ability.

Carrying out college students' innovative experiment projects in-depth, makes students achieve the scientific research training in undergraduate phase, changes the situation with weak practice teaching link and hands-on skill in the process of original education training, changes the force-feeding teaching methods, and promotes the teaching way of research-oriented learning and individualized cultivation. Over the past three years, the number of innovative projects at all levels has reached 142 items, and 639 students participated in these projects, accounting for 64.22% of all students. In all, they motivates our school to form the atmosphere of innovative education, construe innovative culture, and further promote educational teaching reform, then improve the teaching quality.

4.General mobilization and typical demonstration, making college students' innovative experiment project effectively guide the construction of study style. College students' innovative experiment project as the core platform, we not only directly invest manpower, material resources and fund to innovative experiment projects, but also encourage students to participate in the scientific research projects and others, meanwhile give corresponding research grants to students through the radiation effect of platform and docking of teachers' scientific research projects and students. Therefore it can greatly improve the students' enthusiasm to scientific research, cultivate the interest to scientific research, and enhance the practical ability and employment skills.

By taking part in scientific research, it can cultivate students' innovative spirit, improve students' interest in learning and desire of seeking knowledge, as a result, the good study atmosphere is formed, students' grades are obviously improved, and the virtuous cycle which the innovative projects guide the construction of study style is implemented.

Implement educational reform, train the top creative talents in the field of forestry; Carry out the key specialty construction, build national first-class majors with advantages and characteristics; and perfect construction of key courses, strengthen the intensity of digitized courses; innovate teaching contents and methods, construe a new evaluation system of talents; at the same time, establish and improve the teaching system, promote teachers' teaching ability; reform practical teaching mode, highlight innovative ability of talents.

Taking improving the quality of talent cultivation as the goal, we should strengthen the comprehensive practical ability and innovative entrepreneurial spirit of talents, attach great importance to college students' innovative experiment projects as usual, insist students oriented, implement personal cultivation, integrate resources of college to realize the sharing resources, and perfect the mechanism of innovation projects' evaluation and incentive and management system. Above all, we make the innovative experiment projects become a link between teachers and students, become the important carrier of integrating theory with practice, become an effective way to scientific and technological innovation and study style construction , and make unremitting efforts to cultivate more and more excellent creative talents.

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