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An Analysis of Talent Cultivation Model in Yale-NUS College*

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Abstract—Yale-NUS College is a new cooperative college held by the National University of Singapore and Yale University. Yale-NUS College with its unique characteristics differs from Chinese universities in Singapore and Yale University in the aspects of training objectives, course arrangement, teaching organization and management, construction of the faculty team. It will be a significant guidance on talent cultivation model in Sino-foreign universities to study these characteristics.

Keywords—Yale-NUS College; talent cultivation model; analysis

I. INTRODUCTION

It is a general strategy and objective requirement for all countries to promote their own education development by introducing the world's high-quality educational resources. Singapore regards higher education as the most critical tool to achieve national economic and social development, and universities are naturally an important position to attract high-quality international talents and foreign educational institutions into Singapore. Through four stages development: transplantation of educational model, local exploration, establishment and development internationalization strategy, international localization and local internationalization, Singapore has formed a unique development situation in attracting high-level university educational resources and experience in the world to promote its own educational development, and has made tremendous achievements. Taking Yale-National University

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College of Singapore as an example, this paper analyses and summarizes the experience of the talent cultivation model of Yale-NUS College and its enlightenment to us.

II. BACKGROUND OF THE ESTABLISHMENT OF YALE-NUS COLLEGE

The Singapore government has successively introduced international policies such as introducing world-class universities, global campuses and so on, which have been effectively implemented. By 2005, 16 well-known foreign universities had come to Singapore to run their schools through the three stages of development: establishing the knowledge and technology base, expanding science and technology education, fostering creativity and innovation. While introducing resources to develop education in Singapore, Singapore also strongly supports its excellent universities to become world-class universities. For example, Singapore has set up an international academic advisory group to help National University of Singapore and Nanyang Technological University become world-class universities of high level.

In order to solve the current complex problems in depth, Singapore re-examines the quality structure of talents. In 2008, Singapore's Expanded University Education Research Committee recommended that, on the basis of introducing world-class universities to jointly run schools to train talents and opening overseas branches for many years, deepen international cooperation and set up a more integrated Liberal Arts College. In 2009, the National University of Singapore and Yale University began to explore the possibility of cooperation under the common will of the government and universities.

Yale University, as one of the top universities in the world, has always attached great importance to exerting its influence in the world. At the same time, Yale University has cooperated with many Asian universities in many aspects. Its Liberal Arts College is well-known all over the world and has trained many elites from all social fields. In the process

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of continuous development, Yale University, on the one hand, wants to expand its influence on the new type of humanistic education in Asia, on the other hand, it also wants to gain experience from the humanistic education in Asia. National University of Singapore has gathered elites from home and other countries. It has always attached great importance to cooperating with well-known foreign universities such as Duke University, Johns Hopkins University, New York University and Massachusetts Institute of Technology, which are world-renowned for their research in engineering, life and biomedicine, social sciences and natural sciences. For a long time, Singaporean universities have paid more attention to the study of practical subjects and vocational education as a whole. Today, with the globalization of economic and social development, it is necessary to constantly expand its mode of running schools and personnel training. Yale University and the National University of Singapore are both looking forward to building a bridge integrating East and West education by combining the advantages of both sides perfectly, and trying to solve many complex problems in today's society with different ways of thinking and problem solving.

In 2011, the Singapore government decided to collect the essence of two famous schools, and on the basis of meeting the needs of economic, social and educational development in the 21st century, select the elements suitable for Asia and Singapore and develop a model suitable for ourselves, and set up a new undergraduate Liberal Arts College- Yale-NUS College to train the citizens of the world, follow free exchanges and respect cultural diversity. In 2013, Yale-NUS College began to enroll students, based on the international training of thoughtful and knowledgeable talents who can contribute to the development of Singapore, Asia and the world.

The Singapore government's education liberalization policy has created a global open education system for Yale-NUS College, which is undoubtedly a successful start for the government to make extensive use of international educational resources and cultivate high-level international talents adapted to its own economic development and social construction.

III. CHARACTERISTICS OF YALE-NUS COLLEGE TALENT CULTIVATION MODEL

As a bright pearl of cultivating excellent undergraduates in the United States, Liberal Arts College has attracted much attention. In line with the rise and development of Humanities Education in Asia, the Singapore government has the strength to promote the friendly cooperation between Yale University and the National University of Singapore. In 2011, the two schools jointly established Yale-NUS College, the first Liberal Arts College in Singapore and even in Asia, and began enrolling the first batch of students in 2013. As a result, Yale-NUS College provides new humanistic quality education for potential students in Singapore and Asia, trains leaders and qualified citizens in today's complex and changeable world, injects fresh blood into Asia's higher education model, and is regarded as a timely and visionary plan.

A. Recruiting Outstanding Students Globally Based on the Goal of Internationalization

Yale-NUS College is not a simple transplantation of the experience of Yale University and National University of Singapore, but a new education model integrating the understanding and wisdom of Singapore in running schools and personnel training, adhering to the concept of "whole person" education, and designs a new educational model that incorporates Asian characteristics. Yale-NUS College requires itself to assume broader social responsibilities, explore talents cultivation models that integrate the world and Asian characteristics, nurture citizens of the future world, and promote economic and social development in Singapore, Asia and the world.

Based on the above orientation, Yale-NUS College designs training objectives from the perspective of internationalization in order to train comprehensive talents with global vision, critical thinking and strong sense of responsibility who can adapt to the needs of global economic development and work efficiently and confidently in a crosscultural environment. Starting from the training of future world citizens, Yale-NUS College screens students according to their academic achievements, interview performance and thesis content. It integrates the information student interviews, performance in Yale-NUS, recommendation letters, and course assistant activities, and carries out an all-round evaluation of admission, to expect to recruit students with leadership potential, excellent academic achievements, strong thirst for knowledge and all-round development of critical thinking. In 2013, Yale-NUS College received more than 11,000 applications for admission in its first enrollment. Through written examinations and interviews, more than 157 students were enrolled, with diverse backgrounds from 26 countries, of which 62% were Singaporean students. In addition, the Government of Singapore and Yale-NUS College provide a large number of scholarships and subsidies for top students every year in the hope of recruiting outstanding students worldwide.

B. Establishing Curriculum Structure with Emphasis on Liberal Education and Professional Education on the Basis of Interdisciplinary

Catering to the needs of economic and social development in curriculum design, combining the advanced experience of Liberal Arts College of Yale University in education, Yale-NUS College rethinks the western Talent Cultivation Model in an Asian way, establishes schools regardless of departments, and blurs the boundaries between disciplines, so that teachers will not overlook interdisciplinary teaching because of focusing too much on their own disciplines. In the first and second year of university, comprehensive humanities, social sciences and natural sciences are offered as interdisciplinary general courses. In the third year, students can choose their majors according to their personal preferences and under the guidance of comprehensive teachers' consultants and they have a higher flexibility in choosing their majors.



Yale-NUS College offers two kinds of courses: formal courses and informal courses. The formal courses include three parts: common courses, elective courses and professional courses. The common courses mainly include philosophy and political thought, scientific inquiry, quantitative reasoning, modern sociology and other interdisciplinary courses in the fields of humanities, arts and science and technology, which are compulsory general course for first and second-year students. The optional courses are designed to help students broaden their horizons and optimize their knowledge structure, and covered the fields of psychology, history, humanities and arts, including the history and culture of Southeast Asia, the rise and fall of the British Empire, and the history and culture of the United States. The professional courses are "deep" exploration on the basis of certain "width" given to students by common courses, which require students to comprehensively use the previous knowledge to explore a certain problem in depth, such as anthropology, humanities and arts, global affairs and

Yale-NUS College believes that future internationally competitive talents need a broader foundation and vision. Therefore, in addition to formal courses, a variety of informal courses are offered, including "Week 7" and other colorful extracurricular activities. The unique "Week 7" course, the seventh week of each semester, allows students to participate in a one-week practice program outside the regular course. There are many kinds of practical projects. Students can go to Bandazia city of India, under the guidance of teachers to explore the cities destroyed by the 2004 Indian Ocean tsunami, also go to Greece, Bali and Malaysia or some other countries to appreciate the different national customs and social customs of the world, or stay in Singapore to study the community and religious diversity of migrant workers in order to understand the local culture. Students summarize their experience in "Week 7" by presenting or performing manuscripts. In addition, Yale-NUS College also has a variety of extracurricular activities and overseas internship opportunities, which provide every student with opportunities to study and practice abroad during their stay at Yale University, including internships or projects.

Yale-NUS College emphasizes both liberal arts and specialty on the basis of cross-discipline, offering systematic formal courses and a large number of colorful informal courses. Students are encouraged to overcome their narrow national outlook, understand Singapore, Asia and the world from different perspectives, and try to solve many complex problems in today's society by different ways of thinking and problem solving in the process of group discussions, independent research and overseas practice.

C. Exploring Diversified Teaching Models in Combination with Social and Technological Development

Yale-NUS College believes that the rapid changes of society and technology make the channels and methods of knowledge acquisition more flexible and flexible, and the revolution of students' learning style has a certain impact on teaching organization and teaching methods. The revolution

of students' learning style has a certain impact on the form of teaching organization and teaching methods, and traditional way of knowledge transfer from teachers to students needs to change to the dialogue and interaction between teachers and students and mutual students.

- 1) Inquiry-based classroom teaching: Yale-NUS College's classroom teaching is mainly conducted in the form of small seminars, with no more than 18 students in each class. The aim is to provide students with opportunities for critical thinking, deep communication between students and teachers, and free communication between students. In the seminar, the college uses its highly internationalized teacher-student background to encourage students to think independently, to understand Singapore, Asia and the world's culture, thinking and activities from a broader perspective, and to increase students' international learning experience. Students can learn to think in a pluralistic environment, form their own understanding and judgment, know how to care about life and society, and become a person with a sense of social responsibility.
- 2) Liberal education integrated teaching accommodation: Yale-NUS College is the first Liberal Arts College in Asia, and the residential college system, as an essential part of the overall education of American liberal arts colleges, is one of the indispensable means to achieve the mission of school education, is also an important reason for its outstanding implementation of general education, and is considered as the "heart of College life". Accommodation colleges are not responsible for teaching, but consciously or unconsciously realize the dual purpose of teaching and living in the process of providing living and life. Yale-NUS College distributes students in three residential college districts, which have three missions of living, learning and improving leadership. The college has a dean and a supervisor who live in the same dormitory building, regardless of their major and gender. They and their families live in the college and manage their students' life and study separately, at the same time, senior students serve as consultants for freshmen. All colleges have their own dormitories, stadiums, classroom teachers, classrooms, conference centers, courtyards, restaurants, laundries, libraries and so on. Every student lives together and forms a small community. The college also holds various social activities regularly, providing a good learning environment for students, where students can discuss and communicate with their classmates at any time, so as to absorb more extensive knowledge, and cultivate good communication and communication skills.
- 3) Encouraging participation in non-classroom teaching: Rich and colorful non-classroom teaching is an important part of Yale-NUS College. This kind of teaching focuses on giving students opportunities to use and test theoretical knowledge comprehensively, enriching learning experience, deepening learning process, making students make their own contributions in personal participation, and



enhancing their practical ability and social responsibility. Yale-NUS College provides students with diversified practical opportunities, together with more than 40 enterprises, governments and non-governmental organizations at home and abroad, provides opportunities for students to explore learning in many ways, and provides targeted guidance in related fields with people from all fields of society to enable students to develop in an all-round way.

D. Creating an International Teacher Team to Cultivate Excellent Talents

Teachers are the soul of universities. Only with first-class teachers can we cultivate high-quality talents. The Singapore government attaches great importance to the construction of teachers. order high-level In to support internationalization of personnel training and scientific research in Singapore, the government has set up an international human resources team, adjusted immigration policy, and introduced world-renowned professors and scholars from the world by providing high salaries and welfare, establishing scientific and technological research institutes and laboratories. Yale-NUS College, in particular, has been focusing on creating a multi-cultural environment by introducing international teachers, prompting people to reflect on the existing education system while expanding their horizons, and to build a new education concept and Talent Cultivation Model. Supported by Singapore's immigration policy and policies related to quality working Yale-NUS College began internationally respected, pioneering and innovative teachers from the academic community through its international recruitment policy, in order to create a more diverse environment and cultivate talents with an international perspective.

While focusing on recruiting teachers from all over the world, Yale-NUS College also supports the overseas exchange of teachers by employing world-renowned scholars to give lectures, send teachers abroad for further study or visits, support teachers to participate in international academic activities, and provide teachers with applications for overseas visits and seminars of Expenses to support the internationalization of teachers.

Yale-NUS College's high-level internationalized teachers provide an important intellectual guarantee for the training of internationalized talents. It is precisely because of the faculty with international ideas, vision and multicultural structure that Yale-NUS College's origin and scientific research in Asia can be guaranteed.

IV. THE ENLIGHTENMENT OF YALE-NUS COLLEGE TALENTS TRAINING MODEL TO THE TALENTS CULTIVATION OF SINO-FOREIGN COOPERATIVE UNIVERSITIES

While introducing the world's advanced educational resources, Yale-NUS College has always adhered to the Asian characteristics, and from the perspective of promoting regional economic and social development, trained talents who can not only think about Asia from the world perspective, but also understand the world from the Asian

perspective. This not only provides a reference for personnel training and scientific research in China's Sino-foreign cooperative universities, but also brings enlightenment to other universities in China.

A. Supporting Policy in Close Connection with Economic and Social Development Needs

Singapore regards education as an economic act of creating national wealth. By introducing the world's highlevel universities to promote the economic, social and educational development of Singapore, Singapore's higher education has increased its global visibility and achieved good results. After the implementation of Singapore's plan of introducing world-class universities in 1998, Johns Hopkins University, Massachusetts Institute of Technology, Carnegie Mellon University, Stanford University and other universities carry out joint research and personnel training with Singapore's national universities. The majors they offer are highly applied engineering, business and medicine, which are closely related to Singapore's key industries. In recent years, Singapore has opened new branches by introducing foreign high-level universities, and introduced new majors related to game development, film production and future industry development. The establishment of Yale-NUS College, which began enrollment in 2013, has further deepened the content and form of cooperation.

Under the premise of improving the competitiveness of the country, Singapore has formulated its education policy. In order to attract high-quality foreign educational resources and world-class talents to work in Singapore, Singapore has "established a leading global university in Asia that can influence the future". Its Economic Development Bureau and Ministry of Human Resources have jointly established eight daily liaison offices overseas to attract international talent to work, invest and live in Singapore with the high degree of national headhunting companies. With such policy support, Yale-NUS College receives a large amount of government support funds and the right to use funds independently every year, which provides financial support for recruiting first-class teachers and retaining outstanding talents worldwide, enabling the College to plan and implement talent strategies scientifically according to its own development. Under the joint effect of national policy support and college talent strategy, Yale-NUS College brings together high-level international teachers with different cultural backgrounds, academic achievements and industry experience, creating a diversified atmosphere for international talent training.

In introducing foreign high-quality higher education resources, promoting the construction of high-level universities and cultivating high-quality talents, Sino-foreign cooperative universities should further provide more targeted guidance and support in terms of policies and systems, gain more autonomy, to build a high-level teaching staff for their own initiative and provide guarantee for the training of high-quality talents.



B. Relying on the Cooperation of Multi-departments to Cultivate High-quality Talents

Regarding higher education as an important engine for promoting economic and social development, Singapore's higher education policies are formulated on the basis of multi-sectorial and multi-disciplinary expert group recommendations. For example, its economic sector directly participates in every higher education reform, and ensures the healthy and orderly development of higher education through the introduction, promotion, registration and quality control of higher education resources and coordination of division in the education sector.

University cultivation talents in various fields are closely linked with economy, commerce, transportation, culture, science and technology, tourism and other industries. However, there is still a phenomenon of industry or sector monopoly in China, which has brought great obstacles to the reform of talent cultivation mode. To cultivate talents in all fields, Sino-foreign cooperative universities need to coordinate efforts from all sides, open channels for talent cultivation, and cooperate with relevant fields to cultivate talents. At present, although Sino-foreign cooperative universities also emphasize the cooperation of production, learning and research to train talents, more enterprises provide internship opportunities and venues for talent training. Enterprises have not really participated in the early planning stage of Talent Cultivation Model, such as formulation of talent training objectives and allocation of educational resources. It is impossible to mobilize the initiative and enthusiasm of enterprises to participate in the collaborative training of talents. Therefore, the state needs to speed up the implementation of classified guidance and management of universities. In accordance with the resources endowment of Sino-foreign cooperative universities, we should accurately orientate them and cooperate closely with relevant fields to open up channels of cooperation from various aspects such as training objectives, contents, approaches and evaluation, so as to coordinate the training of internationalized talents to meet the needs of social development.

C. Drawing Lessons from Advanced Talent Training Concepts Based on Regional Development

In the process of introducing high-level universities from the world to Singapore to jointly run schools, set up branches and cooperate in running universities, Singapore has always been a firm attitude based on Asia and facing the world. The core of Yale-NUS College is to learn from and communicate, not to replace and copy. Regardless of talent cultivation, discipline construction, specialty setting, curriculum arrangement, teaching methods and evaluation methods, it is based on Asia, combined with national conditions and integrates the advanced experience of the two universities, not Yale or another branch of National University of Singapore. In the deeper cooperation, on the one hand, Singapore's local universities began to re-recognize themselves while cultivating multiculturalism. On the other hand, world universities began to re-recognize Asia and add Asian characteristics to their own educational experience.

This kind of cooperation, which is mutually conditional and complementary, provides fertile ground for the cultivation of internationalized talents. In the innovation of personnel training mode, Sino-foreign cooperative universities should base themselves on the development of their own countries and universities and draw lessons from the advanced experience at home and abroad. They should also widely mobilize the active participation and feedback of enterprises, institutions and other employing units to integrate the needs of economic and social development and advanced experience at home and abroad into their own school-running practice and the regional development situation, to build a unique Talent Cultivation Model rather than simply imitate and copy.

D. Introducing First-class Teachers to Improve the Quality of Talents Cultivation

The cultivation of high-quality talents is closely related to the training objectives, enrollment, specialty construction, curriculum design, teaching organization and methods, the construction of teaching staff, teaching management model, and students' evaluation methods. However, teachers are the key to determine the extent to which these resources can be brought into play. The organization and development of formal courses and informal courses of Yale-NUS College require teachers not only to have a high level of teaching, but also to be knowledgeable in both China and the West. To ensure that the goal of talent training is achieved, Yale-NUS College recruits outstanding teachers from the world. The first 52 teachers are selected from more than 2,000 applications from around the world. These diverse backgrounds from the United States, Australia, Malaysia, Canada and other countries are important factors for Yale-NUS College to create a multi-cultural background and build an international talent cultivation model. Sino-foreign cooperative universities should draw lessons from Yale-NUS College's experience in attracting international talents and adopt various ways to recruit first-class talents from all over the world to carry out high-level scientific research and improve the quality of personnel training. At the same time, they should create a good social and humanistic environment in terms of system, remuneration and emotion, give the truly outstanding talents a platform to realize their value, to attract more excellent people through the gathering of excellent talents.

In addition, Sino-foreign cooperative universities should also provide diversified ways to improve the quality of existing teachers, such as providing opportunities for teachers to further their studies, lectures, cooperative research, and attend academic conferences, so that teachers can widely understand and contact new ideas and methods, learn from the experience of excellent personnel training at home and abroad, and promote the perfection of their own personnel training model.

V. CONCLUSION

The talent cultivation mode is the product of history. Its development requires both theoretical guidance and continuous enrichment and improvement in practice to better



guide practice. Studying the characteristics of the talent cultivation model of Yale-NUS College in Singapore, it has important practical significance for the reform and innovation of the university personnel training mode in China under the new situation, and the improvement of its own talent cultivation mode for Sino-foreign cooperative universities. On the one hand, it provides reference for the reform of talent cultivation mode in China; on the other hand, it provides experience for improving the talent cultivation mode of Sino-foreign cooperative universities.

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