

Research on the Significance, Characteristics and Path of China's Construction of First-Class Undergraduate Education

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Abstract: Building a first-class undergraduate education is the current common strategic task of Chinese higher education. Why build first-class undergraduate education? What kind of first-class undergraduate education to build? How to build a first-class undergraduate education? This is a problem faced by Chinese universities. After analysis and research on the law of higher education development and the development trend of the world's education powers, building a first-class undergraduate education is China's need to respond to international competition, the content of building a high-quality education system, and the foundation for building a first-class university and first-class discipline. With advanced concepts, first-class conditions, diversification, and individualized training models, Chinese universities need to achieve this goal through changes in concepts, teacher responsibilities, student interests, and professional development.

1. Introduction

In June 2018, more than 150 of the best universities in China jointly issued the “Declaration of First-class Undergraduate Education” in Chengdu, proposing to adhere to undergraduate education as the foundation and accelerate the construction of first-class undergraduate education. Chinese universities regard first-class undergraduate education as a universal consensus and strategic task, which is not only related to the policy orientation and stage needs of China's higher education development, but also to the dissatisfaction and worries of the Chinese society and education circles about the quality of undergraduate education. Since the large-scale expansion of undergraduate enrollment at the beginning of the 21st century, the number of undergraduates in Chinese universities has increased dramatically. The faculty, funding, and conditional resources have not completely kept up with the growth of undergraduate education. First of all, to ensure the orderly operation of education and teaching, it is difficult to invest more energy and financial resources to improve the quality of undergraduate education. At the same time, in the context of China's rapid economic and social development in the past 40 years and China's continuous movement toward the center of the world stage, for quite a long time, most well-known universities in China have hardly coincidentally focused more on how to achieve the world. First-class scientific research results, how to cultivate first-class doctoral and master students. Why is it so? Because the achievements in these areas are obvious achievements, with obvious display and influence, and can be obtained in a relatively short time. In comparison, undergraduate talent training undoubtedly lacks visibility, and educational achievements are more invisible. It is difficult to directly use data such as papers and achievements to quantify evaluation, and the growth cycle of undergraduate talents is relatively long due to the competition between doctoral and master students. China is often at a disadvantage and it is difficult to expand a university's reputation and social influence in a short period of time. It is precisely because of the relative neglect and weakening of undergraduate education by colleges and universities in the past stage that the Chinese government and Chinese colleges and universities have made the construction of first-class undergraduate education the focus and core of the next stage of development. The first-class undergraduate education mentioned here refers to undergraduate education that represents the world's first-class level and is widely recognized internationally. This article will focus on discussing the important value and significance of first-class undergraduate education to China, the commonalities and characteristics it

should have, and the ways and methods to achieve it.

2. Building a First-Class Undergraduate Education is of Strategic Significance to China's Modernization Drive

Undergraduate students are the largest group of higher education in China. Since the reform and opening up, the tens of millions of undergraduate graduates trained by Chinese universities have become the main force in all walks of life in Chinese society and the talent foundation for the rapid development and progress of Chinese society. Beginning in 2021, China will enter a new stage of the “14th Five-Year Plan”. China's socialist modernization is about to embark on a new journey. Higher education has entered a new stage of high-quality development. Undergraduate talent training is facing many new situations and new requirements. An undergraduate education that is at a first-rate level in comparison and is more competitive is of vital importance to China.

2.1 Building a First-Class Undergraduate Education is an Urgent Need for China to Respond to International Competition for Scientific and Technological Talents

In today's world, facing the new situation of international talent competition and increasingly fierce technological competition, facing the new needs of building a new development pattern and catalyzing new development momentum, facing a new round of scientific and technological revolution, new challenges of industrial transformation, and facing informatization. The new changes in the ways of acquiring and imparting knowledge in the era urgently require Chinese universities to train more high-quality innovative talents. Especially in recent years, the all-round competition between China and the United States in various fields has become more and more prominent. The development of various undertakings in China requires higher education, scientific knowledge and outstanding talents, and is more urgent than ever. Only by proactively adapting to the country's major strategies and the new needs of economic and social development, accelerating the organic connection of the talent training chain with the national innovation chain and industrial chain, and comprehensively improving the ability of undergraduate talent training, can higher education in China provide more powerful resources for building a modern socialist country. Talent support.

2.2 Building a First-Class Undergraduate Education is an Important Part of China's Construction of a High-Quality Education System

The Fifth Plenary Session of the 19th Central Committee of the Communist Party of China held in October 2020 proposed to build a high-quality education system, improve the quality of higher education, and accelerate the training of talents in science, engineering, agriculture and medicine. Through historical vertical comparison and international horizontal comparison, China's higher education is currently in a critical period of connotation development, quality improvement, and reforms. Generally speaking, China is still not a strong country in higher education, and the problem of “big but not strong” is still more prominent. In particular, the shortcomings in undergraduate talent training are obvious. Since 2018, the Ministry of Education of China has introduced 40 measures to accelerate the construction of high-level undergraduate education, 22 measures to deepen the reform of undergraduate education and teaching, vigorously promote the construction of new engineering, new medicine, new agriculture, and new liberal arts, and strive to break the constraints of higher education. The bottleneck problem of the development of educational connotation. To improve the quality of higher education in China, we must first follow the laws of higher education, accurately grasp the development trend of world universities, build a high-level, distinctive undergraduate talent training mechanism, and form a high-quality higher education system.

2.3 Building a First-Class Undergraduate Education is an Important Foundation for China to Build a World-Class University and a First-Class Discipline

The level of talent training is always the fundamental criterion for measuring the level of a

university. Throughout the first-class universities in various countries, all of them put the cultivation of undergraduate talents in an important strategic position and regard the cultivation of first-class undergraduates as an important indicator of the first-class level. Since 2015, China has implemented the construction of “Double First-Class (World-Class Universities and First-Class Disciplines)”, focusing on improving the overall strength and international competitiveness of China's higher education. Among them, the content of talent training has been regarded as the most important part. For China's “double first-class” construction universities, talent training is the first evaluation indicator, because more and more universities have deeply felt that the quality of undergraduate training directly affects higher-level masters and doctors. The quality of postgraduate training is high. Without first-class undergraduates, it is difficult to cultivate first-class graduate students, and it is also difficult to become a world-class university and first-class discipline.

3. Basic Characteristics of First-Class Undergraduate Education

What are the basic characteristics of a first-class undergraduate education? This is the first issue that needs to be clarified to build a first-class undergraduate education. According to the essential attributes and main characteristics of undergraduate education in higher education, combined with the status quo of first-class undergraduate education in powerful countries in higher education in the world, the basic characteristics of first-rate undergraduate education can be reflected in the following three aspects.

3.1 Possess Advanced Undergraduate Education Concepts

Advanced undergraduate education concepts will lead universities in undergraduate education and teaching strategy design, target positioning, degree of emphasis and practical effects. In the United States, whether it is a world-class research university such as Massachusetts Institute of Technology, Yale University, Stanford University, etc., or dedicated to training undergraduates and providing high-quality undergraduate education, Amherst College, Swarthmore College, Wellesley College and other liberal arts colleges (Liberal Arts College), which are considered to be more representative of first-class undergraduate education, Established a leading, cutting-edge and directional undergraduate education concept in the world. In the first-class research universities, one after another has proposed the pursuit of excellence in quality, reshaping the value of undergraduate education, centering on student learning, and realizing the common development of all students. To this end, these research-oriented universities conduct teaching and learning based on research, stimulate their learning initiative with students as the center, attach importance to the cultivation of scientific argumentation thinking, and restructure courses, reform teaching, and integrate resources based on these concepts. In the liberal arts colleges that take undergraduate education as the sole mission, they pay more attention to teaching and student-centered, highlighting educational experience and exploration, and based on these concepts, emphasize liberal arts education and general education, and provide small-scale and small-class teaching, High-quality elite undergraduate education. Therefore, first-class undergraduate education is based on an educational philosophy that reflects the first-class level, represents the direction of education, and meets the needs of students.

3.2 Have First-Class Educational Resources

First of all, there must be a first-class teaching staff. Whether the undergraduate education of a university is of first-class level, more refers to whether the student-teacher ratio of this university is low, close to or meets the international first-class undergraduate education standard, and more refers to the faculty of this university Whether the structure of age, education, professional title, academic background and other aspects is at a scientific and reasonable level, more refers to whether the teachers of this university have first-class educational ability, profound knowledge and infect the personality charm of students. The level of the teaching staff is undoubtedly the core element of first-class undergraduate education. Secondly, there must be first-class educational conditions. Including teaching facilities, equipment, information conditions, resource guarantees,

etc. Among them, the number and functions of classrooms, laboratories, etc. should be able to meet the needs of different forms of teaching, especially small class teaching, seminar-style teaching, and online teaching. Paper information resources such as books, periodicals, and materials, and electronic information resources such as online courses, quality courseware, and learning videos, must be able to fully meet the learning needs of students. Once again, there must be first-class disciplines and research platforms. First-class undergraduate majors need the support of first-class disciplines, and the cultivation of first-class undergraduate talents cannot be separated from the influence of first-class academics. First-class undergraduate education also means more opportunities to study and visit world-renowned laboratories, to join a first-class subject team, and to participate in cutting-edge scientific research and achieve certain results.

3.3 Focus on Diversification and Personalized Training

The diversification of talent training is the directional characteristic of first-class undergraduate education. The so-called first-class undergraduate talents must meet the current and future economic and social development needs for talents, the needs of different professional talents in different industries, and the needs of different types of talents for different types of employers. To realize the diversification of talent training, it is necessary to highlight the individualized training of students in the training process. This requires the establishment of different types of talent training goals and programs, the implementation of a personalized training model that is student-centered, stimulates students' interest, and highlights student autonomy, and provides students with more professional knowledge time and more choices. The curriculum gives students richer curriculum resources and greater study space. At the same time, it is also necessary to closely integrate the needs of modern society and the development of industries, expand the resources and conditions for students to receive education, and form a mechanism for collaborative education of government, industry, research and research. Graduates trained by first-class undergraduate education should possess a variety of types, individual characteristics, stronger learning and innovation ability, active adaptability and practical problem-solving ability, be more popular with society, and be able to gradually assume important social responsibilities and social roles.

4. The Main Path to Build a First-Class Undergraduate Education

As undergraduate education has become increasingly prominent in the central, basic and forefront status of Chinese higher education, comprehensively improving the quality of undergraduate education and accelerating the construction of first-class undergraduate education will become the core tasks of Chinese universities in the future. The group of undergraduates in Chinese universities is extremely large, and improving the quality of undergraduate education as a whole is a complex, systematic and long-term project.

4.1 Update Education and Teaching Concepts

To build a first-class undergraduate education, the first thing to do is to change the traditional concepts that do not conform to the law and stage of the development of higher education, and to re-establish the educational and teaching concepts that are more in line with the needs of the times, world trends, and national needs. For a long time, more managers in Chinese universities have focused on first-class scientific research and first-class graduate education. The current key is to truly establish the concept of focusing on education and teaching, highlighting the fundamental functions of talent training from the school's mission, vision and strategic direction, the school's system design, team building, management model, incentive mechanism, funding input, the security of resources and other aspects should be carried out around the central task of undergraduate education. For teachers, it is necessary to increase incentives for teaching positions, education work, and educational performance, so that teachers who do well in class have the same status, honor and treatment as teachers who do well in scientific research, and truly promote teachers' love Teaching, being good at teaching, and having fun in teaching, effectively mobilize teachers' enthusiasm, initiative and creativity in educating and fostering people. With regard to students, it is necessary to

focus on student learning, to maximize the satisfaction of students' learning power, to emphasize more speculative, experiential and interesting learning, to encourage innovation in learning content and methods, to enhance the effectiveness of student learning, and to promote the continuous growth and development of students. As American colleges and universities have done, "comprehensively assessing the campus where students learn, removing restrictive factors, and effectively promoting each student's enrollment, complete studies and successful graduation have become the main trend in American colleges and universities pursuing the quality of undergraduate education." (The main trends among American institutions pursuing undergraduate education quality include performing a comprehensive assessment of the campus where students learn, clearing away obstacles, and effectively promoting each student's enrollment, completion of studies, and successful graduation.

4.2 Strengthen Teachers' Responsibilities for Educating People

The vocation of a teacher is to teach and educate people. The teacher is the first identity, giving a good class is the first priority, and training students is the first responsibility. The construction of the teaching team should be based on the needs of first-class undergraduate talent training, further clarify the responsibilities and functions of teachers, take the earnest performance of education and teaching duties as the basic requirements for evaluating teachers, and guide teachers to take every class and care for every student. At the same time, the rapid development of science and technology in the information age, the continuous updating of knowledge, the complex and complicated exploration of scientific mysteries, and the rapid changes in higher education have presented new challenges for teachers' educational and teaching capabilities. It is necessary to continuously improve the educating ability of teachers, promote teacher education and training on a regular basis, support teachers to train and study in world-class universities, promote teachers to master modern educational concepts, expand their international perspectives, improve teachers' professionalism and academic standards, and enhance teachers' dedication Spirit and professional ethics. Teachers must not only be competent in the current role of instructing students in education, but also meet the needs of the future development of first-class undergraduate education, combined with the experience of large-scale online education during the new crown epidemic, actively adapt to new technological changes such as informatization and artificial intelligence, and continuously improve teacher information Teaching ability.

4.3 Stimulate Students' Learning Potential

A university is a stage for learning knowledge, developing abilities, and improving quality. It is a field that guides students' healthy growth and overall development. Focusing on stimulating students' interest in learning and growth potential, deepen education and teaching reform, expand students' choice of majors, courses, and learning methods, promote teaching model reforms, update teaching content, and encourage mixed teaching, interactive discussion, and experiential practice. Improve students' classroom participation and learning initiative, and guide students to change from "I want to learn" to "I want to learn". Education is not a one-man show for teachers. It needs to be designed, developed, and evaluated with students as the center and full consideration of student needs. It is necessary to reform the talent training model, coordinate classroom teaching and practical education, increase the mining and utilization of off-campus resources, strengthen cooperation with enterprises, governments, and research institutions, and build a collaborative education mechanism that integrates government, industry, university, and research. Improve different types of curriculum systems, practice systems, and resource systems by categorizing innovative, compound, and applied talents to provide students with more choices and growth paths. Improve the student evaluation mechanism, improve the comprehensive quality evaluation system, innovate the process of evaluation methods for students' academic and growth, explore non-standard answer test methods, reasonably "increasing the burden" on students, increase the degree of academic challenge of college students, and allow students to learn more Time is spent on reading good books and practicing skills to achieve more effective learning, and the quality improvement is reflected in the continuous growth and all-round development of students.

4.4 Building a First-Class Undergraduate Major

Major is the basic unit of talent training, and curriculum is the core element of education and teaching. To improve the quality of undergraduate education, the fundamental thing is to improve the quality of professional construction and the quality of the curriculum system. At present, the Ministry of Education of China is selecting and building first-class undergraduate majors and first-class courses in universities across the country. All colleges and universities need to re-examine and evaluate existing majors, combine market demand for talents, combine future economic and social development trends, and combine their own characteristics and traditions to further optimize the layout of majors and determine the first-class undergraduate majors to be built. The focus is to face the development trend of the future industry, analyze and predict the future needs of different majors for undergraduate talents, and carry out the construction of first-class undergraduate majors in a targeted manner. In terms of the construction of the curriculum system, the key is to form a modular, crossover, and systematic curriculum system according to the needs of different types of students, set up as many elective courses as possible, give students sufficient freedom and space to choose courses, and set up as diverse as possible. There are alternative professional education courses to meet the individual needs of different students. At the same time, it is necessary to meet the requirements of the construction of new agricultural sciences, new engineering sciences, new liberal arts and new medical sciences, combined with the needs of education informatization construction and industry informatization development, and accelerate the cultivation of online, offline, online and offline hybrid, virtual simulation experiments. First-class courses such as teaching and social practice.

References

- [1] ASTIN A. How the Liberal Arts College Affects Students. *Daedalus*.1999.12(1): 77–100.
- [2] Lin Jian. First-Class Undergraduate Education: Cognition Problems, Essential Features and Construction Path. *Tsinghua Journal of Education*.2019.40(1):22–30.
- [3] Shang Hongjuan. How First-Class Undergraduate Education Reform in the United States Can Inform the Development of double first class Education in China. *Chinese Education & Society*. 2018.51: 282–293.
- [4] Wang Dongfang, Fang Jun. A Model of First-class Undergraduate Education: How the American Liberal Arts College Runs. *Journal of Higher Education*.2020.41(6):103–109.