

# A Practitioner of the Internationalization Concept of Universities—Yang Fujia, Chancellor of the University of Nottingham Ningbo

**Xiaoyu Liu**

*School of Foreign Languages, Quanzhou Normal University, Quanzhou, 362000, China*

**Abstract:** *Yang Fujia was chancellor of University of Nottingham Ningbo, the first Sino-foreign cooperative university in China. His Chinese and Western learning experience and practice of educational management shaped his philosophy of internationalization of universities. He advocated liberal education, which integrating and innovating liberal education of Fudan University and humanistic education of many top western universities; he attached great importance to undergraduate teaching and research, he held that China's universities should "learn from the strengths of western education and develop their own characteristics". His concept of internationalization of universities has its time significance.*

**Keywords:** *first-class undergraduate education, local internationalization, CFCRS*

## 1. Introduction

Yang Fujia was a famous nuclear physicist, academician of the Chinese Academy of Sciences, former chancellor of Fudan University, and chancellor of University of Nottingham Ningbo, the first Sino-foreign cooperative university in China. He has developed his own unique philosophy of higher education in his long-term practice of university management. He is known as the "fire-spreader". [1]

## 2. Yang's Academic Biography and the Origin of Internationalization Concept

### 2.1 Learning Experience and Scholarly Spirit

Yang's ancestral home is Zhenhai, Zhejiang Province. He attended Gezhi Middle School in his early years. The Gechi Middle School was founded in 1874 by Mr. Xu Shou, a pioneer of modern science and education in China. It was the first school that integrated Chinese and Western elements in China. Adhering to the school's motto, "To seek truth and knowledge by examining things", the teachers of Gezhi Middle School advocated the pursuit of truth by gaining knowledge from facts. At his young age, Yang developed his interests in natural science, and his logical thinking ability was improved in the study of science subjects.

In September 1954, Yang Fujia entered the Physics Department of Fudan University with honors and studied from famous Professor Lu Hefu. At that time, when the scientific and cultural undertakings began to flourish, scholars held that "different forms and styles in art can be freely developed, and different schools of thought in science can be freely debated" [2]The "Double Hundred Approach" guideline encourages academic freedom and emancipator thoughts. Professor Lu encouraged the young man Yang Fujia to use a different method to prove a new model of the atomic nucleus shell at that time. He operated according to the strict requirements of academic norms, and came out the reverse conclusion and understood this world's frontier research topic more deeply. "Rich in Knowledge and Tenacious of Purpose, Inquiring with Earnestness and Reflecting with Self Practice", the school motto of Fudan University, laid a solid foundation for his future conversations with world-class masters.

In 1963, Yang was a selected scholar in nuclear reaction energy spectroscopy at the Bohr Institute in Copenhagen, Denmark, which was known as the "pilgrimage mecca" for the physicists and the home of atomic physics. He always studied with enthusiasm and worked hard day and night. One year later, he proved the prediction of Nobel laureates Prof. Aage-Bohr and Prof. Motson about a state of nuclear motion. During the visit to Copenhagen of the Nobel laureates in the theory of shell structure, Mrs. Maria Goeppert-Mayer and Jensen, F.J. Yang had an in-depth discussion with them. In Bohr, Yang was

affected by the Copenhagen spirit of “encouraging equality, free discussion and close cooperation”, which became his belief in his future studies.

## **2.2 Innovation of Internationalization Concept**

With China’s accession to the WTO, China’s higher education has accelerated its integration into the world higher education system, opening up a wide channel for Chinese scholars to go to the outside world. In 1996, Yang Fujia was invited to attend the International Association of University Presidents Conference and was elected as the executive director. In 1997, after returning from a visit to the U.S., Yang Fujia wrote an article to introduce the coming new trends of “knowledge-based economy” to the domestic society. He suggested that “in the era of knowledge economy, the status of higher education institutions will change significantly. It will not only be a place to teach knowledge, nurture talents, create knowledge, and enrich the treasure of human knowledge, but also a place to nurture knowledge-based enterprises.” Yang understood the function of the university to serve the economic, cultural and social development of the country is “to see if it can answer the questions raised by the reality .....” He has been actively working to promote the Shanghai Light Source, a large scientific project for major national needs and frontier scientific issues, and has been actively promoting the establishment of the Fudan Development Institute, a think tank that advises the Shanghai government and enterprises. In December 2000, he went to the University of Nottingham to serve as the chancellor of the University of Nottingham in the United Kingdom, where he concentrated on the comparison of Chinese and foreign education, accumulating strength for the innovative development of internationalization of higher education in China.

## **3. The Main Content and Practice of Yang’s Internationalization Concept**

Yang Fujia’s academic life and practices of educational management are deeply rooted in China, and he has also drawn valuable essence from the broader world of higher education, forming his own unique philosophy of higher education that blends East and West.

### **3.1 Advocating Liberal Arts Education**

Liberal Arts Education is defined in China’s *Dictionary of Education* as an educational idea that promotes the intellectual, moral, and physical development of people in many ways with a general cultural cultivation program as the main content. The liberal arts education originated from the thought of Aristotle in ancient Greece, in order to realize the freedom of education and cultivate the rational, intellectual, aesthetic and other sentiments of human beings. In addition to his own study of humanities education at Yale, Harvard, Nottingham and other top universities in the world, Yang’s idea of liberal arts education also comes largely from the “liberal education” advocated by Xie Xide, the former chancellor of Fudan University. Fudan University’s exploration of liberal arts education began in the 1980s, hoping to convey the spirit of science and humanities through liberal arts education, cultivate students with a complete personality, appreciate different cultures and ways of thinking, develop the habit of independent thinking and exploration, and have a higher grasp of nature and society. This has something in common with the Harvard Red Book *Liberal Education in a Free Society*, which proposes that “education is not only the transmission of knowledge, but also the cultivation of the mind, including the ability to think effectively, to communicate effectively, to make appropriate judgments, and to discern values”.

In December 2000, when he became chancellor of the University of Nottingham Ningbo (hereafter referred as UNNC), Yang proposed the idea of “liberal arts education”. He believes that “the primary goal of a university education is not just to teach a particular vocational skill, but also to provide students with a balanced development of thinking skills, an open and comprehensive vision, and a balanced development of personality”. This educational advocacy reflects his thinking about the supremacy of professional knowledge and the prevalence of pragmatism in contemporary times, and his reflection on the over-specialization and utilitarianization of universities. The connotation of liberal arts education is “liberal”, which requires the integration of arts and science, cross-disciplinary, and the possession of a wide range of knowledge and skills. Yang Fujia quoted What Mr. Qian Xuesen said, “Scientists should have some artistic cultivation, and be able to learn the imaginative thinking ability of literary scholars and artists, and be able to associate in a large span of time. Scientific innovation often does not rely on scientific, logical reasoning. The germ of scientific innovation lies in the imaginative thinking, in a sudden inspiration given to you by a large span of association.” Elegance is to behave

first and cultivate second. Elegance is a human care and humanistic spirit, as well as seeking goodness and beauty in the human ethics value system. The purpose of liberal arts education is to make up for the various problems caused by the separation or even opposition between professional training and humanities cultivation by advocating the harmonious development of humanistic thoughts and professional abilities, and to cultivate senior professionals who have both professional scientists and rich humanistic qualities. In order to create a humanistic atmosphere, the UNNC has established an extracurricular activities, with nearly 20 student clubs and service-oriented student organizations, and more than 70 social practice and student research groups, covering academic, artistic, sports and social practice, providing students with a unique cross-cultural background, and also nurture humanistic spirit the classroom instruction that cannot train.

### ***3.2 Emphasizing the Undergraduate Teaching and Encourage Truth-seeking***

Yang Fujia attached great importance to undergraduate education. He strongly advocated the quality of teaching at the undergraduate level and focused on inspiring the talents of young scholars through the scientific research system.

In his early years, Yang Fujia was tutored by masters such as Professor Lu Hefu, Professor Zhou Tongqing, Professor Chen Jiangong and Professor Su Buqing, and firmly believed in the significance of the enlightenment and guidance of famous teachers for the growth of young people. In an interview with *The Paper News*, he said: teaching is the professor's job. He established the system "master class" at Fudan University as an important initiative to strengthen the qualities of undergraduate teaching, strengthen teaching quality management and improve teaching standards. The system was supported by many famous professors including Professor Yan Shaozong, Vice Chancellor of Fudan University, and famous economists such as Hong Wenda and Professor Wu Bolin. Before each class, the faculty introduced the professor's academic achievements and teaching experience to students, building a sense of purpose and honor for undergraduates to devote themselves to science. The famous professors combine the frontier developments in disciplines in the teaching of basic courses, so that students can broaden their spectrum and train thinking power. The professors' rigorous style of study and their dedication inspired undergraduates. In the first semester of the system, the number of famous professors in basic courses rose rapidly from 2 to 16.

Education is about lighting the torch, not filling the vessel. Yang Fujia once said: The two most important things, increasing the power of the mind and the upbringing of knowledge. And between these two, the thinking training is more important. He designed a lot of problem-based learning projects in his edited book *Atomic Physics* to guide students discover and discuss problems. He emphasized that the study method is to "keep discovering problems and to keep creating something." He practiced the seminar teaching method during years of teaching. In 1998, program "One Tutor for One Undergraduate Student" was joined Mr. Li Zhengdao's project. On the basis of this, Fudan also established the "Wangdao" and "Xiyuan" programs, which were refined and expanded into the "Fudan University Undergraduate Research Grant Program" (FDURO) system.

The UNNC's curriculum also reflects the concept of research-based learning. In order to give every student the opportunity to discuss, the university has structured "small classes that encourage questioning" with no more than twenty students in each class. Students search for literature, analyze it, and form their own conclusions; they strive for unity of supporting material and conclusion, and integration of theory and practice; plagiarism is eliminated. Professors provide sufficient guidance to students' research, which largely influences students' academic attitude and develops their ability to think independently and creatively.

### ***3.3 Promoting Internationalization and Localization of Universities***

The root of the word "university" is "universe", which means universality, worldliness and cosmopolitanism. Internationalization is both a natural attribute of universities and a necessary path for their development. As early as the 1990s, Yang Fujia advocated that research universities should take the initiative to communicate with top foreign universities; through such frequent cooperation, the universities in their own countries will benefit and rapidly improve their own standards.[3] Fudan University has made internationalization one of the university's development strategies, and is among the leaders in China in hosting international and regional academic conferences and in signing inter-university cooperation and exchange agreements with foreign universities. At the end of the Ninth Five-Year Plan (1996-2000), there were more than 800 international students studying at Fudan

University, and 70% of them were degree students, of which 30% were master's students and doctoral students, cultivating a group of international people who know and love China. A group of young people was promoted to further studies abroad by virtue of their rigorous academic attitude and academic accumulation in their professional fields. They have brought back knowledge in cutting-edge fields and quickly grown into the master candidate in various disciplines and majors, establishing long-term international exchange relations for the university, and further attracting a large number of foreign talents to work in China, promoting the cooperation of our universities in the Asia-Pacific region and even internationally, and greatly enhancing the international influence of the university.

Introduce high-quality educational resources is another strategic design to accelerate the internationalization of local universities. In 2003, the 68th executive meeting of the State Council adopted *The Regulations on Chinese-Foreign Cooperative Education*, which "encourage the introduction of high-quality educational resources, the development of Chinese-foreign cooperative education in the field of higher education and vocational education, and encourage Chinese higher education institutions to cooperate with foreign famous higher education institutions to run schools in cooperation." Yang Fujia actively worked and coordinated with the Chinese and British sides to build the UNNC together with the Wanli Education Group. In 2004, Yang became the chancellor of The UNNC, the precedent of Sino-foreign cooperative universities with independent legal personality.

The UNNC uses quality curriculum resources from the UK, recruits professors from the world, and assesses teaching quality using both UK standards and peer review. To cultivate innovative talents with a global perspective and international education experience, The UNNC has established close exchange and cooperation relationships with over 140 overseas undergraduate institutions in 40 countries and regions, and undergraduate students can travel around the world through 2+2 courses, exchange study programs, winter and summer short term programs, internships in international organizations, international volunteering, research workshops, international competitions or conferences, etc. Exchange and study.

As a witness of China's higher education from closed to open, Yang Fujia said in an interview with *Liberation Weekend*, "Opening does not mean copying everything. Chinese education has to learn from the advantages of the western and run its own characteristics." The university adopts a presidential system under the leadership of a board of trustees, with the Chinese members acting as an independent legal entity, and the ratio of Chinese to foreign trustees is 8:7, which ensures the socialistic direction. The university has localized the foreign curriculum and gradually developed into a teaching system that integrates the East and the West. The UNNC leads students to learn Chinese history, traditional Chinese thought, civic and legal knowledge, and makes full use of Ningbo's local history and cultural resources to cultivate students' materialistic view of history, patriotism and cultural confidence. Among the 28 majors introduced in the UNNC, 13 of them have localized based on China or UNNC, accounting for 46% of the total. [4] In scientific research and social services, the UNNC has provided industrial consultancy reports for leading industries in the region, such as textiles, garments, manufacturing and construction, making the UNNC an important part of "service-oriented education system" by the municipal government of Ningbo. And also it becomes an innovative university with both international characteristics and active service to the local economy and society.

#### **4. Insights from Yang 's Internationalization Concept of Universities**

Yang Fujia's concept of internationalization of universities is the essence of personal practice and exploration, and an excellent model of Sino-Western educational cooperation, which still has its contemporary significance.

##### ***4.1 Cultivate International Talents with both Humanistic and Scientific Spirit***

Against the backdrop of a century-long change in the world landscape and the emergence of new industrial revolutions, university education should not only nurture students' sense of family and humanity, but also focus on cultivating students' spirit of scientific exploration and laying down solid basic professional knowledge and abilities in order to provide a continuous supply of talents to realize the Chinese dream of great rejuvenation of the Chinese nation. Yang Fujia mentioned many times that patriotism is an important and excellent quality of a person. He often said, "China is the place where the world begins in my heart", and that people should always have a heart for the benefit of the motherland and the people. Colleges and universities should fully understand the current context of the times and influence students' interest and character cultivation through campus culture, and teachers

should become models for students' character building and knowledge learning; integrate humanistic connotation with professional education to give young people a broader vision, sharp thinking and insight, a strong sense of historical responsibility and national cultural pride to meet the test of the new era.

#### **4.2 Emphasize the Fundamental Study and Advocate Inquiry**

Foreign universities generally value the quality of undergraduate education as the strategic development priorities. A series of initiatives implemented by Yang Fujia in the practice of higher education management to strengthen the study of fundamental subjects, cultivate questioning, advocate inquiry-based teaching, and focus on creative consciousness and innovative thinking are still effective ways to cultivate top quality students today. The Ministry of Education issued *The Opinions on Accelerating the Construction of High-level Undergraduate Education* and *Comprehensively Improving Talent Cultivation Ability and the Implementation Opinions on Undergraduate Curriculum Construction* in 2018 and 2019. Respectively, which clarify the plans for higher education institutions to strictly implement the system of professors teaching undergraduate students and promote undergraduate students' participation in scientific research. It is still a question that higher education administrators need to think about how to make colleges and universities return to the basis of educating people, how to change the performance evaluation system of "emphasizing scientific research and neglecting teaching", and how to put into practice the concept of encouraging teachers to devote themselves to teaching and scientific research to feed educating people.

#### **4.3 Explore the Development Path with National Characteristics**

On April 25, 2022, General Secretary Xi Jinping stressed "China has a unique history, a unique culture, and a unique national condition, which determines that our country must follow its own path of higher education development." [5] at Renmin University of China. The developed countries have borrowed and learned from others and transcended to create their own characteristics. The development of the United States at the end of the 19th century was largely due to the experience of learning from German universities and the adoption of the Morell Act, which founded the unique industrial and agricultural colleges and promoted the education of agricultural and applied subjects in public universities in the Midwest, providing a solid educational foundation for social development. Today, when internationalization is in full swing, we should pay more attention to running education rooted in China, speed up the digestion and absorption of western experience, serve the economic, cultural and technological industrial upgrading of Chinese society and other realistic problems, explore Chinese standards and Chinese models, and come out with a new path of higher education with Chinese characteristics.

### **5. Conclusion**

Yang Fujia's internationalization concept of universities and his practice was extraordinarily effective and worthiest of reference by Chinese universities. China should actively layout the internationalization of higher education in the post epidemic era, integrate liberal arts education, attach importance to undergraduate teaching and research, and explore Chinese characteristics into the core value of university internationalization, explore the Chinese road, Chinese model, and Chinese discourse system, and lead this round of global higher education internationalization.

### **References**

- [1] Weiqi Y, Yi Z. He is the "fire spreader" of advanced educational concepts [N]. *Guangming Daily*, 2022-7-19.
- [2] Jiefei L. The "Double Hundred Policy" Examination [J]. *Literary and Artistic Contention*, 2018(8): 34-37.
- [3] Fujia Y. *Contemporary Chinese educators' literature (Yang Fujia volume)* [M]. Shanghai: East China Normal University Press, January 2006.
- [4] Ke S. The International Vision and Localization Turn in the Construction of Vurriculum System of Sino-foreign Cooperative Universities [J]. *Chongqing Higher Education Research*. 2016(5):96-102.
- [5] Committee of Renmin University of China. Steadfastly taking the new path of building a university with Chinese characteristics and world undergraduate education [EB/OL]. [http://www.qstheory.cn/dukan/qs/2022-06/01/c\\_1128695999.htm](http://www.qstheory.cn/dukan/qs/2022-06/01/c_1128695999.htm).