

Development of higher education management under the guidance of cultivating college students' innovative capability

Peng Guo

Civil and Architecture Engineering College, Shenyang University, Shenyang, 110044, China

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Abstract: Innovation is the basic driving force to promote the progress of human society and the prosperity of the country. Today, human society has entered the information age, and it is more dependent on innovation. Innovation is the general trend. Without innovation, mankind will lose its direction and soul and have no future. It is a gathering place for young talents in colleges and universities, which bears the brunt of the cultivation of innovative capability and occupies an important position. Therefore, improving the management level of colleges and universities, deepening the reform of the management system of colleges and universities, and cultivating students with innovative capability are the core and basic points of the innovation and development of colleges and universities in China. If you want to succeed in the fierce international competition, you must cultivate a group of high-quality and high-level professionals with solid foundation, wide knowledge, strong capability and high quality, and all-round development in moral, intellectual and physical aspects. How to accomplish this glorious and arduous mission is a new task facing the majority of higher education workers. This paper discusses the relationship between the cultivation of innovative talents and the reform of university management system, and points out that the reform of university management system is of great significance for cultivating innovative talents, improving the quality of running Chinese universities and building world-class universities.

1. Introduction

Innovation is the inexhaustible motive force of social development, and innovation is of great significance to human life. The whole history of the development and progress of human society is a history of continuous innovation. Since the industrial revolution, the development of human civilization is accompanied by innovation, from the invention and application of steam engine, internal combustion engine, computer and other technologies, without exception.

Innovation constitutes the ladder of the development of the times and historical progress [1]. In the period of national economic and social transformation, the management system of colleges and universities is also facing challenges, and it also brings greater development opportunities. The existing management system of colleges and universities has obviously lost its superiority, showing more and more disadvantages in reality, such as the lag of management system construction, the delay of updating management concepts and methods, etc [2].

The 21st century is an era of rapid development of science and technology and productive forces, full of competition and challenges. If you want to succeed in the fierce international competition, you must cultivate a group of high-quality and high-level professionals with solid foundation, wide knowledge, strong capability and high quality, and all-round development in moral, intellectual and physical aspects. The lack of innovative realize and innovative capability education inhibits the development of college students' personality. The cultivation of innovative spirit and practical capability is the focus of quality education, and the practice base of scientific and technological innovation is an important support for the implementation of quality education for college students. For many years, exam-oriented education has occupied the mainstream in higher education. Examination-oriented education has achieved certain results in training students to master systematic knowledge [3]. But on the other hand, its side effects can't be ignored. This exam-oriented education ignores the differences of talents' individual endowments, hobbies, acceptance methods and degrees in learning methods. The diversity of talent development is

neglected in the training goal. In line with this, we should carry out the systematic reform of talent training mode, improve students' knowledge structure, promote students' personality development, and enhance their innovative spirit and practical capability, so that the school teaching work has realized the change from attaching importance to knowledge transfer to paying more attention to capability and quality training, and effectively improved the quality of talent training.

2. Change the concept of cultivating college students' innovative capability

2.1. Strengthen the spirit and capability of innovation

People's innovation capability is related to three factors: first, knowledge factors, that is, specialized knowledge and relevant experience in a certain field; Second, intelligence factors; Third, non-intellectual factors, or creativity tendency, refer to people's personality characteristics. On the one hand, through exploring the core concepts of innovation, innovative capability and college students' innovative capability, the theoretical basis of cultivating college students' innovative capability is clarified, and the necessity and significance of cultivating college students' innovative capability are clarified and strengthened. On the other hand, by reflecting on the existing problems in the cultivation of the innovative capability of contemporary college students, and digging and analyzing the causes, we can carry out targeted research on countermeasures, in order to cultivate the innovative capability of college students and improve their comprehensive quality. Many colleges and universities have held great discussions on educational ideas, deepened the reform of teaching management system and boldly explored ways and means conducive to the cultivation of innovative talents [4]. For example, to expand the professional education system, from training counterpart professionals to training wide-caliber and compound talents, because one of the important signs of innovation capability is to require students to have strong adaptability and open thinking; Perfecting the credit system, implementing the major-minor system and the double-degree system, creating free conditions for students to choose courses, and enhancing students' capability of self-learning, self-management and self-development; Implementing flexible academic system and suspension of school to start a business gives students greater autonomy in choosing majors and exercising their abilities; There is no doubt that studying the cultivation of college students' innovative capability has definite pertinence and its specific usefulness. The research on the cultivation of college students' innovative capability in this paper, of course, analyzes the significance and value of this research from the needs of the current society, but more importantly, the cultivation of college students' innovative capability is not only carried out for some purpose. Fundamentally speaking, the significance of this research lies in college students' self-growth, self-development and self-realization.

2.2. Change the training mode and advocate comprehensive quality education

The training mode corresponding to the social standard values and the traditional concept of quality is the liberal arts division with too clear boundary and the specialty setting with too narrow caliber. It should be said that this training mode has played a positive role in industrialization and standardized production, and in meeting the urgent social demand for talents. However, the trained college students have narrow knowledge, single skills, and lack of innovative passion and innovative capability [5]. Guide students to establish a correct sense of innovation. Innovation realize generally exists among college students' individuals and groups. What matters is how we discover, explore and sublimate. People with innovative capability may come to the fore if they have innovative realize and an appropriate environment conducive to the sublimation of innovative realize. And the specific value of quality education that is respected by college students' parents or college students is shown in Figure 1:

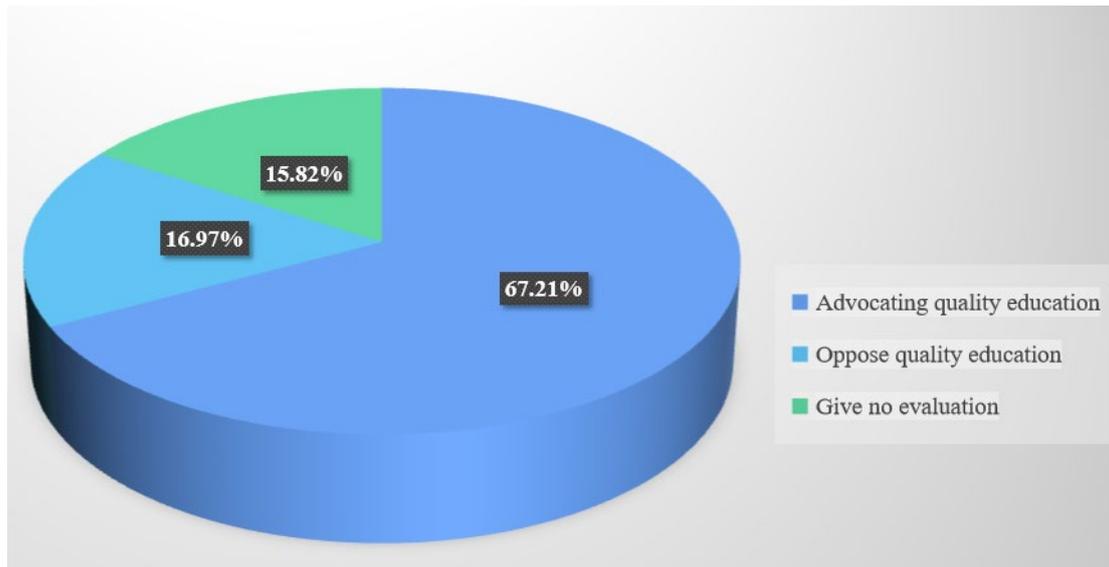


Figure 1 Proportion of the number of people who admire quality education

Therefore, it can be seen from Figure 1 that there will be a good response to the respected educational means, both for the smoothness and quality of teaching. The cultivation of innovative realize should be based on self-realize, materialism and objectivity, and it needs all-round support from contradiction theory, practice theory, epistemology and development theory. It is no longer a simple ideological problem to establish a correct awareness of innovation capability, but an action problem under the guidance of correct thinking. Scholars study the ways, paths and modes of cultivating college students' innovative capability from the multi-dimensional and multi-level perspectives of the state, society, universities and students, and form corresponding countermeasures and suggestions [6]. This paper probes into the cultivation of college students' innovative capability from the aspects of new educational ideas, changing educational and teaching methods, and creating a good innovative atmosphere and environment. A management team that is politically firm, has both capability and political integrity, understands education, is good at management, and meets the needs of the development and reform of higher education. The administrators of colleges and universities should establish the concept and realize of continuing education and lifelong learning, and realize that the beginning of new work is also the beginning of new learning, and if they don't learn, they will fall behind. It is recognized that it is the duty of every educational administrator to keep track of the development situation of higher education in the country and the world, constantly explore the teaching rules of higher education, and improve the management level and efficiency.

3. A good environment is an important condition for cultivating innovative talents.

3.1. High-quality teachers are the key to cultivating innovative talents.

In a sense, only innovative teachers can implement innovative education and cultivate innovative talents. The demonstration, democracy and inspiration of teachers have great influence on students. Now, the number of high-quality teachers is slowing down every year. The specific value is shown in Figure 2:

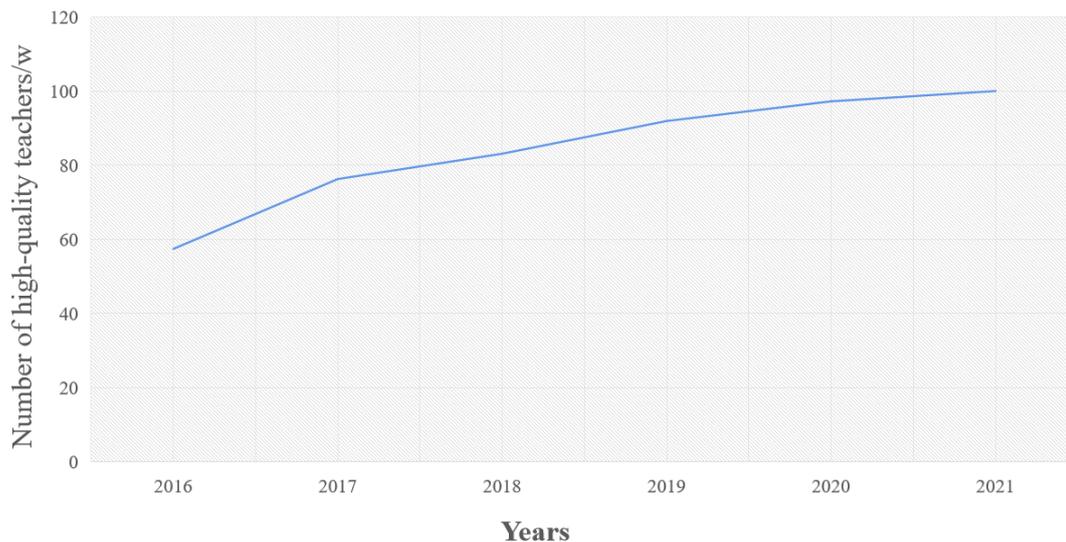


Figure 2 Changes in the number of high-quality teachers from 2016 to 2021

Figure 2 shows that in recent years, the growth rate of the number of high-quality teachers has become extremely slow. This change will do great harm to future education. On the one hand, it will lead to a decrease in the number of high-quality teaching for college students in the future; on the other hand, teachers, as cultural inheritors, may have irreversible consequences for future education. While high-quality teachers can formulate scientific, rational and relatively flexible evaluation indexes and standards for examination results. After taking various forms of assessment, a set of applicable, scientific and reasonable standards must be formulated for the evaluation of achievements. Generally, we should adopt the teaching objectives, evaluation standards and evaluation system that combine unification with individuation. For some examination methods that are flexible but not easy to be measured by unified standards, we must fully mobilize teachers' subjective initiative, require teachers to have a high sense of responsibility and good professional ethics, and cultivate teachers' attention and understanding of students' individualized thinking education. In the process of operation, teachers can formulate a set of scientific and reasonable operation and management mechanisms, which can stimulate the enthusiasm of instructors and students to take the initiative to participate, and give full play to the functions of innovative practice bases [8]. The school has adopted the method of accounting teachers' workload by way of project identification, which has stimulated the enthusiasm of instructors [9].

Teachers are encouraged to participate in extracurricular scientific and technological innovation practice guidance activities of college students as part-time jobs, but in this process, attention should be paid to exerting the joint force formed by the new and old administrators, not only giving play to the strengths of professional graduates who are familiar with educational management theories, but also carrying forward the experienced advantages of the original teaching administrators; We should not only strengthen the study of all kinds of professional knowledge, but also strengthen all kinds of necessary professional qualities, and strive to make the teaching management team take the road of professionalization and specialization to adapt to the inevitable trend of the development of teaching management in colleges and universities. It is obvious that teachers are the core link in improving the quality of talents and education. Whether the teaching content, curriculum system and training methods are advanced and scientific plays a decisive role in whether the knowledge structure, quality structure and capability structure of talents can meet the needs of the future.

3.2. Construction and operation of scientific and technological practice base

The practice base is the support base for college students to carry out independent study and scientific and technological innovation practice. The school can set up its own innovative practice base in the school to promote an innovative practice environment with teacher-student interaction,

project process management as the core, independent practice and research study as the main forms. Unlocking students' innovation is sensitive and proactive. Innovation will not fall into inertia and stereotype. It is an extraordinary activity. This extraordinary activity is extremely keen, and it can actively find problems in places that people are familiar with, and it can make an extraordinary judgment while hesitating and tangling [7].

In addition, innovation that is not bound by boundaries and frameworks requires keen observation and accurate judgment. Teaching managers should have a high degree of principle, innovative spirit and capability in their work, and be able to flexibly choose management methods and methods according to work requirements. At the same time, the scientific teaching management also depends on the innovative spirit and creative capability of teaching managers. Build such a team. There are various forms and ways to downplay majors, encourage the mutual penetration of liberal arts and science disciplines, and strengthen the mutual penetration and integration of liberal arts and science disciplines with universities in various countries, which can be roughly divided into three types: Tsukuba mode of comprehensive knowledge teaching organized by academic groups and disciplines, MIT mode characterized by interdisciplinary course selection, and mode of integrating liberal arts and science disciplines through composite courses [10]. After the operation and continuous optimization in the next few years, the scale of college students' scientific and technological innovation practice base has been continuously expanded, its functions have been continuously improved, and its role has become more and more important. At present, it has become the supporting base for the cultivation of college students' scientific and technological innovation and practical capability, the platform for individualized cultivation of college students, the bridge and link of the integration of teachers' resources and disciplines, and the training base for young teachers' scientific research capability. It has a good room for improvement in both enlightening students' innovation in the future and strengthening students' innovation capability now.

4. Conclusion

The cultivation of students' innovative capability is a major event related to the quality of talent training in Colleges and universities, as well as the prosperity of the country and the rejuvenation of the nation. Young people are the most dynamic and creative group in society. Of course, they should be in the forefront of innovation and creation, and be the pioneers of the times who are enterprising and innovative. For a long time, we have advocated the "preaching, teaching, and dispelling doubts" of "telling without doing" and "sitting on the sidelines", while ignoring the creativity and innovation spirit of students, which is obviously incompatible with the concept of educational function of Contemporary Colleges and universities. Under this educational system, many talents with innovative realize and capability are strangled in the cradle, and the development of talents has lost their personality characteristics. In addition to summarizing the reform of teaching methods in Colleges and universities, this paper puts forward a more realistic development of teachers' potential, the establishment of scientific and technological innovation practice base and senior teachers' team. This is not only conducive to the development of China's scientific and technological work, but also a new way to cultivate innovative talents in the era of knowledge economy.

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