
REFORMS IN HIGHER EDUCATION

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Preface

The papers presented in the present edition cover the reforms in Higher Education in India and abroad.

A detailed status of the Sri Lankan higher education is presented by Dr. S.B. Dasanoyaka. The paper analyses and discusses the concern of the MBA graduates. The author reflects a limited focus on practical application in curriculum. The author suggests that MBA programmes should move with the changes that occur in the industry; programmes should be more innovative; guidance and counseling may be given.

A few articles highlight the reforms in higher education. The authors drive home the point that quality of Education has to be enhanced.

Dr. P.K. Manoj lays emphasis on higher rate of enrolment in universals.

Professor Chandrasekaran brings out a tertian to the following. Education should become increasingly aware of the process of change and try to design courses, curricula and content. The author consists of Quality assurance, placement assurance, Conducting training programmes, Social responsibility, choice based credit system and value added education.

Professor Sridevi highlights the use of Technology in today's higher education.

The effort of the author in bringing out an education of the book is highly laudable.

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REFORMS IN HIGHER EDUCATION – CHALLENGES FOR BUSINESS SCHOOL IN SRILANKA – A CASE STUDY

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INTRODUCTION

The Sri Lankan higher education is mainly provided by the government led public sector, traditional Universities, Open University and some private affiliated Institutes. Still private sector Universities are not allowed directly to offer Sri Lankan degrees except for a few special cases such as Sri Lanka Institute of Information Technology (SLIIT) due to political sensitivity of this subject. Foreign degrees are directly offered by the foreign universities operating in Sri Lanka on affiliated and franchising basis. However during the last few years, private sector involvement in higher education especially based on affiliated concepts had marked exponential growth. The total number of universities, including Open University, stood at 15 in of 2005 (See table .1 in appendix). The total number of undergraduate and post graduate students enrolled are around 65206 and the annual intake is around 16600 for all the degree programs in traditional Universities. Sri Lankan Universities are not at all capable of providing places for those who qualify to enter Universities. For instance in 2003, Sri Lankan universities were capable of absorbing only 12% of those who qualify to enter University through Nation-wide British model GEC (A/L) examination. According to the latest available

students enrollment data for 2004, public sector Universities have 22% enrollment and 53% go to private sector affiliated ones and professional courses such as CIMA, CIM and IT. Another 15% enroll with Open University (very low completion rate) and 10% go to abroad for higher education. In 2003, around 1500 students went to UK for higher education.

In this context, the Master of Business Administration (MBA) degrees are emerging in Sri Lankan public sector universities because of the global demand for managers. This paper surveys the current MBA programs in Sri Lankan Universities in a comparative perspectives.

Methodology

The research methodology adopted was administering an interview schedule and respondents needed to express their viewpoints. The interviews were unstructured and open-ended as respondents needed to be given the opportunity to express their point of view. Each respondent was interviewed once only but when the need to clarify certain items of information arose the respective person was approached.. The main respondents were MBA offering universities namely Postgraduate Institute of Management (PIM) attach to Siri Jayawaradanapura University, University of Colombo, University of Peradeniya, University of Ruhuna, University of Kelaniya, University of Rajarata and Moratuwa University. The respondents included MBA students, lecturers and employers. Respondents were chosen in the following manner. As the study focused on a comparison of MBA programs in Sri Lanka, lecturers were chosen from Universities that conducted an MBA program and who are

also part of MBA programs in other universities. Secondary sources of information were located through websites, brochures and other relevant documentation.

Analysis, Discussion and Conclusions

Acquiring an MBA degree has become a trend for graduates in the business field. MBA programs are facing a rise in demand because of this situation. The challenge faced by MBA programs is to ensure recognition and value that was associated with MBA in the past, continue in the future as well.

- Employers of MBA graduates have expressed concern about the limited focus on practical application in curriculum. Through the use of group studies that involve on-site projects and by incorporating recent research done in a Sri Lankan context, MBA programs can be made more applicable to the Sri Lankan business environment.
- MBA programs should move with the changes that occur in the industry. MBA curriculum should incorporate case studies and business models drawn from the business environment in Sri Lanka. This will ensure that there is constant interaction with the industry.
- MBA programs in Sri Lanka should be more innovative in their approach. They should seriously consider incorporating key features of the business environment in the South Asian region and the Asian region, particularly Asia Pacific. Several Indian and Pakistani companies have invested in the country. Some Sri Lankan companies have set up business operations in

India, Pakistan and Bangladesh. Therefore, the need to gain knowledge of the particular business environment and culture of these countries is critical. MBA programs in North American and British universities have included the study of regional business environments as elective modules. The same approach can be applied to MBA programs in Sri Lanka.

- Universities should also look at the feasibility of linking with leading foreign business schools so that the recognition of the MBA goes beyond the territorial boundaries of Sri Lanka. Such collaborations will have long-term benefits not only for the MBA program but also for academics, post graduates as well as undergraduates in the university system. The advantage of such an approach is that multi-national companies that operate in the country will value such MBAs.
- Students seem to have problems with the quality of lecturers in general as well as inadequate library facilities. These problems seem to be common across MBA students in several universities.
- All the MBA programs that were reviewed have distinct plans to expand in the future, in terms of student numbers, new electives or collaborations with foreign universities. This speaks volumes for the future of MBA programs in Sri Lanka.
- Employers believe that MBA programs are more focused on theory than on the practical implications of management. Thus, there is a need to refocus efforts toward a more practical orientation..
- The choice between a general MBA and a niche MBA which focuses on a specific area within management

should be decided by considering the particular needs of the student such as his goals and career aspirations.

- In specific industries such as IT, most software engineers are not adequately equipped with managerial skills required to undertake activities related to project management. Thus, an MBA which focuses on such students is a timely measure.
- Apart from IT management, certain MBAs focus on mathematics and economics, and this type of MBAs are suited for those who are more interested in pursuing careers in economics or finance.
- Employment opportunities of niche MBA students are few hard compared to functional and international business MBA students. However, given the necessity of management skills in the IT industry, it's possible that all MBA graduates will find gainful employment in Sri Lanka and abroad.
- All MBA programs of Universities in Sri Lanka should be governed by a quality assurance authority comprising eminent academics. This will ensure that all MBA programs meet the necessary standards, as certain MBA programs that commenced recently seem to lack proper guidelines of ensuring that quality standards are properly maintained.
- Certain Universities have not included proper guidelines for evaluation of the programs and modules. This is a vital factor for further development of the respective programs.
- The use of information and communication technologies as an effective source of teaching should also be considered.

- The use of western business models was observed in many MBA programs offered by the Universities in Sri Lanka. Only one or two institutions incorporated Sri Lankan case studies and even fewer referred to text books written by Sri Lankan academics. This does not augur well for the development of curriculums based on a Sri Lankan context. Western business models were developed based on the contextual variables that are prevalent in their own environment and cannot be applied to the Sri Lankan business environment without taking into consideration the impact of culture, the different organisational working methods and political and socio-legal settings.
- Top leadership is been said to be important, with visible leadership support seen as crucial in getting reforms off the ground. A common assumption is that most reforms are unsuccessful because they come into conflict with ongoing programs, personnel interests or otherwise fail to win broad acceptance. Many reforms are thought to survive only in enclaves, somewhat removed from mainstream programs, or survive only if they change substantially from their original purposes. Many reforms failed due to lack of stakeholders integration and awareness and failures in communication.
- But still the following questions regarding the business schools remain to be answered: How far can the business schools play a proper role in public life by contributing to public policy making? How far business schools deviate from basic fundamental can and publication oriented research to more policy and development oriented practical research. Are Sri

Lankan business schools able to produce visionary, strategic thinking, achievements oriented and value added and creative managers to lead and manage local business?.

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APPENDIX

General and University Education in Sri Lanka, 2002- 05

General Education	2002	2003	2005(a)
Total school	10,508	10,473	10,461
Government schools(b)	9,829	9,790	9,709
o/w National schools	323	323	324
Other schools	679	683	692
Private	80	85	93
Pirivena	599	598	653
Pupils ('000)	4,179	4,098	3999
New admissions ('000)	325	316	328
Teachers ('000)	196	197	216
Pupil/Teacher ratio (government schools)	22	21	19
University Education	13	13	15
Universities	48,666	64,291	66386
Students (d)	3,390	3,543	3875
Lecturer (e)	9,027	10,730	7154
Number graduating	3,288	3,456	1652
Arts and Oriental studies	2,018	2,121	1436
170	170	307	345
Commerce & Management studies	1,060	652	755
754	754	1,274	805
Law	1,159	1,876	1250
Engineering	578	1,044	911
Medicine	12,144	25,471(f)	14520

Sources: Ministry of Education University Grants Commission. Central Bank of Sri Lanka, 2006.

HIGHER EDUCATION REFORM AND MARKET INTEGRITY APPROACH

(A case of Nepal)

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Education, Knowledge, Market and Reform

Education, a term refers to a system of learning, writing, thinking and new knowledge is understood as human behavior on knowledge gaining and generation. As social sector of the economy, human resource development is required for multiplication of efficiency and productivity leading to sustainable economic growth. Thus, education is the foundation of human development and economic development.

The developments in science and technologies have led to the emergence of knowledge in societies in which the central capital is knowledge. At present, knowledge is becoming the true capital and the premier wealth-producing resource. The concept of natural resources-based growth and development approach has been replaced by human resource-based development model (Sakya, 1998). Knowledge is capital pursuing growth and welfare of the country.

It is found that education, knowledge and market are interlinked in the course of development. Application of new and innovative knowledge creates its own market demand, as in classical thought. Market demand of knowledge creates its supply, as in Keynesian thought. Thus, the relationship between knowledge and market

integrity directly and indirectly can be seen as vital determinant of growth economy.

Study context: Identity, Education and Policy

Nepal is the highest *Himalayan* country existing as tiny landscape in Asia and in the world with landlocked geo-set up. Recently, India locked in the term specifically used in geo-politics and development economics. Natural and biodiversity profile of IUCN and resources studies accept the richness of natural resources and divergence of bio-diversity. Anthropologist Prof. Dor Bahadur Bista in his book, *People of Nepal* (1970) proves the presence of divergent identity of people, caste, ethnic groups, religion and culture, like African countries and developing countries.

Human Development Index (HDI) of Nepal is not satisfactory, Literacy is also low index. Negligible improvement of GNP per capita indicator, despite contradictory political economy can be accounted but still, it doesn't change the status of least developing country (LDC) in accordance with the World Bank's categorization based on GNP per capita indicator. In addition, economic growth is sluggish and is less than 3 percent but annual population growth rate is uncontrollably incremental.

Mass illiteracy and mass poverty are great threats. This is an example of the poor correlation between education and development led development gap. Its adverse consequences can be observed in multidimensional aspect in growth and development in developing countries like Nepal because education contributes to economic growth, but by itself it will not generate growth (WB, 1995). The strongest growth comes

about when investment in both human and physical capital takes place in economies (WB, 1995).

Development of people means investing more in human capabilities, in education, health and technical skill, so that they can work productively and creatively. Development for the people means ensuring that the economic growth generated is distributed widely and fairly so that it improves the quality of life of every body. Human capacity development is synonymous with educational development (Sakya, 1998). The annual investment on education is approximately 2.5 percent of GDP. It is very low not only in compulsory basic education and also university education. The result is 56 percent illiteracy.

Reforms are being carried out at the higher level education both in terms of curriculum content and structure. The priorities for the Ninth Plan (1997-2002) are proposed to be set on: 1) development and expansion of basic and primary education, 2) enhancement of skill training opportunities through technical education and vocational training, 3) improvement of quality of education and 4) expansion of higher education institutions in technical areas. However, progressive report of the Ninth plan and of Tenth plan shows progress as unsatisfactory in quality in higher education as productive market demand. Global Integrity Report 2007 shows 27 percent gap between policy and implementation that can be found in education.

OBJECTIVES:

The main objective is to assess education reform and market integrity approach in Nepal. Specific objectives are to observe education reform in Nepal and its status and

to assess education reform and market integrity and finding issues and providing policy implicative suggestions.

RESEARCH METHOD:

This descriptive cum explorative research is based on the survey conducted by the Center for Integrated Development Studies only in Kathmandu Valley in Nepal in 2007. Its data collection method was telephone and e-mail interviews. Their sample sizes were 50 companies, 25 professors and 25 policy makers.

Additional and supplementary information and data were basically collected and compiled from the secondary data and primary information sources such as

- published/unpublished government documents in the Department of Education, Ministry of Education
- documents from government bodies and non-governmental organisations (NGOs), such as INSEC, AMENSTY NEPAL, World Bank, Asian Development Bank, Newspaper, UNDP;
- interviews with officials from National Planning Commission, Ministry of Education, Scholars, Civil Society, Academician;

Outcomes and performance

Based on the survey of center for Integrated Development studies and secondary database and information, policy reform's performance was assessed with the following indicator variables including *no of university, investment, private participation etc.* Aggregate approach can be implied for its contribution and picture.

University Structure Change

State policy *reform II* based on education policy 1992 liberalized fully to the private sector in education. Free entry of private sector creates naturally *dualism in* education structure and character. It can be found in the post 1990 after the initiation of *reform II*. Current global university's trend, structure and development are market friendly. In other words, there is *professionalism and market driven with higher productivity and efficiency*. Therefore, quality education is *a first choice and preference*. As shown in the table, the reform II has established new and innovative educational structure in Nepal. Private university has been more market friendly not only for domestic but also for global, despite costlier academic session so that students can easily get good will and confidence for competition with western university's students(*see its details in table no-1*).

Table No-1: Indicators of education system

Indicator	Language	Students from	Concentration	Teacher	Infra structure	Drop out	Performance	Investment	Cost
Public	Nepali	Poor family	Rural	Political	Average	Higher	Not good	Not so high	Free
Private	English	Middle class/ rich family	Urban	Professional	Good	Zero	Good	High	Costlier

Source: Center for Integrated Development Studies, the educational survey, 2007

Breaking monopoly of state university, Private University has given *alternatives* in university education and school education to the middle and higher-class family for getting western style and module higher education system and environment. At a certain level, it has diverted outflow of students into Nepal. Thus, professional and academic university gives quality education as required to the Nation.

Multi University:

Higher education in Nepal has traditionally been defined as grade 11 and above. This includes the two-year upper secondary course, the two-year bachelor’s degree and postgraduate studies (WB, 2000). Since market demand was homogeneous quality and heterogeneous universities, *Multi University* concept for competitive and qualitative international level higher education for increasing easy access in university was perceived and then, it was implemented. Its positive consequences can be found in the vertical and horizontal growth of university and higher education as follows.

Table No-2: State vs. Private Universities

University	State	Private
Tribhuvan University	1	
Mahendra Sanskrit University	1	
Eastern University	1	
Pokhara University	1	
Kathmandu University		1
Lumbini University	1	
Total	5	1
Percentage	83	17

Source: *compiled from Economic Survey, 2004*

As shown in table no-2, state university dominantly covers 83 percent but private university covers only 17 percent out of 6 universities. The role of private sector has increased in higher education but is sufficiently large. It has promoted competitive structure of education market Its consequence is State as in the trendsetter in higher education, although expenditure of GDP on education is still limited. Outcomes of liberal education policy cannot be found in terms of number of university and private investment. It puts a question, why? Therefore, favorable reform cannot convince to the private sector.

Growth of number of university and colleges

Education reform has created big market opportunity to private investment and participation as entrepreneur in education sector. It is recognized as huge potential business. Record of Ministry of education (2007) in the annual white paper discloses 1000 colleges in urban areas in the post *reform II*. Noticeable numbers of private colleges have come all over the country with large scopes of higher education business market. Thus, market and coverage of private education are found big, liberal and competitive. (*See its details in table no-3 below*)

Table No-3: Change in the number of university

Items	Before reform 1990	After reform 1990
No of University	1	8 (1 is private)
Places (development regions)	1	5
Private colleges	0	1000

Source: *Economic Survey, 2007*

As shown in table no-3, the private sector has preferred to colleges rather than university in terms of investment, management, infrastructure and operation. It cannot be underestimated that investment and distribution of colleges are very limited. No, it is called significantly larger and well distribution and market development. Thus, *reform II* has succeeded in this regard. Its positive consequence can be observed in the quality education.

Growing share and coverage of Private Sector

Involvement of private sector makes additional *heterogeneous opportunity with heterogeneous quality, cost, environment and modes* in higher education for making competitive and wider market throughout the country. Students have access to *information about quality, cost, courses and environment* for reaching right and logical choice decision on course for further career and life is easier than before 1990.

In Nepal, the size of students is estimated approximately 0.2 million. Distribution of students among universities is found TU led. Table 4 reveals that Tribhuvan University share 90.6 percent while Kathmandu University shares only 2.7 percent (see *its detail in table no-4*).

Table 4: No of Students distribution in Universities

Students	Number of Students	Percentage
TU students	198565	90.6
TU campus	119139	(60)
Affiliated Private Campus	79426	(40)
Mahendra Sanskrit University	3610	1.6
Kathmandu University	6015	2.7
Eastern University	6388	2.9
Pokhara University	4614	2.1
Total	219192	100

Source: *compiled from Economic Survey, 2007*

Revisit of Assessment system

Assessment system is assurance of *quality education* and *international credibility*. In general, it is said that it would be universally accepted and accredited. Therefore, it should be norms, value and system of international assessment practice and experience done by top and excellent university because it determines students' quality, ability, performance and potentiality.

Practices reveal two types of examination system including annual examination system and semester examination system. Two State Universities including Tribhuvan University and Mahendra Sanskrit University adopt annual examination system in which one-year academic year is assessed by taking examination system by Examination Controller. It is so called mass level education for increasing quantum of highly educated manpower. In engineering faculty, Tribhuvan University is practicing Semester Examination System.

In the post 1990's, there were established Eastern University, Pokhara University, Kathmandu University and Lumbini University. They use semester examination

system from which academic freedom is restored in terms of authority of preparing curriculum, developing questionnaire, testing in examination and improving opportunities.

Table No 5 shows that majority of universities use semester system and minority university use annual system. Old and state university still prefers annual system but new university choose semester system in accordance with trend and market.

Table No-5: Assessment system in University

University	Assessment	
	Semester	Annual
State led		
Tribhuvan University		x
Mahendra Sanskrit University		x
Eastern University	x	
Pokhara University	x	
Private		
Kathmandu University	x	
Total (%)	60	40

Change in Teaching Mode and Library

The wave of globalization, increasing migration for foreign labor and higher growth in studying abroad for further advance study has led to improvement in standard of education. The post of the educational reform has transformed pre historical traditional lecture methods and library into modern and technologically advanced methods and e-library in Nepalese universities resources. Overhead, projector and computer technology modes in teaching have become common. Utility is very easy, convenient, effective and time and energy efficiency to the teacher. Therefore, partially, Tribhuvan University has begun to use it but new

universities, established in the post 1990 use them as integral educational aid. Statistically, approximately 80 percent universities and colleges have adopted modern tech led teaching mode and library. Thus, applied teaching mode and library has come into existence. Therefore, students understanding level can be found higher. Learning mode is global.

Since English language is a compulsory. Therefore, In Tribhuvan University, English and Nepalese languages are used in proficiency certificate and B.A but in Masters, only English is used. Private colleges and Universities and State led New Universities use English for teaching. Therefore, its coverage and size in the post reform is recorded at 90 percent. Therefore, Nepal is towards modernization towards *International Standard education*.

Statistics shows around 2 percent of GDP. However, its major sources in Nepal are grant and loan. This ambiguous situation only permits for mass education, instead of quality education. There is student's fee as alternative source, like as developed countries university and private colleges. Politics and strong students associations which have fully suppressed it at nominal level (US\$ 50 per annum) is a strong barriers in this regards in the state university.

Private investment in higher education in the post *reform II* has added around 3000 million. It has partially managed resource constraints for quality education. Therefore, the impact of the *reform II* is found *effective and encouraging*.

Competition and choice

Competition and choice give a right to decision making to the people for getting welfare. This principle can be applied in higher education. In the 1990's, higher education was monopoly of Tribhuvan University. There was no question because of absence of choice and competition. In the post 1990's, the growth of non-homogeneous and homogeneous educational institutions in educational market have supplied variety of non-homogeneous and homogeneous *quality, standard, environment, fee, curriculum, affiliation, management, medium* etc., which have diversified and added new options of educational institutions in public and private. Its consequences are observed positive to all class and caste with competitive choice and decision making for getting quality at the affordable cost. There may be higher beneficiaries as low-income people. Therefore, competition and choice can mainstream the low-income people towards quality education.

Conclusion

Jawara Lal Nehru once said about the importance of the university in life. He said, "A university stands for humanism, for tolerance, for reason, for the adventure of ideas and for the research of truth. It stands for the onward march of human race towards even higher objectives". Higher education reform determines university's performance, quality and contribution. In the context of 21st century's revolutionary information technology led globalization, world higher education development trend in the course of university and industry nexus and in the pressure of overall development against poverty and

inequality, Nepal should seize an opportunity of world through excessive policy reforms not only in the side of growth but also welfare of the people for maintaining national diversity, identity, culture and indigenous. Basis of international standards, Nepal should reform national policies towards how to develop university and industry (market) linkages and integrity for integrated development of industry and education sector for enhancing productivity and efficiency in HRD for full and high value employment. Its subsequence would be positive on growth and welfare of the nation. Let's hope *happiness with food security, social security and economic security*.

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HIGHER EDUCATION IN INDIA: THE WAY AHEAD

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INTRODUCTION

Education is one of the most important inputs that influences the all round development of any individual or economy – economic, physical, social, cultural, ethical and spiritual. Dre’ze and Sen (1995) [7] have observed that education enables people to ‘build up their capabilities’, thereby ‘broadening their entitlements’ and ‘facilitating expansion of freedom’ which in turn is the primary end and principal means of development. In the emerging deregulated economic environment, education has got added significance because production of knowledge has attained the status of the most decisive economic activity. Knowledge has become the most important raw material in the ‘knowledge economy’ of the 21st century. Gnanam (2004) [9] has observed that ‘the ability of a society to generate, select, adapt, commercialize and use knowledge has now become critical for sustained economic growth and for improving the quality of life for all.’ The existing ‘market economy’ of India characterized by Liberalization, Privatization and Globalization (LPG), has influenced all aspects of human life, the case of education system being one of utmost significance in this regard. Of late, with General Agreement on Trade in Services (GATS) becoming fully operational under the WTO regime, it will be difficult for India to survive as a nation without developing her ‘intellectual knowledge’ through diligent monitoring, expansion, strengthening and re-

orientation of her education system as per the ever-increasing demands of the market.

Because of the onslaught of economic deregulation, the last decade of twentieth century has seen many significant changes in the global environment which are having a bearing on the role, function, shape and mode of operation of higher education systems across the world. Most notable among such developments has been the transition towards societies which are highly knowledge-based and more technology-intensive. The impact of globalization on higher education in respect of the newly deregulated economies, mostly developing nations, has been really significant. In India too there have been a few very prominent changes in the higher education system since the initiation of the economic deregulation in the early nineties. Firstly there has been a trend towards privatization and commercialization of education and secondly there has been growing competition from increasing presence of foreign educational institutions. Both the central and state governments have been encouraging the establishment of universities and colleges in their respective areas of jurisdiction. Tilak (2001) [23] has observed that one of the consequences of the above policy of 'laissez faireism' of the governments has been the erratic and unregulated growth of private higher education. Patel (2004) has observed that the new developments have resulted in numerous problems, the most important among these being the significant decrease in budget outlay per student from Rs. 7676 in 1993-'94 to Rs. 5873 in 2001-'02. Further, as already noted, there are clear indications of international competition with the foreign universities setting up their campuses in India resulting in

high level of student mobility and fast commercialization and privatization of education.

Sources of Data and Methodology

The data used for this study are essentially secondary data. The major sources of data include, inter alia, official statistics published by various Government departments, papers in the relevant topics published in reputed research journals, publications as well as the official web-sites of the UGC, UNESCO and World bank, and books in the relevant topics written by well-known experts in the field. The methodology is both descriptive and analytical in nature. It is descriptive to the extent that it traces the history of higher education in India, particularly that pertaining to the post-deregulation era, and portrays the current status of the same. Further, it is analytical to the extent that it critically evaluates the present scenario in respect of Indian higher education and also tries to develop appropriate strategies for reforming the higher education system in India so that it can withstand the pressures of privatisation and internationalisation.

Part I

Higher Education in India – an Overview

Higher Education in India – a Historical Perspective:

The higher education in modern India commenced with the establishment of Hindu College at Calcutta in 1781 by Raja Ram Mohan Roy with his friend David Hare. East India Company did not take any interest in educating the masses

The Woods Education Dispatch (1854) is known as the Magna Carta of English Education in India. It prescribed for the first time, a detailed educational policy for India.

Based on one of its recommendations, the first three modern Universities were set up in India in 1857; one each in Bombay, Madras and Calcutta. These were constituted based on the erstwhile model of the London University. At the end of 1900, there were five universities in India, the fourth and fifth universities viz. Lahore and Allahabad Universities being founded in 1882 and 1887 respectively. In 1901-'02, there were 191 Colleges and 23009 students in India. At the time of independence we had 18 universities. In order to facilitate co-ordination among the Universities in their activities, an Inter-University Board was established in 1925. [Later on, in 1973, this Board was converted into the present set up – Association of Indian Universities (AIU).]

Soon after the Independence, priority was given to basic education as advocated by Mahatma Gandhi. In respect of higher education, the first action taken by the Government of India was the appointment of the University Education Commission in 1948 under the Chairmanship of Dr. S Radhakrishnan– an eminent teacher philosopher. The Commission stressed on restructuring of higher education and it recommended for reorganization of the University Grants Commission (UGC) with powers to allocate the grants within the total limits set up by the Government. An interim UGC was set up in 1953. It was given autonomous statutory status by an Act of the Parliament in 1956.

A landmark development in the field of higher education in India was the appointment of the well-known Kothari Commission in 1964. Another milestone was the adoption of National Policy of Education in 1968. The most important aim of this Policy was the implementation of the recommendations of Kothari Commission Report, 1966. In 1985 the document “Challenge of Education” observed “the

general condition of Universities and Colleges is a matter of great concern to the nation". As part of the National Education Policy (NEP) adopted in 1986, the emphasis in respect of higher education was on the consolidation and expansion of facilities in existing institutions. Ramamurthi Committee appointed in 1990 recommended for the development of autonomous colleges, redesigning of courses and programmes, establishment of State Councils for Higher Education to develop co-ordinating mechanisms, enhanced support for research etc. In 1992 New Education Policy was revised.

Current Status of Higher Education in India:

There has been quite a remarkable growth in the higher education system in our country over the years. India has got the one of the largest higher education systems in the world, and is second only to that of USA.

S. No.	Particulars	1947	2005
01.	No. of Universities /University-level institutions	18	343
02.	Enrolment of students	2,28,804	99,53,506
03.	No. of University Colleges and Affiliated Colleges	591	17625

Table: 1.1. Growth in the Number of Higher Education Institutions in India (*2004 Statistics)

[Source: (i) Official Website of UGC, www.ugc.ac.in
(ii) Sharma, J P & Jain Tanusree, *University News*, Association of Indian Universities, Vol. 44, No.30. July 24-30, 2006, pp.1.]

The significant quantitative growth in Indian higher education is evident from the statistics given in Table 1.1 above. Of the 343 Universities in all, comprising of 19 Central Universities (including newly established Allahabad University which was incorporated as a Central University in 2005), 204 State Universities, 95 Deemed Universities, 5 Institutions established under State Legislation Acts, 13 Institutes of National Importance and 7 Private Universities. Besides, there are 10 Open Universities.

Higher Education in India - Some Disappointing Facts:

In spite of the remarkable quantitative growth in higher education in India over the years as suggested by the substantial growth in student enrolments and the number of higher education institutions, it has to be stated that in respect of Enrolment Ratio (i.e. the ratio of students in the relevant age group attending higher education institutions) the situation in India still remains to be very poor.

Table: 1.2 Gross Enrolment in Higher Education in Selected Countries

Particulars: Name of the Country / Group (Year)	Enrolment Ratio	Particulars: Name of the Country /Group. (Year)	Enrolment Ratio
World total (1997)	17	Developing Countries (1997)	10
Developed Countries (1997)	52	Asia (1997)	11
USA (1995)	92	Korea (1997)	68
Canada (1995)	88	China (1997)	6
UK (1996)	52	India (1997)	7
Australia (1997)	80	Less Developed Countries (1997)	3
Japan (2002)	45*	Africa (1997)	7

[Source: UNESCO (1999)]

[Sharma, J P & Jain, Tanusree., *University News*, Association of Indian Universities, Vol. 44, No.30, July 24-30, 2006, pp.1; * Altbach and Ogawa (2002)]

The trend in respect of expenditure on higher education per student over the years is still poor. It depicts this dismal situation as we observe that the public expenditure which was as high as Rs.7676 in 1990-91 (at 1993-94 price level) has declined rather constantly over the years to reach a level of just Rs.5873 in 2001-02 – a decline by nearly 24 percentage.

Part II

Globalization and the Impact of GATS on Higher Education in India.

As a result of the ongoing process of economic deregulation in India, characterized by Liberalization, Privatization, Globalization (LPG), there have been paradigm changes in every field of Indian economy. A plethora of factors – fast vanishing trade barriers, increasing technological progress particularly the rapid advances in the field of Information and Communication Technology (ICT), declining costs on communication and transportation etc. – have resulted in a situation named World Economic Integration – an irreversible process with lots of implications. Within such an integrated system, knowledge and technological progress are of vital importance; and in respect of the educational system in India, especially the higher education system, the implications are multifarious.

Many an international report has underlined the utmost significance of the role of higher education in enabling economic development of nations as well as in transforming them as vibrant knowledge economies of the

world. For instance, the International Commission on Education for 21st Century states, “Higher education is at one and at the same time one of the driving forces of economic development and the focal point of learning in a society. It is both repository and creator of knowledge. Moreover, it is the principal instrument for passing on the accumulated experience, cultural and scientific, of humanity” (Delors, 1996. p.130) [5]. Further, the recent UNESCO Report, “Towards Knowledge Societies” states, “Institutions of higher education are destined to play a fundamental role in knowledge societies, based on radical changes in the traditional patterns of knowledge production, diffusion and application.” (UNESCO-2005, p.87) [31]. This report has pointed out that there has been a growing flow of foreign students in search of quality higher education. The percentage of foreign students in various foreign countries as reported by the above report is as shown in Table 2.1 below.

Table: 2.1 Percentage of Foreign Students in Higher Education in various countries

Name of the Country	% of foreign students	Name of the Country	% of foreign students
USA	25% (Highest)	Japan	04 %
UK	11 %	Russia	03 %
Germany	10 %	Belgium, Canada, Italy, Spain	02 %
France	09 %	Austria, Malaysia, Sweden and Switzerland.	01 %
Australia	08 %		

[Source: Compiled from *Towards Knowledge Societies*, UNESCO-2005, Paris]

The General Agreement on Trade in Services (GATS) and Higher Education:

One of the most prominent developments in this era of world economic integration which is having a bearing on Indian higher education system has been the adoption of GATS (General Agreement on Trade in Services). GATS is a comprehensive legal framework of rules and disciplines covering 161 service activities across 12 classified sectors; comprising of a wide range of activities such as education, health, finance, environment etc. GATS define services trade as occurring through four possible modes of supply. [Exhibit (1) below].

On the one hand, internationalization has made the competitiveness of education extremely important, hence posing a threat to many of the domestic educational institutions. On the other hand, it is bringing in tremendous financial benefits, as well as so many academic, political and social advantages through the presence of foreign students. In this regard, the observation by Albach (1989) [1] is quite relevant, 'Foreign students and scholars are one of the most important elements of the international knowledge system. They are the carriers of knowledge across borders. They are the embodiment of the cosmopolitan culture and they are one of the most visible and important parts of the world wide exchange of ideas.'

Another development which is likely to have revolutionary influence on the education systems the world over is that of the advances in ICT. The traditional boundaries indicating geographical jurisdiction of universities are fast vanishing and distance and other informal modes (like, e.g. virtual campuses) of education are spreading throughout the world. GATS and ICT revolution

have resulted in many an advanced country setting up their campuses, both physical and virtual, in developing nations.

In short, as far as higher education institutions in developing nations like India are concerned, the need of the hour is to bring in very high level of competitiveness for their educational programmes and hence to make it market-friendly. Competitiveness pressures arising mainly out of internationalization in the field of education has enormously enhanced the need for more and more amounts of latest knowledge.

The observation by Kulandai Swamy (2003) [13] is worth mentioning in this regard: “Students from developing countries were moving to Universities in the advanced countries for higher studies; but today the universities in advanced countries are setting up their campuses in developing countries. It is now possible through satellite communication for a university in the USA to offer its programmes with the same lectures, assignments and discussions in China or Russia. Academics in India must prepare themselves for international competition right on our soil in the field of higher and continuing education.”

Part III

Strategies for making our Higher Education System more Effective

In view of the foregoing, the following strategies appear to be quite meaningful and appropriate to make the higher education system more effective and dynamic.

- (i) The most important need is that of formulating a national pattern of higher education that specifically addresses our economic, social and cultural requirements. This is because of the fact that we still

follow a higher education system that follows, by and large, the one left behind by the British.

- (ii) Need for flexible and pragmatic education policies: In view of the rapidity of the developments in the field of education these days, what is really required is education policies which are flexible enough and pragmatic to address to the ever growing needs of the globalized world. The traditional rigidities associated with the Indian university system should definitely change. The latest experiments in respect autonomous colleges, self-financing institutions, private universities etc. appear to be a welcome initiative in this direction, in an economy that is becoming increasingly global, wherein “survival of the fittest” is the natural rule.
- (iii) In order to ensure a quality of the highest order, there should be a permanent and rigorous mechanism for quality assurance of all higher education institutions on an ongoing basis. Accreditation be made mandatory for all such institutions. Some commendable efforts already made in this direction by NAAC (under UGC) or NBA (under AICTE) should be further streamlined and systematized.
- (iv) Higher education institutions should be ‘Learning Organisations’: The basic purpose of higher education to shape up the inherent process of cultural reproduction. Besides, they not only train academic professionals, but also nurture the scientific temper of questioning facts and norms and accordingly they raise critical consciousness about the process of general socialization. Further, apart

from providing subject expertise in specific disciplines, these institutions have to contribute substantially to intellectual enlightenment with the help of duly researched and diagnostic interpretations. In short, the institutions of higher education, themselves have to be learning organizations i.e. those which can sense the changes in the environment fast and also respond proactively to such changes.

- (v) Because of the tremendous benefits that ICT can provide in any field, particularly in respect of an ever-dynamic and strategic field like higher education; and also because of the already available ICT infrastructure of India as being the best outsourcing destination of the globe, it is imperative that any policy initiative in this field should also be one that embraces ICT to the extent possible.

Conclusion:

India has got a higher education system that is second largest in the world, with about 350 universities and 17000 colleges, and there has been commendable growth in institutions over the years. However, in respect of gross enrolment ratio which is just 11 percent (tertiary education) as per the latest World Bank estimates, there is enough scope for improvement. In order to become a developed nation India has to improve this ratio significantly. Some experts feel that this should be a minimum of 40 percent. But, looking at the current level of just 11 percent, we may very realistically fix an immediate target of 25 percent – the barest minimum for the time being. Another matter of concern is the significantly low

quality of education as per international benchmarks. To rectify this problem, stringent measures for quality assessment and accreditation are required. In spite of a few limitations of the system as above, let us hope that India could register quite significant knowledge-based growth and accordingly emerge as one of the major players in the global educational arena in the days to come.

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EMERGING TRENDS IN HIGHER EDUCATION

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INTRODUCTION

Change is the elixir of life. Change is inevitable. In the context of liberalization, privatization and globalization there is a world wide competition in every walk of human activity. It is highly imperative to be alert to face the world full of competitions Whatever we want and try to achieve should have a direct bearing on the quality standards. Educationists should become increasingly aware of the process of change and try to design courses, curricula and content. The objectives are likely to be realized by revamping the skills of teachers by enhancing the quality of teaching, class room communication, and the quality of team efforts thereby ensuring by the of all stake holders of educational endeavours.

In the globalised context, the learner is the customer. Educational managers do well to ensure the product quality and service quality. All individuals have to contribute to the quality of product, namely the learners, service and management ensuring the overall credibility of the institution. In the educational setting, service quality means focusing the attention on all educational services, particularly the interface between the institute and industry and between the teacher and learner. The global perspectives of educational sector are analyzed here:

Quality assurance :

Globalization has promoted the quality of institutions. A student seeks admission with the hope of

getting quality education in the educational institution which is chosen by him. Quality teaching, quality learning, experiential learning and blended learning are mantras which highlight the quality of education. Internal quality assurance cells are established in colleges.

It takes care of quality course curriculum and content quality methods and strategies of communication to achieve the course objectives and quality methods. It will also develop quality methods and strategies of testing and evaluation. The quality cell ensures enhancement of the quality of life and status of the members of the staff as individuals and as members of groups in an educational institution. The quality of the life of the learners is of paramount importance.

The quality assurance cell also strives hard to ensure the quality performance of the learners. The end results alone will not be taken into account for quality assessment. The means or processes through which the final results are achieved are given importance and weight.

The quality organization ensures healthy relationship amongst the members of the organization. Quality life also is ensured among the teachers and the learners. Alumni associations acts as a link in ensuring quality life of the learners even after the learners complete their course of study. It will result in greater mutual benefits.

Placement assurance :

Almost all institutions of higher education are aware of placement assurance. They appoint a placement officer who looks after the job opportunities of the

students. The placement officer has contact with industries and corporate sectors. He arranges campus interviews in the institution for not only for his own students but also for students from other educational institutions.

Tie-up for placement and MoU :

Globalisation has also given the possibility of creating tie up with industries for placement and also promoted Memorandum of Understanding with industries. The companies who conduct placement interview want to know what the students actually desire to become. They select by screening techniques, such as written test, group discussion and interview. Establishing MoU with corporate sectors is a credit to the educational institution.

Infrastructure :

Globalization has given a chance to improve the infrastructure of institutions. Both parents and students are eager to know about the infrastructure of the educational institution before they seek admission in colleges. Spacious and airy classrooms with lighting facilities are their expectation. Science students want to know about the laboratory facilities with modern sophisticated instruments and chemicals. Good hostel facility, sports facility, library facility and toilet facility are the other things they expect. An institution with good transport facility is also preferred by the students. A canteen which serves the student with hygienic food is always welcome by them. Drinking water is a very important factor which is a part of the infrastructure of the institution. Protected and purified drinking water is given to students who are the clients of the educational sector.

Teaching aids like OHP, LCD power point projectors and computers have become essential for all the departments of educational institutions. Internet browsing centre, Xerox centre, students' rest room, teachers' rest room and gymnasium are provided to students in almost all educational institutions of higher education. The infrastructure of the educational institution also determines the quality of the organization.

Because of globalization the libraries are well stocked with books and journals both national and international. Students have the opportunity of getting standard international books and journals for their reference and they also have the opportunity of getting research materials and literature through internet. Globalization is a boon for the development of infrastructure of the institution.

Conducting training programmes :

After globalization because of the development of competition among the educational institutions, the institutions have started rendering training programmes for the learners. Training in soft skill development, paper presentation, group discussion and techniques interview are conducted regularly for the betterment and job opportunities of the learners. Each institution tries to print a quality brand to attract more learners towards it. It also improves the business service of the institution.

Social responsibility :

Blood donation programmes, Aids awareness programmes and Environment awareness programmes are arranged periodically by Institutions. Red Cross Club and Red Ribbon Club engage the volunteers in social service.

Nearby villages are adopted Health awareness camps are conducted in the adopted villages. Students have the opportunity of coaching economically backward children in the villages by conducting week-end classes. All these inculcate a social responsibility in the learners who understand life and adjust with the difficult situations which they come across in their student life.

Increase of competition :

Globalisation has increased the sense of competition among the educational institutions. Every institution wants to introduce new courses which are job oriented. Examples are the Introduction of Computer Science, Information Technology, Bio-technology, Bio informatics, Genomics and proteomics, genetic engineering, gene technology, Microbial biotechnology, Fashion technology, Hotel Management and Catering Science and Computer application. Universities and Colleges offer MBA programmes with specialization in Finance, Marketing, System analysis, Banking and Hospital Management. The healthy competition among the institutions keeps the academic metabolism of the institutions very active.

Positioning and accreditation :

The Central Government and state governments insist upon getting a credit to institution. Based on the norms and guidelines of NAAC and AICTE the institutions are accredited. To get accredited institutions strive hard to improve the quality and to boost up the image with the credit awarded to it. Both the teachers and the learners are willingly taking part in the accreditation of the institution. Even after the accreditation they work hard to maintain the quality and achieve excellence in performance. An

institution gets the position according to the credit given to it. Positioning keeps the institutions always vigilant about their processes of maintaining the quality of the teachers and the learners.

Choice based credit system and value added education:

Many autonomous institutions have introduced choice based credit system and value added education in their curriculum. A science student can select his favourite subject in arts and the arts student can select his subject of interest in science. This improves the interdisciplinary growth of the learner and also helps for the all round development of his personality. The value added education helps the learner to achieve his objectives and attain values necessary for leading a complete life.

Part-time Certificate Courses :

Globalisation has also helped the institutions of higher education to conduct part-time institutional certificate courses and university certificate courses on their campus. A learner gets the chance of improving and developing his knowledge in other subjects also. At the same time the certificate courses also help the learners for getting better placement. The learners have also felt the need of gaining knowledge in different subjects which will uplift their personality and lay a strong foundation for their successful and prosperous life in future.

Study abroad :

Globalisation has opened the way for the learners to continue their higher studies abroad. Many foreign universities have reduced their fees for the courses offered by them. They also give scholarships to the learners.

Countries like England, Australia, Germany, New Zealand and Russia have reduced their tuition fees.

Value Ethics :

All educational endeavours are built upon a sound and solid foundation of highest ethical standards, virtues and values. They have thoroughly understood the need to build up modern India with their learners endowed with ethical virtues and values. It is also a welcoming factor which will strengthen our nation and promote national integrity.

Communication skill in foreign languages :

English has been established as a language of global communication and a language of opportunities. A high degree of proficiency in English and excellent communication skills enhance the employability of students. In view of the increasing importance of English for career purposes, universities and institutions are offering courses in communication skills as part of their general English course. Globalization also has promoted the learning of other foreign languages like German, French, Japanese, Spanish and Chinese. If a learner is interested in developing his communication skills, he can join courses offered by universities and colleges. Learning one more foreign language will make the chances of the learner bright for employability.

Promoting Research activities :

Formerly learners had to go to a university for higher studies after completing their post graduation in colleges. But now research facilities are available in colleges themselves. The learner can very well pursue his

research work in the college as all a resources are available there. Facilitating research activity in colleges is the positive outcome of globalization. Quality guides are guiding the research work of their research scholars. Some of the institutions are publishing their our journals to promote research activity of the learners.

'E'learning facilities :

Globalisation has made possible 'E' learning. Many resource materials are available in 'E' form. Development of Information Technology has made it very easy to access 'E' learning. Online examinations are also conducted. Many institutions have established 'E' libraries.

Conclusion :

Globalization has changed the total educational scenario. The change occurring in educational institutions has led them towards achieving their goals and objectives resulting in the enhancement of quality of environment. It has resulted in the enhancement of the quality of infrastructure of the organization and the quality of the life of the members of the system.

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NOW OR NEVER: SHIFTING PARADIGMS AND EMERGING TRENDS IN HIGHER EDUCATION

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INTRODUCTION

Education, particularly higher education as the instrument of individual, societal and economic transformation is well recognized now more than ever. Consequently, there have been greater interest and investment in higher education the world over with the concomitant increase in the number of students who opt for higher education. This demand for higher education form a sizeable portion of the population is going to continue during the years to come. In addition to the need for the expansion of higher education, there are a number of political and socio-economic factors that affect the development of the system of higher education in any country. In order to cope with these challenges effectively and efficiently, it is essential that the educational institutions have a realistic understanding of the emerging trends and the role they have to play to build a better future.

REFORMS IN HIGHER EDUCATION

The higher education system is witnessing significant transformations and reforms, including the emergence of new types of institutions and the higher education landscape are changing very fast. Today, there are universities without building or classrooms or even a

library. There are universities located thousands of miles away from its students in a different continent. There are higher education institutions (HEIs) open 24 hours a day, seven days a week, and 365 days a year.

There are HEIs that offer degrees with a catalogue of hundreds of courses. These developments that seem to be imaginative are indeed realities. Soon the system may introduce degrees valid only for five years after graduation and colleges willing to reimburse its students if they do not find a suitable job within six months after graduation. With the developments in WTO and GATS we will soon have countries whose main exports earnings come from the sale of higher education services. There are also changes in patterns of financing and governance, establishment of external quality assurance mechanisms, reforms in curriculum design, and technological innovations for teaching-learning. In this rapidly changing scenario, the higher education institutions are expected to quickly adopt to emerging developments and plan for a better future. The prerequisite to plan for a better future is an understanding of the changes and their impact on the system of higher education.

An analysis of the changing context reveals the following trends, most of which are likely to permeate through the educational policies and practices of the next few decades:

Trend I

- 1.1 Shift from elitist to mass education
- 1.2 Continuing quantitative expansion

Trend II

- 2.1 Decreasing funding from governmental sources
- 2.2 Debate on higher education as a non-merit item
- 2.3 Increasing demand for non-formal and life-long learning
- 2.4 Socio-political pressure based on demographic, political, and socio-economic changes
- 2.5 Increasing private initiatives
- 2.6 Increasing influence of market forces

Trend III

- 3.1 Focus on science and technology
- 3.2 Shift from mono- to multi- and inter-disciplinary approach.
- 3.3 Rethinking the role of universities

Trend IV

- 4.1 Quality Assurance

QUALITY OF HIGHER EDUCATION IN INDIA

In the current shuttered environment, the quality of education and research in Indian universities has been in consistent decline and they continue to lose their best students to universities abroad. Unsurprisingly, on every measure higher education in India lags behind. Even though we have IITs and IIMs many students are not able to serve in India. The flood of Indian students into universities in the United States, Britain, Australia and Singapore indicates that given half a chance Indian students would exit the system. The country's premier economic research institution, the Delhi School of Economics, has only 5 registered M.Phil aspirants and an even smaller number of Ph D students. Another indicator of

the rot in higher education is that Indian research publications account for only 2 percent of papers published worldwide.

The entry of foreign universities into India is likely to prove a boon for higher education. Opening the door to foreign institutions of higher education is a necessary first step towards breaking down the massive wall between Indian students and quality higher education. It would be ironic to allow foreign companies to sell us cars, phones, toothpastes and lipsticks, but deny their participation in the provision of education which is far more crucial to improving the quality of life of Indians.

There can be no doubt that higher education has made a significant contribution to economic development, social progress and political democracy in independent India. It is a source of dynamism for the economy. It has created social opportunities for people. It has fostered the vibrant democracy in our polity. It has provided a beginning for the creation of a knowledge society. But it would be a mistake to focus on its strengths alone. It has weaknesses that are a cause for serious concern. There is, in fact, a quiet crisis in higher education in India that runs deep. It is not yet discernible simply because there are pockets of excellence, an enormous reservoir of talented young people and an intense competition in the admissions process. And, in some important spheres, we continue to reap the benefits of what was sown in higher education 50 years ago by the founding fathers of the Republic. The reality is that we have miles to go. The proportion of our population, in the age group 18-24, that enters the world of higher education is around 7 per cent, which is only one-half the average for Asia. The opportunities for higher

education, in terms of the number of places in universities, are simply not enough in relation to our needs. The quality of higher education in most of our universities requires substantial improvement.

It is clear that the system of higher education in India faces serious challenges. And it needs a systematic overhaul, so that we can educate much larger numbers without diluting academic standards. This is imperative because the transformation of economy and society in the twenty-first century would depend, in significant part, on the spread and the quality of education among our people, particularly in the sphere of higher education. It is only an inclusive society that can provide the foundations for a knowledge society.

PARADIGM SHIFT IN HIGHER EDUCATION

Various developments both locally and globally, in areas such as post modern science, people power, social formations and moves towards new environmental ethics are signs of an important paradigm shift. *Higher Education Pendulum Swings*

From

To

♦ Liberal-classified	Industrial –Commercial
• Liberal Education	Vocational Emphasis
• Academic Independence	Industrial relevance
• Total societal access	Restricted access
• New selective access	Selective access
• Personal Development	Manpower planning regions
• Basic research	Applied/Strategic research

• High value of Humanities and arts	Utility of subject
• Research for knowledge	Directive research
• Specialisation	Broader/Multidisciplinary
• Government financed	Self financing

ACTIONABLE INITIATIVES BY INSTITUTIONS

At present India has five hundred and forty million youth under the age of 25 which will continuously be growing till the year 2050. In the coming decades, India needs large number of talented youth with higher education for the task of knowledge acquisition, knowledge imparting, knowledge creation and knowledge sharing. Between now to 2050, two important events will be taking place in our country, India would have become a developed nation by 2020 through an integrated development plan in 5 key areas where India has core competence. India would also have realized Energy independence by 2030. During this period, the youth population which accounts for 54% of the total population of the country will be continuously growing till 2050, which will be unique to India. The youth power is indeed a great power, particularly the ignited mind of the youth is the most powerful resource on the earth, above the earth and under the earth. This presents an opportunity to develop a “Global Human Resource Cadre” which will be an essential resource for not only for India but for many countries in the world. NIT will have to work towards increasing education system from the existing 10% to 15% by the year 2015, 20% by the year 2020, 25% by the year 2025 and 30% by the year 2030.

The new form of knowledge production poses an immense challenge to existing institutional structures of the higher educational system. There is a clear shift of the process of knowledge production, where the university or for that matter institutions of higher education are not the focus, but individuals and competencies become the central categories of analysis. The challenge is further made more difficult since there has been an expansion of the higher education system, where not only the kinds of institutions engaged in this business have increased but also the very numbers of universities has grown. It is not the size of these institutions that pose a challenge but the varied functions of these new kinds of institutions. The two varied functions to be undertaken by the Higher Education institutions are:

Capacity building among students:

"Learning gives Creativity, Creativity leads to thinking, Thinking provides knowledge and Knowledge makes you great"

When the students come out of the educational institutions certain capacities are required to be built in them to deal with the real world, particularly to grow in their professional career and participate in the national development. The ingredients for capacity building must be embedded right from the beginning of the students life from primary education to higher education. A good educational model is the need of the hour to ensure that the students developed as enlightened citizens and also participate in national development missions. For participating in the nation building tasks: the capacities

required to be built among the students in their formative years by the educational institutions are:

- a) The capacity for research or inquiry
- b) The capacity for creativity and innovation
- c) The capacity to use high technology
- d) The capacity for entrepreneurial leadership and
- e) The capacity for moral leadership.

Research and enquiry:

The 21st century is about the management of all the knowledge and information we have generated and the value addition we could bring to it. We must give our students the skills with which they find a way through the sea of knowledge that we have created and continue with life- long learning. Today we are empowered by technology to teach ourselves beyond classrooms and become life-long learners. This is indeed required for sustained economic development of the nation and also individual prosperity.

Creativity and Innovation:

The management of knowledge in the 21st century is beyond the capacity of a single individual. The amount of information that we have around is overwhelming. The management of knowledge therefore must move out of the realm of the individual and shift into the realm of the networked groups. The students must learn how to manage knowledge collectively and to work in multidisciplinary teams. When the information is networked the power and utility of the information grows multifold. Information that is static does not grow. In the new digital economy, information that is circulated across enterprise, creates innovation and eventually contributes to national wealth.

Capacity to use high technology:

Every student in our schools and colleges should be brought in contact with technology to aid their learning process. Educational institutions should be equipped with adequate computing equipment, laboratory equipments, and Internet facilities with high band width connectivity and provide an environment for the students to enhance their learning ability. In the midst of all of the technological innovations and revolutions we cannot think that the role of the teachers will be diminished. In fact the teacher will become even more important and the whole world of education will become teacher assisted and would help in "tele-porting" the best teacher to every nook and corner of the country and propagate the knowledge. The teacher becomes a facilitator and knowledge manager.

Entrepreneurship:

The aptitude for entrepreneurship should be cultivated right from the beginning and in the educational environment both in the Schools and the Colleges. We must teach our students to take calculated risks for the sake of larger gain, but within the ethos of good business. They should also cultivate a disposition to do things right. The inner being must be illuminated with righteousness. This capacity will enable them to take up challenging tasks later.

Moral leadership:

Moral leadership involves two aspects. First it requires the ability to have compelling and powerful dreams or visions of human betterment. Moral leadership requires a disposition to do the right thing and influence others also to do right things. There is a need for inclusion

of "moral science" class as a part of education in all the schools and colleges. If we develop in all our students these five capacities, we will produce "Autonomous Learner" a self-directed, self controlled, lifelong learner who will have the capacity to both respect authority and at the same time is capable of questioning authority, in an appropriate manner. These are the leaders who would work together as a "Self-organizing Network" and transform any nation into a developed nation in a time bound manner.

Employment-oriented education

A sea change is likely in the approach to taking education to everyone cutting across social, gender and geographical barriers in the Eleventh Plan. The Plan will focus more on improving secondary school education, enhancing employable skills at all levels and give a thrust to science education, which is being overshadowed by the growth of technical education.

To reach these ambitious goals:

- Private players

The government will increase its allocations manifold and at the same time involve the private players who have become crucial in increasing the intake capacity and that too at the required pace. The thrust will definitely be on involving them in taking education to every doorstep and only to those who are "not-so-business minded" would be encouraged.

The importance of private players' role could be gauged from the fact that during the 10th Plan, the share of private unaided higher education institutions increased from 42.6 per cent in 2001 to 63.21 per cent in 2006. Their

share of enrolment also increased from 32.80 per cent to 51.53 per cent. With their participation in the education sector inevitable now in view of the changes across the globe, the growth is bound to increase.

Spending on education by the government will also witness a quantum leap. In the 11th Plan, the projected allocation for education is Rs. 2,74,228 crore and it will be 19 per cent of the total allocation, while it was just Rs. 62,461 crore under the 10th Plan and the amount was just 7.68 per cent of the total budgetary allocation. The enormous increase mean to the students by providing Quality and employable education to more people and getting a chance to study in world-class institutions.

- **Restructuring**

The system will be restructured to impart competitive skills and capabilities of global standards. But again those who have been denied access to education due to various factors would be getting a prime share in the government spending. Reduction in regional and social disparities, support to institutions located in border, hilly, remote, small towns and educationally backward areas, support to institutions with larger students population of Scheduled Castes, Scheduled Tribes, Other Backward Classes, girls and minorities and provision of scholarships, fellowships, hostel facility and remedial coaching to neglected sections will be the top priorities. So the financial assistance will be increasing enormously. While the urban students will get exposure to quality education through establishment of 30 Central Universities, students residing in the backward areas will get 370 additional degree colleges.

- **Women's education**

About 6,000 colleges that are not getting UGC funds now will be financially helped to improve standards. And the good news for women is that construction of hostels will be taken up in a big way in the colleges and the universities thus bringing education closer to them. Top priority is being given for this project understanding the need to include women in the growth of the nation. The focus of 10th Plan was on primary education but now the time is to strengthen secondary education, and as part of it, 6,000 model schools would be created apart from polytechnics. These will be done in public-private partnership with an idea to reach the neglected areas.

- **Focus on sciences**

The diminishing interest in pure sciences due to job potential in the technology sector was a matter of concern and the government agreed to establish three new Indian Institutes of Science Education & Research (IISER) in addition to the existing ones at Pune and Kolkata. These would come up in Bhopal and Thiruvananthapuram while one has already started at Mohali and with focus on research in sciences. These are apart from the IITs and NITs. But the plans will take shape only if the Gross Enrolment Ratio is increased to the targeted level of 15 per cent. The whole effort of allocating huge amounts to the education sector is to increase the GRE on par with the world average of 22 per cent.

Conclusion

The challenges that confront higher education in India are clear. It needs a massive expansion of opportunities for higher education, to 1500 universities nationwide, that would enable India to attain a gross enrolment ratio of at least 15 per cent by 2015. It is just as important to raise the average quality of higher education in every sphere. At the same time, it is essential to create institutions that are exemplars of excellence at par with the best in the world. In the pursuit of these objectives, providing people with access to higher education in a socially inclusive manner is imperative. The realization of these objectives, combined with access, would not only develop the skills and capabilities we need for the economy but would also help transform India into a knowledge economy and society. The cornerstone of successful education, training and certification is the effective use of assessments. The 21st century offers a real opportunity to use technology to make assessments more widely.

Higher Education Institutions need to

- ◆ Network with user agencies, society etc.
- ◆ Evolve short term knowledge cum skill oriented programmes.
- ◆ Reduce quantity on the long term conventional academic programmes
- ◆ Evolve research to generate knowledge for local specific needs

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HIGHER EDUCATION REFORMS WITH SPECIAL REFERENCE TO SOCIAL SCIENCES

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It is a well known fact that education contributes to both economic growth and social development. Particularly higher education's role is crucially significant in promoting economic progress of a nation as well as in transforming societal structure and fabric. In the current context of globalisation with emphasis on knowledge and information, it is the knowledge that drives economic growth and it has the potential to influence social functions, values and modes of interaction. It is this knowledge which is currently being generated in the arena of higher education systems across the world. Hence the economic growth of a nation depends on the capacity of the higher education system to produce the required knowledge base as well as on the process of dissemination and utilisation of such knowledge not only for domestic consumption but also for global consumption. Thus such an important function of knowledge production and dissemination has been the onerous responsibility of the higher education systems in all countries including India which are on the path of economic progress.

The higher education system is expected to play a crucial role in generating new ideas through research and development and in accumulating and transporting human capital, in terms of knowledge and training, skills attitudes and values. However, in the present context of globalisation, it is increasingly being felt that higher

education is no longer the sole generator of knowledge needed for development, as knowledge is also being produced for market purpose in other industries such as IT, BT and other corporate sectors and industries which are moving into the core production sectors in the knowledge economy. Yet, higher education systems through their research and teaching help to produce expertise, manage development, engineer social transformation and preserve social values and cultural ethos (Verghese, 2007). Because of such an important role played by higher education systems it is still considered as a very vital component of the entire education system.

Today much knowledge required for development is available at a low cost but its accessibility and use depends on the human capacity to process and absorb it. In the present context even if a country's capacity to produce knowledge is weak, its capacity to access and absorb it determines the pace with which it can develop. It is precisely for this role, higher education assumes vital significance in enhancing human capacity to absorb and use knowledge.

In so far as considering the benefits of higher education it is noticed that individual benefits of higher education in terms of better employment, higher salaries and greater abilities to consume and save are well documented. Rates of return analyses in the recent past have shown a reversal patterns- returns to tertiary education are increasing and those to primary education are declining, widening earning differentials between university graduates and those with lower levels of education. Higher education makes a significant contribution to reduction in absolute as well as relative

poverty and is found to be related to human development indicators which reflect other dimensions of human poverty as it significantly reduces infant mortality and increases life expectancy. Recent evidences suggest that income inequality is high where enrolments in higher education are low. A comparison between developed and developing countries further illustrates this point. It is argued that low enrolment rates in higher education and high income disparities coexist in the early stages of development in many countries (Varghese, 2007). A recent analysis of Indian and cross national data on higher education, economic growth and development using poverty and HD indicators such as infant mortality and life expectancy clearly shows that higher education plays a significant role in development (Tilak, 2007).

Higher education in India - Rapid Expansion & Emerging Concerns

It is noticed that there has been an unprecedented expansion in higher education in India during the last few decades. Prior to independence the country had only 20 universities. However in 2005, the number of universities in the country has increased to 357, comprising 20 central universities, 217 state universities, 106 deemed to be universities and another 18 institutions of national importance established through central and state legislations. The number of colleges offering general degree education has increased from 500 in 1947 to 17,625 in 2005. The number of colleges offering technical education such as engineering, management, pharmacy and allied subjects was 5473 in 2004. The overall number of teachers

in higher education has increased from 700 in 1950 to 4.72 lakh in 2005.

Notwithstanding the quantitative expansion of the higher education system, access to higher education in India is still far below the expected level. The proportion of our population in the age group (18-24) that enters the world of higher education is around 7.0 per cent, which is only one half the averages for entire Asia. In fact when compared with that of the world (23%) and other advanced countries (40-50%), this figure is far much lower. China with more than 17 million students has the world's largest higher education system, yet it is found to enrol 20% of its university age population, which is quite higher than that of India. India with third largest enrolment in the world has only about 10 million students in higher education system which works out to less than 10 per cent of the age group (Tilak, 2007).

Equity in higher education in India is also a serious issue. The progress of higher education across regions, rural-urban and states and also across social categories indicates that the growth has been uneven across different population segments. There are pockets of excellence as well as pockets of mediocrity. As per available statistics, the enrolment rates in rural area are just 7.76 per cent as compared to 27.2 per cent for urban areas in 2001. Similarly inter-state variation is also noticed. States such as Nagaland, Goa, Maharashtra are placed at the high spectrum of enrolment ratio as compared to Bihar, Orissa, West Bengal and Rajasthan, which are at the low end of the spectrum. Differential enrolment ratios are also seen for male (11.1%) female (7.9%), S.C.(7.0%) and S.T.(4.6%) (Thorat, 2006).

Quality in higher education is yet another serious concern in India. Quality of higher education in colleges and universities in terms of various parameters is far from satisfactory as reported by various committees and commissions. A substantial proportion of colleges is not assessed for quality. As of now only 20% of the 14,000 colleges seem to have been assessed and accredited by the NAAC and bulk of them is of medium to low quality (Thorat, 2006). From yet another source we notice that only 10% of the colleges have been assessed by the NAAC (NKC, 2006). Lack of financial resources, poor governance regulatory framework, unwieldy student strength, and poor accountability systems have further compounded the problem in higher education leading to poor quality.

One more serious concern is that of relevance. To what extent higher education offered in our universities and colleges is relevant from the point of responding to the emerging demands of the economy and society as well as in equipping and preparing the individual student for the emerging challenges is an issue of significant concern. Increasing number of degree holders are not in a position to acquire gainful employment or engage in any self employment clearly indicating mismatch between supply and demand of the job market.

Higher Education and Social Science Disciplines

The higher education system across the world does not reveal uniform pattern in terms of structure, form, programme content, duration, type and mode of delivery. In India also, across universities there is variation. However, in general higher education is categorised in

terms of broad faculties of studies such as Arts, Humanities, Social Sciences, Law, Natural Sciences, Life Sciences etc., In the context of globalisation, as higher education is directly impacted by the market forces, the value of disciplinary faculties is determined by their marketability in terms of demand and absorption into the labour market. In knowledge driven economies, knowledge and services become tradable commodities and hence will carry relatively more weight. It is those specialised abilities, skills and technological competence which command greater demand in the labour market rather than mere general abilities. Engineering, computers and electronic specialisation certainly will command a higher currency not only in the domestic market but also in the international market in the context of globalisation. In such an event, what will happen to social science disciplines how will these disciplines survive the threat of globalisation and what adjustments and modifications are required to revive these disciplines and what issues and concerns need to be addressed in the process of higher education reforms are some important questions which need to be addressed. This paper in essence discusses some of these issues and concerns. In the first place the paper takes a critical look at the available secondary database to map the trends and patterns in the higher education and in the subsequent part it addresses the issues and concerns relating to higher education reform with special reference to social sciences.

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REFORMS IN CURRICULUM DEVELOPMENT WITH SPECIAL REFERENCE TO COMMERCE EDUCATION

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INTRODUCTION

Commerce is one of the ingredients of business. Business includes industry and commerce. But actually both business and commerce are the branches of Economics. Economics decides what to produce, how to Produce, who will produce and when to produce Industry helps in converting the raw materials into finished goods with factors of production and commerce helps such functions by transferring by finished products, by financing such activities, by storing and saving from loss, by giving information about goods and services and by activating the buying and selling producers, products and services. Commercial activities and the education about such actions and transactions is called Commerce Education.

Concept of Curriculum

A concept of the curriculum is more helpful and valuable than a formal definition, because of the diversity of curriculum practices, programmes and interpretations throughout India. A curriculum has been said to consist of:

1. all the experiences the child has, regardless of when or how they take place.
2. all the experiences the learner has under the guidance of the schools.
3. all the courses which a school offers.

4. the courses offered within a certain field, for instance, “the science curriculum” and “the commerce curriculum”.

Problems in present Curriculum

All universities do not follow a uniform pattern of the syllabus. The standard is not fixed, level of understanding the subject is not estimated, required knowledge whether expert knowledge, general knowledge, practical knowledge, executive knowledge, etc., is not determined. Even if they are fixed, constructed and determined, it is not followed strictly. All such drawbacks of the present commerce curriculum make commerce education defective.

Curriculum of Commerce Education :

Commerce Education is simply one phase of the total educational programme. The curriculum in business education is a special area of instruction that deals directly with,

1. business skills and techniques,
2. business knowledge and facts
3. business understanding
4. economic understanding and business attitudes, and
5. business appreciation necessary to understand and adjust to that economic and social institution known as business.

Importance of Curriculum Development in Commerce Education :

1. Improve the quality of the educational services of schools and colleges.

2. Prepare the student for employment and career in business.
3. Provide opportunity for all students to gain an understanding of the business world and the consumer world.
4. Provide the opportunity for all students to learn those skills and business abilities which they can use effectively in their personal life.
5. Give the attention to both preparation for taking up a job and preparation for advancement in it.
6. Give attention to the development of desirable personal qualities, traits and attitudes in each individual student.
7. Meet the standards of modern business and assist in building pride in the students.
8. Permit each student to progress at his own rate until he achieves valuable personal goals.

Needs for Redesigning

Commerce Education has major roles to play in the process of economic development of our country. Commerce education is a common education; it is the education for business. Commerce is the basis for all ultimate activities.

A meaningful commerce education will take the country from the underdeveloped stage to the developing stage and from there to the economically developed stage. Hence, right from the higher secondary course, commerce education is to be carefully redesigned and curriculum is to be rightly constructed.

Redesigning

Commerce education is being taught at present. At the higher Secondary Level (+1 and +2), In +1, there are two papers called Business Studies and Accountancy. In +2 also there are two papers in the same name. Syllabi for these papers are not consistently designed and constructed. Many portions are repeated. Students who seek admission into B.Com or BBA, etc study once again the same subjects, same portions of which make the students lazy and inattentive. For example, Sole Trader Final Accounts, Partnership Accounts and Company Accounts are in +2 and the same is repeated in B.Com and B.B.A. Though the standards differ here is difference between +2 and degrees as the teachers also teach the same subject the same manner there is change in evaluation pattern also. Some students face problems in doing simple problems in arithmetic at the degree level and even at the postgraduate level in commerce education. Maning such practices dilute the importance of the commerce education. Hence the following redesigning is suggested for Commerce Education.

1. The name of the Commerce Education is to be changed into Business Education. B.Com. Degree is to be replaced by Bachelor of Business Studies BBS, and the M.Com by the MBS.
2. Level of Teaching is to be very thorough. Students are not to be asked to mug up. The principles are to be clearly explained with many examples. Strict discipline is to be maintained.
3. A simple Project work is to be introduced with the practical problems of a data collection with ole traders and other non trading organizations and

they may be asked to draw the final accounts of the concerns.

4. As far as the Degree Level is concerned, the proposed Business Education can be divided into 10 specialized groups. Each group may consist of three subjects, as Optional, I, II and III. Each subject is to be taught fully in V and VI semester as Paper I and II. The students have to take any one group.
 - Advanced Accounts and Income Tax
 - Finance and Audit
 - Banking and Salesmanship
 - Information Technology
 - Secretaryship and Laws
 - Costing
 - International Trade and Transactions
 - Organisation and Management, Office Organisations
 - Rural Development and Village Administration
 - Entrepreneurship (on Entrepreneurial Development)
5. Post Graduate Business Education, must have 10 papers each year and if it is semester pattern, each semester must have five papers as follows. Each Semester will have one paper common for all specialization and the remaining four papers are from the Specialization. The first year vacation is to be utilized for an on – the – job training for a period of 31 days in any organization by having a tie – up programme and the students will submit a training report. The final semester will have one paper Research Project with Viva Voce.

6. The syllabi for each subject are to be carefully constructed.
7. The level of knowledge in the Degree Stage (BBS) is Executive Level and the level of knowledge in the Master Degree Stage (MBS) is the Expert Level including the Executive Level. In Master Degree, only the Optional Subjects will be studied with advanced problems at expert level.
8. Each subject in the Commerce Education and the Proposed Business Education must have Assignment Work, Seminars, Tests, Group Discussion, The teachers are required to maintain a Students Ledger by recording all the marks awarded to the Students.

Measures for Curriculum Development

1. Research in curriculum : Facilities for such research should be established in the universities, in the secondary training colleges, and in the state institutions of education.
2. Preparation of textbooks and other teaching aids: Preparation of suitable textbooks, teacher's guides and other teaching and learning material.
3. Inservice education of teachers: With a view to developing improved teaching competence and better teaching skills in the changed situation. Consisting of seminars and refresher courses should be arranged to orient the teachers to the revised curriculum.
4. Relate Curricula to available facilities : Facilities available in the schools and the needs of the students with reference to their socio-economic background.

5. Freedom to schools to adopt experimental curricula:
To permit schools to try out experimental curricula.
6. Gradual introduction of advanced curricula : State Board of School Education to prepare advanced curricula and introduce them progressively in all the schools and all the subjects through a phased programme spread over a number of years.
7. Subject teachers' association : Formation of subject teachers' association for different school subjects. Experimentation and assist once in revision and upgrading of curricula through the provision of better teaching materials and use of improved techniques of teaching and evaluation.

Conclusion

The future of any country depends upon the country's economic development which in turn depends upon trade, commerce and industry on one side; the technological development, the entrepreneurship qualities on the other. A discipliner which has been catering to these needs is commerce education, The proposed business education will meet these demands.

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REFORMS OF CURRICULUM IN HIGHER EDUCATION IN INDIA

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INTRODUCTION

The Indian education system has expanded phenomenally since independence. Today, India has more than 398 universities and over 18000 colleges churning out over 2.5 million graduates each year. Statistically India stands at third place in terms of volume of production only next to USA and China. This set up is not even able to give adequate education to all education seekers. Barely 10% of eligible students get chance to finish their higher education. However, the major concern is quality education and its recognition in the international market. "India and Indians are sought after, Indian companies are becoming global players and India is even cited as a possible threat to future prosperity of the developed world". Simply put, India is "resurgent and enroute to prosperity". In this context, one should point out the disturbing deficiency in our present educational system as indicated in a recent KPMG report titled 'Global Skills for Graduates in Financial Services' (Business Standard), June 6, 2007 its says that 58% of Indian financial services organizations are facing difficulties in recruiting the right people with the right set of skills. The report also states that the graduates are coming out of universities" with inspiring theoretical knowledge".

But what the financial companies are looking for is business soft skills such as: team work, communication, client relationship management, customer services,

business awareness, problem-solving and achievement-orientation skills that are essential for them to operate in today's global competition.

As customers are becoming more and more demanding, retention of their loyalty has become difficult, and that is where the relative importance of 'soft skills' has increased. The net result is an acute shortage of skilled workforce for the financial services companies that are today contributing seven per cent plus to the country's GDP, which is likely to increase further.

Although there is growth in the infrastructure under higher education, which is rated to be the second largest after the US in the world, it hardly covers seven percentage of the population and is lower than even that of developing countries such as Indonesia (11%), Brazil (12%), and Thailand(19%) (Source: UGC Annual Report 200-01). In qualitative terms, it is depicting a still agonizing scenario: "There serious complaints at all levels about the lack of responsiveness in the system. Academic activities are at low ebb and the academic calendar itself gets seriously disrupted almost every year. The system of higher education continues to encourage memorization of facts and regurgitation rather than creativity. While the result in higher education are clearly determined by the foundation laid in school education, we cannot wait for the ills of school education to be remedied before bringing in meaningful improvements in higher education. We cannot ignore the fact that we do not have many colleges today which can pride themselves on imparting under graduate education of high quality, comparable to some of the well-known institutions in the world" (Ramamurti committee report, 1990). The findings of this report, though old, still

hold good and, for that matter, the current situation may be worse than what has been described in the report. The current plight of our university system is well described by Andre Beteille (2005) who laments that "our universities are simply functioning as a degree- giving institutions concentrating on conducting examinations rather than becoming a system that transmits, generates and interprets knowledge". Manoj Pant in his article – Reorienting Priorities (Economics Times 2007) – observed that according to the 2001 Census data, out of the 38 million university degree-holders, 28 million are non-technical graduates and are, therefore, considered by private sector as lacking employable skills. "One of the main reasons for such poor skill competency is the lop-sided growth with emphasis on churning out university graduates to the neglect of employable industry skills", he said.

If our youth have to acquire and enjoy a unique competitive advantage in the global job market, we should not cripple the universities-be they private or public-with bureaucratic procedures. They must be allowed to capitalize on the market opportunities by granting them freedom to redesign their courses or design new courses with least time lag. At the same time, universities must hone up faculty resources, build relationships with industry – the generator of employment – that facilitates a free dialogue between them in designing the requisite curriculum for supplying 'employable' graduates to the industry, and in the process help industry compete in the global market. "One key issue in faculty recruitment is the need for cross-fertilization of ideas in institutions of higher learning. All the great universities of the world have an inflexible policy recruiting only alumni of other universities

into the faculty. In India too, in earlier decades, faculty was from diverse backgrounds and drawn from other universities and states in large measure. But over the past three decades or so, increasingly faculty is drawn largely from among the alumni of the same university. Such 'academic incest' is leading to a stultifying atmosphere of limited intellectual interaction and undermining fresh thinking, new ideas and innovative research. As part of the effort to rejuvenate our universities, we need to adopt the global best practices in recruitment.

Today, the contribution of services sector to GDP is more than 50% (Rashmi Banga 2007) and the greatest chunk of it is contributed by export of services like software and other business and professional services that have grown from almost nil to more than 60% between 1980-81 to 2005-06. Similarly, according to a study by Banga and Goldar (2005), the contribution of service sector input to output growth in manufacturing (organized) was about 1% in the 1980s, which increased to about 24% in the 1990s. It means with an annual growth rate of 9%, service sector –exporting English –speaking skills of Indian boys and girls retailing, tourism and hospitality, BPOs/KPOs—is all said to become the job market for Indian youth.

K.Sudharao and Mithilesh Kr Singh (2006) argue that there is a gap between the need of employment terminals-industrials-and the academic institutions. As employment in governments is decreasing while the industry-related jobs are increasing, there is a need to foster close links between academic institutes and the user industry to identify gaps in skill requirements and fill them with proper modification to the curriculum.

So there is a need to employ technology oriented programme in to an innovative curriculam. Here is a proposal for one such programme. This unique programme will develop understanding of technology innovation and solution in the digital world. It will foster innovation through an interdisciplinary approach to industry and non industrial sectors that rely on technology and the internet.

e - Science:

Object Oriented Programming

- Machine Learning
- Grid Technology (including middle ware, data access, work flow and meta data management).
- Grid security issues for grid computing and secured protocols(SSH,SSL,TLS,HTTPS)

e - Technology:

Artificial Intelligence for the Internet.

- Technology for Entertainment.
- Technology for Energy.
- Technology for the health service.

e - Commerce:

- The Internet economy.
- Information technology management.
- Semantic Web.

e - Management:

- Intellectual capital.
- Corporate assets in the E-business.
- Customer Relationship Management.
- Marketing Communication.

e - Security:

- Authentication and Authorisation.
- e- Identity
- e- Biometric.
- e- Signature.

e - Forensic:

- History of computing crimes and legal issues.
- Auditing techniques, authentication methods, hard drive recovery and reconstruction method, and event and system logging techniques.
- Computer forensic applications and tools.
- Disaster recovery strategies.

e - Bio:

- Bioinformatics and its current challenges.
- Bio Application and Sciences.
- Data Mining.
- Pioneering Energy.

e - Nano:

- Principles of information processing and Nano technology.
- Procedures, process and practicals for Nano array processing
- Logic for molecular machine and quantum information processing
- Bio-Nano integration

The programme focuses on the advancement of technology and e-science as the core modules leading

students to optional modules for specialization in the sectors they wish to have a career in. This enables students to develop critical thinking and carry out a research dissertation of particular interest.

As technology matures career opportunities for MSc graduates with Innovative Technology Skills are expected to continue increasing in all sectors and this programme is designed to meet that demand. The requirements of industry are varied, challenging and continually changing, with innovation at the forefront of the knowledge explosion.

The programme can be studied full -time over one year or part-time over two years. The programme offers the flexibility to specialize in an area of choice. Students have to take two core modules e-Science and e-Technology which offers inter disciplinary knowledge of innovation in the use of technology by industry, government and businesses. Student can choose the following combination of optional programmes:

1. e-Management, e-commerce
2. e-security, e-forensic
3. e-bio, e-nano.

This will enable students to work in the following sectors:

- Telecommunications
- Entertainments
- Manufacturing
- Bio-tech industry
- Information security
- Pharmaceutical
- Aerospace
- Energy industry

- Media and television
- Ministry of defence
- An Organization with a global view or interest

The aim of this programme is to provide students with the sound theoretical and practical knowledge in innovative technologies:

- Knowledge
- Subject based practical skills
- Skills for life and work
- Admission requirements

Now in the days of stiff competition the banks are expanding their reach to customers through establishing branches, running mobile branches and ATMs. In a similar way universities also can run some popular courses on generic competencies. Nagarjuna University, Guntur has attempted to provide education to the commuters of train who travel from point to point. The classes will be held inside the train while they are on travel and they will be completing a course on communication skills.

Conclusion

The aim of this program is to provide students with a sound theoretical and practical knowledge in innovative technologies.

- Knowledge
- Subject based practical skills
- Skills for life and work
- Admission requirements

Educators must, therefore, strive to build long-term relationship with the emerging job market segments and offer in conjunction with them well-trained graduates with requisite skill sets who are ready to hit the ground running

and contribute to the growth of the business. Such innovative initiatives alone sustain our current growth rate of economy.

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SKILLS WITHIN AND BEYOND THE BOUNDARIES OF COMMERCE CURRICULUM

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In the overall educational framework, acquisition of skills and competence for employability have come to assume a critical role in the technologically changing world. It is no longer enough to be traditionally literate but what is required is a large base of skill to meet the changing demands of the present era of globalization.

Competence in any field is attained by a judicious mix of knowledge and skill: the skill gained by undergoing adequate training. But with the prevailing education system in our country, knowledge component predominates skill component, and the formal education system is unable to match education and employment.

Commerce education began its journey in India as early as in 1886 when the first commercial school was started in Madras by the Trustees of Pachiappas Charities. Thereafter, the Presidency College in Calcutta started commerce classes in 1903 which provided full-time instruction of two-year duration in subjects like English with special reference to commercial correspondence, arithmetic, an Indian language and shorthand, typewriting and book-keeping as optional subjects. It is vivid that communication skill, literacy skill and vocational skill had been incorporated into the commerce education since its inception.

During the post liberalization era, commerce education has been recognized as one of the most significant components of higher education and the ongoing economic reforms have accelerated the growth and spread of commerce education considerably. Commerce programs catch the fancy of the students. Commerce education and training in India is offered by specialized institutions like I.C.A., I.C.W.A., I.C.S., universities, colleges and higher secondary schools.

The traditional commerce education at the college level commences with the undergraduate course-B.Com and goes on to postgraduate course – M.Com and then reaches to research courses, namely, M.Phil and Ph.D. Though steps are taken to develop commerce education and curriculum to offer the required skills, the present scene of globalization insists on the acquiring of certain skills beyond the boundaries of commerce education.

Students coming out of colleges and universities should have knowledge, skills, attitudes, and values to become successful in a turbulent corporate environment. Corporate world expects positive work culture, high tolerance for ambiguity and disorder, motivation from within, a desire to postpone gratification, a spirit of sacrifice, and ethical conduct and behaviour from the job incumbents. Thus the students are in need of a handful of soft skills to cope with the ever-changing corporate scenario.

Skills within the Curriculum

A good curriculum has certain features such as giving the learner a sound knowledge base, developing the related skill of the learner and making the learner

undertake any responsibility connected to the chosen discipline. The commerce curriculum in the under graduate and post graduate courses is designed to enable the students to have a wide base of knowledge in the subject and to acquire the skills required of him from industry and trade.

The traditional commerce curriculum includes courses on Financial Accounting, Cost Accounting, Management Accounting, Banking, Income Tax, Commercial Law, Company Law and the like. In recent times there had been a significant metamorphosis in the Commerce curriculum and innovative courses have been introduced . The UGC has acted as the catalyst to bring about significant changes in the commerce curriculum and has introduced specialization into its fold

The University Grants Commission set up a Curriculum Development Centre in Commerce and entrusted it with the work of restructuring and reframing the various courses in commerce. The Centre prepared a Model curriculum for commerce education with two-fold objectives, firstly to enhance the academic standards by covering more and more latest advancements in the field of commerce and secondly to emphasize the professionalisation / vocationalisation of these courses making them job-oriented so that young persons, who pass out of educational institutions could get settled in life.

Apart from the usual B.Com program, a number of sister-specialty streams have been conceived in different aspects of Commerce in the UGC Model Curriculum. The Bachelor Degree specialty programs include Bachelor of Accounting & Finance, Bachelor of Marketing, Bachelor of International Business, Bachelor of Banking & Insurance

and Bachelor of E- Commerce. The master specialty programs include Master of Finance & Control, Master of Marketing, Master of International Business and Master of E- Commerce

The UGC Model Curriculum had recommended some PG diploma programs also. They are Diploma in Insurance Business, Diploma in Computer Based Accounting, Diploma in Taxation, Diploma in Business Statistics & Computer Applications, Diploma in Cost Accounting, Diploma in Inventory and Store Accounting, Diploma in Banking & Finance, Diploma in International Business and Diploma in Financial Services

The UGC forwarded this Model Curriculum to the various Universities requesting them to update their curriculum accordingly. In view of this model curriculum, many universities and autonomous colleges have tuned their curriculum to contain variety of skills. Widening the area of business knowledge has become the main concern and imparting computer skills the next effort in the modernized curriculum of most of the Universities and autonomous colleges.

As a result, topics such as "international accounting standards," "corporate governance," "new financial instruments," "e-commerce," "supply chain," "insurance," "import-export policies," and "WTO issues and concerns" are woven into the revamped curriculum to widen the knowledge base and develop greater theoretical skills. Offering hands-on-training on various computer packages like MS-Office, Tally, SPSS and the like strengthen the practical skills of the students. Financial Accounting Software Packages as a part of the curriculum not only

nurture the computer skills but also the accounting skills of the students.

Skills beyond the Curriculum

The growing phenomenon of globalization, liberalization and privatization has provided new dimensions in the field of commerce. E-commerce, e-finance, e-marketing, e-investment, e-banking, paperless trading and governance are gaining importance all over the world. At the same time, the outsourcing business, call center activities, small business operation and IT based services are expanding very fast. Hence new skills like presentation skills, e-transaction skills and IT processing skills are required to cope up with these changes.

The presentation skills equip one to offer a better presentation to the top management. As e-filing and e-governance have been in many Central and State Government organizations the e-transaction processing skills have gained prominence. With the introduction of the latest IT tools and techniques such as enterprise resource planning and business intelligence and enterprise information systems, the IT skills have attained significance.

In the initial years of career, technical abilities are important to get good assignments. However, when it comes to growing in an organisation, it is the personality that matters, more so in large organisations where several people with similar technical expertise will compete for a promotion. Hence training on soft skills becomes relevant where the education system does not delve into personality development.

"Soft skill training is essential because we do not have it in our academic curricula. Therefore, corporate houses have to take up the task of grooming employees who are the link between the company and the external world, so that they are able to present themselves better," says Sumeet Mehta, an equity research analyst with Fortis Securities Ltd. Behavioural training experts say there are several soft skills required in these circumstances. Some of them include:

- i. Interpersonal skills
- ii. Team spirit
- iii. Social grace
- iv. Business etiquette
- v. Negotiation skills
- vi. Behavioural traits such as attitude, motivation and time management.

Mohan Rao, a technical director with Emmellen Biotech Pharmaceuticals Ltd, Mumbai defines a 'good attitude': "It is a behavioural skill, which cannot be taught. However it can be developed through continuous training. It represents the reactive nature of the individual and is about looking at things with the right perspective."

Well-developed oral and written communication skills are essential so that one can interact successfully with all types of people and groups. "It is essential to be technically sound, but one should also have the ability to convey the idea to the masses in the simplest possible manner," says Mayurkumar Gadewar, an ERP consultant with Pricewaterhouse Coopers. The other important skills required include: working to meet deadlines, conflict resolution, public speaking, Diversity/Cultural Awareness, analytical and problem-solving skills, and leadership skills.

Case Study of Skills acquired by B.Com students of Fatima College

To identify the specific skills, a case study of the skills acquired by the final year B.Com students of Fatima College (Autonomous) has been attempted. The study aims to portray the skills acquired within and beyond the curriculum.

Skills within the Curriculum

The updated curriculum aims to impart the following skills to all the students

1. Theoretical skills with a sound knowledge base - Traditional courses like Accounting, Cost Accounting, Commercial Law, Company Law, Auditing Income Tax Law and Innovative Courses like E-Commerce, Insurance Management, Investment Management and Marketing of services
2. Communication (Oral and Written) Skills - Business English and Spoken English Courses
3. Arithmetic Skills - Business Mathematics and Business Statistics Courses
4. Computer literacy skills - MS-Office and Web Designing Courses
5. Computer Accounting skills - Tally 9 Course
6. Interpersonal (theoretical)skills - Value education and Counseling sessions
7. Social grace(Theoretical)skills - Human Rights and Environmental Awareness courses
(Practical) skills- Visits to Home for the aged, home for the destitute and exposure to human rights cases in court.

Skills beyond the Curriculum

The students are given opportunities to acquire skills as

1. IT and E-transaction skills – Internship in Banks (On the job training in E-Banking and Core Banking Solutions)
2. Advanced Computer Skills – Diploma Courses in Computer languages & Applications
3. Literary Skills – Functional English Course and Translational Techniques
4. Analytical/Research skills – Individual Projects/Dissertations
5. Driving Skills – Two wheeler and Four wheeler driver training
6. Entrepreneurial skills/ Vocational Training Skills - Soft Toy making course, Beautician Course, Fashion designing and Garment construction course, Food Preservation Course, Typewriting and shorthand
7. Leadership skills – Chances to take up leadership at varied levels, in associations, NCC, NSS and the like and through Leadership training program
8. Team Spirit skill – Participating in inter collegiate and intra collegiate competitions as a team, participating as a group in camps of NCC, NSS etc.,
9. Social Grace skill – Participating in Extension activity (Tutoring the students of a nearby Government school in Accountancy and Commerce)

The following table gives the number of students who have acquired the skills beyond the curriculum among the total 61 students of B.Com in the year of this study.

Skills Acquired Beyond Curriculum

S.No	Skills	No of students acquiring skills	Percentage to total number of students
1.	IT and E-transaction skills	17	28
2.	Advanced Computer Skills	19	31
3.	Literary Skills	0	0
4.	Analytical/Research skills	7	11
5.	Driving Skills	13	21
6.	Entrepreneurial skills / Vocational Training Skills	23	38
7.	Leadership skills	21	34
8.	Team Spirit skill	61	100
9.	Social Grace skill	55	90

All the students attended campus interviews and 28 of them have been placed in two IT companies. The impact of the skills acquired beyond the curriculum on the placement is analyzed on the basis of the following hypotheses and tested with the help of a statistical tool, Chi-square test.

$\chi^2 = \sum (O-E)^2 / E$, where O is the observed frequency and E is the expected frequency. The calculated χ^2 is compared to $\chi^2_{0.05}$ for $v=(c-1)(r-1)$. When the calculated χ^2 is less than the $\chi^2_{0.05}$ the null hypothesis is accepted and if otherwise the null hypothesis is rejected.

1. Ho: There is no association between IT and E-transaction skills acquired and placement in IT firm
2. Ho: There is no association between Advanced Computer skills acquired and placement in IT firm.

3. Ho: There is no association between Entrepreneurial/ Vocational training skills acquired and placement in IT firm.
4. Ho: There is no association between Analytical/Research skills acquired and placement in IT firm.
5. Ho: There is no association between Leadership skills acquired and placement in IT firm.

The following tables reveal the number of students with the skills and their placement position.

Students with IT and E-transaction skills

	With IT and e-transaction skills	Without IT and e-transaction skills	Total
Placed	15	13	28
Not Placed	2	31	33
Total	17	44	61

Calculated $\chi^2 = 17.01$ is greater than the χ^2 for $v=(c-1)(r-1)$ ie., 3.84 and the null hypothesis is rejected. There is an association between IT and E-transaction skills acquired and placement in IT firm. The Yule's coefficient value is 0.89 which proves that there is a high positive association between these two attributes.

Students with Advanced Computer skills

	With Advanced Computer skills	Without Advanced Computer skills	Total
Placed	10	18	28
Not Placed	9	24	33
Total	19	42	61

Calculated $\chi^2 = 0.50$ is lesser than the χ^2 for $v=(c-1)(r-1)$ ie., 3.84 and the null hypothesis is accepted. There is no association between Advanced Computer skills acquired and placement in IT firm.

Students with Entrepreneurial/ Vocational training skills

	With Entrepreneurial/ Vocational skills	Without Entrepreneurial/ Vocational skills	Total
Placed	14	14	28
Not Placed	9	24	33
Total	23	38	61

Calculated $\chi^2 = 3.33$ is lesser than the χ^2 for $v=(c-1)(r-1)$ ie., 3.84 and the null hypothesis is accepted. There is no association between Entrepreneurial/ Vocational training skills acquired and placement in IT firm.

Students with Analytical/Research skills

	With Analytical / Research skills	Without Analytical / Research skills	Total
Placed	6	22	28
Not Placed	1	32	33
Total	7	54	61

Calculated $\chi^2 = 5.05$ is greater than the χ^2 for $v=(c-1)(r-1)$ ie., 3.84 and the null hypothesis is rejected. There is an association between Analytical/Research skills acquired and placement in IT firm. The Yule's coefficient value is 0.79 which proves that there is a high positive association between these two attributes.

Students with Leadership skills

	With Leadership skills	Without Leadership skills	Total
Placed	9	19	28
Not Placed	12	21	33
Total	21	40	61

Calculated $\chi^2 = 0.12$ is lesser than the χ^2 for $v=(c-1)(r-1)$ ie., 3.84 and the null hypothesis is accepted. There is no association between Leadership skills acquired and placement in IT firm.

The results of the analysis show that out of the skills which are acquired by the respondents, only two skills have got an impact on placement namely, IT and E-transaction skills and Analytical/Research skills.

So it may be concluded that the Commerce students of Fatima College (Autonomous) have acquired the necessary skills for placement from within the curriculum itself. The students who walk an extra mile to take up internship or individual projects have greater chances of career promotions.

Conclusion

Globalization, liberalization and privatization open the doors for healthy commercial development in the economy. This in turn results in demand for personnel to handle assignments in commercial establishments. Students developed in various skills may be well suited to the requirements of the emerging commercial ventures of India. So it is prime time that the Universities and colleges offering Commerce education rise up to the occasion and offer the best and suitable curriculum containing a sound knowledge base with a bunch of required soft skills.

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REFORMS IN MANAGEMENT AND COMMERCE CURRICULUM

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INTRODUCTION

Business – industry, trade and commerce has become technology oriented and sophisticated. The business world has been revolutionized by computer technology Information technology revolution has made the world a global village. Business houses are adopting new strategies. Accounting standards are evolved nationally and internationally to be used in the preparation of financial statements. New financial instruments are being introduced in the capital and money markets. Accordingly there is a need for improving and redesigning the management studies curriculum. The growth and development of education fully depend upon the extent of the role of academicians, Parents, administrators and the state.

NEED FOR REDESIGN

In today's business scene, there has been a growing demand for professional oriented managers/entrepreneurs. The field of commerce is expanding day by day. Many new fields have emerged in the recent years, thanks to the policy of privatization of public enterprises, economic reforms, adoption of market economy and entry of Multi National Corporations. Specialized areas like Mutual fund, Equity Research, International financial management, investment and portfolio management,

marketing of financial services and merchant banking have enriched the commerce curriculum.

The need for the same is felt mainly on account of the following:

- Greater complexity of all business transactions increasing the need for restructuring.
- Increased specialization within the economy leading to greater reliance on specialists.
- Globalisation there by increasing the demand for information services. This is filled by the rapid challenges brought about by new information technology.

Implementation there by making increased and new demands on legal and other professional services:

Management education has a major role to play in the process of economic development of a country. It is the education for business and is the basic for all ultimate activities. A meaningful management education will take the country from the under developed stage to the economically developed stage. So, management education is to be carefully designed and curriculum is to be rightly constructed.

Defective curriculum

All universities do not follow a uniform pattern of the syllabus. The standard is not fixed; level of understanding the subject is not estimated; required knowledge, whether expert knowledge, is not determined. If they are fixed, constructed and determined, it is not followed strictly. All such drawbacks of the present management curriculum make management education defective. Therefore, curriculum has to be redesigned.

Information Technology

Information technology has created the need for the re-engineering of educational institutions. We talk about virtual life, virtual university, virtual library and the like today. Potential customers can read information about the product in the website. In advertising, the communication is made a two way affair through internet. The net offers tremendous opportunity to understand customer needs and offer customized product and services.

Money is transferred electronically between seller and buyer with the help of electronic payment system. The information technology embraces all spheres of modern business activities such as E-banking, E-Shopping, E-Tailoring, E-Journal, E-Book and so on. The growth of information technology has led to the growth of banking and finance, insurance, tourism, health care, education, transport and communication.

The advent of information technology has transformed accounting, auditing systems and various other activities of business. Computers have replaced the manual accounting, Office systems rely heavily on information technology. The technological revolution has brought about a sea change in the management curriculum. In management courses computer oriented papers have become imperative. Courses in this area include:

- Evaluation of commercial application
- Selection of software and software implementation
- Out- sourcing
- System Audit & Fraud investigation
- ERP Solutions

A professional manager will be normally involved in implementation, review of implementation, identification of problems and offering solutions to such problems with respect to the aforementioned service areas.

A sound curriculum should serve the educational objectives only when it is complemented by effective instructional (teaching) methods. In short, the curriculum sets the goal and instruction is to assist the learners to achieve the goal set.

Stress Management

The modern world provides tough competition to all types of business houses. “Survival of the fittest” has become the order to the day. In order to be most fit, the professional manager has to achieve perfection in their assignment. It can be reached only when he /she is able to maintain the stress. This is possible only if one can able to identify this, one can become dysfunctional, which will affect the individual and also the organization. It is with this avowed end in view that the stress management should be included in the curriculum of commerce and management studies.

Manufacturing and Logistics

The Challenges of a borderless world are impacting manufacturing industry. Businesses are reorganizing into global and transnational organizations to augment their ability to compete and be more responsive to the customer needs. Organizations are increasingly adopting best practices to redefine standards of manufacturing excellence and thereby enhance competitive position. Manufacturing effectiveness and logistics management would be significant market differentiation in future. There

is an opportunity to develop business solutions specifically for the manufacturing businesses to meet the challenges and sustain the competitive advantage.

The course potential in this area includes:

- Site selection
- Layout
- Capacity assessments
- Appropriateness of technology
- Best manufacturing strategy
- World class manufacturing system
- Benchmarking for “best-in-class” practice
- Key manufacturing process design
- Drafting gain sharing schemes
- Industrial engineering studies
- Cycle time management
- Online scheduling

Conclusion

Liberalization coupled with globalization has breached the trade barriers and national borders are no longer a limitation in the flow of commerce and management. In this changing scenario the Indian Industry previously pampered and immune to global competition realizes the need to wake up to survive more than complete with the global players. The need for top end professional managers/entrepreneurs is immense in the current dynamic business disposition. The future of any country fully depends upon that country's economic development, which in turn depends upon the trade, commerce and industry on one side and the technological development, the entrepreneurship qualities on the other side. So the management curriculum needs to be re-

designed with introduction of information technology, stress management, logistics and business oriented papers to realize the above objectives.

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REFORMS IN CURRICULUM DEVELOPMENT AND EVALUATION PROCESS

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CONCEPT OF CURRICULUM

The literal meaning of curriculum is derived from a Latin word “currer” that means a chariot race, runway or path, laid way i.e. laid to reach the goal.

“Curriculum is a tool in the hands of the artist(teacher)to mould his material(student)in his studio(school)”- Cunnigham.

According to “Brubacher” Curriculum is a runway which one has to run to reach a goal or a course of study”.

NATURE OF CURRICULUM

Curriculum can be considered as:

- a. content/subject matter
- b. program of planned activities
- c. intended learning outcomes
- d. cultural reproduction
- e. as experience
- f. discrete tasks and concepts
- g. agenda for social reconstruction

The various processes involved in curriculum include objectives of education,classification of objectives, selection of curriculum and learning experiences,diagnosis in curriculum development,organization of curriculum content and learning and the different patterns of curriculum organization.

Basis of Curriculum Development

1. Nature of Knowledge-it can be realized from the different levels of knowledge that each school subject contributes to a distinctive knowledge of each school subject.They also lead to some specific mode of thinking. Curricularists have to take implications from the different levels of knowledge i.e.,at what stage facts have to be included, ideas have to be included and concepts have to be incorporated and kind of disciplinary thought system that should be included through different subjects at school.This knowledge also makes an important basis for curriculum development.

2. Sociological Basis of Curriculum Development-Curriculum Development always looks at the social conditions,social needs,demand of the society and the aspirations of people.

The fundamental ideas which education/curriculum should emphasize are

1. Culture of a society at a given time and place to make the child to participate.
2. Social context related curriculum,i.e.with the social framework.
3. Values of that kind,which indicate the existing means and also the men needed.
4. Fundamental training for values and loyalties required for that culture.
5. Appreciating the change.
6. Reconstructionists also feel that education is social engineering.

According to Counts,the task of education is “to prepare individuals to take part in the management of conditions under which they live.”According to

O.B.Smith,"it is clear that the time for building a comprehensive social perspective is here.He also feels that we need to have continuous critical examination and reconstruction of curriculum."

He feels that educators must undertake the following into consideration and frame the curriculum.

- Analyzing the social trends
- Consider the problems of society
- Speculate on social consequences
- Maintain a democratic way of life,project such values through education

Thus school functions are enormous and need lot of serious thought and action.

Curriculum framers need to analyze different dimensions of society and sociological issues related to education and finally should confirm and devise suitable curriculum.

Psychological Bases for Curriculum Development

Many psychologists, philosophers and curriculum framers tried to develop their own principles of understanding about the curriculum and its transaction in the classroom.

From the history related to learning theories, broadly learning theories may be classified into three groups.

They are:

1. Behaviorist or association theories
2. Cognitive or information processing theories
3. Phenomenological or humanistic theories.

Cognitive Theories

Mostly curriculum development is based on cognitive theories, which is very convenient to develop, evaluate, organize and establish.

Most of the psychologists consider human growth as cognitive, social, physical and psychological. There is a big controversy about the impact of heredity or environment on the growth and development of individuals. However, there is a progressive change in physical, developmental aspects, and also it depends on both.

Curricular Innovation

The curriculum being the main instrument of education, it can never be static. As the frontiers of knowledge expand with time, the curriculum should be updated, restructured in such a way that it will enhance the quality and standard of education. Thus innovations in curriculum become inevitable, with the changes that take place in the society. To ensure holistic education to the budding generation, the aims, content, style, media and processes of education need radical transformation so as to produce a generation capable of living up to and positively influencing the changing socio-economic, cultural and political milieu.

Few ideas relating to the innovations of curriculum for 2000 A.D. are

1. Values
2. Self-learning
3. Knowledge
4. Computers
5. Instructional Designs
6. Community Involvement

7. Higher Education
8. National Integration
9. Design of Courses.

Process Evaluation

This stage mostly focuses on the implementation aspect. It tries to find out the congruence between the planning and factual situation.

In the process of implementation, it tries to locate the weaknesses of the program in its design or in the implementation, provides information required for planning and also helps in noting or recording the whole procedure that occurs. The program manager has to monitor and plan meticulously with the help of the data relating to failures/weaknesses. It takes care of different aspects before finalization of the program. Implementation of the program will be tried out on pilot basis. This whole process involves locating the defects, decision made during implementation and design of the project. Finally checks for the relevance of content, strategies and time schedule.

Qualitative evaluation is relatively difficult and needs a lot of commitment from the evaluators and expertise in that area and needs a thorough focus on the area.

Steps in the Process of Evaluation

1. Focus on the topic to be evaluated
2. Collecting the information
3. Organizing the information
4. Analyzing the information
5. Reporting the information
6. Recycling the information

Curriculum Development for the Twenty First Century

The curricular changes are bound to come. However, it is for us to decide whether the changes come about hesitatingly, on an ad hoc basis, following in the footsteps of other countries or whether they come in a planned and systematic manner.

This planning requires:

1. Preparation of a comprehensive integrated syllabus which should fully operative in 2000A.D., but changes may be introduced in carefully graduated steps so that the transition is as smooth as possible.
2. Preparation of text books.
3. Preparation of problem books, enrichment books and supplementary books.
4. Preparation of teacher guides.
5. Preparation of teaching aids included models, films, computer soft-ware programmes etc.
6. Preparation of similar materials for teachers.
7. Changes in pre changes training of teachers.
8. Inservice training of teachers.
9. Setting up an adequate machinery for implementation.
10. Examination reform towards continuous internal assessment by the teachers who are well-informed and well-motivated is vital if we have to enter the twenty-first century with confidence.

Conclusion

During 1976 and 1980's the suggestions were more towards teaching basics and raising curriculum standards. By 1988 all the states have implemented statewide teaching programs, which means all these states

needed teachers to teach basic skills.They say beginning teachers should show minimum competencies/basic skills(spelling,grammar and mathematics)on the hole the back to basic movement has emphasized on essential curriculum i.e. reading,writing and mathematics,solid subjects like English,History,Science and Mathematics at all grades the stress was mostly on information but not on how to think about the process.Teachers have to have a healthy attitude towards children and their needs and toward society. Only in this way we can have planned innovation in the curriculum and in education as a whole.

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EDUCATION TO STRENGTHEN AGRICULTURAL DEVELOPMENT

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Globalization has resulted in a high degree of expansion in trade and transfer of capital, labour, production, consumption, information and technology, which might collectively be enormous enough to cause qualitative change. It must be admitted that the impact of globalization has been uneven and responses to it are varied in terms of its positive and negative dimensions world over. The widely discussed globalization phenomenon fundamentally results from the globalization of economic life, which is largely universalisation of capitalism. Globalization never had global equality as its objective. Indeed, in effect it makes the rich richer, guarantees the perpetuation of the privileged class and maintains the gap between the rich and the poor, the haves and the have-nots and between the overdeveloped and underdeveloped regions which has grown exponentially.

The wealthier nations continue to exploit the people, resources, and the land of the poorer nations, often causing environmental degradation. Rich nations have managed to increase their wealth manifold whereas the undeveloped nations and people at the end of the spectrum have become victims to their maneuvers. The worst sufferers are the agriculturists of the developing nations in Asia, especially India. They are unable to compete with farmers of rich nations, particularly, the U.S.A. Who enjoy the patronage of the state in the form of subsidies. In this context it is necessary to study ways and means of helping our farming community.

Globalization has a multi-dimensional impact on the system of education. It has underlined the need for reforms in the educational system with particular reference to the wider utilization of information technology, giving productivity dimension to education and emphasis on its research and development activities.

Education is an important investment in building human capital and is responsible for technological innovation and economic growth. It is only through improving the educational system of our country the multi-faceted development of its people, most importantly the farmers, can be ensured. In the post-industrialized world, the advanced countries used to derive the major proportion of their national income from the service sector. Since the service sector is based on imparting skills or training to the students and youth, the education sector is the most vital and crucial.

Education, as a service industry, is part of the globalization process under the Umbrella of General Agreement on Trade in Service (GATS). However, there is every possibility that this might force countries with quite different academic needs and resources to conform to systems inevitably designed to service the interest of corporate educational providers, and thereby breeding inequality and dependence.

Educational system would provide the sites of struggle for defining meaning and power of national identity and a national culture. Decades of under-investment in education have created shocking shortages of buildings, laboratories, libraries, sanitary facilities and even drinking water in poorer and rural regions of the country.

In the wake of globalization process, to cope with the changing priorities of the people, the planners are bound to revise their strategies in the education sector. It must be reflected in the equitable and just allocation of funds and identification of priorities for agriculture oriented curriculum suitable for the rural poor. This demands a wider domain for the national debate on syllabus and curriculum reform.

The first step is to liberalize and deregulate the education system to encourage promotion of new schools, colleges, vocational and other institutions of higher education with specific goals to take the rural poor to prosperity. It will also serve as an incentive to keep the youth in their own villages and prevent migration to overcrowded cities and towns. Granting autonomy and encouraging a decentralized syllabus design will strengthen this move.

The rapid growth of the software development and electronic communications industries is an achievement no doubt. But, because of the strong hold of the English language in MNCs and corporate circles, the rural and urban divide is almost complete in the field of education. However this great reservoir of skills and expertise offers the opportunity to utilize them for the spread of quality education even in rural areas. Simply applying these technologies to rural education will work wonders.

The children of the poor and socially disadvantaged have been denied quality education. Only education catering to the needs of all layers of people will lead India towards real prosperity. In this context it must be pointed out that the rural youth are forced to drop out from school education and thereby not able to pursue Higher education.

And those with means seek colleges and universities in urban centres. Instead of searching for a job or a degree programme in urban areas they must be able to pursue courses suitable to their milieu at the same time continuing their occupation in the field. This will contribute to agricultural development which is the backbone of our country. Along with the subject knowledge students should be able to develop the specific agriculture skills. General skills along with communication and technological skills must be part of the rural curriculum.

Rural world is changing rapidly. The youth have to prepare themselves in tune with the rapid changes. Agricultural colleges cannot do this stupendous work. Colleges in rural areas must reorient their syllabus to offer multidimensional and interdisciplinary courses to retain the youth in villages at the same time making them equal to their counterparts in cities. Agriculture is changing with new technologies. So rural youth must be trained in farm and non - farm activities, so that they can perform as useful and enlightened agricultural workers, engineers, mechanics and managers, and even as agricultural economists. So they need to have skills that differ from those their parents had on order to face the new challenges.

It is necessary to provide a basic education that motivates them to acquire skills required for the emerging market economy and face international competition in the farm sector. These skills must be integrated in Higher Education.

Low attainment in education in rural areas is often attributed to farm work. Children miss school or drop out to help their parents in farm or house hold work. Other

reasons for drop out include the inability to meet the cost of attendance, distance to educational institution, non availability of Institution for Higher education, a curriculum or language incompatible with local conditions and poor school quality. This problem requires immediate and multidisciplinary approach.

Finding and maintaining employment requires broad based occupational skills or specific job-related skills acquired in training institutions or on the job. In today's rapidly evolving and globally competitive economy, there is a need for personal capabilities such as flexibility, resourcefulness, and communication.

The integration of occupational training and social promotion in the rural education is thus of paramount importance. The learning process should be related to rural work and living conditions. Rural women should be given preference for social promotion programmes, including training in protection against toxic products used in agriculture. The self help groups can be effectively utilized for the purpose.

The training institutions should give basic training courses as income generating opportunities which will cause tremendous change in the local rural economy.

Enterprises provide training, available to those with formal jobs, usually those with higher levels of education.. But training programs in farm management and in marketing with good growth prospects will raise the productivity and income of enterprises by upgrading technology and managerial skills related to rural development.

Entrepreneurs in the new agriculture need the skills and competencies to operate in open and demanding

markets. Though advance agronomic techniques remain essential, entrepreneurs also need a better understanding of the business side of their operations. They need more and better market information and greater understanding of their costs and revenues, the required investments and the value chain they operate in.

To help students get a foothold in the new agriculture, universities should encourage business development courses. The new agriculture also requires more and better trained researchers and agricultural professionals. A new generation of agricultural professionals is needed to replenish this dividing human resource pool and engage the shifting opportunities associated with the rise in market driven production.

Effort to revitalize agricultural education should concentrate on updating curricula, transforming teaching practices and increasing the number of graduates at all post secondary levels. Most agricultural education institutions offer curricula focused narrowly on the production of predominant crops and livestock. Curriculum reform should introduce greater institutional flexibility in the face of rapid change and greater responsiveness to employers and stakeholders.

Doctoral training can be carried out in agricultural disciplines. Because of the interdependence of knowledge across disciplines ,it may be better to train agricultural specialists in general universities set up in rural areas, where there is close interaction with specialists of other departments. Instead of treating agricultural sciences and agricultural economics as isolated disciplines in separate agriculture universities, they must become part of general academic universities.

Where local training is not feasible in some disciplines, students can obtain doctoral training through “sandwich” programs that combine locally relevant training with access to international knowledge resources, instruction in research methods, and exposure to a wider range of modern technologies.

Because of the long time needed to prepare a new generation of agricultural scientists and professionals, urgent action is needed now to design, fund and implement programs that combine upgrading local universities, supporting regional centers of excellence in teaching and research and providing cost-effective higher-degree training outside the region.

Ignoring agriculture and increasing technological development will lead to lopsided development. Integrating technology in agriculture, identifying localized effects in the globalized scene, utilizing the rural human resource enhancing the traditional vocation and involving women force should be the prime concern of the educational system. This may probably save our nation from brain drain, illiteracy and child labour and thereby from threats of poverty.

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TECHNOLOGY IN TODAY'S HIGHER EDUCATION FOR SERVICE EXCELLENCE

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INTRODUCTION

Today, the use technology can be seen in almost every aspect of higher education, whether it is student services and human resources software, course management systems for on-site and distance courses communication with students via e-mail, laptops in classrooms, hybrid classes, faculty in one state teaching for institutions in another via distance, or faster and greater access to research materials via the Internet.

Our students have many different academic majors, career goals and personal ambitions, but they all have one thing in common. They must develop strong information technology skills to survive in a technology-driven work force and in a world increasingly populated with computers. Colleges and universities grapple daily with the challenges of building their institutions' "digital nervous systems," ensuring students and faculty access to the highest-quality learning resources, training faculty members to use technology in instruction, and funding technology purchases so that they can help their students attain critical technology skills.

Technology offers the opportunity to change the roles that teachers and students have traditionally played. With technology dispensing information, teachers are free to coach and facilitate students learning. With technology

monitoring learning, students can become active learners, working to effectively acquire new skills as they solve problems. If the goal of creating high-performance learning organizations is to be realized, the reinvention of education has to incorporate these new tools.

Driving factors for integrating technology with higher education :

- ***Corporate Expectations :***

"Our students are entering a world in which 60 percent of the jobs will require technological competency, a world in which they must continue to update their occupational and technological skills in order to be successful," - *James L. Morrison*, Microsoft Scholar and professor of educational leadership at the University of North Carolina at Chapel Hill.

In the present scene subject knowledge through books alone will not equip the students to face their corporate life. There comes the need for technological know how to acquire more knowledge and skills to compete in a global environment.

- ***Innovation:***

The higher education community must continue to find innovative ways to empower educators to use technology to enhance learning and prepare students for careers and a lifetime of learning. Since innovation is a magic mantra for continuous improvement, it alone can confirm the business life of the educational institutions in the market.

- ***Growing demands of the students:***

As the students are facing a tough competition in the job market, their expectations from the educational institutions are also growing, from the simple basic knowledge to multiple intelligence level. Inculcating multiple intelligence is possible, through the integration of technology and education. Training is equally important to students, who must master an impressive array of technology skills, ranging from understanding productivity and communication software tools to information-seeking and management skills, to excel in today's work force. College graduates need to know how to use the Internet, e-mail and database, spreadsheet and word-processing software just to survive, and they rely on colleges and universities for opportunities to learn those skills.

- ***Globalized competition:***

Indian Education industry is filled with lots of public and private players and that too at the global level. The global players in education are providing their service in India either through online or offline. Benchmarking is the result of this hiked competition and hence competing with global players is demanding the utilization of technology in education.

Implementation of technology in higher education:

Although the move toward implementing technology in higher education is driven by an increasing number of competitors as well as student demand, there is still considerable resistance to embrace it. Adoption of technology requires more than merely installing a product. Any change will get a reaction of resistance and to the technological changes in education is not an exemption.

Barriers: A set of barriers are to be identified first, since any implementation will be considered successful when the barriers are overtaken in an effective manner.

Individual level barriers for adoption of technology:

- Lack of technological literacy or competency of the faculty member
- Fear on the part of faculty members that students are more adept at the technology than they are
- Inertia and comfort with traditional delivery methodology
- Belief that learning is more effective in the classroom
- Time commitment to learn the new technology which competes with other demands such as advising, research and service
- Threat to academic freedom and autonomy

Organizational level barriers for adoption of technology :

- Lack of leadership to support the transition
- A culture strongly rooted in traditional delivery formats such as lecture
- Low regard for teaching and learning within the institution in comparison with research and scholarship
- Lack of recognition or interest from colleagues or others in positions of authority
- Lack of willingness to share best practices
- Lack of incentive for adopting proficient with new technology

- Institutional policies which limit experimentation with alternative approaches to teaching
- Excessively bureaucratic processes for obtaining approval, support, or resources
- Quality assessment procedures which encourage conformity and inhibit risk taking
- Lack of faculty involvement in the selection and implementation process
- Lack of adequate infrastructure to support the technology

Four steps of Strategic approach for the effective implementation of technology:

Step one: *Strategic analysis* - analysis of an organization's external environment, its current strategic orientation, and the degree of its effectiveness at meeting its objectives and mission.

Step two: *Strategy making* - begins with the decision to change its vision and orientation in the future and includes defining the products and services to be offered, specifying the markets to be served, developing a position to be competitive in those markets, and assessing the underlying organizational processes and culture that will either enable or inhibit the change.

Step three: *Strategic plan design* - defines how the change process will be logistically accomplished through sequencing and pacing in light of the prevailing culture as well as anticipated resistance.

Step four: *Implementation of the plan* - transition to the new orientation which includes developing budgets and timetables, assigning roles and tasks that will guide the process, garnering commitment to ensure that there is a

high level of ownership in the process, communicating to ease uncertainty, and allocating resources for support.

ARCS model:

ARCS model (Surry & Land, 2000), which stands for Awareness, Relevance, Confidence, and Satisfaction can be used as a way to increase acceptance and adoption of the new technology. This framework, based on motivational theory, suggests:

- Increasing *awareness* by offering showcases,
- Demonstrating *relevance* through retention, promotion, and tenure decisions,
- Building *confidence* through support and mentoring activities, and
- Increasing *satisfaction* via rewards and incentives. Possible incentives can include release time, stipends, mini-grants, teaching with technology awards, upgrades to current hardware or software, travel to conferences to present work, or support for publications that showcase technology adoption

Effectiveness of technology.____ When working with technology, unions and institutions should ensure that:

- New technology makes sense educationally, truly advancing student learning and scholarship;
- Investments in technology make sense financially in a realistic cost/benefit analysis;
- Students and faculty have full access to new technology and related training; and,
- Faculty and staff rights, including their intellectual property rights, are protected.

What are the features of technology that promote engaged learning and effective instruction??

- Access: connectivity and interconnectivity, design for equitable use
- Operability: interoperability, open architecture, transparency
- Resource location and direction: distributed, user control of input, designed for collaborative projects
- Capacity for engagement: provide access to authentic and challenging tasks, interesting and useful databases or information sets and powerful relationships, take charge of learning, problem solving and exploring, provide information that is just in time and just enough, make explicit what is typically implicit, diagnose learning problems, adapt the system output and learning opportunities in light of diagnoses, customize learning for specific interests, levels of ability and learning preferences.
- Ease of use: effective help, user friendliness, speed of processing and operations, user control, training and support
- Functionality: prepare learners for diversity of technology functions used in the workplace and homes in the 21st Century, develop skills for programming and authoring, and develop skills related to project design and implementation.

Impact of using technology in higher education:

Multiple Intelligences and Multi-media

Howard Gardner, Professor of Harvard University and author of *Frames of Mind* (New York: Basic Books, 1983) from *Multimedia Book*, ITTE wrote that:

- Seven or more "multiple intelligences" that are of equal importance in human beings develop at different times and in different ways in different individuals.
- Multi-media can go along way to address these intelligences, much more than traditional teaching methods.
- Below is a list of the intelligences and the technology tools that can be used to teach to them

Verbal/Linguistic intelligence: The ability to think, communicate, and create through words both in speech and in writing.

- Computer software which allows young children to write and illustrate their own stories before their fine motor skills are developed enough to allow them to do so by hand.
- Word processing software stimulates learners to interact more closely with their work.
- Audio and video recording can give students instant feedback on their story-telling skills and can help them develop them further.
- Multimedia software helps students produce multimedia reports.
- Telecommunications programs link students who correspond in writing.

Logical/mathematical intelligences: Memorize and perform mathematical operations, ability to think mathematically, logically, and analytically and to apply that understanding to problem solving.

- Multimedia products that graphically illustrate physics concepts.
 - Providing challenging visual/spatial tasks which develop mathematical and logical thinking .
 - Develop higher-order mathematical thinking by making abstract ideas concrete.

Visual/spatial intelligence: The ability to understand the world through what we see and imagine and to express ideas through the graphic arts.

- "Paint" programs that allow students who are unskilled with paper and brush create art on computer screens.
- Databases of art work.
- Desktop publishing.
- Camcorders to create documentaries.
- Internet links to museums and virtual tours.

Bodily/kinesthetic intelligence: The ability to learn through physical coordination and dexterity and the ability to express oneself through physical activities.

- Educational games which challenge fine motor coordination while developing logical thinking skills and mastery over abstractions.
- Construction of Lego robots and program their movement through the computer.
- Electronic fieldtrips - programs that allow students to interact electronically with a scientist who is exploring the depths of the Mediterranean or the inside of a volcano.

Musical intelligence: The ability to understand, appreciate, perform, and create music by voice or instruments or dance.

- Students can hum into a synthesizer and make it sound like any instrument they want.
- Musical Instrument Digital Interface (MIDI) makes it possible to make music on an electronic keyboard, which can be made to sound like any instrument and then can be orchestrated electronically.
- Interactive presentations of renowned classical music let students understand music on many different levels; listening to it, seeing the score as it is played, hearing individual instruments played alone, reviewing biographical material about the composer and learning about the music's historical and cultural backgrounds.

Interpersonal intelligence: The ability to work cooperatively with other people and to apply a variety of skills to communicate with and understand others.

- Clusters of students working together on computers learn more than individual students working alone.
- Electronic networks linking students with their peers within the community and around the world.
- Lumaphones allow students to see a picture of the person with whom they are speaking.

Intrapersonal intelligence: The ability to understand, bring to consciousness, and express one's own inner world of thoughts and emotions.

- Multimedia gives teachers the tools to turn the classroom into centers of student-directed inquiry.
- Technology offers tools for thinking more deeply, pursuing curiosity, and exploring and expanding intelligence as students build "mental models" with which they can visualize connections between ideas on any topic.
- Individual growth plans, developed jointly by the student, parents and teacher can encourage the development of intrapersonal intelligence. Technology supports such plans with electronic records, videotaped interviews, and multimedia portfolios of student work.

Effects of Technology on Teaching and Learning

- Technology implementation often stimulates teachers to present more complex tasks and material.
- Introduction of technology will tend to support teachers in becoming coaches rather than dispensers of knowledge.
- Technology use increases teachers' sense of professionalism and achievement.
- Technology can motivate students to attempt harder tasks and to take more care in crafting their work.

- Parents and other community members will have access to classes, libraries, homework hotlines, school bulletin boards, community access channels and other resources to assist them in helping their children succeed in schools. Parents and teachers can communicate through personal electronic mail boxes and voice mail

Impact on students:

- They explore and represent information dynamically and in many forms.
- Become socially aware and more confident.
- Communicate effectively about complex processes.
- Use technology routinely and appropriately.
- Became independent learners and self-starters.
- Know their areas of expertise and shared that expertise spontaneously.
- Work well collaboratively.
- Develop a positive orientation to the future.

Practical case on integration of technology in higher education:

A 10-year study supported by Apple Computer, Inc., concluded that students provided with technology-rich learning environments 'continued to perform well on standardized tests but were also developing a variety of competencies not usually measured. Students explored and represented information dynamically and in many forms; became socially aware and more confident; communicated effectively about complex processes; became independent learners and self-starters; knew their areas of expertise and shared that expertise spontaneously.'" (ACOT)

"In 1986 Apple Computer, Inc. launched a project called Apple Classrooms of Tomorrow (ACOT). The project began with seven classrooms representing what was intended to be a cross section of K-12 schools. Each participating student and teacher received two computers: one for home and one for school. The goal of the project was to see how the routing use of computers would affect how students learn and how teacher teach."

The ACOT students routinely and without prompting employed inquiry, collaboration, and technological and problem-solving skills of the kind promoted by the school reform movement.

ACOT of Impact on Students:

- Students explored and represented information dynamically and in many forms.
- Became socially aware and more confident.
- Communicated effectively about complex processes.
- Used technology routinely and appropriately.
- Became independent learners and self-starters.
- Knew their areas of expertise and shared that expertise spontaneously.
- Worked well collaboratively.
- Developed a positive orientation to the future.

Other ACOT Findings After 10 Years

- Technology acts as a catalyst for fundamental change in the way students learn and teacher teach.
- Technology revolutionizes the traditional methods teachers use.
- Students become re-energized and much more excited about learning - resulting in significantly

improved grades - while dropout and absentee rates decrease dramatically.

- For high school students in the program, drop-out rates fell from 30 percent to near zero, while absenteeism was reduced from 8 percent to 4 percent.
- Teachers can and will embrace technology, if they are given the kind of professional development and support they need.

Conclusion

When deciding upon new technologies, teachers must assess the constraints and supports to adoption within their own institution and consider them as crucial to the process. They need to consider the breadth, aggressiveness, differentiation, logic and orchestration of the technology that they are going to implement for the attainment of service quality.

Fortunately, the rapid technological changes that have made these new workplace competencies so important and greater knowledge of education so critical also provide new and effective tools to help raise the knowledge and skills of teachers and the achievement of students.

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HIGHER EDUCATION AND THE CHANGING ROLE AND FUNCTIONS OF SOCIAL SCIENCE RESEARCH

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It is time to take a look at the priorities of our times as far as social development through education is concerned. If the purpose of education is to provide the individual with the knowledge essential for living a satisfying life in closer harmony with nature and fellow beings, where the individual is at liberty to pursue legitimate acts for self-fulfillment, if the purpose is to engender the noble desire in the individual to engaged himself in the adventure of putting into practice socially beneficial ideas, if the purpose is to create a human society where outward differences will not be emphasized but the basic similarities are stressed so that individuals feel that they are useful to society through sharing their wisdom and pursuing the meaning of life, the present education system has to be replaced by a system based on a holistic and well-integrated view of human existence on Planet Earth.

Humanizing Development

For this purpose, development priorities have to be set for the benefit of all and not just for the rich sectors of the world and the rich sectors of the nation. The term 'development' has to be used in a wider sense referring to the development of entire socio-cultural matrix. Portes, (c.f., Pandey, 1985) summarizing the current connotation

of development, concludes that the term development is used consistently to convey economic, social and cultural transformation. Portes defines development as follows:

“Development can be defined as a complex of three main criteria: (1) Economically, sharp and sustained increases in national product; generation of centers of self-sustained, (2) Socially, redistribution of national income on an egalitarian basis; in corporation of marginal masses into the money economy, (3) Culturally, emergence of a few national self-image, confident of the future and willing to make sacrifice to bridge the gap with the developed world”.

Portes further developed the definition of development, but the content of the previous definition is intact.

- Economic transformation, in the direction of sustained and rapid increase in the national product and the conquest of “decision centers” in manufacturing, which give the country a measure of autonomy for guiding its future growth.
- Social transformation, in the direction of a more egalitarian distribution of income and widespread access of the population to “social goods” such as education, health service, adequate housing, recreational facilities and participation in political decision making.
- Cultural transformation, in the direction of reaffirmation of national identity and traditions. Emergence, in elite and masses alike, of a new self-mage which dispels

feelings of second rate nationality and external subordination.

The properties of the definition of development, then, consist, of three distinct yet interrelated elements – economic, social and cultural. Economic development begets social and cultural transformations. The social and cultural transformation, in turn, determines economic growth. A definite kind of social and cultural approach to redistribution of economic rewards provides incentive for definite type of economic expansion. This gives rise to national self-image, which, in turn, induces people to make sacrifices, needed for the foundation of economic growth. In conclusion, the development in modern sense refers to the planned, directed and stimulated upward movement of the entire social system-economic and non-economic – in the direction of over-all desirable goal of a given society.

To achieve the target of development (in terms of social transformation) education is the best and most powerful instrument. The relationship of education to development has been greatly emphasized and examined in considerable depth in the last three decades because ‘development’ itself has been the priority of people all over the world, and especially in the so-called developing nations. The same impression is reflected in the views of distinguished economist and Nobel laureate Amartya Sen, (*c.f.*, Vajpai, 2000) when he started:

“The central issue is to expand the social opportunities open to people. In so far as these opportunities are compromised by counter-productive regulations and bureaucratic controls, the removal of these hindrances must be seen to be extremely important. But the creation of social opportunities on a broad basis

requires much more educational facilities, and health care for all (irrespective of incomes and means), and public provisions for nutritional support and social security”.

Sen attempted to spell out ‘education’ as one of the thrust areas for the movement for the country after the great independence movement. In India in the post-independence era central and state governments have been trying to strengthen the process of education, more specifically higher education, to build a new and progressive social order based on social justice. But the vast disparities in academic practices, facilities and standards make it practically impossible to implement a uniform set of reforms. If there is to be an academic revival it was realized that reform of education could no longer be postponed as progress in every sector of national life depended largely on quality and adequacy of the system of higher education.

Various Commissions and Committees have reviewed the status of education and higher education in the country from time to time and made significant observations and recommendations. The Delors Commission (UNESCO, 1996) describes that education should be on 4 pillars – *learning to know, learning to do, learning to live together and learning to be*. The third aspect points to development of social and moral values.

Learning to live together is possible by developing an understanding of other people and an appreciation of interdependence i.e., in the spirit of respect for the values of pluralism, mutual understanding and peace. UNESCO adopted a declaration on higher education for the 21st century at World Conference on Higher Education held Paris in 1998. As a result of world conference, UNESCO

(1998) has issued a set of recommendations, *World Declaration on higher education*, which has two distinct parts. In the first part, the UNESCO has envisioned higher education in terms of roles and functions that it should play in socio-cultural and economic development of nations “as a fundamental pillar of human rights, democracy, sustainable development and peace”. In the second part, recommendations are made for concrete and specific steps (priority actions) that need to be taken at national and international levels for change and development of higher education and overall to enhance its quality and relevance. The National Knowledge Commission, 2006 Note features research by university faculty members as an important element of improving the quality of universities through enhanced teaching performance and knowledge creation. In the section on Universities, the Note states:

“There are synergies between teaching and research that enrich each other. And it is the universities that are that are the natural home research. What is more, for universities, research is essential in the pursuit of academic excellence”. The Note further states “The research outputs of these universities shall be vital contributors to India’s socio-economic development and progress in science and technology”.

A review of the observations and recommendations of various commissions/committees and the debates on the subject at various fora indicate that there are four major issues in higher education which need to be addressed. These are quantitative expansion and access, qualitative assurance, quality research and governance.

Primary Focus: Teaching or Research

The quality of teaching in higher education goes along with quality of research. One of the reasons for poor quality of education in India is that we are lagging far behind in terms of research. According to Human Development Report 2002, 'India could claim only one patent per million residents in 1998'. The CSIR Report also reveals that "in the entire history of CSIR of India, only 3 out of 20,000 papers published by the scientists have been cited 100 times against a world average of one in every 250". In universities, teachers conduct research only for the sake of producing Ph.D. degrees. Although some 11,000 Ph.D. are being produced every year in our universities, the research topics of various disciplines have no relevance to the present life.

A two-pronged strategy is required to improve the quality of research. The budgetary allocations for research need to be substantially increased and research careers should be more attractive than teaching. At the same time, research must be socially and economically more relevant which calls for a greater interface between universities, research institutions and various sectors of society like industry, agriculture, infra-structure, etc.

Research in Pursuit of Social Needs

Research enriches human society. The progress we enjoy at present is the result of the research conducted by men in the different phases of human history; the researches conducted in the period of Industrial Revolution activated the process of industrial development. Many of the problems faced by society namely, poverty, over population, depletion of natural

resources and ecological imbalance can be solved through research. If we analyze the history of mankind, especially the history of developed countries, we can see that developments were mainly due to the advancement in research.

Research in social sciences is always undertaken on the basis of emerging problems of society. For example, after the Second World War, most of the research works in social sciences were done with the following themes; how to bring about social stability? How to usher social development? How would the system hold in the face of social changes? and how power would be located and exercised?. All these problems called for the study of man in relation to the social institutions as well as environment.

The question arises: Can social problems be studied scientifically? Scientific or empirical study is often referred to as applied research, because it has a fairly direct immediate application to a real world situation. For example, empirical research on poverty alleviation may help government devise successful income maintenance and social welfare policies. If social problems can be studied scientifically, they can produce scientific knowledge about social phenomena.

The social-economic structure of a society has an impact on research. Developing countries accord low priority to research. On the Research & Development front, developed countries account for 85% of worldwide R&D investment. This is in contrast with a total of 11% investment by China, India, Brazil and East Asia and four per cent by rest of the world. The scientific research orientation and proper planning towards the existing factor endowments help organize resources in a

development perspective. It is essential for development of human resources. The expenditure rendered for defence, entertainment etc. can be slightly reduced and research can be promoted. Absence of proper research and man power planning is the reason for the under-utilization and mis-utilization of human resources.

An anatomy of the education system in the third world countries reveals that there is incompatibility between the social needs and education system. The education system in these countries is basically modeled on the colonial pattern of education system. The social cost of education sometime exceeds social benefit. In order to fulfill the social needs, the pattern of education especially the nature of research should be redesigned. Any social problem can be solved by redefining the education system and redesigning the nature of research.

In the age of Globalization and Liberalization international education agencies will have a direct impact on the education needs of the developing countries. The process of Globalization of education should be directed towards advancement of research for meeting social needs in the New Millennium. The gap between policy-making and research generalization should be bridged as far as possible. In the knowledge-based society of the New Millennium, public policies are required to be framed on the research-based knowledge considering the needs of the society. Only then social science research can be realistic and utilitarian.

Linkages between Higher Education Institutions and NGOs

It is disheartening to note that our higher education system is urban oriented in the matters of location of facilities, allocation of finance and content of curriculum. To minimize this orientation direct linkage between institutions of higher education and the masses is the need of the hour. It will help in functional use to disseminate the knowledge created and skills developed at the institutions for shaping the public attitude towards the desired and directed goals of development. As the NGOs of our country are capable of reaching the deprived masses or disadvantaged groups, they can be the link road between the institutions of higher education and society. Due to a high level of expertise combined with insight, empathy and flexibility of approach, many times NGOs are more successful than any other body in the promotion of education and training in the informal sector. In the First Five Year Plan itself it was noted that NGO's would have to bear the major responsibility for organizing various activities in different fields of human welfare and development. Over the years this recognition has increased in scope and emphasis. The Seventh Plan explicitly expressed the intention to involve NGOs in the implementation of developmental programs, particularly in rural areas.

The institutions of higher education and NGOs should go hand in hand to strengthen the efforts of government in accelerating the community/rural development programs in the form of developing scientific attitude, appropriate skills in the people. Both the agencies can work together in promoting, teaching and training, research and extension and nation building and cohesion activities for integrated development of the society.

Suggestions

The paper laments non-application of research findings to real life situations. A strong case is made out for dissemination of results of research to the end users. It is proposed that:

- (1) it should be made mandatory for each thesis/project report to include a section on “Application to Societal needs” wherein the researcher must examine the practicability of implementation of the suggestions made.
- (2) the concept of ‘Research Application Cell’ in each university/institute is floated and a pyramid structure is proposed at the state and national levels.
- (3) joint efforts with NGOs can be made to identify the need - based courses and suggest the same at higher education level.
- (4) joint efforts can also be made to create awareness in the masses. NGOs can provide the necessary data to carry out socially relevant research projects.
- (5) NGOs can assist universities to undertake and implement projects like VPP (Village Promotion Programme) and VAP (Village Adoption Programme) etc. to promote rural mass.
- (6) the results of the research activities should be infused into the local community with the help of NGOs.
- (7) NGOs can specifically cater to needs of the special population like disabled, differently abled, minorities, disabled due to socio-economic, cultural deprivations, natural and man-made calamities.

There are certainly many more steps to be taken to improve the quality of higher education. Therefore it is necessary that the road map of the future higher education scene is to be charted clearly to facilitate the transition of India into a developed nation and the strongest nation in the Asian continent over the next 50 years. Otherwise sooner or later we would be pushed to a corner and shown the door. Let us avoid that kind of a disaster and demonstrate that we have the capability to kick start. Only then we will be in a position to achieve the purpose of education i.e., development of capability for deep thinking and imbibing the high values of our culture, so that we can shape our future. Education provides us with a discipline to face the rigours of practical life and bestow confidence to deal with complex and challenging situations.

Finally, let us recall Gurudev Rabindra Nath Tagore's views about the real destination of our education:

"The highest education is that which does not merely give us information but makes our life in harmony with all existence".

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COMPLICATIONS AND SOLUTIONS: INDIAN HIGHER EDUCATION

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PROBLEM SETTING

From Kothari commission to Pitroda Commission Indian higher education system has been facing many challenges. In the recent past, our higher education system has been much in discussion. Today, more than ever before in human history, the wealth or poverty of nation depends on the quality of higher education. Simply, it holds the key to inclusive growth. Hence, if higher education is driven in the right path, India can achieve the economic growth without much difficulty. But, the Indian higher education has been facing a lot of problems in terms of accessibility, equity, quality, administration, infrastructure, curriculum, financing, educational outcomes, wastages, and uneven distribution. Of which, quantity and quality are burning issues which have a bearing on finance. Hence, Quantity, Quality and finance problems should be solved. Therefore, these issues should be studied in a careful manner to tackle these problems.

The present study attempts to analyses complications being faced by the Indian higher education system regarding to accessibility, quantity, quality and financing. It offers a few solutions.

Accessibility:

Beginning at the time of independence with such modest figures of 27 universities and about 600 colleges,

today, India has more than 390 university level institutions and over 18,000 colleges, in addition to a large number of research and development units, professional colleges and institutions. The average number of university graduates in India is huge in size. In science and engineering alone, it is almost 7,00,000 including about 5000 Ph.Ds (Atbach, 2006) These figures appear impressive by themselves. But, with all this, and inspite of the distinction of having the third largest higher education system in the world, India provides access only to about 7% of the 18-23 age group (Daniel, 2005) And, even in this situation of limited access, seats in colleges, particularly in professional ones, remain unfilled in large numbers. It means that, the Indian higher education system failed to increase the supply of what and where there is an actual demand. It shows that the development and growth in higher education institutions has not taken place uniformly throughout India. Most of the renowned universities and colleges of the country are concentrated in urban areas. The development and growth of higher learning institutions in rural India is far from satisfactory. Many of the rural students wish to get a degree. But no colleges are available in their place. Hence, due to the lack of accessibility many rural students are denied higher studies. Therefore the Government and private Institutions should come forward to establish their higher education institution in rural areas. Another reason for excess supply is the failure in providing courses the students and market need. It is important to note that we are living in a period where market forces determine the fate of the country. We are moving from knowledge-centered to skills-centered society. Those who have skills and innovative thinking can only survive in this

competitive market. Therefore, colleges need to restructure their courses according to the market and students need.

Quantity and Quality in higher education:

Due to the twin concern with quantity and quality in higher education in India, we are not able to achieve both.. With the limited financial resources, to achieve both quantity and quality in higher education will be a mirage. At the same time we can't sacrifice one for another. Both these things should be achieved tactically . Quantity can be enhanced through open and distance education mode of education. Today, 23% of all higher education enrolments in India are in distance education, specifically in open universities and 102 dual-mode institutions. The Government's target is that by 2010, 40% of all higher education participation in India will be through distance education. As far as quantity is concerned, it is a welcoming trend. But as for quality many surveys report that, students produced by the open and distance education mode are not acceptable in the job market.

It needs better governance from all direction on all indicators. Maintaining equal quality in all institutions is not possible, by every institution is possible and crucial. Quality should be assured by every institution by fitting a strategy or model. But there is no single model that fits all. It is up to the institutions to decide what model fits it best. However, there are some basic conditions that have to be met with. For this purpose it is imperative that each institution develops an efficient Internal Quality Assurance (IQA) System. An Internal Quality Assurance System is a system under which students, staff and management

satisfy themselves that control mechanisms are working to maintain and enhance the Quality. The National Assessment and Accreditation Council (NAAC), an apex body for quality assurance of institutions of higher learning in India, has given guidelines to all the accredited institutions to establish an Internal Quality Assurance Cell (IQAC) to ensure qualitative growth of the Institution.

The Total number of institutions, which have established the IQAC (As on June 30, 2007), is given in Table.1

Table.1 No. of Institutions which have established IQAC

Region	Accredited	IQAC Established
Northern region	566	242
Western region	1237	752
North eastern region	235	167
Southern region	1131	665
Eastern region	<u>463</u>	<u>115</u>
Total	3632	1941

Source: University News

This table depicts that the accredited institutions have been trying their best to upgrade themselves by evolving an effective quality assurance body. It is heartening to say that most of the IQAS established institutions could overcome the leadership crisis with the help of IQAC which ensures team spirit. Hence, it is the best and sensible way to achieve optimum quality by the institutions.

Financing :

Lack of finance is the only hindrance in achieving quantity and quality. Both can be achieved at the same time only through better finance on higher education. Indian higher education system has only two options: public

expenditure and private expenditure. The share of expenditure on higher education in terms of GDP has been declining year by year. Due to various reasons, Government has been reducing its expenditure on higher education. India spends only 0.37% of its GDP on higher education in the year 2006. It is due to the fact that students may not be able to assess the likely benefits of higher education in terms of higher pay package and other non-monetary benefits. Limited job prospects in the developing countries, high drop-out rates are also high because of long gestation periods and other uncertainties, skill obsolescence, absence of collateral in higher education are other reasons. No one can blame the Government for reducing expenditure on higher education. For the developing countries like India have to invest more on various development sectors. As far as the private expenditure is concerned, it can't be extended beyond certain limit. Here the individual benefit will only be considered. Hence, we must explore alternative sources of financing higher education. Otherwise the issue of financing will be a perennial problem to our country.

Alternative sources of financing higher education:

The present study strongly suggests that the corporate sector is the next best and justifiable alternative source of financing higher education. It is the very wide and emerging sector which utilizes the skilled human power. Corporate Sectors are making huge profit and enjoying all the benefits without contributing anything to the education sector. Hence every corporate sector has some responsibility to contribute towards higher education. Many of the western countries make it

compulsory for every corporate sector to have social responsibility likewise here also, hence they should contribute in public expenditure in terms of making development expenditure like education, infrastructure to share the increasing welfare expenditure of the Government, corporate social responsibility.

Apart from this, enhancement of education loans helps to reduce the immediate burden of both the public and private. Graduate tax can be imposed as any other tax it when an incumbent has an income where exceeds a certain threshold limit. It helps to add to the general income tax. Better governance can reduce the cost per student. Subsequently, government expenditure for may be reduced higher education system. By increasing the employability of student through providing market demanded courses Government can indirectly force the demanders to extend the household expenditure on higher education. It will reduce the burden on the Government. Besides, by encouraging patrons, permitting foreign students to seek education in India, and encouraging huge foreign direct investment help can be other alternative sources of financing higher education.

Concluding Remarks:

As far as the accessibility is concerned, it can be solved by investing more on higher education through generating alternative financing resources and establishing more number of higher learning institutions in rural area. Quantity can also be ensured through the same ideology, since accessibility and quantity are more or less twins While the quality enhancement is taken into account, it can be attained by establishing IQAC. Quantity and quality are

the major problems arise on because of paucity of better finance. The solutions are participation of corporate sector, and enhancement of education loans.

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PARADIGM SHIFT IN PROFESSIONALIZING COURSES IN SOCIAL SCIENCE

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In the new millennium, the poised for a spectacular economic growth with GDP expected to cross 9 points by the end of this plan period. More budgetary allocation is expected for higher education. And the social science subjects like Economics and commerce also will get due share. But that of what? The students of these subjects are taught with professional features of the subjects but the curriculum throughout the country is such that they are not helped to professionally qualify as Chartered Accountants, Financial Analysis, Cost Accountants, Company Secretaries and the like. With such a limitation in the system of Higher Education, a student of these subjects remains a master in his subjects, but lacks the employable traits, or enterprising skills. He knows everything in his subjects but at the same time he is ignorant of everything about his career.

The existing curriculum does have prospective optional subjects but their scope and treatment are at the minimum which eventually fails to make the students proficient and professionally qualified. Such students become content with whatever jobs that come unto them for any remuneration package. They are presented to accept any type of jobs, for the question of survival is there always before them. Ultimately the very objectives of higher education get defeated at the basic level itself with huge amount of money being earmarked every year. In the

wake of globalization and market economy, and India emerging as a considerable economic power, it is imperative to make the optimum use of the human resources including those opting for social science subjects for their academic pursuit.

Restructuring the Curriculum

Revamping the system of higher education is the need of the hour with relevant and drastic changes in the existing curriculum and teaching methods. What has to be done for the qualitative enhancement in social science subjects? First the objectives in imparting subjects like economics and commerce must be offered together with major subjects with adequate focus and treatment. Thus, specialization of a particular subject will help the students to become professionally qualified either to be employed or settle with self employment. For example, in commerce subject, specialization can be on cost accounts and audit, financial analysis, marketing and salesmanship, tax consultancy and the like. Similarly, in economics subject, specialization can be offered in the areas like statistical investigation, micro level planner consultancy service, planning and budgeting and the like.

Evaluation needs changes:

The methods of evaluation in today's system of higher education are far from being scientific. The age old system of evaluating the performance of the students who rely mostly on their rote memory discourages the students further from becoming original and creative. The system fails to measure the innate potential of the students. Thus, the students are rendered inefficient and unemployable in today's job market.

Modern Technology in Higher Education:

We can not be blind to the technological revolution in today's context and therefore all the technological innovations and gadgets like computers, internet, digital labs, virtual class rooms, edu-sats and the like must be facilitated in the system of Higher Education.