

Strategic planning of manpower at Institutes to meet the challenges for changing scenario of the modern industries requirements

Mamta Mainak Saiyad

Lecturer - plastic Engineering Department,
Nirma institute of diploma studies, Sarkhej-Gandhinagar Highway,
Post Chandalodia, via gota,
Ahmedabad-382 481
Email: ma2sa@yahoo.com

Abstract: - The challenges of present century will be enormous and exorbitant. The developments of human activities in all spheres of life are highly important and indispensable. The industries in the country, have flourished mainly by the Technocrats. They have been educated and trained by the technical institutions. Industrial organization in the country can come forward to expose the students as well as faculties to the real problem and developments of industry. On the other hand, the curriculums for various courses of the technical institutes should be developed in view of changing scenario of modern industries requirements, by adapting man who is capable of living in a technological society and of transferring it to meet the material and spiritual needs of the age.

Key Words: enormous, exorbitant, Technocrats, curriculums, changing scenario, spiritual needs

1. INTRODUCTION

The challenges of the present century will be enormous and exorbitant. The developments of human activities in all spheres of life are highly important and indispensable.

The industries in the country, have flourished mainly by the Engineers and Technicians working there. These technical personnel have been educated and trained by the technical institutions.

Technological development is taking place at a fast rate. No one can ignore this

fact and get them trained in these new fields. Industries should sponsor the Engineers and Technicians to undertake continuing education programmes run by technical institutions.

Industrial organization in the country can come forward to provide scholarships to bright students and shop floor training/experience for students as well as faculties to expose them to the real problem and developments of industry.

On the other hand, the curriculums for various courses of the technical institutes

need to be developed in view of changing scenario of the modern industries requirements.

The global technological advancement has forced the industries and technical institute to realize that they can no longer live in isolation from each other. Recent developments both in education and in industry have made this forward projection of education of far greater moment than previously.

The present day system of education is designed mainly to know things orally and locally perceived without giving scope for deep study for acquiring thorough knowledge. The ways and means of removing these difficulties; not by adapting man to the technological society, but rather by considering how education can form the “whole man” – that is, the man who is capable of living in a technological society and of transferring it to meet the material and spiritual needs of the age.

These suggestions are only a few of many by which manpower may be planned in proper manner and which in turn; institute can provide expertise and technocrats to serve the needs of industries.

2. Role of Industry

There are many industries in the country, which have flourished mainly by the Engineers and Technicians working there. These technical personnel have been educated and trained by the technical institutions, but nowadays these institutions are finding it difficult to run due to scarcity of fund. They are finding difficult to come up to meet the growing demand of technical education and consequently industries have started finding following difficulties,

2.1 The technical knowledge at present given is wholly inadequate for industry needs.

2.2 Technical education including apprenticeship and other forms of in – industry training is liable to be too narrow in a world of rapid technological change.

2.3 The cultural content of technical education is inadequate.

The ways and means of removing these difficulties; the industries management should realize that for the better working of their establishment, they have to help the technical institutions. The various methods by which they can help are instituting scholarships, sponsoring projects, providing training for the students, involving technical institutions in the R & D programmes, involving the curriculum development work of the technical institutions, honoring best students and teachers, sponsoring faculties for participating in the continuing education Programme of the technical institutions to update knowledge, running special courses in the industry itself.

Even industrial giants in the country can come forward and institute scholarship for students to pursue their studies and to undertake research work in the field of their requirements, so that the bright students may not be deprived of the type of education they want to study. Many organizations in other countries are doing these effectively.

The government in turn should permit technical institutions to take these sponsored students over and above the sanctioned strength. After graduation these students can either be employed in the organization sponsoring them or serve the country for at least five years.

To provide the much-needed shop floor experience for the students and expose the students to real problem of industries, industries may come forward in providing industrial training. By these not only the students but also the industries gain. This scheme is beneficial to the industries as they get help not only from the students but also

through the expertise of the technical institution.

For better industry – institution relation which is the much – needed aspect of technical education, faculties from industries and technical institutions must be freely exchanged for short periods. This will help in sharing the expertise of each other.

The best work done by students and the faculty are going unnoticed by society. Only when due recognition is given to the talents, will people come forward for displaying their best. Industries can come forward in instituting awards and cash prizes for the best student and best teachers.

3. Role of Institutes

The challenges of the present century will be enormous and exorbitant. The developments of human activities in all spheres of life are highly important and indispensable.

But the world today is in agitation. Problems between nations, within nation and among human beings are very large. In this situation, preparation of good curriculum for development of overall personality of the student is very much necessary to face the problems and challenges of the situation.

A curriculum is the planned Programme of the activities to achieve the objectives of education. According to academicians, curriculum does not mean only the technological subjects, but includes totality of all experiences that a student should know through the manifold activities that go on in the institute, in the classroom, library, laboratory, workshop, playground and numerous informal activities.

For curriculum reforms there must be closer relationship between men and environment, greater identification of the subject should be made, job oriented and employment opportunities can be created, socio-economic conditions should be developed, co-ordination between subjects should be made, creative skill should be

improved, ability of problem solving should be developed, right values should be increased and thus up-dating the knowledge of information is required.

In this sense the whole life of the college becomes the curriculum, which can touch the life of the students at all points and help, in attaining balance personality.

The present day system of education is designed mainly to know things orally and locally perceived without giving scope for deep study for acquiring thorough knowledge. The general education given is lacking in the realistic, contemporary knowledge necessary for life in a technological society and inclines towards bookish “know about” rather than a practical “know how”.

Students are taught to repeat words precisely and to operate as mechanical and mathematical process without giving opportunity for logical thinking and reasoning. The present system of curriculum and syllabus can be reformed to develop the creativity factors, analytical power, problem solving ability etc.

Present structure of curriculum have neglected the student thinking and learning process that would assist them greatly to develop visualization, imagination and sensory perceptual abilities. The models so often presented to the students in their textbooks emphasis linear thought processes, ignoring intuitive, analogical and metaphorical thinking.

This does not mean that subject matter will not be used, or that it becomes unimportant. Things cannot teach without teaching something, and students cannot learn without learning something. Only the question is that what is the subject matter is for?

While framing the curriculum stress could be laid upon the proper teaching of fundamental subjects and as upon comprehensive knowledge as calculations

and general science. Students can also be introduced to such subjects as business administration, economics and management, which are relevant to the immediate requirements of the chosen field.

The theoretical appreciation of fundamental principles could be constantly tested against practical application in the shape of workshop activity.

Neurological studies indicate that education as it is now structured develops only one part of the human brain and leaves the other part untouched, which has a high level, potential. Different teaching techniques and methodologies can be adopted to influence and activate the other part to be functioned of the brain.

The experiments throw new light on the visual process and its importance for behavior. It is the major tie that binds us to the outside world. We also gain some knowledge of what lies outside us by experimental process. This concept of vision leading to an experimental way of managing the life as well.

In general, the teaching should aim at developing the personality of the student, together with such a spirit of inquiring and independence of thought as would stand one in good stead not only in his work but in his free time activities as well.

Subject matter alone cannot educate and build a "whole man". The students should experience all kind of things and not the fragmentation of knowledge.

The curriculum continues to be fashioned on the concept of preparing students for acquiring degrees and diplomas without practical content and thus the students become useless to be positioned in jobs immediately after college studies.

Curriculum for various courses of the technical institutes have been developed purely by teachers of the institutes. Now it has been realized that the industries and other research organization have to be

involved in the curriculum development in view of the changing scenario the industries hold participate in the curriculum development work of various technical institutions. Sponsoring projects has become a reality nowadays. Many industries are now sponsoring projects as they find it useful for their own growth. The financial burden of the technical institutions is less, and students are able to acquire the real shop-floor experience in the development and execution work of the project in industries.

There are many reputed Industries and Research organizations contributing immensely in certain fields of specialization. Using this experience, they can come forward in framing proper curriculum for specialized courses, in consultation with technical institutions and university authorities, which can be offered by them at their place itself.

These types of steps can be encouraged by the universities and industries, before starting such practice; there are some following suggestions,

- 3.1 Regular statistical estimates are needed of a country's requirements in trained personnel for the major types of work at all levels. These estimates should be local and regional as well as national in their scope.
- 3.2 More over, as present education is not for the present but for future need of society, occupational trends should be continuously forecast as far as practicable.

These suggestions are only a few of the many aspects by which the industries and other organizations in India can come forward in lessening the financial burden of the suffering of technical institutions.

Recent developments both in education and in industry have made this forward projection of education of far greater moment than previously. The technological advancement taking place in

the world has forced the industries and technical institutes to realize that they can no longer live in isolation from one another. They need the help of the other. This has to be viewed as a good but only a starting point. In the years ahead, it can be said; there will be positive and encouraging cooperation between industries and technical institutions.

Mamta Saiyad

Author

4 References:

- 4.1 **John W Hanson and Cole S. Brembeck** *Education and the development of nations* London Holt, Rinehart & Winston 1966
- 4.2 **OESER A O** *Teacher, Pupil & Task* London. Tavistock. 1971; Trade p/b. Reprint. 196pp
- 4.3 **Oppenheim** *Questionnaire design & attitude measurement*
- 4.4 *The Hindu speaks on Education*
- 4.5 **Altbach, Philip G.** *Scientific Development and Higher Education: The Case of Newly Industrialising Nations* Westport, CT, U.S.A.: Greenwood Publishing Group, Incorporated, 1989
- 4.6 **W. Cummings** *International Handbook of Education and Development Preparing schools, Students and Nations for the Twenty-First Century* Elsevier Science Ltd North-Holland 1997

5. Certificate

“This is to certify that this paper has not been published and is not being considered for publication by any other organization or journal and that me agree to present the paper at the National Seminar on “Technical Manpower Planning in India-Issues and concerns”, September 5-7, 2004.”