

## The Core of Constructing World-class Universities in China is to Cultivate First-Class Talents

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### Abstract

Based on a systematic review of new deployment and new requirements from the Chinese government of higher education in the new situation, the article deeply analyzes the important position, the difficulties and reform measures of talent cultivation in recognized world-class universities. The research points out that the core of the construction of the first-class universities in China's universities is to cultivate first-class talents. From three aspects of enrollment, cultivation and employment, the article clarifies the development path of first-class talents, focusing on the core link of talent-cultivation process. According to the needs of the country and the new era, the target and positioning of talent cultivation need to be adjusted, the cultivation program based on the change of educational concepts needs to be reconstructed, and implementation of the program needs to be ensured by deepening the reform of the teaching management mode and the reform of education and teaching methods, hence, improving the quality of the talent cultivation.

**Key words:** World first-class universities; First-class talents; All-round development; Complete credit system

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### INTRODUCTION

In October 2015, State Council launched the Overall plan ("Double first-rate construction plan") to promote constructing the world first-class universities and first-class academic disciplines, to guide and support the high-level universities and academic disciplines with good basis aiming for world -class development by accumulating good resources, cultivating excellent students and generating first-class research outcomes, to accelerate the pace of becoming world-class universities. In September 2017, the Ministry of Education and other two national ministries unveiled the list of Chinese universities and academic disciplines for the double first-rate construction. Though the concept of world first-class university has been long existed but the in-depth research on its connotation and features is insufficient without any concluded results. This indicates that the way of constructing "double first-rate" cannot be the same for all, should take China's reality and distinct Chinese characteristics into account. Chinese president Xi Jinping in May 2014 pointed out those Chinese world-class universities should echo China's features. In his speech, he also stated that there would not be a second Harvard, Oxford, Stanford, MIT or Cambridge University in the world, but there will be first Chinese ones such as Peking University, Tsinghua University, Zhejiang University, Fudan and Nanjing University to emerge as the world-class universities. In December 2016, when attending a conference on the ideological and political education work for national higher education, President Xi underscored that the foundation of higher education lied in the cultivation of students and their virtues. Only when colleges and universities produce excellent students, can they likely to step into the forefront in the world arena. Universities prioritize the improvement of their competence of cultivating talents and push the other work forward accordingly (Xi, 2016). In October 2017, President Xi proposed in the 19th Communist Party of

China National Congress that connotation development of higher education is the core to speed up the development of world first-class universities and academic disciplines. To achieve this goal, Chinese universities should adhere to the socialist education direction, fulfill the party's principle on education, implement the essential task of cultivating students and their virtues, hence, develop talents for the future. In this May, President Xi stressed the importance of developing next generation and upholding political correctness to become top Chinese universities in his inspection to Peking University. His words lighted the tunnel for China's universities in their path to world renowned universities.

## 1. THE STATUS OF TALENT CULTIVATION IN RECOGNIZED WORLD CLASS UNIVERSITIES

The fundamental sign of world first-class universities is that they produce research results with international impact and figures with international influence. All research results are done by human beings, therefore it is possible to become world first-class universities or respected universities when talents influencing the world are cultivated. Look back at the history of the world's higher education, the University of Bologna, the world's first university founded in 1008 years by Italy with the "Bologna tradition" characterized by its teaching and tasked by its imparting knowledge, or the "Humboldt idea" forming the foundation of research-orientated universities of today and emphasizing that universities should pay the same attention to the teaching and research, or the rise of American university and the "Wisconsin Spirit" with the good concerns of going out of the tower of ivory and combining the University with Society in the early 20th century, make it clear that the developing talents is the core mission of the university. By combing the various views and discussions on world first-class universities, Harvard University believes that the mission of the university is to discover and innovate knowledge and to create an atmosphere for people exploring the truth. Oxford University believes that people with innovative thinking are the source of pushing the development and prosperity of the future. Universities are places to cultivate such talents. MIT sees its mission as enhancing knowledge and developing students to become the best people in the 21st century in science, technology and other fields, serving the nation and the world. Yale University believes its mission is to protect, impart, promote and enrich knowledge and culture, and cultivate leaders and citizens for the country and the world. Although different universities have different descriptions of their missions, different concerns and emphasis, the most basic consensus is that, no matter what kind of university it is, talent development is always the core mission of the

university and also the fundamental task of the university. In fact, Harvard, Yale, Stanford in the America and Oxford and Cambridge in the United Kingdom among the world's most recognized universities, are all remembered and respected by the world for their cultivation of a large number of famous people. For instance, Harvard University has 85 teachers and students who won the Nobel Prizes, 8 presidents of the United States, and many world-class academic masters, thinkers, writers. Oxford University has cultivated 47 Nobel laureates, 26 British prime ministers and tens of thousands of scientists, politicians, entrepreneurs, etc (Dong, 2016). Therefore, the quality of talents is the key to measure and determine the university level, the university prestige, the university status and the future of the university. It is also an important factor that constitutes the core competitiveness of the university. In the process of constructing world-class universities in China, the mission of universities needs to be constantly strengthened, talent development as the basic task of universities needs to be adhered. Hence, all-round talents who can make significant contributions to the progress of science and technology and the development of society can be developed.

## 2. THE ACTUAL SITUATION AND REFORM MEASURES OF FIRST-CLASS TALENT CULTIVATION IN RECOGNIZED WORLD CLASS UNIVERSITIES

In the higher education system, undergraduate education is the basis. Its solid and superior quality is the cornerstone to carry out high-level research and develop the top innovative talents. Looking at the world first-class universities, it is not hard to find that almost all of the research-oriented universities have never relaxed their attention on undergraduate education, while emphasizing scientific research and graduate education, but constantly change the training modes. The tutor system formed at the early

stage of Oxford and Cambridge University, the elective and credit system in Harvard are all the strong support for undergraduate education. However, in recent years, with the increasing proportion of scientific research in research-oriented universities, especially in the current policies concerning the personal development and interests, there is an imbalance between teaching and scientific research. This also exists in world-class universities. UNESCO has put forward a statement, "Higher education for almost all countries is in fact in crisis". Only focusing on outstanding academic achievement and market influence, but ignoring talent development, especially on the undergraduate education, is to pursue of the excellence without the soul, to lose the essence of the education. A successful university should be student-centered, knowledge-based,

education-focused, and research-driven, as stated by Frank Rhodes, who has been the president in Cornell University for 18 years. In order to solve this worldwide problem in developing talents, international higher education, has conducted a series of reforms by combining with their own actual status and history. 45 European universities signed The Bologna declaration, to accelerate the Bologna progress and unify the higher education and research in Europe, build up the European Higher Education Area, improve the attraction of European higher education to the whole world. For instance, American universities emphasize on building platforms for students to have international communication and exchange, Australian students promotes the “Melbourne mode” featured by encouraging undergraduate students to explore disciplines wide and graduate students to focus on majors (Gu, 2009). These proactive measures taken by world-class universities facing to challenges of cultivating talents are worthy of learning.

### 3. ENLIGHTENMENT TO THE TALENT CULTIVATION OF CHINESE UNIVERSITIES

Challenges faced by the world-class university also exist in universities in China. Undergraduates’ education is the foundation of cultivating talents; it is also the soul of a university. It is difficult to achieve the goal of building a world-class university without the improvement of undergraduate education. On one hand, the useful experiences and special practices of talent cultivation need to be summarized, inherited and carried forward. On the other hand, the successful experience of cultivating talents and typical ways of deepening education reform in world-class universities can be learned. Three aspects need to be paid more attention when we focus on the quality of talent cultivation. First is the student enrollment. It is necessary to enroll the best students into the school under the Chinese current college entrance examination system, so as to lay a good foundation for developing outstanding talents. The second is to focus on the talents cultivation process, which is highlighted in this paper. The third is to strengthen the employment guidance for students, helping students to take the first step in their careers carefully, guiding students not to over-emphasize the immediate interests, and inspiring students to have great aspirations, take part in the mainstream, and make great achievements in border space.

Emphasizing the cultivation process is an important task to ensure the quality of talents cultivation, and it is also a universal practice recognized by world-class universities. Yale University has been adhering to its tradition of attaching great importance to undergraduate education, paying special attention to the undergraduate curriculum. This is also an important reason why Yale

University has become a world-class university (Liu, 2010). Stanford University also serves as a world-class university that highly values developing talents. It has always insisted on the cultivation of undergraduates as the focus of university and formed a series of innovative models and concepts for talents cultivation. Facing the new changes of the environment and new requirements on talents, Stanford University made a comprehensive review and research on the new round of undergraduate education reform from the concept and objectives of talent cultivation. It also introduced “*Undergraduate Education Research*” report in 2012, which indicated the direction for undergraduate education development, planned the development route for Stanford University, for its future in a long period of time (Li, 2010). It also has an important influence in the international higher education community. As a Chinese proverb goes, stones from other hills may serve to polish the jade of this one. Facing with the new round of higher education reform, several aspects need to be focused on the cultivation of talents in universities in China.

#### 3.1 The Goal and Orientation of Undergraduate Talent Cultivation

Chinese economy has been taking off during the past 40 years due to the reform and opening-up policy. Gradually moving to the center of the world stage, China is now the second largest economic entity of the world. To keep up with the rapid development of comprehensive national power, higher education of the nation should be adjusted, from quantity first to quality first, which could continuously provide intellectual support to the nation’s further development. As a result, colleges and universities should follow the changes and development of the society; reexamine their objectives and schemes of talent cultivation. Take Tsing Hua University as an example, it focused on the education of undergraduates and preppies (ready for study in the United States of America) during its early stage, with the orientation that Tsing Hua should help students’ lay solid foundations in their character and academic development. In the 50s to 60s of 20th century, to meet the urgent demand of large-scale economic construction, Tsing Hua put forward “red engineer” talent cultivation objectives, changing its orientation from “solid in foundation” to “solid in foundation and skilled in practice”. With the reform and opening-up policy, China stepped into the stage of independent innovation. To meet the need of talents with innovative thinking and ability, Tsing Hua changed its orientation from “solid in foundation and skilled in practice” to “solid in foundation, skilled in practice and adept in innovation”. Nowadays, moving into the 21st century, Tsing Hua’s talent cultivation orientation changes to “high-quality, high-level, diversification and innovation” (Gu & Wang, 2010). From the above-mentioned examples, it is obvious that colleges and universities

should clarify their orientation of talent cultivation based on the demand of country and university. According to the requirement of National College ideological and political work conference, colleges and universities should focus on the basic tasks of morality development, sticking to “four services”, cultivating builders and inheritors of socialism. Based on the ambitious goal, different schools can have different orientations. Taking Northwestern Polytechnical University (NPU) as an example, NPU is a multi-disciplinary, research and open university. “Multi-disciplinary” is the orientation of variety, “Research” is the orientation of level, and “open” is the orientation of pattern. Based on this orientation and present stage of social development, the objective of talent cultivation is adjusted to “high-quality talents with solid foundation, professional ability, international view and the sense of social responsibility”.

### **3.2 Reconstruction of Talent Cultivation Program Based on the Educational Concept of All-Round Development**

Training program is the top-level design of talent cultivation, and different programs embody different ideas of education. Based on the law of higher education and various demands of national social development stages, the educational concept should also be adjusted and keep pace with the times which, too, is the fundamental factor that universities should take into account when designing a talent cultivation program. Before the founding of People’s Republic of China, most of Chinese universities adopted the mode of American higher education, which underlined liberal education and focus on developing generalists. After that, due to the need of large-scale national economic construction, Chinese universities mainly followed the mode of the former Soviet Union and emphasized on the idea of professional education, until the 80s. From 90s of 20 century to now, with the development of national economy, more and more universities have started to concentrate on the combination of liberal education and professional education, thus cultivating high-level students with integrated development. Nowadays, with society developing, structure of knowledge changing, interdisciplinary integrating, people’s job choice varying and lifelong learning system gradually improving, the concept of undergraduate education has quietly changed, from grounding for students getting a job to grounding for the lifelong learning. From the perspective of the education’s nature, as a superior activity of human being, its essence is to dig out everyone’s potential and foster everyone’s ability for the overall development. From the perspective of the development of information era, knowledge and information undergo a myriad of changes in the twinkling of an eye, so universities must pay great attention to the new changes and new impacts given, and mainly focus on developing the ability of students

to obtain knowledge, create knowledge and sustainably develop themselves. As far as universities are concerned, the reconstruction of talent cultivation programs according to the changes of educational ideology is not making patches to original programs but going back to the essence of higher education and redesigning programs beneficial to students’ all-round development and lifelong learning. Thus, reconstructing talent cultivation programs must set up the idea of “educate students based on all-round development”, build a talent development system and constantly improve the quality of talents. “All-round development” mainly contains three meanings, first is to cultivate the comprehensive quality such as knowledge, ability, personality, accomplishment and sense of social responsibility. Second, it means not only to cultivate generalists, but also to cultivate innovative talents with unique personality, which is cultivating and developing personality on the basis of improving the comprehensive quality. The third thing is to provide space for the development of students’ personality and a good “soil” for the growth of diversified innovative talents. Research shows that if students’ career in the future is consistent with their interests, the probability of their success will be far greater than that of working passively. This requires that universities leave some space for talented students to allow them to study with interest rather than make instructive courses occupy all the learning links of the students in universities when designing a talent cultivation program. Only adhering to the educational concept conducive to the all-round development of students, restructure the program with the guiding ideology of “value molding, ability training and knowledge imparting”, can students have the leadership qualities, and be more likely to make a significant contribution to the working fields in the future.

### **3.3 Conditions Provided for the Implementation of the Talent Cultivation Program**

Talent cultivation program based on the education philosophy of all-round development is a good beginning for developing top talents. Implementation of talent cultivation program is a complicated and systematic project that involves various facets and factors of a university. To well implement the program, three aspects should be considered. First of all, university needs to find the most suitable teaching management approach. According to the trend of education development in the world, almost all first-class universities adopt complete credit system. Some universities in Europe and the States have even been like this for over a hundred years. In China, plenty of universities have also been using complete credit system. Complete credit system is one of the best choices for implementing talent cultivation program, which guarantees students to develop them in all aspects and uniquely. Secondly, universities need to figure out teaching methods to carry out the teaching

plan. The former president of Yale University said barriers that hinder students' innovation ability mainly is teaching methods. There are huge differences among effects brought by different teaching methods. Earlier in the 50s, the educator Jiang Nanxiang once said a story about hunting guns and bread. He said only teaching students knowledge was just like feeding them with bread but not teaching them how to use hunting guns to get food by themselves. Stuffing students with knowledge is no longer applying to the information era because it cannot satisfy students' interest and desire anymore. Research-oriented teaching must be carried out, starting with cultivating students' learning ability to improve teaching methods. Students should have problem-based, project-based and interest-based learning, and be inspired the thirst for knowledge, be cultivated with the critical spirit and ability of independent thinking, lay the first stone for the lifelong learning, and hence have more opportunities for the development in the future. At last, the best educational resources should be applied to students, including letting the best teachers do the undergraduate education. At present, many professors focus more on research tasks instead of giving courses to students. Undergraduate courses are always lectured by young assistants and graduate students. A lot of students complain that they hardly meet those professors who are wealthy in knowledge, and not even taking their courses. This becomes a common problem faced by the world higher education community. In this respect, Yale University has set an example to all universities, requiring all professors, including the Nobel Prize winners, to give lectures to undergraduate students regularly, regardless of their age and achievement, in order to create an environment conducive to teaching through the good examples set up by these famous scholars. Due to this, Yale's undergraduate education has always maintained the leading level in the higher education community in the United States and the world. In this regard, the Chinese

national education authorities have also clearly pointed out that professors must achieve a certain proportion teaching courses for undergraduates. As far as universities are concerned, the implementation of this policy needs to be studied and worked hard to guide teachers to pursue teaching and education as a career, not just a simple means of making a living. At the same time, some practical measures are to be taken to provide conditions for teachers to stand on the teaching platform. Teachers with outstanding achievements in teaching deserve more space for their career development and more respect in universities.

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