

Indian Higher Education: Global Challenges and Local Issues

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Abstract

Globalization has redefined the constituents and drivers of economic progress over last two decades. The traditional contributors of economic development and economic power such as material resources and production capabilities have been replaced by knowledge and information. Globalization has resulted in significant changes in the knowledge economy and ushered new conditions for the provision of higher education to cater the skill requirement all across the globe. Higher educational services have emerged over the last few years as a major economic sector for trade worth several billion dollars. The key elements of globalization include the knowledge society, information and communication technologies, the market economy, trade liberalization and changes in governance structures. These elements of globalization have impacted significantly the education sector in general and higher education in particular. The present study critically analyzes the growth of higher education sector in India and identifies the major concerns. It also evaluates the preparedness of the country for the opening up its border for foreign institutions.

Key Words: Globalization, Liberalization, Higher education, Knowledge economy, Trade in educational services and governance.

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Introduction:

Over the last two decades globalization has impacted operations of various institutions including academic institutions all over the world. Higher education institutions have been both the agent and objects of globalization (Scott, 1998). International mobility, global comparison, bench marking etc. has gained lot of importance in policy making. Teichler (2004), note with surprise the amount of debate on global phenomena in higher education focusing on marketization, competition and management in higher education. Some of the countries adopted institutional devolution, quasi-market competition in the system and performance managed staffing to address the global competition (Valimaa, 2004a). The other countries have responded differently to the changes in global environment. In the English-speaking world, international operations have become the primary mode of development. In Europe, the negotiation of the common higher education area and European Research Area has been the major development leading to the emergence of global higher education environment. Global research circuits have been wired into the rapidly developing higher education systems of China, Singapore and Korea. India has not yet opened up the direct entry of foreign institutions in education sector.

Globalization is described as, flow of technology, economy, knowledge, people, values and ideas across borders as, it affects each country in a different way due to a nation's individual history, traditions, culture and priorities (Knight and De Wit, 1999). Thus, globalization is a multi-faceted process and can affect countries in vastly different ways - economically, culturally and politically, but it does not take an ideological stance or a position as to whether this impact has positive and/or negative consequences. There are a number of factors which are closely related to this worldwide flow, which are seen as key elements of globalization. These include the knowledge society, information and communication technologies, the market economy, trade liberalization and changes in governance structures. These elements of globalization have significant impact on the education sector (Knight, 2004). Technology have made it possible for parent companies to operate satellite enterprises and give directions and instruction from the home base with minimum requirement for physical presence. This, however, has called for new skills and specialized knowledge, the absorption of which requires the availability of a well-trained and highly educated cadre of workers in the host economies (Gibbs, 1989).

Gibbs (1989) has also observed that the demand for such know-how is becoming acute while it remains a key to improve productivity and competitiveness. But data and information processing are major services being outsourced to service providers in developing countries. In addition, many companies are divesting themselves of expensive operations and transferring them to low cost economies or simply closing them and relying on cheaper service suppliers from developing and transition countries. On the other hand, in these host economies, there is growing demand for high-level skills required to tap these emerging opportunities. As a result, education and for that matter higher education, have become attractive avenues for investment.

The interest in higher education as an area of investment seems to be somehow mutual. For some developing countries, it opens up possibilities for capacity building in core skills that are likely to enhance the opportunities for linkages with firms in advanced countries. Some of the

developing countries such as India, Singapore and Malaysia see a niche in establishing themselves as key and reliable exporters of services. Developed countries such as the US on the other hand, see investment in education abroad as a strategy to strengthen the competitive position of its corporations in host countries (Gibbs, 1989). Another factor that is shaping the new global skill structure is the imperative to use education to standardize skills. The current expansion in agriculture, manufacturing and services has created a global need for harmonious standardization of skills and qualifications. As international economic advantage becomes increasingly linked to knowledge-based sectors, tertiary education, which generates much of this knowledge, is being rapidly reconceptualized in tradable terms (Bennell and Pearce, 1998). This had led to the proliferation of new modes particularly those concerning distance education and commercial presence. The use of information technology is prolific in the west, however, it acts only as main stream education. On campus is and will remain the dominant learning setting (Collis and Wende, 2002).

Foundation of Modern Education in India:

India has an age old heritage of education but it was largely based on caste and social status rather than being equally available to all. Traditional Hindu education served the needs of the Brahmin families. Brahmin teachers would teach boys to read and write. Under the Mughals, education was similarly elitist, favouring the rich rather than those from high-caste backgrounds. These pre-existing elitist tendencies were reinforced under British rule. British colonial rule brought with it, the concept of a modern state, a modern economy and a modern education system. By linking entrance and advancement in government service to academic education, colonial rule contributed to the legacy of an education system while preserving the position and prerogatives of the more privileged. In the early 1900s, for the first time demand for technical and vocational training in education was raised by the Indian National Congress.

Pt. Jawahar Lal Nehru (the first prime minister of Independent India) envisaged India as a secular democracy with a state-led command economy. Education for all and industrial development were seen as crucial tools to achieve economic prosperity and social equity. Following independence, school curricula were, thus, imbued with the twin themes of inclusiveness and national pride. It is through the first five year plan in 1950-51, India began its programme for providing free and compulsory education to all children by transforming the elite oriented system of school education inherited from the colonial rulers to a mass education programme. The Indian Constitution resolves to provide quality education to all. In the effort to fulfill educational needs of the country, specifically for the diverse societies and cultures of the country the government has chalked out different educational categories namely, Elementary Education, Secondary Education, Higher Education, Adult Education, Technical and Vocational Education. Institutions of excellence in higher education were formed with a view to provide subsidized quality higher education to build a self reliant and modern India. Even at present these institutions are recognized among the best in the world.

Higher Education in India:

India has been a major seat of learning for thousands of years. The present format of Higher education in India was started in 1857 with the inception of universities in the three presidency towns. At present, India possesses a highly developed higher education system which offers facility of education and training in almost all aspects of human's creative and intellectual

endeavors such as arts and humanities, natural, mathematical and social sciences, engineering; medicine, dentistry, agriculture, education, law, commerce and management, music and performing arts, national and foreign languages, culture, communications etc.

Academic Qualification Framework:

There are three principle levels of qualifications within the higher education system in the country which are as under:

Bachelor/ Undergraduate level: Bachelor's degree is offered after 12 years of school education. Generally it is offered in two streams: liberal and professional field of studies. The liberal studies are generally three years programme offered in arts, commerce and sciences. Some institutions offer bachelor courses with honours in liberal studies which are not necessarily longer in duration but indicate greater depth of study.

Bachelor degree in professional studies is generally a four years programme offered in agriculture, dentistry, engineering, medicine, pharmacy, technology, and veterinary. The bachelors in architecture and medicine take five and five and a half years respectively. There are other bachelor programme which are offered only after completion of first bachelor degree. These include one year bachelors in education, journalism and library and information science. Similarly a Bachelor's degree in law can be pursued only after completion of first bachelor degree but is of three years bachelor programme. The bachelor degree in law is also offered as an integrated degree lasting five years.

Master's / Post-graduate level: Master's degree is normally of two-year duration in both the liberal and professional fields of study. It could be coursework based with or without thesis or research. Now a days to match the skill requirement, fast track programmes in professional streams such as Executive MBA are also available to those having 3 to 5 years of experience at managerial level. Some Master's degree such as in Library and Information Science lasts for one year while in Computer Science lasts for three years.

Pre-Doctoral / Doctoral level: A pre-doctoral programme - Master of Philosophy (M.Phil.) is taken after completion of the Master's Degree. This can either be completely research based or can include course work as well which is generally of one and half year duration. Doctor of Philosophy (Ph.D.) is pursued after masters or pre-doctoral programme and generally takes two to five years to be awarded. Students are expected to write a substantial thesis based on original research with or without course work.

Diploma: Diploma Courses are also available at the undergraduate and postgraduate level. At the undergraduate level, it varies between one to three years in length while postgraduate diplomas are normally awarded after one year's study.

Distance Learning Programmes: At all the levels, programmes in both liberal and professional field are offered through distance learning mode which normally takes longer duration than their equivalent regular programme.

Institutional framework:

The degree / diploma awarding institutions consist of the following:

Central Universities: A Central University in India is established by the Government of India, by Act of Parliament.

State Universities: A State University in India is established by the State Government, by State Legislature.

Deemed Universities: Institutions which have been accorded the status of a university with authority to award their own degrees through central government notification.

Open University: Open University can be a central or state University imparting education exclusively through distance mode in any branch or branches of knowledge.

Institutes of National Importance: Some of the higher education institutions are awarded the said status of Institutes of National Importance by the act of Parliament.

Other Institutions: Include the Institutions established by State Legislative Act and colleges affiliated to the University, both government-aided and –unaided.

The Universities are of various kinds, with a single faculty, or multi-faculties; teaching or affiliating, or teaching cum affiliating, single campus or multiple campuses. Most of the Universities are affiliating universities, which prescribe to the affiliated colleges the course of study, hold examinations and award degrees, while undergraduate and to some extent postgraduate colleges affiliated to them impart graduate instruction. Many of the universities along with their affiliated colleges have grown rapidly to the extent of becoming unmanageable. Therefore, as per National Policy on Education, 1986, a scheme of autonomous colleges was promoted. In the autonomous colleges, whereas the degree continues to be awarded by the University, the name of the college is also included. The colleges develop and propose new courses of study to the university for approval. They are also fully responsible for conduct of examination

Regulatory Framework:

The institutions imparting higher education at different levels are regulated by the following bodies:

University Grants Commission (UGC) set up under UGC Act 1956 is responsible for coordination, determination, and maintenance of standards and release of grants to universities and research organizations.

All India Council of Technical Education (AICTE) has been established under the AICTE Act, 1987. The council is authorized to take all steps that are considered appropriate for ensuring coordinated and integrated development of technical education and for maintenance of standards.

Medical Council of India (MCI) was set up by the Indian Medical Council Act, 1956, amended in 1993. The council is empowered to prescribe minimum standards for medical education required for granting recognized medical qualifications by universities or medical institutions in India. The Council is also responsible to give its recommendations to the Central Government for establishing new medical colleges, opening of new or higher courses of study and increase in admission capacity in any courses of study or training.

Indian Council for Agricultural Research (ICAR) has established various research centres in order to meet the agricultural research and education needs of the country. It is actively pursuing human resource development in the field of agricultural sciences by setting up numerous agricultural universities spanning the entire country.

National Council for Teacher Education (NCTE) is a statutory body set up under the National Council for Teacher Education Act, 1993 to facilitate planned and coordinated development of the teacher education system in the country, and for regulation and proper maintenance of norms and standards in the teacher education system. The Council is empowered to grant recognition of institutions offering courses or training in teacher education.

Dentists Council of India (DCI) constituted under the Dentists Act, 1948, is a statutory body incorporated under an Act of Parliament to regulate the dental education and the profession of dentistry throughout India. The council is responsible for according recognition to dental degree awarded by various universities and also for maintaining uniform standards of dental education in India.

Pharmacy Council of India (PCI) also known as central council was constituted under Section 3 of the Pharmacy Act, 1948. The PCI controls pharmacy education and profession in India up to graduate level. The council prescribes the minimum standard of education for qualification as pharmacist.

Indian Nursing Council (INC) is a statutory body constituted under the Indian Nursing Council Act, 1947. The council is responsible for regulation and maintenance of a uniform standard of training for nurses, midwives, auxiliary nurse-midwives and health visitors.

Bar Council of India (BCI) is empowered to make rules to discharge its functions under the Advocates Act 1961. An important rule-making power is with reference to laying down guidelines for the standards of professional conduct and etiquette to be observed by advocates. The Bar Council of India rules may prescribe for a class or category of person entitled to be enrolled as advocate. The Bar Council of India can also specify the conditions subject to which an advocate must have the right to practice and the circumstances under which a person must be deemed to practice as an advocate in a court.

Central Council of Homeopathy (CCH) was established under the Homoeopathy Central Council Act, 1973. The council prescribes and recognizes all homeopathic medicine qualifications. Any university or medical institutions that desires to grant a medical qualification in homeopathy is required to apply to the council. The council is responsible for

constitution and maintenance of a Central Register of Homoeopathy and for matters connected therewith. All universities and board of medical institutions in India are required to furnish all information regarding courses of study and examination.

Central Council for Indian Medicine (CCIM) is the statutory body constituted under the Indian Medicine Central Council Act, 1970. This council prescribes minimum standards of education in Indian Systems of Medicine viz. Ayurved, Siddha, Unani Tibb. The council is responsible to maintain a Central Register on Indian Medicine and prescribes standards of professional conduct, etiquette and code of ethics to be observed by the practitioners.

Council of Architecture (COA) was constituted under the provisions of the Architects Act, 1972, enacted by the Parliament of India. The Act provides for registration of Architects, standards of education, recognized qualifications and standards of practice to be complied with by the practicing architects. The Council of Architecture is responsible to regulate the education and practice of profession throughout India besides maintaining the register of architects. Any person desirous of carrying on the profession of "Architect" must register himself with Council of Architecture.

Distance Education Council (DEC) was constituted under statute 28 arising from Section 25 of the Indira Gandhi National Open University Act, 1985. The Distance Education Council (DEC) is responsible for the promotion and coordination of the open university and distance education system and for determination of its standards. The Council provides academic guidelines to promote excellence, encourage use of innovative technologies and approaches, enable convergence of all systems and sharing of resources through collaborative networking for access to sustainable education, skill upgradation and training to all.

Rehabilitation Council of India (RCI) The Parliament enacted Rehabilitation Council of India Act in 1992. It prescribes that any one delivering services to people with disability, who does not possess qualifications recognized by RCI, could be prosecuted. Thus the Council has the twin responsibility of standardizing and regulating the training of personnel and professional in the field of Rehabilitation and Special Education.

National Council for Rural Institutes (NCRI) is an autonomous society fully funded by the Ministry of Human Resources Development, Government of India. It was established with a main objective of promoting Rural Higher Education for advancing rural livelihoods with the instrument of education based on the values proposed by Gandhiji.

State Councils of Higher Education (SCHE) Following the National Policy on Education, respective state governments have established State Councils of Higher Education (SCHE). These councils prepare coordinated programs of development of higher education in each state. Thus, they seek to consolidate the efforts and investments of institutions of higher education with the state.

Growth of Higher Education in India

Before Independence, access to higher education was very limited and elitist, with enrolment of less than a million students in 500 colleges and 20 universities. Since independence, the

growth has been very impressive. The number of universities (as on 31st March 2006) has increased by 18 times, (from 27 in 1950-51 to 367 in 2005-06). The number of total colleges has increased by 35 times (i.e. from 578 in 1950-51 to 18064 in 2005-06). The colleges for general education has increased from 370 in 1950-51 to 14400 in 2005-06, while the colleges for professional education has increased from 208 in 1950-51 to 3664 in 2005-06 (Table 1A and 1B). In its size and diversity, India has the third largest higher education system in the world, next only to China and the United States.

The government initiative for the planned development of higher education in the country and establishment of University Grants Commission has transformed the elitist system of education favoring the rich and higher class to a more democratic and mass based system. Around 40per cent of enrolments now comes from lower socio-economic strata, and women comprising of approximately 35per cent of the total enrolments (Tilak 2004).

Enrolment: Enrolment in higher education has been rising steadily although the enrolment rate has continued to remain low compared even to some of the developing countries of Asia and Latin America. From Table 2 it is clear that total enrolment in higher education has increased significantly to 11200595(390%) in 2003-04 as compared to 2872579 in 1980-81. The enrolment in Ph.D. rose by 28per cent during 1980-81 to 1990-91 and further by 39per cent during 1990-91 to 2000-01. This phenomenal increment in Ph.D. was due to addition of new institutions and expansion of seats in existing institutions in the country. The increase in enrolment at the PG level has also been impressive. It rose to 83per cent during 1990-91 to 2000-01 as compared to 22per cent increment during 1980-81 to 1990-91. Further the rise in enrolment of general graduates (Art, Science and Commerce), technical graduates (Engineering, Medical, B. Ed.) and Diploma were 75per cent, 75per cent and 85per cent respectively during 1980-81 to 1990-91 against that of 120per cent, 65per cent and 24per cent during 1990-91 to 2000-01. It was mainly due to the result of expanding facilities for higher education across the country.

Funding of Higher Education: Higher Education in India has been receiving continuous financial support from both the Central and the State Governments. At the start of the planning process in 1950, the total allocation for higher education was only Rs.170 million which has now gone beyond Rs.90,000 million. This impressive increase is offset to some extent by the rise in prices (inflation) and rise in number of students entering higher education. An analysis of government expenditure on higher education shows a real annual growth rate of 7.5per cent in the 1950s, 11per cent in the 1960s, 3.4per cent, in the 1970s, and 7.3per cent in the 1980s (CABE Report 2005). From the Annual Financial Statistics of Education Sector 2003-4, it is clear that the total expenditure by the government on education has increased by 243per cent during the period 1993-94 to 2004-05. It is interesting to note that the plan allocation for higher education which went up to 28per cent in the fifth plan period(1974-79) has been slowly decreasing on a year on year basis and came down to 6per cent of total plan expenditure during the tenth plan period(2002-2007). Further the priority was given to technical education by allocating 10.72per cent against 9.53per cent of higher education during the tenth plan.

Issues and Concerns:

Although Higher Education has expanded several times since independence, issues of access, equity, and quality still continue to be the areas of concern.

Access: The Gross Enrolment Rate(GER), measures, the access level by taking the ratio of persons in all age groups enrolled in various programs to total population in age group of 16 to 23. For Higher Education GER has risen from 0.7per cent in 1950-51 to 1.4 per cent in 1960-61, and 8per cent in early 2000. The current GER which is about 10per cent stands very low when compared to the world average of 23.2per cent, and an average of 54.6per cent for developed countries, 36.3per cent for countries in transition, and 11.3 per cent for developing countries. In view of the projected population in the age group of 18-23 years for 2011-12 which is 144.287 million(Table 3), the access to higher education for all eligible in the country will be a major issue before the policy makers.

Equity: On one hand GER stands low for the overall population, while on the other hand there exists large variations among the various categories of population based on gender, urban or rural habitation and rich and poor. Due to regional disparity in economic development and uneven distribution of institutions of higher education, the higher education is not equally available to the different sections of the society.

Caste-based Reservation: To overcome the deep rooted problem of social inequity, successive governments have introduced caste based reservations in higher education. At present the caste-based reservation is applicable in only government funded institutions, which includes institutions of excellence and amount to approximately 49per cent of the total seats. Due to the cast based reservation, better talent coming from non-reserved category is deprived of the admission in good institution, which creates social unrest and used as a tool to make vote bank by the political parties.

Quality: The higher educational institutions suffer from large quality variation in so much so that a NASSCOM-MacKinsey Report-2005 has said that not more than 15per cent of graduates of general education and 25-30per cent of Technical Education are fit for employment. The various regulatory bodies regulating higher education have constituted an autonomous bodies for monitoring quality standards in the institutions under their purview. For example, National Assessment and Accreditation Council (NAAC) by UGC, National Board of Accreditation (NBA) by AICTE, Accreditation Board (AB) by ICAR, Distance Education Council (DEC) by NCTE etc. Though, there exists autonomous bodies for assessment and monitoring quality standards in the institutions of higher education they suffer from two major deficiencies. First, the quality norms of such councils are not comparable with international standards. Secondly, the enforcement process is not stringent. Further political interference and corruption dilute the role and impact of these intuitions in ensuring the desired quality standards.

Cost of Education: Government funding on higher education has been diminishing on a year on year basis for more than one decade. In the view of withdrawl of government support to finance higher education private institutions has been allowed to take over the responsibility of imparting education to all. Further, in government aided universities the model of self financing and self sustaining institutions has been introduced. All these developments have

added to the cost of education significantly. Though, the education loan has been made easy to facilitate higher education still the terms and conditions imposed by banks in terms of guarantee and criteria of minimum income of family restricts the talent coming from the poor families to go for higher education

Shortage of Teachers: Economic growth led by industrial and service sector during the last decade has created more opportunities and faster career growth for the young talent. Further, the lucrative salaries and glamour has acted as catalyst in attracting talent to such fast growing sectors. Higher education in India which has been passing through transition on account of privatization and withdrawal of financial support from the government has been finding it difficult to attract adequate number of young talent to teaching job. It is a big challenge for higher education sector to sustain in future due to lack of availability of faculty.

Declining Enrolment in Traditional Fields of Knowledge: The changing economic structure coupled with cultural transformation in terms of life style has lead to shift in choice for studies. The major chunk from youth opts for professional courses leading to early employment and faster growth. Therefore, the teaching and research in such faculties is able to attract the best of the talent leaving only a few for fundamental research in basic sciences, literature, art and languages. It, thus, poses the challenge to the sustenance and the development of these basic pillars of knowledge.

Red Tapism: It is an irony in India that the bureaucracy restricts the modernization and expansion of higher education by private players intended to impart quality education. At the same time a large number of institutions without having adequate infrastructure and offering sub-standard education are not only surviving but flourishing. Therefore, to develop a professional, transparent and efficient mechanism to ensure expansion of quality education at a fast pace is greatly desirable.

Vocationalization at the First Degree Level: In conformity with the National Policy on Education, 1986, a scheme to provide career orientation through education at the first degree level was launched in 1994-95. Under the scheme, a university / college could introduce one to three vocational courses in 35 identified subjects. As a result, a number of job oriented programs lasting for approximately 6 months to one year have been introduced in the colleges/universities.

Autonomous Colleges: To keep up with the changes in higher education due to globalization, institutions which has infrastructure and other facilities are given more functional autonomy. By the yeas 2005 there have been 138 colleges functioning as autonomous colleges in eight states in the country. It is a good initiative from government but needs to be promoted across the country.

Privatization: In India both public and private institutions operate simultaneously. In the year 2000-01, out of 13,072 higher education institutions, 42 per cent were privately owned and run catering to 37 per cent of students enrolled into higher education, that is, approximately 3.1 million out of total 8.4 million (Agarwal, 2006).. It is also likely that most of the growth in the rapidly expanding higher education sector took place in private unaided colleges or in self-

financing institutions. Since grant-in-aid to private colleges is becoming difficult, many government funded institutions/ universities have granted recognition/ affiliation to unaided colleges and many universities have authorized new 'self-financing' courses even in government and aided colleges. Approximately 50 per cent of the higher education in India is imparted through private institutions, mostly unaided involving high cost.

Global Competition: India being a signatory of WTO is bound to open up its market for trade in services including education but it does not have a clear policy for strengthening its education sector to compete with the giants in the world. Policy restrictions stop the competent institutions from making necessary changes in the processes of admission, recruitment and salaries of faculty/ staff and opening campuses abroad. In lack of proper policy provisions in time, higher education sector in the country is adversely affected.

Conclusion:

In India, higher education was traditionally looked after by the government, but in view of lack of resources to meet the increasing demand, private sector has been allowed to share the responsibility. The country has a well developed educational set up in terms of range of programs and their acceptability in local industry, but it lacks in terms of international quality standards. Higher education institutions managed by private sector emphasize more on commercial aspect than creation of knowledge which leads to deterioration of quality of education. The councils and government bodies responsible for quality assurance do not have internationally matchable quality norms on one hand and an effective system to monitor and control violation of the existing norms by the institutions on the other. Further, the political parties manipulate the issues of access and equity in higher education for their vested political interest rather than taking the right steps to enhance the quality of higher education. As a result those who can afford the high cost of higher education look forward for the opportunities abroad while the others have to compromise with sub-standard education. If India has to emerge as preferred location for higher education in the globalizing world it will have to develop a national policy to address the challenges of sub-standard quality, ineffective systems of monitoring and control, red-tapism in growth and development and political interference.

References:

1. Agarwal, Pawan. (2006). Higher Education in India. The Need for Change. New Delhi, India: Indian Council for Research on International Economic Relations.
2. Annual Financial Statistics of Education Sector 2003-4, MHRD, Government of India, New Delhi, 2005.
3. Annual Report Ministry of Human Resource Development, Government of India 2006-2007.
4. Bennell, P. y T. Pearce, 1998, "The internationalisation of higher education: exporting education to developing and transitional economies", IDS Working Paper 75, Institute of Development Studies, University of Sussex, Brighton.
5. Central Advisory Board of Education (CABE) Committee Report on Financing of Higher and Technical Education, June 2005.
6. Collis, B. and M.C. van der Wende (eds.) (2002). Models of Technology and Change in Higher Education: An international comparative survey on the current and future use of ICT in Higher Education. Enschede: University of Twente.
7. Draft Report of Working Group on Higher Education for the XI Plan, Planning Commission, Government of India (2007)
8. Gibbs, M., 1989; Interlinkages between services and other economic sectors' in United Nations Centre on Transnational Corporations, Services and Development: The Role of Foreign Direct Investment and Trade, UN, New York, pp. 9-11 at p.10
9. Knight, J. & de Witt, H. (Eds.). (1999). Quality and Internationalization of Higher Education. OECD Publications.
10. Knight, J. 2004; Internationalization Remodeled: Rationales, Strategies and Approaches; Journal of Studies in International Education, Vol. 8, No. 1.
11. NASSCOM-McKinsey Report 2005
12. Scott, P. (1998), .Massification, Internationalization and Globalization., in P. Scott (ed.), The Globalization of Higher Education, The Society for Research into Higher Education/Open University Press, Buckingham, pp. 108-129.
13. Selected Educational Statistics 2004-2005 (as on September 2004), Ministry of Human Resource Development Government of India (2007)
14. Teichler, U. (2004), .The Changing Debate on Internationalization of Higher Education., Higher Education, Vol. 48, pp. 5-26.
15. Tilak, J.B.G. (2004) Public Subsidies in the Education Sector in India. Economic and Political Weekly 39 (4) (24-30 January): 343-59
16. Valimaa, J. (2004a), .Nationalisation, Localization and Globalization in Finnish Higher Education., Higher Education, Vol. 48, pp. 27-54.

ANNEXURE I**Table No. 1A****GROWTH OF COLLEGES AND UNIVERSITIES**

Years	Colleges for General Education	Times	% change	Colleges for Professional Education	Times	% change	Universities/Deemed Univ./Institutes of National Importance	Times	% change
1950-51	370		Nil	208		Nil	27		Nil
1990-91	4862	13.141	1214.054	886	4.260	325.962	184	6.815	581.481
1991-92	5058	1.040	4.031	950	1.072	7.223	196	1.065	6.522
1992-93	5334	1.055	5.457	989	1.041	4.105	207	1.056	5.612
1993-94	5639	1.057	5.718	1125	1.138	13.751	213	1.029	2.899
1994-95	6089	1.080	7.980	1230	1.093	9.333	219	1.028	2.817
1995-96	6569	1.079	7.883	1354	1.101	10.081	226	1.032	3.196
1996-97	6759	1.029	2.892	1770	1.307	30.724	228	1.009	0.885
1997-98	7199	1.065	6.510	2075	1.172	17.232	229	1.004	0.439
1998-99	7494	1.541	54.134	2113	2.385	138.488	237	1.288	28.804
1999-00*	7782	1.038	3.843	2124	1.005	0.521	244	1.030	2.954
2000-01*	7929	1.019	1.889	2223	1.047	4.661	254	1.041	4.098
2001-02*	8737	1.102	10.190	2409	1.084	8.367	272	1.071	7.087
2002-03*	9166	1.049	4.910	2610	1.083	8.344	304	1.118	11.765
2003-04*	9427	1.028	2.847	2751	1.054	5.402	304	1.000	0.000
2004-05*	10377	1.101	10.077	3201	1.164	16.358	364	1.197	19.737
2005-06	14400	1.850	85.042	3664	1.725	72.505	367	1.504	50.410

** Includes institutions for Post-Matric courses.

Source: Educational Statistics 2004-2005.MHRD 2007

Table No. 1B**PERCENTAGE CHANGE IN NUMBER OF COLLEGES AND UNIVERSITIES**

Time Period	Percentage Change in the Colleges for General Education	Percentage Change in the Colleges for Professional Education	Percentage Change in the Universities/Deemed Univ./Institutes of National Importance
1950-51 to 1990-91	1214.054	325.962	581.481
1991-92 to 1998-99	54.134	138.488	28.804
1999-00* to 2005-06	85.042	72.505	50.41

Source: Educational Statistics 2004-2005, MHRD 2007

Table No. 2**ENROLMENT BY LEVELS AND MAJOR DISCIPLINES**

Year	PhD	PG	General Graduate (Art, Science & Commerce)	Technical Graduate (Engg., Medical, B Ed)	Total Higher Education (Degree 2+3+4+5)	Diploma	Total Higher Education (Degree 6+7)	% change
1980-81	25417	291341	1886428	239267	2442453	430126	2872579	Nil
1990-91	32468	354216	3285776	416828	4089288	796686	4885974	70.0902
2000-01	45004	647338	7244915	688625	8625882	987279	9613161	96.7501
2001-02	53119	647016	7139497	790050	8629682	1104594	9734276	1.25989
2002-03	65357	782590	7633125	1035701	9516773	1199785	10716558	10.091
2003-04	65525	806636	8026147	1110840	10009148	1191447	11200595	4.51672

Source: Selected Educational Statistics, Different Years

Table No. 3**POPULATION PROJECTIONS**

(in 000)

Year	Population (18-23 years)
2007	135440
2008	138318
2009	141257
2010	144259
2011	144287

Source: Draft report of working group on higher education for 11th Five Year Plan