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## HIGHER EDUCATION IN INDIA – QUALITY PERSPECTIVE

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**Abstract:** *Three main key determinants of quality in higher education are the adequate availability of quality faculty, optimum and adequate infrastructure and resources and availability of third party quality assurance system. It has been observed that while majority of students in higher education go to universities and colleges which come under the state system, they lack adequate resources in terms of manpower and infrastructure. Five issues – quantity/quality, regulation, privatization, staffing, and studying abroad – form the core of this note on the state and the prospects of higher education in India. This paper provides an overview of the Higher Education in India. Students are the primary customers in an educational setup and it is strongly supported by many researchers. Students involve in different roles: they are the product of the process, the internal customer for campus facilities, the laborers of the learning process and the internal customer of the delivery of the course material. The paper gives a overview on Higher Education statistics and challenges that are being faced by Higher Education Institutions and finally tries to bring out some suggestions to improve the Quality in Higher Education.*

**Keywords:** *Higher Education, Higher Education Institutions, Quality, GERs*

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According to Harvey (1995b), quality as fitness for purpose is defined as quality in terms of fulfilling a customer's requirements, needs or desires. Theoretically, the customer specifies requirements. In education, fitness for purpose is usually based on the ability of an institution to fulfill its mission or a programme of study to fulfill its purpose. McNealy (1993) supported this definition stating that quality is a dynamic state and one definition of it is meeting or exceeding customer needs and expectations and these needs and expectations are determined through communication with the customers. Oakland (1995) added to this by stating that quality is simply meeting the customer's requirements. Furthermore, Goetsch and Davis (1994) said that quality involves meeting or exceeding customer expectations and applies to products, services, people, processes and the environment (Dejager & Nieuwenhuis, 2005).

## **DIMENSIONS OF QUALITY IN EDUCATION**

According to Murad and Rajesh (2010) quality in education has the following dimensions:

**Consistency:** Here the educational processes involve specifications through zero defect approach and a quality culture. But the limitations are in achieving consistent standards and conformity to those standards.

**Fitness to purpose:** fitting the customer specifications, minimum-based fitness for purpose and customer satisfaction.

**Value for money:** through efficiency and effectiveness

**Transformative:** education is an ongoing process of transformation that includes empowerment and enhancement of the customer (Oduwaiye *etal*, 2012).

Five issues – quantity/quality, regulation, privatization, staffing, and studying abroad – form the core of this note on the state and the prospects of higher education in India. Other issues may well be equally critical or even more so; a more encompassing account would certainly have to include such issues as

- the provision of education, higher and otherwise, to disadvantaged groups in Indian society (the issues of "inclusion" and "affirmative action"),
- the quality and relevance of the curriculum in higher education,
- the effect that problems in higher education have on primary and secondary schools, and vice-versa,
- the role of assessment and evaluation in higher education, and



- the state of research both within and outside institutions of higher education (Weiler).

As far as the quality is concern the University Grants Commission (UGC) has laid down indicators under provision what it called, 2(f) and 12 (b). These two together assess the minimum quality requirements to provide the grants to the universities and colleges. The college is recognised under 2(f) if it is a register body with a temporary affiliation and carrying under graduate program. The recognition under 12 (b) is granted provided the college has a permanent affiliation with univeristy. The univesity provides permanent affiliation after satisfying the required minimum conditions.

Thus 2(f) & 12 (b) is the initial and presumably the minimum framework of regulation of quality for the colleges.

Besides the UGC has set up National Assessmetn and Accrediation Council (NAAC) to asses the quality of higher education institutions, which used fairly expanded criteria of quality for universities and colleges in the country (Thorat, 2006).

India is facing a deep crisis in higher education, which is being masked by the success of narrow professional schools. The veneer of the few institutions of excellence masks the reality that the median higher education institutions in India have become incapable of producing students who have skills and knowledge. The process neither serves a screening or signaling function nor prepares students to be productive and responsible citizens. Consequently, students are forced to spend more years (and, increasingly, large resources) in acquiring some sort of postgraduate professional qualification as they desperately seek ways to signal their qualities to potential employers. It would not be an exaggeration to say that India's current system of higher education is centralized, politicized and militates against producing general intellectual virtues. The fact that the system nonetheless produces a noticeable number of high quality students has to do with the sheer number of students and the Darwinian struggle at the high school to get admission into the few good institutions (Kapur & Mehta, 2004).

### **MAIN FEATURES OF INDIAN HIGHER EDUCATION SYSTEM**

- Highly bureaucratized system with multiple controls and regulations exercised by Central and State Governments, statutory bodies (University Grants Commission



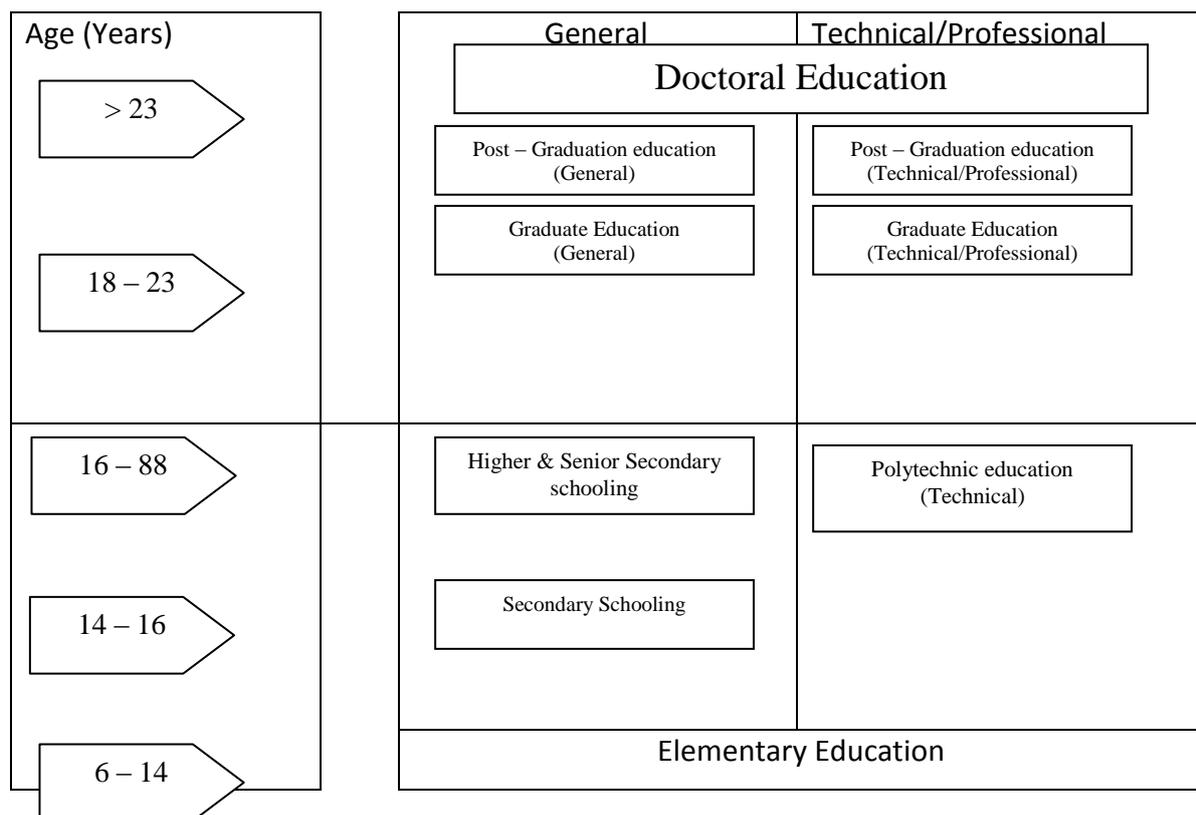
(UGC), All India Council of Technical Education (AICTE) and others), university administration and local management.

- System is heavily subsidized by the Government. Up to 90per cent of the operating costs are paid for by the state. The efficiency of fund utilization is very poor due to internal rigidities.
- Salary and compensation for teaching staff is poor and, therefore, higher education institutions are unable to attract and retain qualified and trained teachers. Besides unattractive compensation packages, recruitment procedure is lengthy and working environment not conducive to retention. As a result, a substantial proportion of high ranking students who could fill up such assignments prefer to work elsewhere or go abroad. In a recent move UGC has further damaged the pay and promotion prospects of college teachers by reducing promotional grades thereby creating more stagnation and frustration amongst college teachers.
- Most institutions offer outdated programmes with inflexible structures and content. While course content has been updated and restructured over time in the world's best institutions, Indian university curricula have lagged behind.
- Infrastructural facilities range from inadequate to dismal. Classrooms are often unattractive and laboratories inadequately stocked, leading to poor teaching. It is estimated that barely 20per cent of the institutions have the basic minimum laboratory equipment.
- Steady electric power supply is not available. Laboratories are poorly stocked and computerization, where it exists is generally dependent on poor communication lines (Kaul, 2006).

A sound higher education sector plays an important role in economic growth and development of a nation. Higher education, in terms of its relevance and importance, enjoys a significant position in the education system as it equips people with appropriate knowledge and skills to be gainfully employed. India has one of the largest systems of higher education in the world offering facility of education and training in almost all aspects of human creativity and intellectual endeavour. In the context of current demographic structure of India where the majority of population is below the age of 25 years, the role of higher education is critical.



**Figure – 1: Structure of Higher Education**



Source: Annual Status of Higher Education of States and UTs in India (ASHE 2013), Ministry of MHRD, CII & Deloitte, November, 2013.

The general education mainly consists of higher education courses in arts, commerce and science, the technical education on the other hand comprises of programmes of education, research and training in engineering technology, architecture, town planning, management, pharmacy and applied arts and crafts. Professional education includes courses in medical education, law and other specialized fields.

## KEY FEATURES OF THE INDIAN HIGHER EDUCATION SYSTEM

### Infrastructure

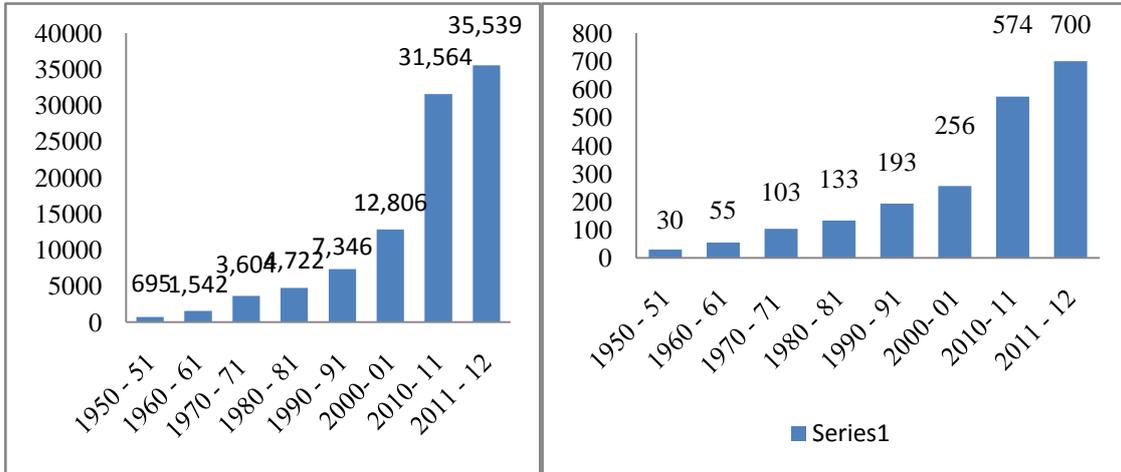
#### Number of Higher Education Institutions

Higher education in India has witnessed an impressive growth over the years. The number of higher educational institutions (HEIs) has increased from about 30 universities and 695 colleges in 1950-51 to about 700 universities (as of 2012-13) and 35,000 colleges (as of 2011-12) as per a recent UGC report<sup>1</sup>. With an annual enrolment of above 25 million



(including enrolment under Open and Distance Learning system), India is today ranked as the third largest higher education system in the world after US and China.

Figure – 2: Number of Colleges Number of Universities



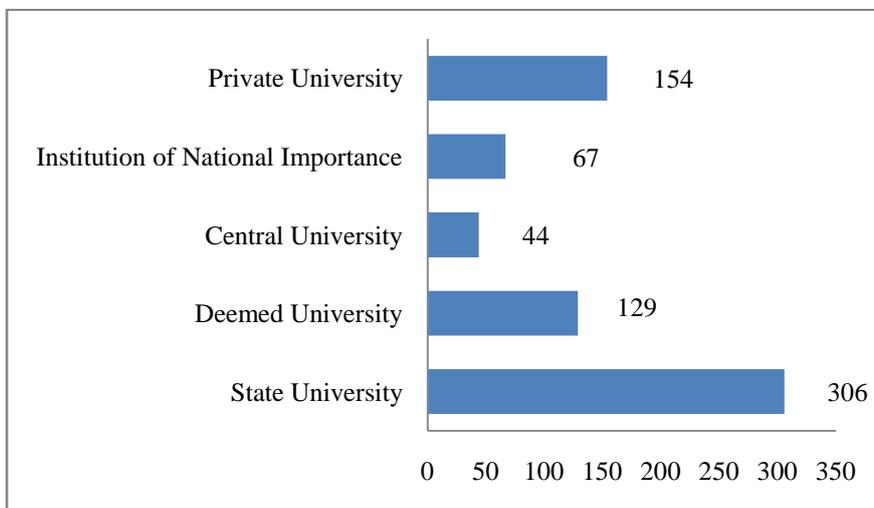
Source: Annual Status of Higher Education of States and UTs in India (ASHE 2013), Ministry of MHRD, CII & Delloite, November, 2013.

As may be seen from Figure 1 above, there has been a threefold increase in the number of HEIs in the country during the last decade.

Higher Education Institutions by type

The break-up of number of HEIs in the country shows that the share of state universities is the highest (44%) followed by private universities (22%), deemed universities (18%), institutes of national importance (10%) and central universities (6%).

Figure – 3: Break up of Higher Education Institutions



Source: Annual Status of Higher Education of States and UTs in India (ASHE 2013), Ministry of MHRD, CII & Delloite, November, 2013.



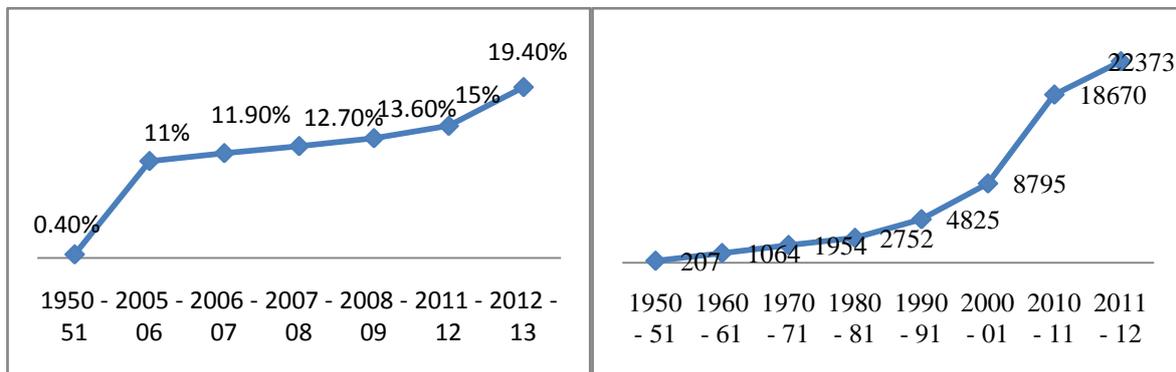
### Private sector participation

The public expenditure in higher education remained close to 1% of the country's Gross Domestic Product (GDP) over the years, which has been quite low in proportion to the burgeoning requirements of this sector. This has led to an exponential growth of private sector institutions.

### Growth in enrolment and GER (Gross Enrolment Ratio)

The increase in the enrolment figures is consistent with the expansion of HEIs over the years. The total enrolment in higher education has increased from 0.21 million in 1950-51 to about 22 million in 2011-12, while the GER has increased from 0.40% in 1950-51 19.4% in 2012-13

Figure – 4: India's GER in higher education (in %)



Source: Annual Status of Higher Education of States and UTs in India (ASHE 2013), Ministry of MHRD, CII & Deloitte, November, 2013.

While we have been able to cross the GER of 15%, which can largely be attributed to the focused efforts of the 11th Five Year Plan, a lot more needs to be done in order to translate the favourable age-structure of the country into a demographic dividend.

The government is targeting to achieve a GER of 30% by 20205 which will require creation of additional enrolment capacity at an unprecedented scale. Accordingly, the 12th Five Year Plan envisages creating an additional enrolment capacity of 10 million, which is expected to raise the GER from present level of 17.4% to 25.2% in 2017-18. The 12th Five Year Plan also acknowledges the need for a continued and growing role of the private sector in higher education.

In fact, of the additional enrolment capacity of 10 million to be created during the 12th Five Year Plan, 6.2 million<sup>6</sup> is expected to be created by the private sector.



### **Enrolment by course**

In terms of distribution of enrolment across various courses, Arts has been the favourite choice amongst students with 37.09% of enrolment, followed by 18.64% in Science, 17.57% in Commerce/Management and 16.06% in Engineering/ Technology (MHRD, 2013).

Once the commitment is made to implement TQM, one of the first steps is to identify the customers or stakeholders. To do this, you must treat the educational process as a system; all elements and the interactions between those elements must be addressed. Process improvement should begin and end with customer (Winn & Green, 1998).

Students are the primary customers in an educational setup and it is strongly supported by many researchers. Students involve in different roles: they are the product of the process, the internal customer for campus facilities, the laborers of the learning process and the internal customer of the delivery of the course material. However, it is generally accepted that students are the primary customers and other prospective customers are such as alumni, parents, employers, employee, government, industry and society may be considered secondary customers (Annamadevula & Bellamkonda, 2012)

Today the Indian education system is one of the largest in the world. At the time of attainment of independence there were only 20 universities and 500 colleges with 0.1 million students in India. But according to the latest research there are 611 universities and university level institutions and 31324 colleges as on 31 August 2011. The vision of 12th Five Year Plan (FYP) is to promote the higher education by forming new universities and increasing the intake capacity of present universities and colleges. For enhancing quality the various measures in the 12th FYP are:

- Continuance of the reforms agenda in higher education will have to be followed in the field of academic, administration, curricula, pedagogy, programme offerings, research, etc.
- Structural and systemic reforms on a huge scale with healthy policies and realistic programmes to facilitate all the measures required for improving quality and to promote excellence in higher education, including good governance.
- Providing incentives through funding for academic reforms like introduction of semester system, grading, choice-based credit system, examination reforms, accreditation, etc. can go a long way towards enhancing quality.



- Focus in the 12th FYP will be on generation of a new knowledge society from the learners' perspective, satisfying the national and international demands of the society.
- Development of new models of accreditation and systems for implementation with the dual objectives of national level coverage and compulsory accreditation of all higher education institutions shall be undertaken in a time bound manner.
- In order to internalize quality inputs, all universities, government and government-aided colleges are to be supported with full-fledged Internal Quality Assurance Cells (IQAC) as a UGC-supported scheme, on regular basis with the required Information Technology (IT) infrastructure and supportive manpower (Bhalla, 2012).

Quality of education is a multi-dimensional concept, with varying conceptualizations. It includes, within its ambit, the quality of inputs in the form of students, faculty, support staff and the infrastructure: the quality of processes in the form of learning and teaching activity: and the quality of outputs in the form of the enlightened students who move out of the system. Quality control is an effective system of ensuring quality, ensuring continuing excellence. Total Quality Management (TQM) is a modern term wider in scope than the total quality control (TQC). TQC considers the role of employees in improving the productivity. But it remains silent about the quality of work life, employee satisfaction and organizational development. TQM, however, is a holistic view and takes into its fold not only ensuring productivity and efficiency but also ensuring individual satisfaction and institutional building and human well being. TQM is not merely preventive, it is pro-active (Solanki, 2004).

Higher education lays significant emphasis on human capital formation. It produces intellectual leaders and path makers. No nation can go high without quality higher education. Basically, primary and secondary education is concerned with transfer of knowledge from the teacher to the taught. But higher education involves analysis, synthesis and the transformation of information into knowledge. Above arguments clearly indicate that higher education is becoming an issue for research and discussion. Parallel to this TQM is becoming popular among developed and developing countries in the world today. Proper management of higher education in universities can put much better result than we expect (Mishra & Pandey, 2013).



## IMPORTANCE OF QUALITY IN HIGHER EDUCATION

Quality in higher education means the educational process is such that it ensures students to achieve their goals and there by satisfies the needs of the society and help in national development.

### Management of Quality in Higher Education System

Quality of Management implies responsibility of all levels of management but it must be led by the highest level of management. Quality management centered upon those strategies, structures, techniques and operations enabling the institution to demonstrate that it evaluates. Its performances of quality insurance and improvement, and its systems of information demonstrate the results of the learning and research processes. The system of quality management in higher education institutions are based upon the existence of standards (models) acting like referential or a system of criteria in the case of external evaluation (quality insurance) or as a guide for internal organization (quality management) (Ahuja, 2013).

According to the reports of United Nations Educational, Scientific, Cultural Organizations (UNESCO) and the World Bank, social and private returns of the higher education are less than those of primary and secondary education. It is estimated that social return of primary education is 25% while that of higher education is only 1%. This has led to the thinking that the returns of higher education are largely private and therefore, subsidy on this should be reduced (Zakuan, *etal.* 2012).

Every educational curriculum starts from study objectives to be achieved during the learning process. To meet expectations and stated studying goals, with more emphasis on various advanced management concepts and methods. Within basic divisions, detailed content of topics is provided as a contribution to the map of necessary knowledge expected from quality personnel – managers and experts (Zivoninoic, 2007).

At present united focus should be on two aspects such as Quality Assessment and Quality Assurance, which are like two sides of a coin. In response to quality aspects, the institutions have adopted various quality management system initiatives like ISO 9001 Certification, Six Sigma, National Assessment and Accreditation Council (NAAC), National Board of Accreditation (NBA) and more importantly have started applying Total Quality Management (TQM) concept in education. The objective of TQM is to build an institution that produces



products or services, which fulfill customers' requirements and thereby delighting them (Misra, 2012). Management Leadership is a key factor in the success of TQM in higher education institutions (Pandi *et al.* 2009).

Recent reports suggest that Indian Institutions are far behind in delivering quality in education on the world map. Only one IIT (place not mentioned) has been listed as 41 ranks among the top 100 educational institutions of the world (Krishnan, 2011).

## **CHALLENGES IN TQM IMPLEMENTATION IN HIGHER EDUCATIONAL INSTITUTIONS**

**Leadership:** Unlike CEO's of business organizations, Vice Chancellors/Directors of Universities/ Institutions do not enjoy ultimate authority hiring and firing personnel and allocating resources. Institutional heads can set goals, organizational values and performance expectations. However since they lack necessary authority, it is difficult for them to deploy these values and goals through the layers of higher education institutions.

**Cultural and Organizational transformation:** Many business organizations have adopted TQM and transformed their institution's culture into a total quality culture that involves elements such as teamwork, employee participation, customer and market focus etc. However higher education institutions have deep-rooted traditions dating back to several centuries and are resistance to change. Eg. Universities and colleges are organized on departmental units. In adopting TQM culture, organizations move from product focus to market focus. But for faculty, particularly research faculty, primary loyalty lies in the academic field. Market requirement for their students are of secondary importance to them except for some professional schools as business and engineering. In business organizations there is cross linkage and well communication between the various functional departments. But in the case of higher educational institutions, most of the individual departments operate in vacuum. This is one reason that interdisciplinary study and research is a rarity.

**Customer Identification:** A different aspect of customer issue here is customer loyalty. In businesses, customer loyalty is very important because repeat buying by loyal customers' has a direct effect on profitability. However higher education is "once in a lifetime activity". If students are considered as customers, this concept makes sense only when they make donations as alumni. However if employers are customers, repeat purchase means recruiting at same institutions every year (Ali & Shastry, 2009).



## **SUGGESTIONS FOR IMPROVING OF TOTAL QUALITY MANAGEMENT IN HIGHER EDUCATION**

### **1. Need for review of course content**

It is necessary to have a good look at the courses being offered now not merely for the organizational purposes of "graded" facilities. Mere accumulation of information is not knowledge, and complete knowledge by itself does not give the necessary wisdom. The purpose of education is not to produce "educated" individual at one stretch by putting all information and knowledge into course at one time, but, on the other hand, it is to take the individual to progressive stages where he would be in a position to acquire what further information and knowledge he wants for his future activities. If we accept this philosophy, it is to be conceded that what is important is not to "load" the curriculum but to arrange it in such a way that different requirements and needs of the individual's calling are provided in the process of life-long education. The credit system no doubt can go quite some way in this regard. But a deliberate attempt is to be made to recognize the fact that many of those who pursue these courses of studies will remain as technologists whereas quite a few of them might end up as managers. Further even a technologist has to have sufficient insight into the marginal areas of the allied fields, if not in-depth study in that field itself. The course content therefore should be so modified as to allow for the technologist to have an overall view in addition to this core discipline, e.g., the professional may have to have managerial training in addition to his professional calling. The education in our institution campuses should break away from the rigid stand of a unidisciplinary approach and a fixed framework but cater to a larger interest to acquaint and give an insight in various fields of expertise of which the institutional faculty and facilities are capable of, by offering on a massive scale refresher courses, study programmes, etc. Attempts should also be made even in the undergraduate programme to provide for an intensive managerial training for those who desire it within the course frame work apart from those who want to pursue the technological programme. Complementary courses might also be provided for the technologist to acquaint himself with the necessary management techniques and practices, and vice versa.



## **2. Diversification, new courses, etc.**

The infrastructure that has been built up appears to be quite adequate to meet the major requirements of the system for most of the efforts mentioned above. However, with the changing technology and development there may be many areas where specialized personnel are required. Many of the emerging areas have been enumerated in Annexure 'G', for industrial and rural requirements, etc. A cluster of courses might be required, organization of diversification on a large scale and occasionally new courses also might be called for. This has to be looked into by appropriate agencies taking care at the same time to see that the fresh inputs for any such effort would be marginal and capable of diversion, whenever required. This is easily said than achieved in practice, but nonetheless the issues are important to be considered.

## **3. Proliferation of courses**

The facilities available at various levels right from the craftsman to the post-graduate level are adequate and any further expansion of these facilities has to be gone into only after a deep study and with caution. The ratio between the graduate, technician and craftsmen in some of the more industrialized economies is of the orders of 1:3:5; facilities for education being also provided for in that order. With us, the facilities provided at the graduate and technician level are in the ratio of 1:2, but in the output the ratio comes down to about 1:1. Organisation of any new course/diversification at one or the other levels has to take into consideration a systematic study of the manpower requirement and utilization, linked with the occupational structure of the various employing sectors. It is, therefore, necessary to keep this in mind while organizing any new course/diversification at any level right from the craftsmen to the post-graduate so that the entire spectrum of activities in the employing fields are kept in mind. This is not to forget the needs of the research and development activities where academic considerations might point to growth potential at a particular level.

## **4. Sisterhood programmes**

While there is no doubt that certain segments of the Technical Education system have built up strong potential (IITs, University Departments, some of the State Colleges, for example), there are others which are rather weak. It is here that practicable and effective system of cooperation programmes between institutions of different types at different levels are to



be organized. Desirable are the programmes of exchange of teachers on short term and long-term, on a massive scale planned in relation to specific levels and goals of development, providing opportunities and appropriate programmes for making available at specific and for known periods the facilities available at the better institutions for the use of the staff of the not-so-well-off institutions, organizing of special programmes of refresher courses, extension lectures, etc. by the faculty of the better institutions at the other institutions etc. Efforts at curriculum development, faculty development etc., though now well organized and recognized, have yet to be gone through on a much larger scale and in a more purposeful way. Preparation of manuals for lectures, workshop practice etc., production of text-books, preparation of teaching aids etc. also have to be undertaken by all the institutions by pooling the resources that are available.

#### **5. Industry-Institution Collaboration**

For the improvement and further development of the system it is necessary that there is interaction between technical institutions and industry and other field organizations. There has been an awareness of the need for such interaction: creation of agencies such as Industrial Liaison Boards in the States, Co-option of Industrial representatives on the various academic bodies such as the Boards of Management, Boards of Studies etc., and the system of Visiting Professorship/guest lectures etc. has helped to an extent in breaking this ground. But much more remains to be done in this direction. This initiative so far has been with the technical education system with the industry and field organizations, unfortunately, not always showing more than lukewarm interest. This attitude had radically to be changed in that both technical institutions, who produce manpower for the industry and the field organizations, and also the latter themselves are partners in the same enterprise of developing the economy; and it is high time that this responsibility, is duly realized by setting up this interaction. The employing sector should go all out to associate and involve itself in all matters and at all levels of technical education, planning and implementation. On the other hand, the technical education system should make this possible by appropriate incentives and safeguards for such involvement by personnel from the industry and employing organizations. A stage has been reached where purely academic consideration in a system of professional education should not be the criteria in determining about the suitability of personnel for technical education. Sufficient credit should be given by the



educational authorities for giving appropriate recognition for field expertise- while considering the faculty requirements. Schemes such as adoption of institutions by industry etc., which have been initiated, should be encouraged totally by the industry.

#### **6. Improvement of teaching methods**

Production of textbooks, other teaching material and teaching aids which have been started now on a small measure have to be considerably stepped up. Manuals for better utilization of the laboratory and workshop equipment, use of the library as a resource centre both by the teachers and the students have to be encouraged. In all these attempts of preparation of teachers and students materials, emphasis also has to lay on the possible slower comprehension of the non-urban student to the methods employed in the urban situation.

#### **7. Integration of practical training with the institutional courses**

Because of the lack of sufficient 'training' places in industry and field organizations, the provision of training under the Apprenticeship Training Programme has been after the institutional course. For a more effective and coordinated approach, it is necessary to think in terms of integrating the practical/industrial training with the institutional course itself, at appropriate stages of the course. This will lead not only to better supervision but also better comprehension of the field precepts and practices by the student.

#### **8. Simplification of procedures**

Easy operation and flexibility are the basis for simplification of procedures. Simplifications of procedures are to be attempted through systematic recording analysis and critical examination of existing methods. Method study improves the how to do work not only in individual operations but also in processes, procedures and systems.

#### **9. Clarity in Responsibilities**

Definite and clear-cut responsibilities should be assigned to each staff member with provisions for exercising adequate control at different levels. Confusion and unclear assignment of responsibilities lead to chaos. So, specific job assignment should be made to different sub-ordinates for ensuring certainty of work performance.

#### **10. Committee Management**

The concept of decision making and management through committees is far superior in vesting the decision making and management in the hands of a single person. There should



be ample scope for effective interaction, exchange of thought, deliberation, consultation etc. This is possible through Committee Management.

### 11. Effective Leadership

Leadership is the paramount necessity in planning, organizing, financing and fund raising, operational policies and expansion. The application of these qualities of leadership is the force which determines the effectiveness functions of college administration. Some of the qualities of leadership which a college administrator should possess are vitality and endurance, decisiveness, persuasiveness etc.

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