Development of Higher Education in India & China: A Comparative Perspective

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Historical Background: India and China are two most populous nations of the world. Both are developing nations on a fast growth trajectory. However, both the nations face a daunting task of educating their rapidly growing populations. Education of the citizens is vital since it determines the level of progress and development and prosperity of the two nations. And it is not just the provision of the basic or elementary education that determines the trajectory of national growth but the level and extent of higher education determines the development of the full potential of the populace. But just as basic education was a late comer to these two countries, the arrival of higher education too has been quite recent in comparison to the western world.

In 1880 the level of literacy in India was barely 3 percent and in China it was not much better. Both the countries began their tryst with basic education at almost the same time when they were ensconced in a traditional social and familial setup. Higher education was an even more distant dream at the turn of the twentieth century for both these countries. After China got itself converted into a Republic in 1920 it launched on a rapid path to improving literacy and education but by the time the Kuomintang Government was overthrown in 1949 by the Communists led by Mao, China which at that time had a population of over 500 million had barely achieved the literacy level of 20 percent. India had been launched on the path of literacy and education by the colonial rulers much earlier than China. The Iliteracy rates in British India rose from 3.2 per cent in 1881 to 7.2 per cent in 1931 and to 12.2 per cent in 1947. But the concerted efforts and real progress began only in 1947 after India got its Independence. Hence at the time of its independence India's literacy stood at 12 percent with a population of 350 million. 1931 there were 39 universities, (13 national, 12 provincial and 14 private) and 17 colleges (2 national, 6 provincial and 9 private) 23 professional schools, (3 national, 15 provincial and 5 private) as per Chinese Education History (Hayhoe 1989). But by 1947, 207 higher institutions were setup which included 55 comprehensive universities (Hayhoe 1989). The level of higher education in China in 1949 was barely 3 percent of the educated population but despite its abhorrence of the West, the higher education system came to be established on western lines. In India in 1947 higher education level was barely 2 percent with 20 universities and a few major colleges

Planned Approach to Higher Education: Both India and China, realizing the daunting task of nation-building and achieving national socio-economic progress and development including educational development and growth, set out on the path to planned socialistic development through the Five Year planning method. Thus while China started its first Five Year in 1953 (1953-1957) India launched its First Five Year Plan in 1951 (1951-1956) and presently both have entered their Twelfth Five Year plans with India's from 2012-2017 and China's 2011-2015. Both China and India made continual budgetary provisions and legislative efforts throughout the last six decades to achieve faster growth and development in the education sector including in the higher education sector. Incidentally, both the countries were inspired by and guided by the then Soviet Union (USSR) in formulation and implementation of planned strategy to socio-economic growth particularly in the initial years. However China did suffer some reverses in its higher education development during the Cultural Revolution period from 1967 to 1976 when the expansion of University and college education saw a great decline in higher education (from 674,400 to 47,800) due to political ideology pursued by Mao. This had a most adverse impact on higher education in China and its profound impact was felt for a long time. But after Mao's death in 1976, Deng Xiaoping launched sweeping changes and expansion of higher education from 1980s onwards in China. However, it was the planned approach to development that made it possible for both India and China to keep the pace of development with fast growing populations. Hence literacy levels were constantly maintained to reach the present high levels of literacy in both the countries – in China 95 percent and in India 74 percent at present.

Legislative and Policy Developments: Both India and China in course of the last six decades had to enact

several laws and legislative enactments and take Policy decisions to ensure that literacy and education levels were enhanced and improved. China though originally emphasized more on the basic education and its growth, later also pushed the growth of higher education through various legal enactments. The Policy reversal in higher education policy came in China during the 1967-1976 period of cultural revolution and from 1985 onwards there has been no looking back by China with many vital enactments to foster higher education. The far-ranging educational reform policy effected by Deng Xiaoping covered all levels of the education system, and particularly higher education, and was primarily aimed to narrow the gap between China and other countries, particularly in the emerging context of liberalization, privatization and globalisation. Modernizing education was considered as vital for modernizing China and making it into a superpower. Thus there was devolution of educational management to the local level as a way to improve the education system at all levels. Instead of a centralized control a more flexible approach to growth of education was adopted through the creation of the State Education Commission. The path-breaking enactment came in 1986. This Law on Nine-Year Compulsory Education came into effect from July 1, 1986, with the avowed goal of universal education tailored to local conditions and guaranteed the right to nine years of education (six-year primary education and three years secondary education) for all children. A specific degree law was passed on 12 February 1980 and amended on 28 August 2004 consisting of 20 articles and was meant to streamline the degree awarding system. Compulsory Education Law of 1986 adopted on 12 April 1986 and amended on 29 June 2006 making 9 years education compulsory is spread over 8 chapters and 63 articles

In 1993, China launched the "Project 211" aimed at creating top 100 universities. By merging 708 schools of higher learning into 302 universities for creating a new force at higher education level this policy sought to create top level universities in China. In 1994, the China enacted the Reform Program of Teaching and the Curriculum in Higher Education Towards the 21st Century. The new initiative was directed at thousands of faculty members in higher learning institutions including presidents, professors and teachers. The Education related Order 45 of President of China was promulgated on 18 March 1995 and made effective from 1 September 1995. Another specific higher education law Order 7 of the President of PRC was promulgated on 29 August 1998 and made effective from 1 January 1999. This law on Higher Education is spread over 8 chapters and 69 articles. In 1998 a "Project 985" was launched by China aimed at developing 10 to 12 world-class universities which could compete with the top universities and Institutions of Higher Learning in the world. The focus on rankings for Chinese Universities based on quality assurance was initiated. The Institute of Higher Education at the Shanghai Jiao Tong University, started rankings of the world's top universities under its Academic Ranking of World Universities (ARWU) system called as "The Shanghai Ranking." It is now one of the most influential and widely discussed ranking systems in the world of higher education based on several stringent criteria. It was China's endeavour to find its way into the top slots of World Class Universities. Hence (and despite the blatantly dark Cultural Revolution period) China has made great strides in developing a policy framework for the development of higher education in China. In the case of India however the legal and policy development on the education front really began after the first National Education Policy of 1968, and then followed by the National Policy of Education (NPE) of 1986 and its further development in 1992 by way of Plan of Action (PoA). The recent efforts at higher education reforms had been spearheaded by the Ministry of Human Resource Development (MHRD). The latest attempt at revamping the University and College educational setup has been the formulation of the National Commission for Higher Education and Research (NCHER) Bill which has however not been enacted and implemented as yet.

Higher Education Development: It is observed that from 1957 to 1960, the number of higher institutions in China increased from 229 to 1,289 (Hayhoe 1989) but reduced to 610 in 1962, and as per the China Statistical Yearbook 1996, the number continued to decrease to 434 by 1965 though the enrollment of university students increased. It is interesting to note that during this period the style of higher education system in China followed a Confucian-Western mix, according to Finnish National Board of Education 2007. China began to dramatically expand its higher education system in 1999 as large number of students were

graduating from secondary schools and due to the increasing absorption of China into a global trading (WTO) system. Its self realization of emergence as a world power left China no other option but to expand its higher education sector. Hence more and more Chinese students have taken to higher education in last decade. As a further impetus on August 29, 1998, China enacted and ratified the Law on Higher Education made up of 69 articles contained in eight chapters, spelling out the goal and principles of higher education, its management system and establishment, organization and operation of higher learning institutions, teachers and students, financing and investment, and legal responsibilities. This new law has provided the basis for rapid development of China's higher education, and provided legal protection for higher education in China.

In China by the end of 1998 there were 1,022 institutions of higher learning (universities and colleges) with 3.41 million students, and also there were 962 other higher-learning institutions with 2.82 million students, and around 17,106 secondary special and technical and vocation higher schools, with 11.26 million students. China also launched a project for creating 100 world class universities in 1993, by merging 708 schools of higher learning into 302 universities under the "Project 211" for creating a new force at higher education level. Since 1999 China allowed in a big way the rapid expansion of the private sector in higher education field. Between 1999 and 2003, enrollment in higher education in China increased from 1.6 million to 3.82 million. In 2004, the total enrollment in ordinary schools of higher learning was 4.47 million. By the end of year 2004, there were 2,236 colleges and universities, with over 20 million students enrolled in China and over 6 million Chinese students graduated from university system in 2008. In 2006, 18.7 million students were enrolled in formal higher education under state universities and the private universities had enrolled about 1.3 million. In 2010 China had 6.3 million students graduating from College or University.

Higher education in India too has been on a rapid growth trajectory since last decade. The Government has cited the following official figures of this growth.

No. of Institutions	2002	2007
Universities	201	378
Colleges	12342	18064
NAAC Accredited Universities	61	140
NAAC Accredited Colleges	198	3492
Enrolment (lakh/millions)	75 (7.5m)	140 (14 m)

Source: http://data.gov.in

Today with 700 universities and with more than 35,000 affiliated colleges the students enrollment at higher education in India has reached over 20 million students and is apparently larger than that of China which though is catching up fast. Hence the Indian higher education scenario presents a large and a complex system which is also constantly growing. Higher Education sector in India is monitored by the Ministry of Human Resource Development with several specialized bodies directly overseeing their workings such as for Arts, Science, Commerce and conventional education, the University Grants Commission, for engineering education and business schools All India Council for Technical Education (AICTE) for medical education the Medical Council of India (MCI), for teacher education, the national Council for Teacher education (NCTE), for agriculture education and research, the Indian Council for Agriculture Research, for legal education, the Bar Council of India (BCI), for dental education the Dental council of India, for planning education, the Institute of Town Planner, India,(ITPI), for architectural education, the Council of architecture and so on. The latest break-up of the institutions of higher education in India is Central Universities (Public) 44, State Universities (Public) 306, State Universities (Private) 154, Deemed Universities (Private or Public) 129 and Institution of National Importance (Public) such as IITs/IIMs, 67. The total number of institutions which grant degrees and diplomas of higher education in India is over 700 and the total number of affiliated colleges and institutions of higher learning number about 35,539 at present.Of the total of 20 million students enrolled in the higher education it is reported that about 17.5 million or 86 percent are enrolled at the graduate level mostly in the conventional streams such as arts, commerce and science, 2.5 million or 12 percent at Post Graduate level again mostly in the conventional subjects and disciplines, 0.16 million or 1 percent at research/doctoral level and 0.21 or 1 percent at diploma level. Hence in comparative and quantitative terms the higher education in India is ahead of that in China but the question of quality is not very clear. The issue of quality of higher education in India and China can be gauged from the rankings of the Indian and Chinese Universities at the world level.

Numl	ber o	f Uni	iversities	s Rank	ked ar	nong	Globally	High-ranked	Universities	in	2005
Rank	Country	Top 20	Top 100	Top 200	Top 300	Top 400	Top 500				
19	China	-	-	2	6	15	18				
33	India	-	-	_	-	1	3			Source:	•

Academic Ranking of World Universities 2005, Institute of Higher Education, Shanghai Jiao Tong University (SJTU 2005), (http://ed.sjtu.edu.cn/ranking.htm)

World University Rankings-2010 by Times survey

Country	Population in millions	Top 20	Top 50	Top 100	Top 200
China	1,330	0	1	2	6
Hong Kong	7	0	3	3	5
India	1,173	0	0	0	2
(IIT-Mum/D	el)				

Source: Times Higher Education, (http://www.timeshighereducation.co.uk/).

Top 200 Universities of the World in 2008/2009 by Times survey

Name of Country	2008 Rank	 Name of University 2009 Rank Name of Univer 			ersity
China	56	Tsinghua University	/ 49	Tsinghu	ia University
China	50	Peking University	52	Pekin	g University
India	174	IIT-Mumbai		163	IIT-Mumbai
India	154	IIT-Delhi	181	IIT-Delhi	

Source: Times Higher Education, (http://www.timeshighereducation.co.uk/)

Hence, though in quantitative terms and enrollment terms, India has been ahead of China in the field of higher education during the 1990s, in the qualitative terms and number of universities reaching higher rankings in the world, today India is lagging behind China.

Present Scenario:

The higher education system in China has both the US and the UK systems integrated with a strong Confucian bias but with a stronger link to the US system of higher education. China has both the shortcycle colleges of two-year and three-year period leading to degrees and diplomas and also the four-year colleges and universities which offer academic as well as vocational courses leading to bachelor degrees with specialisations. Master's degrees and PhDs are offered by the universities and research institutions which are nationally accredited. In India, by and large the University system is based on three-year period system though recently Delhi University had introduced the more specialized and demanding long-term Four Year Degree Programme at the conventional level. The Master's degrees and PhDs are offered by the State and Deemed Universities in India. Various PGDP (Post Graduate Diploma Programmes) in professional fields are also being awarded in India by recognized institutions of higher learning. Hence here too we notice that China has been moving more towards higher specialization at the graduate level than India which is more mired with lower specialisation three-year degree/diploma programmes, especially in the conventional education fields, though at the professional levels the four-year and five year programmes cater to the students involved in professional and technical education such as medicine, engineering, and so on. However in real terms the number is relatively low in the higher education field as already pointed out earlier.

The 1986 Law of 9 years compulsory education now covers 99.7 percent of the population area of the country, and 20 percent of college age population is presently enrolled in higher education institutions up from 1.4 percent in 1978. In June of 2013 a total of 9.12 million candidates took the National Higher Education Entrance Exam (Gao Kao) in China. China also boasts of the largest education system in the world. As regards India, with the 86th Amendment to the constitution creating the Right to Education and making education compulsory till 14 years of age and free for all between 6-14 years, the goal of the

universalisation of education has still not been achieved. Though literacy was just 3 percent in 1880 and went up to 65 percent in 2001 and reached 74 percent in 2011 and is fast approaching 80 percent, India is lagging behind China in the field of education even though India has the third largest education system in the world after China and US.

Also China has made greater strides in the field of educational research especially in higher education sector when it comes to awarding of doctorates and even enrollment. For instance in 2007, a total of 20,131 PhD degrees were awarded in India, of which a mere 6,918 were in science and engineering. Indian universities doctorate output was half of China's, which in the same year had awarded 41,464 doctorates. As is evidenced by the fact that while in 2010, India had 201 universities, 130 deemed universities and 16,885 colleges where 9.95 million students were taught by 457 thousand teachers, China, way back in 2004, had 2,236 higher education institutions with over 20 million students; with an enrollment in higher learning reaching 19 percent of educational enrollment. According to the UNESCO Report on world higher education (2003) the student enrollment in China's higher education institutions was the world's largest. Further, even though India spends around 4.1 % of its GDP on education as compared to China's 3% of its GDP, the amount spent in real terms by China is much more and the effectiveness of financial expenditure on higher education in China is much better than by India. The data on Indian government expenditure on higher education as % of total government expenditure (not as percentage of GDP) and its breakdown by years is given below:

	2008-09	2009-10	2010-11
% of total budget allocated to MHRD	5.16%	4.36%	4.50%
Higher Education (Including Technical & Other)	28.05%	34.66%	33.45%

Source: Lok Sabha UnStarred Question No. 4500 Answered on 21.12.2011

It can thus be concluded that the development of higher education in India and China, though began around the same time and in somewhat similar conditions, and despite India's higher educational development having been a gradual and relatively smooth affair as compared to China's checkered development, today China has surpassed India in the field of higher education both in quantitative and qualitative terms.

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