

---

# REVAMPING OF THE TECHENICAL EDUCATION

Prof. N. V. Ratnalikar.

---

## ABSTRACT

*It is pointed out that the limiting factor for growth and prosperity of a nation/state is the scientific and technological capabilities of its people, also that the contribution towards quality and excellence of any amount of physical, technical and economical resources available in any Engineering Institution is limited by the level of competence and commitment of the teacher implementing the educational progress.*

*The problem arising out of massive expansion in Engineering Education have been pointed out. The way out whatever revamping, renewal, or overhailing, whatever one may call it, and remedial measures suggested.*

---

## INTRODUCTION

World experience tells us that the limiting factor for growth and prosperity of a nation/state at this juncture of time is the the SCIENTIFIC & TECHNOLOGICAL CAPABILITY of people. The availability of funds, raw materialss, minerals etc. are all important but not as much as the ability of people to master EMERGING TECHNOLOGIES & applying the same to various vocations and professions.

FINANCIAL INVESTMENTS ON massive scale, have been made in the past in industry, without a matching investment in technical education. Consequently, the much desired return from investment are not obtained and crore of rupees are locked up in sick industries. Non performing and zero yield assets are created with time-cost overruns, mainly due to the deficiency in technical education,. The capacity utilisation of most of the plants is far too low by

world standards. The opportunities offered by change in technology in national and international markets are being lost due to neglect of technical education. Let us aspire to seize such apportunities at least in future.

Answers to the problems of removal of poverty, providing housing, clothing, food, employment lie now in making the masses competant in using the science and technology in their respective fields, which essentially demands nothing less than WORLD CLASS TECHNICAL EDUCATION. INTERNATIONALISM IN in industry, trade and commerce due to increased communication has become the trend of time, demanding competitiveness and higher productivity for which proper TECHNICAL EDUCATION is a prerequisite.

Maharashtra state in the recent past has witnessed. PRIVATISATION OF TECHNICAL EDUCATION & Many non grant colleges/ polytechnics have been established.

This has emerged spontaneously, to meet the peoples growing demand. Although the demand in terms of quantity is met with yet in terms of quality, so far, it is not- Privatisation has given birth to several problems, but has also led to desirable aspect of regional growth.

Intervention by Govt, All India Council of Technical Education, thinkers, industrialists, Economists, and statemen with long range thinking is the pressing need of time. The nation/state needs no rash measures but a strategy. It is high time that we pause, ponder, think and discuss where we are and whither we tend to go and debate the vital issues so as to revamp the technical education. We should aim at identifying the deficiencies in present system and apply our mind afresh to the mode of organization and functioning of the institutions, their structure, examinatio systems etc.

### THE PRESENT SITUATION

There has been massive and sudden expansion in technical education in the southern states -Karnataka & Maharashtra in particular. The intake at both degree and diploma has increased from a few hundred to few thousands. The expansion in Maharashtra is indicated in the table below.

DEGREE LEVEL	INTAKE		
	1982-83	1985-86	
	16	76	2642
			14250
DIPLOMA LEVEL	1982-83	1985-86	
	50	255	6373
			31350

The expansion has taken place in the midst of the dearth of faculty experienced not only in Maharashtra but throughout the Country, lack of adquent equipment/obseclence oif existing equipment in the then existing Insitution. Naturally today the situation in Technical Education may be sumarrised as given below.

1. Education Standards going down.

2. Substandard Insitution have come into existance.
3. Dearth of qualified and experience faculty.
4. Lack of committed/devoted teachers, trained Administrators and planners.
5. Want of work culture.
6. Lack of awareness in repect of duties and responsibilities of the teaching profession amongst the teachers.
7. Tendency to seek maximum benefits with minimum inputs.
8. Lack of wider/national outlook in all activities of life.
9. Social and political enironment smacking with corruption/nepotisun etc.
10. Absence of ideal personalities/ leadership in all fields, at all levels, regioanal and national level.

### THE WAY OF OUT- REVAMPING OR OVERHAULING

What is the way out? We are called upon to face stiff competition in the world market today? Our public sector undertaking are running in loss? Our post graduate and undergraduate are undervalued and required to face entrance tests in U.K. & U.S.A. Our imports far exceed our exports. We have to import advanced/emerging technologies.inspite of the fact that in scientific and technology manpower, we stand Third in the world order. All this dismal picture can be traced to our Technical Education System and Technical Education we impart in our Technical Institutions. The system needs revamping rather overhauling. Unless this is done, we shall not only continue, with our problems at State/Na-

tional level, but the problems will acquire massive proportion, get more complicated and will elude solution. Hence the urgency in finding a way out. It may be revamping or even overhauling the present system of education. What ever it be, it has to be taken up, without any loss of time, as any delay/postponement will result in irreparable loss for the nation.

If the system is to be rectified, we must pay attention first to the Technical Institution which is the basic unit of the Educational system.

The role of a teacher is crucial in the growth and development of any institution. Around the teacher, revolve all essential activities of an Educational Institution-Instructions, both theory and lab, learning resource development; research development and innovation; consultancy and interaction with Industry and community services. A teacher has to be qualified academically and skilled professionally. He should be fully aware of his duties, responsibilities and obligations as a teacher. It is only then he can do justice to his job.

The Institution must provide all necessary physical facilities for conduct of educational programmes conducted by the Institution. It is also essential that academic climate is generated suitable for education of the students, development of the faculty and healthy growth the institution, and

which ultimately has a bearing on the Educational system itself.

Hence for the revamping/overhauling of the system, the following measures should and must be taken up in each and every institution.

1. Training of the Teachers, Administrators & Planners.
2. Planning-perspective as well as yearly plans-and programme of the action for each Institution.
3. Involving all concerned-particularly teachers-in Institutional planning.
4. Developing a work culture in the Institution and inculcate an attitude to work for quality and excellence in the faculty.
5. Introduction of performance Appraisal and Development system, Academic Audit, accreditation, close liasson with Industry and community services.
6. The expansion has taken place in telnducing Industry to extend support to Instituion.
7. The Head of Organisations-Directors, Principals, Head of Depts. should be trained for the revamping overhauling of the educational system.