Chapter Two

EVOLUTION OF THE UNIVERSITY SYSTEM

The mind has exactly the same power as the hands; not merely to grasp the world, but to change it."

- Colin Wilson
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Chapter Two

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Introduction

A report of the International Commission on Education for the 21st century (Delors Report) visualizes four functions for the universities;

First, to prepare students for research and training,

Second, to provide training courses oriented to the needs of society,

Third, to be open to all to foster life long learning in its broadest sense, and

Fourth, to strive for international co-operation.

2.1. Evolution of university system—worldwide

The term ‘University’ is derived from the Latin word ‘universitas’, meaning an organized body of individuals or a corporation.

The first European University was established in Bologna in 1088 A.D. Universities at Paris and Oxford followed this, in the 12th century. These were centers for traveling teachers and scholars. In the 13th century, the European Universities developed into educational centers oriented to meet the demand for civil servants.

Berlin University was founded in 1810 with the objectives of integrating teaching with research (Research University). United States borrowed this concept, and the Universities of Stanford, Berkeley and John Hopkins were established as research Universities.

Cardinal Newman, who founded the Catholic University of Dublin, presented the modern concept of a university. He believed that the University should be dedicated to the pursuit of knowledge for its own sake.

In the late 19th and 20th centuries the market needed trained and educated manpower. As a result science and technology became important in the Universities.

Traditionally, the Universities were considered as elite centers, for the privileged. By the end the Second World War, most of the Universities had slowly transformed themselves into egalitarian institutions. Slowly 'extension' (service to the community) came to be recognized as a function of the University.

**Rapid developments in the political, scientific and economic front have radically affected the** Universities in the later part of 20th century. Opening up of the markets, breakdown of political barriers and tremendous progress in the field of information technology have resulted in 'globalization of the education'. This has presented the new demands on Universities. Universities have been adopting themselves to the changing needs and demands of the students and the society. Depending on their tradition and mission, Universities in Europe and America follow a number of models starting from affiliating university model to the private university model.

Historically, higher education developed in the minds of the elite - the future leaders of society. Newman's idea of a university was a residential community of teachers and students, devoted to discourses on knowledge. The Germans developed the vision of a research university. In the 20th century both stands were accommodated, the traditional role of preparation for learned professions gradually overlapped with a third strand -vocational education. It was further recognized that Universities must not only subscribe to the values of higher education but also offer additional distinctive features, as places of higher education.

Organizational structures of Universities, worldwide, are constructed to maintain stability. They also function on the principle that a consensus should be obtained before major changes are made. This makes Universities conservative in their approach to change.

### 2.2. Evolution of University System - in India.

Chanakya (Kautilya), the author of the famous ‘Arthashastra’ (4th century BC) said that “education is the wealth of the poor, it cannot be taken by the thieves”\(^2\). The ancient people of India had regarded, “education as source of illuminaition and power which transforms and enables our nature


\(^2\) Cited in Achyuthan M, "Educational practices in Manu, Panini and Kautilya", college book House, Trivandrum, 1974, the. 72 re.
by the progressive and harmonious development of our physical, mental, intellectual and spiritual
powers and faculties*. India's ancient centers of learning (in first century A.D) were, Nalanda and
Vikramashila (in the East), Takshashila (in the north) Vallabhi (in the West) and Kanchipuram (in the
south). The seats of higher learning were supported by the people through alms, gifts, fees etc and
by the kings of the land by way of state grants and endowments. Ancient Indian centers of learning
had their own unique traditions and value systems.

a. Pre Independence era

In historical perspective and in medieval period, the first university in India came up at Bandora, in
Goa, in 1620. But this came to an end in 1739, when the Portuguese destroyed the building where
the university was situated to prevent it from being seized and used as a fortress by the Marathas.
Some other Jesuit colleges were also started initially in Goa.

The modern Indian university system has its roots in European institutions and models. Elphinstone
College was founded in Mumbai in 1830.

The Universities of Bombay, Madras and Calcutta were established by the Acts of the 1857 (on the
model of London University - an affiliating type of University). The Acts laid down the administrative
structure of the Universities.

The Governor-General of India was to act as the Chancellor of Calcutta University, while the
Governor-in-council was to act for the Universities of Madras and Bombay. The Chancellor was to
nominate the Vice - Chancellors and the Fellows of the Senate, for life.

The Act of 1857 placed no upper limit on the number of persons the Chancellor could nominate as
Fellows. The numbers swelled in the Senate, until it became a unwieldy body. The membership of
the Senate of Bombay University, for example rose from 39 in the 1857 to 305 in 1900.

The Acts provided for, the post of honorary Vice - Chancellors with a term of two years, nominated
by the Chancellor. The Syndicate controlled the management of university funds. The number of

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4. Attekar SA "Education in Ancient India", Nand Kishore Brothers, Varanasi, 1965, page.8
5. Kundu CL and Gupta LC "Autonomous Colleges, Concept and Implementation". Sterling
Government press, India, p-187, as quoted in Dr Niroj Sinha, 'University Administration in India',
Indians in the Senate was very few. The Senate created the Syndicate and its decisions were subject to revision by the State. The Calcutta University Commission has observed that the colleges were reduced to coaching institutions and Indian Universities in their first form were no true Universities.\footnote{Ibid, in Dr. Niroj Sinha, op cit p-25.}

The University of Punjab was established in 1882. The University of Allahabad came in to existence in 1887.

Minor amendments were made to the acts in 1860 and 1884.

**Thomas Raleigh Committee Report (1902)**

In 1902 Lord Curzon appointed a committee under the chairmanship of, Thomas Raleigh.

This committee had before its eyes, the example of reorganization of the University of London, when it became the teaching as well as examining body.

The Act of 1904, suggested changes in the functions of the university, in order to enable it to become a truly teaching University. The Senate was reduced in size with a minimum of 50 members and a maximum of 100, other than ex-officio members, Chancellor and Vice-Chancellor. The composition of hundred members consisted of;

- 80 - nominated by the chancellor.
- 10 - elected by registered graduated graduates.
- 10 - elected by Faculties.

Thus elective element in a Governing body of an Indian University was introduced for the first time, by the Act of 1904.

Syndicate was given statutory recognition. It consisted of 17 members under the chairmanship of Vice-Chancellor. College teachers (who were members of the Senate) also formed a part of it.

In practice, however, there was no change in the tight Government control. The chancellor in addition to his nomination power also had power to approve the election of the elected members. The appointment of faculty needed the Government approval; university regulations too needed approval of the Government. The changes in the administrative structure met strong disapproval of the Indian intellectuals, including Gopalkrishna Gokhale.
Contribution towards change process:

As a result of the Commission's recommendations the Universities were asked to undertake some teaching on their own and carry out research as well. Sir Asuthosh Mukherji initiated a movement for the establishment of postgraduate departments and research in the Calcutta University. With his efforts a model of teaching University was created in India for the first time. An Indian language, Bengali, came to be studied at the postgraduate level. Teaching at the Master's level came to be concentrated at the University. Universities began to exercise greater control over colleges.

Calcutta University Commission (1917-1919).

Some of salient features of the recommendations of the Commission were;

i. For the internal administration of the University, a representative court in place of Senate and a small executive Council in place of Syndicate were set up.

ii. The Commission considered the Senate to be representative of the public opinion. Its recommended membership was between 400 and 500, mostly of ex-officio status and elected, rather than nominated. Annual reports from the Executive and the Academic Council with full statement of accounts had to be placed before it. It was essential to secure its assent on ordinances made by Executive Council as well as proposal of change in the status.

iii. An Academic Council and Board of Studies was set up to settle the academic questions pertaining to courses of study, examinations, degrees etc.

iv. The Commission suggested the introduction of intermediate examination as a demarcating line between the Universities and the Schools with the intermediate classes attached to them.

Contribution towards change process:

The implementation of the Committee's suggestions among other things ultimately led to the creation of Boards of Secondary Education with a view to emancipating secondary education from the domination of Universities.

In 1921–22, the British transferred the subject of education to the Indian Ministers and with the
grant of "Provincial Autonomy" in 1935, all the stages of education came under the effective control of the people. Both these events helped the establishment of the Boards of Secondary Education in Indian Provinces.

The universities first established by the British in India were mainly affiliating and examination conducting bodies. By the time of independence, general pattern of Indian Universities was teaching plus affiliating type.

By 1923 India had 12 universities. An Inter University Board (converted into the Association of Indian Universities in 1973) was established in 1925, with a view to coordinate activities of these the universities.

Sergeant Report (1944)

The Sergeant Committee was appointed by the Government of India to prepare a comprehensive report on the post war educational development of India. The report of the committee contained a perspective plan of 40 years which laid emphasis on universalisation of elementary education, eradication of illiteracy, vocationisation of education and planned developments of higher education.

Interestingly, the Sergeant Report envisaged that India would reach the educational standard of the England of 1939, in a period of not less than forty years.

Contribution towards change process:

As recommended by the Sergeant report, a University Grants Committee was established in 1945 with a limited purpose of dealing with three Central Universities viz; Benaras, Aligarh and the Delhi. In 1947 it was empowered to deal with all Indian universities but its role was purely recommendatory in nature.

The British Government did not take serious action on the Sergeant Report, presumably due to the fact that the country was well on its way towards attaining independence. After independence, the new Government had its own ideas on the subject of education and new committees were formed.

b. Post-independent India

The main function of Universities under the British rule was to make available to the 'Raj', a class of

bureaucrats and to open European knowledge to the Indian students. English higher education encouraged scientific way of thinking. It also encouraged the use of 'rational' principles in various fields. English education became a condition for access to employment, both in the public and private services. In 1947 there were only 19 universities and the enrolment stood at 2.5 lakhs. After independence, higher education lost its elite character and adopted a more popular role. In January 1948, in his inaugural address to the All India Educational Conference convened by the Union Education Minister, Pundit Jawaharlal Nehru, the then Prime Minister of India, observed:

"Whenever conferences were called to form a plan for education in India, the tendency as a rule was to maintain the existing system with a slight modification. This must not happen now. The entire basis of Education must be revolutionized".

However after independence India was plagued with a host of problems. The rehabilitation of refugees, integration of Princely States, the reorganization of the bureaucracy and armed forces, preparing plans for the development and the drawing up of Constitution, attracted immediate attention of the planners.

A brief summary of the recommendations of various Commissions formed after independence is presented below:

i. Radhakrishnan Commission

In 1948 a University Commission under the chairmanship of Dr. Radhakrishnan was appointed. The main recommendations of the Commission, made in 1949 covered all aspects of university education.

They emphasized the 10+2 structure at the pre-university stage, development of research to advance the frontiers of knowledge and reform of examination system by assessment of the student work throughout the year.

The Commission suggested that English be replaced as early as possible by any Indian language and students should be familiar with three languages - the Regional, Federal and English. The Commission was also in favor of the idea of setting up rural universities. It gave guidelines to the structuring of higher education and recommended that the University Grants Committee should be recognized and should have powers to allocate grants within the total limit set by the Government. Finally, it desired that university education be placed in the concurrent list.
Contribution towards change process:

An interim University Grants Commission was set up in 1953 and was given autonomous, statutory status by an act of Parliament in 1956.

Many of the recommendations, though considered worthy and essential were, due to various reasons, not implemented or were only partially implemented. For e.g. Education was included in the concurrent list of the Constitution only in 1976.


In 1952 the second Education Commission was appointed under the chairmanship of Dr. AL Mudaliar. The Commission sought to diversify the higher secondary education course by establishment of multi-purpose schools, which would provide terminal courses in technology, commerce and agriculture, fine arts and home sciences. The objective of the recommendation was to divert students from university education in to different walks of life, according to their aptitude and capabilities.

Contribution towards change process:

Multipurpose school system was implemented. However it met with lukewarm response, as it was terminal in character with no openings for higher education. The three-year degree course came in to vogue and was mostly accepted. State Boards of Teachers Education were established in a number of states as recommended.

iii. Period from 1956-64.

Both secondary and university education underwent rapid, unplanned and uncontrolled expansion, which resulted in deterioration in standards and creation of severe problem of educated unemployment. The colonial set-up continued and the vision of a National system of education visualized in 1947 got blurred within two decades.

iv. The Model Act for Universities.

The committee on “The Model Act for Universities“ was appointed in December 1961. The purpose was to consider broadly the organizational structure of the universities in India, and
to prepare the outline of a “Model Act” suited to their role and functions, in the modern context.

The committee made in-depth analysis of the university affairs. It set forth in concrete terms the functions, aims and objectives of the universities. The committee maintained “it is necessary that the constitution of a university should be formulated in sufficiently general terms so as to permit innovations and experimentation”.

The committee emphasized, “the main Act of the university should lay down the structure and organization in broad terms and the relevant details may be prescribed by the statute and ordinances”.

v. Kothari Commission Report (1964-66). The Commission emphasized on the need for in-built flexibility in the system of education and making the education to be Science based. Among other recommendations, the Kothari Commission suggested that work experience should be an integral part of general education. In higher education, about one third of the total enrolment was expected to be in vocational courses. The Commission also recommended special inputs for major universities to ensure quality of research, improvement in courses and expansion of facilities.

The Commission also visualized an increase in the proportion of national income devoted to education from 2.9 percent in 1965 to 6 percent by 1985. Based on the recommendation of the Kothari Commission Report, the first National Policy on Education, in independent India, in the form of a resolution was passed in July 1968.

Contribution towards change process:

Kothari Commission report provided broad guidelines and suggestions for modifying the system of university education in India. While there is no doubt that these guidelines have been guiding principles of the reform program in India, the change process has been very slow. For e.g. the Commission recommended that a major goal of examination reform, should be to improve the reliability and validity of examinations and to make evaluation a continuous process aimed at helping the student to improve his level of achievement.

10 A bid. p.4.
Regarding implementation of the policy, J.P. Naik\(^{11}\), the member-secretary of the Kothari Commission was led to remark “the stress and strains of the system have continued to grow further so that the educational scene in the country in 1978 is not certainly better and is probably a little more complicated and difficult compared to 1966”.


The terms of reference to the committee set up in June 1969 was; to consider the structure of the universities: functions, responsibilities and powers of statutory bodies: conditions of service of Staff, students participation and related matters.\(^{12}\)

According to the committee on university autonomy “It is not a legal concept, not even a constitutional concept. It is an ethical concept and an academic concept” \(^{13}\). It desired that the universities and the Governments have to work in collaboration. The Commission also emphasized the role of the University Grants Commission as a guide, philosopher and friend of the university system.

The committee has discussed the administrative structure of the university in detail. It has given considerable thought to participatory democracy with the cooperation of all the component parts of the university.


According to the policy, the most urgent need in higher education was to “protect the system” consisting of 150 universities and 5000 colleges from “degradation”. Autonomous colleges are to be developed to gradually replace the affiliating system. The creation of autonomous departments within the universities on a selective basis should be encouraged. Research in science and technology and interdisciplinary research in social sciences as well as setting up of national research facilities with proper form of autonomous management are to be encouraged. The open university system should be encouraged, in order to augment opportunities for higher education. The rural university, on the lines of Mahatma Gandhi’s revolutionary ideas on education, is to be set-up to transform rural India. De-linking degrees from jobs will be

\(^{11}\) Naik JP, “The Education Commission and after” New Delhi, 1982


\(^{13}\) ibid. p.15.
made in selected areas, where candidates despite being equipped for a given job are unable to get it, because of unnecessary preference for graduate candidates.

As far as the financial aspect was concerned, the Government proposes to gradually increase the expenditure on education till it “formally exceeds, six percent of the national income”. Additional sources to the extent possible will be raised partly by mobilizing donations from the beneficiary communities and partly by raising fees at the higher levels of education, while affecting the cost savings by the efficient use of facilities. And finally, implementation of the various parameters of “new policy” will be reviewed “every 5 years”.

In fact the program of action, 1986 observers “time is the essence, and unless we act now, we stand in the danger of once again missing the opportunity of educational reform, so critical not only for the development of our nation, but for our very survival”.

The experience in implementation of the policy necessitated certain modifications and NPE—1986 was revised in 1992.

**Contribution towards change process:**

The task of implementing the NPE and POA lies with the States and Union Territories and the Center has to monitor the implementation.

The NPE—1986 enunciated a comprehensive framework to guide the development of education. For the implementation of the POA-1992, 22 task forces were constituted on different subjects. However, the different Programs Of Action were spread over the years, from the Seventh Five year plan to the Tenth Five year plan and beyond.

The phasing of these programs was left somewhat flexible, so that the implementing agencies could match the mobilization of resources with the process of implementation. The inevitable result has been a gap between formulation and implementation.

In India political parties do not hold similar or common views on educational policy. Coalitions of different parties have held power in the Center in the last decade. Moreover, implementation part is mainly in the hands of the State Government, where again different political parties with

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their own views on education, hold power. This could be the reason for slow progress on some of the recommendations made in the policy. For e.g. the recommendations with regard to autonomous colleges, autonomous departments, Open University system, have made some progress, but not at the pace desired. Further, it has not been possible for the Government to increase the expenditure on education to six percent of the national income as recommended by the Commission.

viii. Alexander Committee on the role of the Governor’s as Chancellor’s

This committee constituted in 1996 submitted its report in April 1997. The committee has made some observations on the role of Chancellors and certain recommendations for strengthening the role of the Chancellor.

2.3. Expenditure on Higher Education.

2.3.1. Share of higher education in national income.

The priority given to education can be measured in terms of share of education in the GNP or in total education budget. A low figure of 1.2 percent of GNP was invested in education sector have only 0.19 percent of GNP was invested in high education sector in 1950-51. The share of education sector gradually increased to 3.5 percent of GNP in 1995 and 3.7 percent in 2002. The Budget Estimates for the year 2004-05 show that the Government proposes to spend around 4.0 percent of GNP on education (Tables 2.01 & 2.02).

Out of the total Government expenditure on higher education, ‘Plan’ expenditure forms a small portion (less than 15 percent), while the non-plan expenditure dominates. Plan expenditures have a special significance in that, they set direction for the future development, while non-plan expenditure maintains the system. Plan expenditure details on different sectors of education have been provided in table 2.03. Share of higher education was only 8% in the 1st plan period. This gradually increased to 25% in the IV plan period and maintained at around 21 percent during 6th plan period. There after the case of higher education has been characterized by declining expenditure reaching a level of only around 10 percent by the IX plan period. In Xth plan outlay it has been further reduced to 08 percent.

The relative importance given to education itself has been declining gradually over the years from
7.86 percent in the I five-year plan to 4% in the Xth plan. It would be interesting to interpret this in the framework of public finances, particularly as a phenomenon of the ‘displacement effect’ described by Peacock and Wiseman. According to them, public expenditure on social sectors like education gets displaced due to economic problems created by war and other crisis and more importantly, public expenditure levels do not go back to the former (or pre-crisis) levels even several years after the economic crisis has passed.

On the financial side, the Indian higher education system is in a deep crisis. The Common Minimum Program (CMP) of the ruling Coalition at the Center has committed to raise expenditure on education to 6% of GDP in the long run. The budget for the year 2004-05 has imposed a 2% Cess on all Central Taxes to finance education. The Cess has been earmarked to finance program of universal access to primary education. Even if the percentage of GDP spent on education is increased, the additional money will go to literary programs and primary education. There is a tendency of late to suggest that higher education must pay for itself. The financial crunch higher education is facing, is bound to continue or even aggravate in future.

2.3.2. State expenditure on higher education.

States bear a large burden on higher education as compared to the Central Government. One of the reasons is that, the finances come initially from both the UGC and State Governments but after few years, the finances are mostly in the hands of the State.

Educational expenditure accounts in excess of 15% of the total budget of the states (see table 2.04). In Karnataka higher education accounts for about 13 percent of educational expenditure (see table 2.05). It is worth noting that the share of Indian Government in funding higher education is declining significantly since 1971.

2.3.3. Expansion of higher education.

India has the largest academic system in the third world and second largest in the world. It has one of the oldest higher education system in the third world, with Universities dating back to 1857 and collegiate institutions older than that.

The hallmark of Indian higher education since independence has been growth. Student numbers

have grown from 1,74,000 in the 28 Universities and 695 colleges in 1950 to 94,00,000 students in 304 Universities and 15,342 colleges in 2004. (tables 2.06, 2.07 & 2.08). Over expansion has been criticized even in the Calcutta University Commission Report 1917-19. However, this has to be seen in the light of the fact that India adds nearly 2.2 crore to its population every year (compared to only 1 crore even in China). Such an increase in population naturally puts stress on the higher education system, as expansion takes place without commensurate increase in funds.

2.3.4. A comparison with other countries.

Compared countries in America, Oceania and European region, countries in Africa and Asia spend very little on public expenditure on education (table-2.09). Table 2.10 gives details of expenditure on education as percentage of total G.N.P. of selected countries. India being an underdeveloped country has a per capita GNP of 380 $ (440 $ in 2000) and spends 3.5 % of GNP on education. Most of the developed countries have a per capita GNP much higher than that of India, and spend in excess of 5 percent of GNP on education.

Even though 9.4 million may appear to be a large number in absolute terms, by world standards India is providing a post secondary education to a relatively small proportion of its young people - about 6.9 % of the relevant age group (table 2.11). Compared to this, United States of America provides post secondary education to 81 % of its young people, France 51 %, Germany 44.4 % and the United Kingdom 49.5 %.

In spite of huge national education system, highly educated persons constitute only 1.2 percent of population in India as against 22 % in the USA.

2.3.5. Declining unit costs.

Estimates of unit costs or simply expenditure per pupil, are indicative of the quality and efficiency of the education system.

Huge investments made on higher education have been more than offset by both an increase in prices and an increase in student numbers enrolled in higher education. Real expenditure per student in Indian higher education has registered a negative growth considering the steep decline in the purchasing power of rupee over the years.

2.4. Public financing of higher education

2.4.1. Rapid growth in public financing of higher education.

Rapid growth in public financing of higher education in India has become necessary for the following reasons.

a. At the time of independence India had only 19 Universities and enrolment of just 2.5 lakhs. Public expenditure had to be increased to cope up with the social demand.

b. Achieving rapid economic growth after independence required large-scale manpower with necessary skills.

c. Government had to provide subsidies to disadvantaged sections of society to achieve equality in education. Increased number of students from disadvantaged sections of the society meant increased expenditure on higher education.

d. The rapid growth of primary and secondary education pushed the demand for higher education.

e. According to Niblett et al.

"An important driving force behind the expansion strategy is 'a kind of Iron law of educational growth' whose logic is very simple: universalisation of primary education, leading to the generalization of secondary and the later to corresponding growth of higher education."  

2.4.2. Major limitations of public financing for higher education

The UNICEF publication of 1992  points out that in India, between 60-70 children could be given primary education for the cost of training one University student; approximately half the nation's children fail to finish primary school, while the country as a whole produces more graduates than it can productively employ. Inevitably, one of the effects is the brain drain of qualified people to industrialized nations.

"It is more difficult to make a case for the general (or social or public) benefits of a college education,"


and for the corresponding general subsidy approach, than it is for elementary and secondary education",\(^\text{18}\) says Fisher.

Elementary education produces higher payoffs both for economic growth (in terms of higher economic returns) and towards improving income distribution. Elementary education sector is suffering from severe under investment. Tapas Mujumdar committee has recommended that an additional 1,40,000 crores be set-aside for educating children between ages of 6 and 14. Perhaps higher education sector may not succeed in getting an increased share of expenditure at the cost of elementary education\(^\text{19}\).

While social rates of return for higher education are high, they are less than the corresponding private rates of return. This suggest that there is need for increasing the private share in funding higher education, strictly from the point of view of economic efficiency.

i. Even though the rapid growth of higher education in the post independence period resulted in democratization of higher education, a majority of the students are still from relatively economically better off sections of the society. Their ability to pay is higher than what they actually pay.\(^\text{20}\)

ii. Some development economists like Johnson\(^\text{21}\) have argued that India pours too large a share of its limited resources in to higher education with its British- imitative preferences (law, economics, humanities) and that those funds would be better employed in increasing primary and secondary education and encouraging craft and technical subjects, more in line with the country’s basic needs .

The Government collection through taxation consists of both direct and indirect taxes.

Direct taxes fall heavily on the higher income groups, and have a statutory effect on inequality of incomes in a developing economy. Indirect taxes are the only method through which even the poorest

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19. 93rd constitutional Amendment Bill promises to make education a fundamental right for children between 6 and 14. Dr.SP Bakshi, noted educationist has opined “when we do not have resources, why talk about making the education a fundamental right” (“Gaping Holes in Education Bill”, Ajitha Shahidiar, Business Line, 12th Aug 2002 p.4).
men can be made to pay for the economic development of the country. Given the preponderant role played by the indirect taxes in India, financing of higher education out of general tax revenue means in effect, transfer of resources from the poor to rich. Huge indiscriminate public subsidization of higher education may be considered inequitable with serious regressive effects on income distribution.

2.4.3. Higher Education is a non-merit good?

The Government’s indifference towards higher education has been brought out in a paper “Government subsidies in India” by the Union Ministry of Finance. The paper classifies the goods and services in to ‘merit goods’ and ‘non-merit goods’. The former merits Government subsidization, while the latter does not. The paper concludes, “education beyond the elementary level falls outside the ambit of merit category. Here benefits of subsidy accrue primarily to the recipients”. In contrast, benefits of providing elementary education spread well beyond the immediate recipients and hence it is be taken as a merit good.

JL Azad and Guljit K Arora have opposed this view. According to Azad ‘Education is a continuum and each stage of education is the sine qua non of the progress to other stages’. Following reasons have been cited to reinforce their argument;

i. Education including higher education has been considered as an investment in human capital.

ii. Higher education provides teachers and educational administrators for primary and secondary education. Hence it is presumptuous to consider any one stage of education in isolation.

iii. Higher education is a potent instrument of social cohesion and economic regeneration. It also improves productivity capacities of recipients.

iv. Research—a ‘merit good’, cannot prosper if the feeder institutions are deprived of financial assistance.

2.4.4. Other arguments for Government funding of Higher Education.

a. Mismatch with economic realities.

India’s best graduates compete successfully in the world market, even while unemployment at home is a stark reality. With unprecedented expansion, quality problems have cropped up with highly qualified persons accepting jobs meant for persons with lower qualifications.

India lags behind on certain vital parameters compared to some other countries (for example, number of researchers per million or number of doctors per million populations). The number of researchers per million of population in Japan is 360, largest in the world. USA has 310, European countries 110, while India has only 15 per million inhabitants. The real problem appears to be unplanned expansion. The expansion of higher education has not matched with the type of manpower demand. The mismatch between the economic strategies, educational planning and manpower development has given rise to many problems, both qualitative and quantitative.

**b. In - equitable distribution.**

Benefits of higher education have not yet been distributed equitably. The Rural-urban inequalities are glaring. Differences with regard to sex, caste and gender are still sizeable. Moreover, the distribution of students is very heterogeneous. Colleges in urban centers have strength in excess of two or even three thousand, while many of those in rural areas, have less than 500 students.

On one hand there is clearly a need to ensure that, much larger proportion of young people, especially those belonging to disadvantaged sections of the society are provided with an opportunity to enroll in higher education programs. On the other hand, in discriminately increasing the number of colleges may not be desirable in view of financial constraints and from the point of view of maintaining quality.

**c. Human Development.**

The UN Development Program’s (UNDP), Human Development Index (HDI) values show that India falls in the medium human development category and has a long way to go to reach the high human development category. (which includes countries like USA, Germany and UK). These countries have HDI value of 0.94 to 0.80 in the year 2000, while for India the HDI was 0.57. On the education index, countries like Australia, Canada and Sweden have values of 0.98-0.99, while India has 0.57. According to UNDP report 2002, India ranks 124th, among 173 countries in the world. UNDP report -2003 indicates that India has further slipped to the ranking of 127 among 175 countries. However in terms of Human Development Indices (HDI) it has made progress from 0.553 to 0.590.
Events worldwide show that higher education is a fundamental component of the fabric of democratic societies. Standing up to the international competition in the atmosphere of globalization may prove difficult if promotion of higher education is relegated to the background.

d. Conclusion:

Most developed countries devote around 6 percent of their GNP to education. India devotes only around 4 percent of its much smaller GNP for education. Only a small share of the population gets an opportunity for higher education, yet, too many talented individuals are chasing too few suitable jobs, resulting in immigration of large number of qualified people to the developed countries. Ideally, India should have pushed at all levels of education-primary, secondary, vocational and university level; but there is insufficient capital for that.

While there is much merit in the argument for increased support to higher education, it appears that the higher education sector will have to live with reduced/ inadequate fund support from the Government for three reasons:

1). On opening the economy in the 1990s, the Government is giving top priority to the process of reducing the budget deficits. The Governments whether Central or State have failed to rein in unproductive expenditure (which can only be achieved by tough administrative reforms) and there is a fall in plan outlays. Education is a soft non-resistance sector and there is not much resistance, when educational outlay does not receive the importance it deserves.

2). Within the educational sector, primary education is considered a non-negotiable component and hence the cuts in budget would invariably fall on higher education.

3). "Reforms have succeeded in shifting the investment balance in favor of the private-sector. The Government has also slowed down investing in public and quasi-public goods, such as infrastructure, irrigation, health and education. The share of private-sector in investment which had come down to 56 percent in the 1980s, is now back to 70 percent, which is about the optimal level", says a Crisil report 25

The Tenth Five-Year document approved by the Planning Commission in October 2002, suggests number of measures to achieve 8 percent target GDP growth. One of them is that user charges will

have to be levied on sale of power, irrigation, water, higher education and health care. It appears that in the eyes of the Government, higher education, without diluting quality, should become as far as possible, self-financing. The thinking of the State Government also appears to be on similar lines. The higher education sector has to take this long-range policy in to account while forming their views on changes to be introduced in the future.

2.5. Role of National Agencies / Bodies and Management of Change in the University system

2.5.1. University Grants Commission

The University Grants Commission (UGC) which came into existence in 1953, became a statutory organization established by an act of Parliament in 1956 for coordination, determination and maintenance of standards of university education. It serves as a coordinating body between the Union and the State Government and the institutions of higher learning. It performs the important role of giving grants to the universities and colleges. It also advises Central and State Governments on the measures, necessary for the development of higher Education.

Ninth Plan initiatives of the UGC.

The activities of the UGC during the Seventh and Eighth Plans were oriented towards the institution building, fund support for quality and equity in education and also in diversification of higher education. During the 9th plan, several initiatives were taken by the UGC for promoting excellence and quality in the University education.

Greater emphasis and encouragement have been given to the conferment of autonomous status to the colleges and to promote innovation and academic flexibility in the curricula.

To promote the participation of the private sector, suitable amendments in the UGC guidelines were carried out to grant the deemed university status to quality institutions, on fast track of basis.

The UGC decided to create 15 percent super numery seats in all University Departments, having adequate infrastructural facilities. These super numery seats are exclusively meant for the foreign students both in the UG and PG courses with a rider of that under no circumstances a seat unfilled shall be allocated to any one other than a foreign student.

UGC started the process of identification of Universities, which may be considered for grant of the status of “Universities of Excellence.”

The UGC decided to make accreditation and assessment by the NAAC mandatory to all the Universities in India.

The UGC launched its own website during the 1999-2000. A new UGC-IT plan was prepared for providing information through the UGC web site. Plans were made by the UGC, for networking of Universities.

To make the higher education sector financially more viable, initiatives were taken to revise the free structure of the universities and mobilize resources.

Efforts were made by the UGC, in consultation with the Government of India to regulate foreign educational institutions and also unrecognized institutions operating in India.

The Commission set up a Planning, Monitoring and Evaluation Cell in the Commission as per the recommendation of the 9th plan-working group (Planning Commission) on higher education. Universities were directed to constitute a Monitoring and Planning Board to monitor the schemes of the UGC as also the implementation of its various regulations.

To stress on quality, the concept of performance-linked funding for one third of the plan grant has been introduced. The plan grant is provided within the overall plans ceiling of the university. During the 9th plan, the UGC’s policy for development of UG and PG education in colleges had four main aims viz.,

- Improvements of standards and quality of education.
- Removal of social disparities and regional imbalances in higher educational facilities.
- Restructuring of courses including developing career thrust in the courses.
- Grant autonomous status to qualifying colleges.

UGC-NET examinations syllabus was updated. The Commission also considered the matter of curriculum development and updating of syllabi in various disciplines. The Commission constituted a standing committee to deal with innovative programs in the disciplines of;
• Humanities and Social Sciences
• Sciences, Engineering and Technology etc and
• Bio-Sciences and Life sciences.

The UGC-DBT (University Grants Commission - Department of Bio-Technology). Joint standing committee was formed to consider proposals on Biotechnology from the Universities.

The scheme of vocational education at the UGC level was introduced during the eight plan (1994-95). The UGC core committees on vocationalisation of education prepared an up-to-date list of 38 vocational subjects, with a detailed syllabus.

To make management of higher education effective, efficient and respond to socio-economic changes, the UGC has been taking various measures at different levels. Towards this end the UGC identified three programs viz: resource mobilization, training of academic administrators and setting up of State Councils of Higher Education during the 9th plan period.

Tenth Plan initiatives of the UGC.

General objectives

To achieve a profound transformation of higher education in order that it becomes an effective promoter of sustainable human development and, at the same time, to improve its relevance to the world and achieve quality in teaching, research and business and community extension functions including lifelong learning.

The Specific Objectives

The specific objectives of the 10th plan are related to the following;

• The relevance of Higher Education.
• Quality, evaluation and accreditation.
• Research and development.
• Out reach / extension activities in business and community including lifelong learning.
• Knowledge and use of information and communication technologies.
• Management and financing.
• Export of higher education and rea orientation of international cooperation.

About 45 percent of the 9th plan schemes/programs have been dropped and 40 new schemes have been added for implementation during the 10th plan period. The five broad sectors of the 10th plan are:

a). General development of university and colleges.
b). Enhancing access and quality.
c). Promotion of relevant education.
d). Quality and excellence and
e). Strength and research.

Presently the UGC has about 70 schemes /programs covering these five sectors. The guidelines for programs like ‘Assistance for Strengthening of Infrastructure in Science and Technology’ (ASIST), Inter-University Centers (IUC), Special Assistance Program (SAP) etc, have been revised for implementation during the 10th plan. 2002-03 was the first year of the 10th plan.

The UGC would encourage the Universities to make three + year structure more flexible, so as to allow students pursue both degree and utility oriented certificate / diploma programs together. UGC would also identify and fund Universities and colleges who have “potential for excellence”. The focus would be on promoting cross research in allied fields. UGC would promote opportunities for foreign students for educating themselves in Indian universities and colleges.

2.5.2. The All India Council for Technical Education (AICTE).

The All India Council for Technical Education (AICTE) was set up in November 1945, by the Government of India on the recommendation of the Central Advisory Board of Education (CABE) to stimulate, coordinate and control the provision of facilities for technical education needed for industrial development in post war period.

Keeping the above context text in consideration, Indian Parliament passed the AICTE Act, 1987 and by promulgation of this Act, AICTE was given the statutory powers with a view to have proper planned and coordinated development of the technical education system throughout the country. As

AICTE supervises the growth and quality of technical education at all levels. The AICTE is entrusted with broad responsibilities, such as according approval to new Technical Education institutions, and maintenance of norms and standards by monitoring the approved institutions.

2.5.3. National Assessment and Accreditation Council (NAAC)

The purpose of establishing the University Grants Commission in 1956 was for “the promotion and coordination of university education and for determination and maintenance of standards of teaching, examination and research in universities”

UGC has established National Assessment and Accreditation Council (NAAC) as an autonomous organization at Bangalore in 1994. NAAC’s responsibility is to assess accredit public and private institutions of higher learning, based on certain parameters which reflect on the functioning of the institution in totality. The philosophy of NAAC is enabling rather than judgmental, so that institutions of higher education are empowered to maximize their resources, opportunities and capabilities.

As at the end of Sept 2004, NAAC Accredited 111 Universities and 1910 Colleges across India. In Karnataka 8 Universities and 315 Colleges have been accredited.

27. The University Grants Commission Act, 1956 (as modified up to 2002.)
Table 2.01. % Share of Higher Education in GNP (All India)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Edn in GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>1.2</td>
</tr>
<tr>
<td>1955-56</td>
<td>2</td>
</tr>
<tr>
<td>1960-61</td>
<td>2.5</td>
</tr>
<tr>
<td>1965-66</td>
<td>2.8</td>
</tr>
<tr>
<td>1970-71</td>
<td>3.1</td>
</tr>
<tr>
<td>1975-76</td>
<td>3.2</td>
</tr>
<tr>
<td>1982-81</td>
<td>3</td>
</tr>
<tr>
<td>1983-84</td>
<td>3</td>
</tr>
<tr>
<td>1995-96</td>
<td>3.5</td>
</tr>
<tr>
<td>2002-03</td>
<td>3.7</td>
</tr>
<tr>
<td>2004-05(BE)</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: Based on Education in India (Various Volumes & Years), MHRD. Dept of Education. New Delhi.

Table 2.02. Sectoral outlay on Education for the last two years (Rs:Crores)

<table>
<thead>
<tr>
<th>Education Sectors</th>
<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allocations</td>
<td>Percent</td>
</tr>
<tr>
<td>Elementary</td>
<td>3800</td>
<td>64.19</td>
</tr>
<tr>
<td>Secondary</td>
<td>648</td>
<td>11</td>
</tr>
<tr>
<td>University &amp; Higher Education</td>
<td>575</td>
<td>9.71</td>
</tr>
<tr>
<td>Technical Education</td>
<td>575</td>
<td>9.71</td>
</tr>
<tr>
<td>Adult Education</td>
<td>200</td>
<td>3.38</td>
</tr>
<tr>
<td>Others</td>
<td>122</td>
<td>2.01</td>
</tr>
<tr>
<td>Total</td>
<td>5920</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Government of India-MHRD. Annual Report 2002-03
Table 2.03: Five Year Plan Expenditure on different sectors of Education in India

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Edn</td>
<td>870</td>
<td>58</td>
<td>950</td>
<td>35</td>
<td>2010</td>
<td>34</td>
<td>750</td>
<td>24</td>
<td>3743</td>
<td>50</td>
<td>5913</td>
<td>52</td>
</tr>
<tr>
<td>Secondary Edn</td>
<td>80</td>
<td>5</td>
<td>510</td>
<td>19</td>
<td>1030</td>
<td>18</td>
<td>530</td>
<td>16</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Adult Edn</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>126</td>
<td>2</td>
<td>248</td>
<td>2</td>
<td>1533</td>
<td>6</td>
</tr>
<tr>
<td>Higher Edn</td>
<td>120</td>
<td>8</td>
<td>480</td>
<td>18</td>
<td>870</td>
<td>15</td>
<td>770</td>
<td>24</td>
<td>1883</td>
<td>25</td>
<td>3188</td>
<td>28</td>
</tr>
<tr>
<td>Others</td>
<td>230</td>
<td>15</td>
<td>300</td>
<td>10</td>
<td>730</td>
<td>12</td>
<td>370</td>
<td>11</td>
<td>936</td>
<td>13</td>
<td>1071</td>
<td>9</td>
</tr>
<tr>
<td>Technical Edn</td>
<td>210</td>
<td>14</td>
<td>490</td>
<td>18</td>
<td>1250</td>
<td>21</td>
<td>810</td>
<td>25</td>
<td>786</td>
<td>10</td>
<td>1015</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>1510</td>
<td>100</td>
<td>2730</td>
<td>100</td>
<td>5890</td>
<td>100</td>
<td>3230</td>
<td>100</td>
<td>7474</td>
<td>100</td>
<td>11435</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Figures in millions of Rupees.
* Included under elementary education
** The figures correspond to only central sector
(the figures in other columns viz I plan to VIII plan include the share of States/UTs).
Source: Five Year Plan Documents, Planning Commission and Analysis of Budget expenditure, MHRD
Table 2.04. Budget Allocation for Education - Govt of Karnataka

<table>
<thead>
<tr>
<th></th>
<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total budget of the State</td>
<td>25857</td>
<td>24433</td>
</tr>
<tr>
<td>Expenditure on Gen Education</td>
<td>3317</td>
<td>3697</td>
</tr>
<tr>
<td>% of Gen Edn on Total Budget</td>
<td>12.82</td>
<td>15.13</td>
</tr>
<tr>
<td>% of Total Edn</td>
<td>13.06</td>
<td>15.47</td>
</tr>
<tr>
<td>Expenditure including Technical Edn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Government of Karnataka, Dept of Education, Performance Budget- 2002

Table 2.05. Sectorwise Budget Allocation for Gen Education - Karnataka

<table>
<thead>
<tr>
<th>Sector</th>
<th>2001-02</th>
<th></th>
<th>2002-03</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plan</td>
<td>Non-Plan</td>
<td>Total</td>
<td>%</td>
</tr>
<tr>
<td>Primary, Secondary Edn</td>
<td>559</td>
<td>2242</td>
<td>2801</td>
<td>84.46</td>
</tr>
<tr>
<td>University &amp; Higher Edn</td>
<td>19</td>
<td>411</td>
<td>430</td>
<td>12.96</td>
</tr>
<tr>
<td>Others</td>
<td>65</td>
<td>20</td>
<td>85</td>
<td>2.58</td>
</tr>
<tr>
<td>Total</td>
<td>644</td>
<td>2673</td>
<td>3317</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Govt of Karnataka, Education Dept, Performance Budget 2002. (Rs: Crores)
Table: 2.06. Number of Educational Institutions in India

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities/Deemed/Institutions of National Importance</td>
<td>45</td>
<td>100</td>
<td>132</td>
<td>184</td>
<td>226</td>
<td>228</td>
<td>229</td>
<td>288</td>
<td>304</td>
</tr>
<tr>
<td>Degree Standard &amp; above. Gen Edn Institutions</td>
<td>967</td>
<td>2285</td>
<td>3421</td>
<td>4862</td>
<td>6569</td>
<td>6759</td>
<td>7199</td>
<td>13150</td>
<td>15342</td>
</tr>
</tbody>
</table>

* as on 31st March.

Source:  
- a. MHRD, Dept of Edn. Govt Of India.  
- b. Education In India  
- c. Selected Educational Statistics  

Table: 2.07. Enrolment of Students (all India)

<table>
<thead>
<tr>
<th>Year</th>
<th>Post Matric &amp; below degree</th>
<th>Degree &amp; above</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>571</td>
<td>428</td>
</tr>
<tr>
<td>1971</td>
<td>1041</td>
<td>1647</td>
</tr>
<tr>
<td>1981</td>
<td>3079</td>
<td>2320</td>
</tr>
<tr>
<td>1991</td>
<td>6358</td>
<td>3672</td>
</tr>
<tr>
<td>1996</td>
<td>8109</td>
<td>5025</td>
</tr>
<tr>
<td>1997</td>
<td>9175</td>
<td>5373</td>
</tr>
<tr>
<td>1998</td>
<td>9294</td>
<td>5654</td>
</tr>
<tr>
<td>1999</td>
<td>10223</td>
<td>6219</td>
</tr>
<tr>
<td>2000</td>
<td>11245</td>
<td>6340</td>
</tr>
<tr>
<td>2001</td>
<td>13324</td>
<td>6408</td>
</tr>
<tr>
<td>2002</td>
<td>13494</td>
<td>6500</td>
</tr>
<tr>
<td>2004*</td>
<td>N/A</td>
<td>9400</td>
</tr>
</tbody>
</table>

* As on August 02. (Figures in thousands)

Sources: MHRD,Dept of Education. GOI. New Delhi. Selected Educational statistics.
Table: 2.08 Indian Higher Education System- Some Statistics

1. Institutions.
   - a. Universities: 276
   - b. Deemed Universities Institutions of National Importance: 11
   - c. Institutions established through State and Central legislation: 5
   - d. Colleges: 13,150

2. Students enrolled (at the beginning of 2002-03) (fig-in lakhs)
   - University Departments: 11.66
   - Affiliated Colleges: 76.55
   - Total: 88.21

3. Facultywise enrolment
   - Arts: 46.13
   - Science: 19.88
   - Commerce: 17.87
   - Professional faculties: 16.12
   - Total: 100

4. Enrolment at different levels (In lakhs)
<table>
<thead>
<tr>
<th>Degree level</th>
<th>PG level</th>
<th>Research/Diploma level</th>
</tr>
</thead>
<tbody>
<tr>
<td>89.13</td>
<td>9.25</td>
<td>1.62</td>
</tr>
</tbody>
</table>

5. Distribution of Students (percentage)
   - Undergraduate Students
     - a. Affiliated Colleges: 89.95
     - b. University Departments: 10.05
     - Total: 100
   - Postgraduate Students
     - a. Affiliated Colleges: 66.02
     - b. University Departments: 33.98
     - Total: 100
   - Research Students
     - a. Affiliated Colleges: 8.85
     - b. University Departments: 91.15
     - Total: 100

6. Strength of Teaching faculty (In lakhs)
   - a. Affiliated Colleges: 3.52
   - b. University Departments: 0.75
   - Total: 100

Source: MHRD Annual Report 2002-03.
Table 2.09. Public Expenditure on Education by Regions of the World

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>5.3</td>
<td>5.7</td>
<td>2.09</td>
<td>5.9</td>
<td>48</td>
<td>40</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>America</td>
<td>4.9</td>
<td>4.9</td>
<td>5.2</td>
<td>5.3</td>
<td>307</td>
<td>375</td>
<td>521</td>
<td>623</td>
</tr>
<tr>
<td>Asia</td>
<td>4</td>
<td>3.9</td>
<td>3.7</td>
<td>3.6</td>
<td>37</td>
<td>39</td>
<td>66</td>
<td>93</td>
</tr>
<tr>
<td>Europe</td>
<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
<td>5.4</td>
<td>418</td>
<td>340</td>
<td>741</td>
<td>982</td>
</tr>
<tr>
<td>Oceania</td>
<td>5.6</td>
<td>5.6</td>
<td>5.6</td>
<td>5.6</td>
<td>467</td>
<td>439</td>
<td>715</td>
<td>878</td>
</tr>
<tr>
<td>World Total</td>
<td>4.8</td>
<td>4.8</td>
<td>4.8</td>
<td>4.9</td>
<td>126</td>
<td>124</td>
<td>202</td>
<td>252</td>
</tr>
</tbody>
</table>

Source: UNESCO statistical year book 1997

Table 2.10 Expenditure on Edn as % of total GNP

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita US$</th>
<th>% of GNP on Public Expn for Edn</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>340</td>
<td>380</td>
</tr>
<tr>
<td>China</td>
<td>620</td>
<td>750</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3890</td>
<td>4310</td>
</tr>
<tr>
<td>Australia</td>
<td>18720</td>
<td>20090</td>
</tr>
<tr>
<td>Japan</td>
<td>39640</td>
<td>40940</td>
</tr>
<tr>
<td>Canada</td>
<td>19380</td>
<td>19020</td>
</tr>
<tr>
<td>USA</td>
<td>26980</td>
<td>28020</td>
</tr>
<tr>
<td>France</td>
<td>24990</td>
<td>26270</td>
</tr>
<tr>
<td>Germany</td>
<td>27510</td>
<td>28870</td>
</tr>
<tr>
<td>UK</td>
<td>18700</td>
<td>19600</td>
</tr>
</tbody>
</table>

Table: 2.11. Enrolment Ratios by levels of Education

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>I level</th>
<th>II level</th>
<th>III level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1995</td>
<td>102</td>
<td>106</td>
<td>90.2</td>
</tr>
<tr>
<td>China</td>
<td>1996</td>
<td>120</td>
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I level : Elementary School and Primary School  
II level : Middle School, Secondary School, High School and Schools of Vocational Edn and Technical School  
III level : Universities and Higher Professional Schools  
Note : Since enrolment ratio given is for the total enrolment. Regardless of age, divided by the population of the official age group if a country has almost universal education among the school-age population at the first level, the enrolment ratio given will exceed 100. 