A Brief Analysis on the Development of Indian Higher Education and Implications for China

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Abstract. The purpose of this work is to study the development of Indian higher education and draw inspiration for higher education in China. Through literature review, it is found that by taking a number of effective initiatives India has attained great achievements in its higher education, which has ensured the ever-growing social and economic development of the country. Based on inspiration drawn from the study, suggestions are put forward for the Chinese higher education.

1. Introduction

India has a long history of higher education. As early as two thousand years ago, some cultural centers in India existed as universities, such as Nalanda and Taksila, which attracted many scholars from all over Asia to study Buddhism. However, India’s modern higher education did not evolve from these ancient universities; it had something to do with the British colonial rule. [1] In 1857, the University of Calcutta, the University of Mumbai and the University of Madras were founded modeled on University of London, UK, and the existing smaller higher education institutions in the same regions were affiliated to these universities. This marked the beginning of India's modern higher education era. After the country’s independence in 1947, the Indian government vigorously developed higher education and, at all stages of the national economic development, kept taking effective measures for education development and reform. As a result, India’s higher education expanded tremendously throughout the years since the nation’s independence. In the year between 1946 and 1947, there were only 18 universities and 636 colleges in India. However, in 2018, India had 903 universities (343 of which were private), 39, 050 colleges (78% of which were private), 1,011 Stand Alone institutions (75.47% of which were private); 36.64 million students were enrolled in higher education with the gross enrollment rate in higher education reaching 25.8%. [2] The huge growth of Indian higher education has laid a solid foundation for its social, economic, scientific and technological development. Today, India is the sixth largest country in space technology and one of the leading software powers in the world.

2. Major Initiatives for Indian Higher Education

2.1 Developing Indian Institute of Technology and Building World-Class Universities

Not long after India's independence, Indian Institute of Technology (IIT) was founded as one of the country’s key higher education construction projects. Since the establishment of the first institute of technology at Kharagpur in 1950, six more institutes of technology have been set up respectively in Roorkee, Mumbai, Madras, New Delhi, Kanpur, and Guwahati. Today IIT ranks amongst the best technological institutions in the world and all the 7 institutes have been playing a vital role in promoting scientific and technological progress and economic development in India.
In the process of the establishment and development of Indian Institute of Technology, the Indian government has always given strong support in various ways. Firstly, the Indian government passed laws to ensure the significant status and healthy growth of Indian Institute of Technology. For example, the 1961 Institutes of Technology Act designates Indian Institute of Technology as a key university in the country and endows it with independent academic policy, independent enrollment and degree conferring power. Secondly, Indian Institute of Technology is strongly financially supported by the government for the promotion of high-level teaching and research. Thirdly, the Indian government confers Indian Institute of Technology high autonomy in school governance. Although all the 7 institutes are under the jurisdiction of the Indian Institute of Technology Committee, which regularly inspects the work of all institutes and plays a coordinating and communicating role, the Committee does not control school-level decision-making. The Academic Council of each institute, which is composed of faculty members, decides on many affairs, including curriculum design, enrollment, staff recruitment, etc.\

Moreover, Indian Institute of Technology, set up on the lines of the Massachusetts Institute of Technology (MIT), USA, has successfully learned from the experience of MIT in various aspects including talent training objectives, discipline setting, curriculum system, international cooperation and exchange.

IITs continue taking strides towards furthering the growth and dissemination of scientific and technological knowledge, and towards nurturing highly skilled human capital which is the major source to provide the continued propelling thrust to the growth of knowledge based economy. Together with other institutes in the technical and engineering education sector, they make India proud of taking the lead in such industry as software outsource and of providing qualified skilled brainpower to manage business, knowledge industries and research centers both in India and abroad.

2.2 Promoting the Autonomy of Affiliated Colleges and Giving Full Play to Their Self-Governance in Running Schools

The Indian affiliated college system was founded in the British colonial period following the model of University of London, UK. It refers to a university accepting a smaller local institution of higher learning as its own affiliated college. The university draws up the teaching plan and syllabus of the affiliated college, designates teaching materials, organizes examinations and awards degrees. Although the affiliated college system played a great role in the development of higher education in India, some affiliated colleges faced such problems as poor school conditions and low teaching quality, and the status of affiliated colleges in the whole higher education system declined as a consequence.

In order to ensure the quality of higher education and give full play to the initiative of affiliated colleges, the Indian government encouraged the autonomy of affiliated colleges. In 1966, the Kothari Education Committee of the Indian Government put forward that any outstanding college in a university that demonstrated its ability to significantly improve its quality should be considered being granted autonomous status, such as the right to formulate its own admission charter, to design its own courses of study, and to hold examinations, while the parent university only conducts general supervision and practically confers degrees. The University of Uttar Pradesh Act of 1973 legally established the status and nature of autonomous colleges for the first time. In 1978, the Grant Committee of Indian Universities reiterated that affiliated colleges should be transformed into autonomous colleges so that they can decide their own curriculum, admission rules, evaluation methods of students' learning and performance, make full use of modern educational technology, promote community services and school–enterprise cooperation, and develop behaviors beneficial to the society and the state. The National Education Policy of 1986 regards the establishment of autonomous colleges as an important measure of higher education reform. The autonomy of affiliated colleges is a great move from the affiliated system of Indian universities to self-governance. Academic, managerial and financial autonomy helps to fully mobilize
the initiative and enthusiasm of the affiliated colleges, so that they can do better in governance, academia, teaching and social services.

2.3 Advocating the Delinking of Academic Degree from Jobs and Making Rational Use of Higher Education Resources

Due to the association of academic degrees with jobs, too much attention was given to academic degrees by the public. Higher education in India experienced swift expansion. In 1946-1947, the number of university enrollment was 225,000 while in 1984–1985 it increased sharply to 3.44 million. In the 30 years between 1951 and 1981, the average annual growth rate of university enrollment reached 9.7%, which exceeded the growth rate of university enrollment in western developed countries. Swift expansion resulted in decreasing of education quality and more course failures by both undergraduates and graduates. In response to such a situation, Dr. Kidwai, chairman of the Federal Public Utilities Commission, proposed the delinking of degree from jobs as early as in 1974. He believed that professional training and on-the-job experience should be valued in such professions as public servants. This view was constantly emphasized in documents or reports of the Indian government and relevant agencies. In 1979, the People's Party Government proposed in the Draft Educational Policy that, in order to alleviate the pressure of higher education, in some jobs that actually do not require higher education knowledge and ability, degree and jobs should be delinked as secondary school graduates could be engaged in these jobs. In 1985, in the report "Challenges of Education: Policy Perspective" the former Ministry of Education of India again proposed to implement the delinking of degree from jobs. In 1986, the National Education Policy officially took the delinking of degree from jobs as an important step of higher education reform. In that year's National Education Policy: Action Plan, specific provisions were made for the implementation of degree-jobs delinking. The National Education Policy, revised by the Indian Government in 1992, reiterates the reform orientation of "delinking degree from jobs".

The delinking of degree from jobs helps to reduce blind pursuit of higher education and alleviate the pressure of higher education institutions, helps to make rational use of higher education resources, and plays a significant role in improving work efficiency and mitigating the unemployment problem of college graduates in the wake of the rapid expansion of higher education enrollment.

2.4. Setting up the National Assessment and Accreditation Council and Establishing a Higher Education Quality Assurance System

In view of India's lack of specialized quality appraisal agencies to evaluate the quality of higher education, the National Education Policy of India in 1986 explicitly proposed setting up an appraisal committee. In 1994, the National Assessment and Accreditation Council (NAAC) came into being at the initiative of the University Grants Committee. This marks the preliminary establishment of India's higher education quality assurance system. NAAC continuously kept improving the methods of university quality assessment. In 2007, NAAC drafted the New Method of College Evaluation and Appraisal which aimed to overcome the limitations of the existing evaluation methods and to enhance the rigor, reliability and validity of the evaluation methods. NAAC plays a leading role in the quality assurance system of Indian higher education. The central and state governments provide strong backing for NAAC, while the University Grants Committee makes full use of economic leverage to support its running. Each discipline committee works closely with NAAC to ensure the education quality within its discipline.

There are various kinds of universities and colleges in India, the quantity being huge and the quality being varied. In the evaluation, the National Assessment and Appraisal Commission did not adopt a "one-size-fits-all" evaluation model, but took into account the actual situation of three categories of higher education institutions, namely "universities", "autonomous colleges" and "affiliated colleges", gave different weights on various indicators and carried out classified and graded evaluation. As the core of India’s higher education quality assurance system, the National Assessment and Accreditation
Council promotes the co-work of the government, the University Grants Committee, discipline committees as well as higher education institutions, which constitutes the basic framework of India's higher education quality assurance system.

2.5. Expanding Financing Channels and Improving School Conditions

The funding of Indian higher education institutions, especially public universities and colleges, comes mainly from the central and state governments. From the early period of the independence to the end of the 1980s, the Indian government's investment in higher education kept increasing, and it accounted for the largest proportion among all levels of education. During the 1990s, in the process of higher education popularization in India, funds within the budget decreased dramatically while extra budgetary funds turned to be the leading force. As a result, multi-channel financing has become an effective solution to the shortage of funds for higher education. Firstly, through the laws and decrees of Indian universities, universities are entitled to charge tuition fees, incidental fees and other fees. Secondly, full play is given to the autonomy of colleges and universities, to obtain funds by providing publications to the society, providing consulting services to economic departments and transferring scientific research results to companies and enterprises. Thirdly, higher education institutions make efforts to get assistance from international institutions and foreign organizations. Taking the Indian Institute of Technology as an example, the first five institutes of technology were assisted and supported by international organizations (such as UNESCO) and other governments (such as the United Kingdom, the United States, Germany, etc.). In addition, domestic donations to universities from organizations and individuals are also growing.

To conclude, the central and state governments’ planned grants, student tuition fees, donations, assistance from international institutions and foreign organizations as well as other efforts constitute the variety of funding sources for Indian higher education. By encouraging higher education institutions to raise funds through multiple channels, their self-financing ability has been greatly increased, and the conditions for running schools have been further improved.

3. Suggestions for Chinese Higher Education

China shares some similar characteristics with India in that it has a large population and it is also a developing country. Upon analysis of the development path of Indian higher education, several suggestions are proposed for Chinese universities and colleges.

Firstly, during the course of higher education popularization, government support should be given to encourage differentiated development of different types of high-level universities and disciplines. By 2017, the total intake of higher education institutions in China reached 36.69 million people, ranking first in the world. In 2018, more than 7.9 million college students were enrolled in China, with a gross enrollment rate of 48.1%, which was about to realize the popularization of higher education. However, there is still a long way to go before China turns into a great country of higher education. While popularizing higher education, it is essential to further improve education quality and build high-level universities so as to enhance the core competitiveness of China. In 2015, at the meeting of the Leading Group of the Central Committee on Comprehensive Deepening Reform, the Overall Plan for Promoting the Construction of World-class Universities and First-class Disciplines (referred to as "Double First-Class Construction) was considered and adopted, which is a new and significant deployment in the field of higher education in China in the new era. Governments at all levels strongly support the construction of "double first-class" by providing resources and policies. Higher education institutions need to well define and widely communicate their mission and goals, create strategic plans for further development, and take effective measures to improve their performance in every aspect and to attain global level of excellence in education.
Secondly, further reform is needed to decentralize university governance so as to enhance the initiative and enthusiasm of secondary colleges. In the recent years, the administrative power of colleges and universities has been gradually transferred from the school level to the secondary colleges, entitling second colleges with greater autonomy. With the continuous implementation of “College as Entity” (referring to allowing secondary colleges more autonomy) and the comprehensive reform of colleges and universities, the functions of secondary colleges have been expanding. In other words, all the work such as talents training, academic research, scientific and technological innovation, cooperation with local regions, talents introduction, international exchanges and social services is carried out at the secondary college level. Hence, the direct links between secondary colleges and governments, markets, society and the international community are not only increasing but also becoming more frequent. Therefore, a co-governance situation should be created between the political power under the organizational framework of the Party committee, the administrative power under the framework of the administrative leading group, the academic power under the framework of the academic committees and the democratic power under the framework of the second-level faculty congress. This is conducive to improving the autonomy and enthusiasm of the secondary college and enhancing the vitality of the university, so as to better perform the university functions which are talent training, academic research, social services and cultural inheritance.

Thirdly, the quality assurance system of higher education is to be improved so as to ensure good quality education as well as other services. A comprehensive system of quality assurance may consist of a number of different entities and processes acting together, including higher education institutions, the central and local governments, and voluntary agencies. Under the premise of running schools independently in accordance to relevant laws, institutions of higher education should enhance quality management, quality control, quality audit, self-evaluation and peer review, and promote the construction of internal quality assurance system from four aspects: material, spiritual, institutional and behavioral. The government's supervision role in quality assurance activities should also be strengthened. Meanwhile, an external quality evaluation and quality monitoring system needs to be built by allowing the involvement of agencies in the inspection and assessment of higher education quality. It is important to note that the assessments of the results must be communicated to interested parties, “both to satisfy demands for accountability and to enable higher education institutions to use the results to affect changes and improvements”.

Fourthly, universities and colleges can diversify their financing channels and obtain greater financial support for upgrading education infrastructure. One of the main reasons for the uneven allocation of higher education funds in China might be, based on the preliminary pattern of higher education resources formed in the first half of the 20th century, under the guidance of the national strategy of "concentrating efforts on major events", the cumulative effect of the complex cycle of differentiated investment under the influence of population distribution, geographical environment, level of economic development, rate of return on funds, etc. Therefore, it is particularly important to encourage all kinds of schools to actively broaden channels for fund-raising so as to achieve self-sufficiency. In addition to striving for financial support from the central government and local governments, higher education institutions should also change their concepts and expand their sources of funds by raising money from all sectors of society (such as social donations, alumni donations, enterprise donations), strengthening contacts with enterprises and research institutes, promoting cooperation with industry and research institutes to realize the transformation of scientific research achievements, providing technical consultation for government departments and enterprises, offering continuing education and vocational training, and expanding overseas markets.
4. Summary

Over the past dozens of years in India, great importance has been attached to higher education. By developing Indian Institute of Technology and building world-class universities, giving affiliated colleges full autonomy, delinking academic degree from jobs, establishing a comprehensive higher education quality assurance system, as well as enabling institutions to increase self-financing capability, India has achieved tremendous development in its higher education. As a developing country with a huge population, China could draw inspiration from the development of Indian higher education.

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