

THE AUTONOMOUS TECHNICAL INSTITUTES : THE WAY AHEAD

* Dr. P.H. Waghodekar

ABSTRACT

The present Technical and Management Education System in India can be considered as an extension to the pre-independence education system designed by the British rulers. It is controlled either by the Government or semi-Government organisations, like universities. The demand for professional education is rising very sharply, and the Government, because of its limited financial and managerial capabilities, is not in a position to cope up with such demand. It is, therefore, proposed that full autonomy in the areas of academic, administrative and financial matters ought to be granted, rather than in a piecemeal fashion, to technical institutes. Some aspects of autonomy have been presented. For example, the autonomous institute management maturity grid and the concept of SEFI have been advocated.

1.0 INTRODUCTION

The demand for trained technical manpower in India is rising very sharply because of rapid growth of industrialisation after independence and the recent trend of globalisation. To cater to this need a large number of non-aided (private) engineering colleges have been established all over the country, especially in the Southern Indian States. This has provided the necessary facilities for imparting engineering education to a sizable section of the society. However, to impart quality education, the Government of India has readily come forward to grant autonomy to higher educational institutes. Academic autonomy is being promoted and encouraged all over the country. However, for one or the other reason, so far, a few institutes of higher learning have opted for autonomy. The scenario needs to be improved, else we are missing the call of the day.

2.0 AUTONOMY TO TECHNICAL INSTITUTES : A CALL OF THE DAY

Autonomy as per dictionary meaning is the right or power of self-government. It, thus, permits institute to be self-managed

and self-governed. It, therefore, can inherit system-flexibility and adaptability for speedy planned changes, experimentation and constructive contribution in the teaching programmes, essentially required for quality education. In fact, autonomy is expected to help grow the institute at a faster rate. However, such an autonomy means giving full freedom to institute in all its functional areas, like academic, administrative and financial. Some of the suggestions in respect of these areas are presented in the following subsections so as to make grant of autonomy more effective and rewarding.

2.1 Academic Autonomy

At present, the academic part is normally dealt with either at the university or Board of Technical Examination level. With a rapid growth in technical education, managing academic excellence on a large scale is proving somewhat unmanageable because of several reasons, like the different intellectual levels of students, availability opportunities, etc. This has slowed down the whole process of academic excellence, and the system-inertia of the education system hardly permits to be more flexible and adaptive

to the environment. The academic autonomy is, therefore, expected to play a major role in the areas, like :

1. Speedier need-based restructuring and improving of study programmes.
2. Introduction of continuous assessment of students' performance based on credit and multipoint entry system [2]
3. Establishment of a close linkage with industries and other agencies for faculty exchange programmes, projects, etc. [3]
4. Introduction of distance learning and continuing education programmes.

2.2 Administrative Autonomy

Whithin the norms prescribed preferably by only one appex body, like, AICTE, institutes can be given administrative autonomy. This can release the State and Central Governments free to do their lion's share in other public affairs. Such an administrative autonomy can lead to the following results :

1. Staff recruitment preferably on contract basis of 5 years can be faster and in time enabling the institute to have sufficient number of quality staff.
2. Students admission wil naturally get decentraised with the effect that the study programmes can be started and finished strictly as per schedule. This will help optimise to a great extent the utilization of the valuable resources of the nation, thereby minimising the waste.
3. Continuous and cross training for staff can be effectively implemented resulting into quality instructions.
4. A suitable reward-punishment system for staff can be effectively installed and implemented [4].
5. The students shall be recognised in pubic and in market after the name of institute and its faculty.
6. The study programmes can be more flexibly and informally administered enabling the institute to pay necessary attention for both strong and weak sections of students for developing their

potential in diverse areas of their aptitude.

7. Facilitites, like, laboratories, library, etc. , can be built up as per the real need of the students and society.
8. The whole institute administration can be made to work "student-oriented".

A Self Financed Engineering Institute (SEFI) can be expected to achive the above results Evidently, SEFI needs financial autonomy.

2.3 Financial Autonomy

Finance is the very "prana" of any organisation as nothing can move without it. Without it, the organisation is lifeless and dead. In India, the engineering education is almost free, i.e., at the cost of public, and the needy section of the society has remained where it was. For instance, the annual expenditure incurred per student at undergraduate and post-graduate levels in technical institutes are around Rs. 30,000 and Rs. 60,000 respectively. This includes 10% depreciation rate on capital investment, recurring expenses, such as, salary and other overheads and amount of scholarship to post-graduates students in IITs. Evidently, it is desirable that the Government should hand over the responsiibiy of catering technical education to some non-government agencies. However, academic autonomy can hardly work effectively without administrative and financial autonomy. Technical institutes, therefore, need to be accorded financial autonomy too.. This can be achived through SEFI. Such institutes can be economically viable and financially well self-supported. Some of the major suggestions in this respect are presented below.

1. Charge appropriate tution fees for free and payment seats based on certain income slabs.. The present fee structure needs reconsideration because, for example, at present in Maharashtra, a free seat student has to pay Rs. 4.000 pa, whereas, a payment seat student needs to pay Rs. 32.000 pa. This structure permits a rich student to go for free

seat and a marginally less meritorious but poor student has to pay exorbitantly high tuition fees who has to abandon his studies only for want of funds. It is, therefore, necessary to revise this fee structure suitably.

2. Donations from public can be allowed, and such donations need to be income tax free.

3. The beneficiaries, like, local bodies and nearby industries, should pay, say, 0.05 % of their revenues to the institutes located in the area concerned.

4. The institute should promote fund generating activities, like, consultancy cell, production unit, etc.

5. The concepts of networking (pooling resources on co-operative basis), productivity with quality, and institute as an industry need to be advocated..

6. Financial institution and banks should readily come forward for generous grant of loans to both students and institutes.

7. Since the institutes promote creation of capital in the form of human resource development, the equity finance approach need to be accepted. The institute, therefore, shall be eligible to receive dividend from student-beneficiaries. Means, such as, traditional mortgage type loans, income-contingent loans, tax on graduates, etc., have been successfully implemented in developed countries.

[5.] Thus, the acceptance of the principle of cost based engineering education can implicitly grant financial autonomy to all SEFIs. To go in for full autonomy all that SEFIs need is only capability and courage to accept the responsibility that academic autonomy implies. If this capability and courage is exhibited by the SEFIs, they can and should go in for autonomy without any hesitation.

3.0 PRE REQUISITES FOR GRANT OF FULL AUTONOMY

Unplanned and half-hearted experimentation with the education system

can prove abortive on long term basis because the effects of any change in the education system can be seen only after 2-3 decades. Naturally, certain prerequisites must be met before going in for full autonomy. Table 1 presents some consideration in this respect in the form of "autonomous institute management maturity grid". This grid is a matrix of 7 × 5 size [6]. Seven management maturity measuring categories have been identified against 5 stages from the stage of uncertainty to certainty. Such a matured management can think of going for SEFI.

4.0 SELF FINANCED ENGINEERING INSTITUTE (SEFI)

The main distinction between Government institute and SEFI is that of financial autonomy which is the crux of autonomy. SEFI came into existence on the concept of full authority in terms of finances and administrative matters which are two of the main features of autonomy. The only element which keeps them away from autonomous status is the academic autonomy in respect of which they are now controlled by the State Government, Universities and the AICTE. If the SEFIs want to go in for full autonomy, they should gather enough courage to take upon themselves the responsibility of going for academic autonomy. This in turn requires the following :

1. Understanding implication of autonomy in terms of quality of product and its acceptability in the market.

2. To get psychologically adjusted to throwing away the crutches of the university affiliation and be bold enough to stand on their own in academic matters.

3. Discard the system-inertia and be prepared to watch the industrial demands for manpower and be ready to conduct not the stereo-type university/board courses, like, engineering degrees and diplomas but to identify needbased courses and run them on unit cost basis.

4. To work hard in matters of teaching as well as administrative and establish the institute as a centre of excellence duly recognised by both industry and society.

5. Each and every staff member and administrative officer should accept the principle of accommodation and pledge himself to work for quality and excellence, knowing well that excellence is more an individual attribute rather than a group characteristic.

6. To be innovative and display high degree of entrepreneurship in moulding the product : students.

All this requires sincerity, sense of purpose, and full understanding of the responsibility as an individual and a member of the faculty who is determined to work for excellence as if their personal career is at stake.

SEFIs are so close to autonomy; they do not realise this. A determined faculty with policy support from management can bridge this gap. One should not wonder if most SEFIs are opting for autonomy in a short span of 5 to 10 years, and work it out successfully.

5.0 CONCLUSION

This paper has emphatically pointed out that grant of full autonomy, namely, in administrative, academic and financial matters, to technical institutes can ameliorate the present Technical and Management Education System scenario in India, naturally leading to the ultimate welfare of the country. Some prerequisites for autonomous institutes through maturity grid have been illustrated. Autonomy is but a tool. An implicit assumption in handling this tool is that it will be used by intelligent men, in a reasonable manner, for a reasonable purpose. All too often this is not the case. It is not that the tool is not good, it is that it is not used properly, for the proper purpose, in the proper manner, with the

proper precautions, and the proper understanding of its limitations and legitimate uses [7]. The paper, it is believed, can prove a thought provoking one to all concerned, preferably for those going for SEFIs.

REFERENCES

- [1] WAGHODEKAR P.H., 1993, Liberalization of Technical Education in India : A Call of the Day, invited paper, proceedings of the National Seminar on "Role of Private Agencies in Providing Facilities for Technical Education : Need for Unified Policy", 22-23 January, BVB college of Engineering and Technology, Hubli, also in Engg Education Journal, April issue.
- [2] WAGHODEKAR P.H., 1993, Students' Performance Evaluation Systems : A Comparative Study, Engg Education journal, VI (3), January, pp. 1-6
- [3] WAGHODEKAR P.H., 1991, Institute-Industry linkage : Today and Tomorrow, proceedings of the ISTE Annual National Convention, December, Madras, also appeared in Engg Education Journal, April 1992 issue.
- [4] WAGHODEKAR P.H., 1990, Training of Technical Teachers : A Normative Theory Approach, Industrial Engg Journal, XIX (4), April, p.1.
- [5] ALBERT D and XIDERMAN A, 1993, Student Loans : An Effective Instrument for Cost Recovery in Higher Education ? The World Bank Research Observer, 8(1), pp. 71-90.
- [6] CAREY W R, 1992, Quality-Tools for Today's Engineers, Automotive Engg. November, pp.33-40.
- [7] WIEST J D and LEVY F K, 1985, A Management Guide to PERT/CPM : with GER/PDM/DCPM and Other Network, second edition, New Delhi : Prentice Hall of India Private Limited.

Table 1 : Autonomous Institute Management Maturity Grid.

Stages Measurement → Categories ↓	I : Uncertainty	II:Awakening	III:Enlightenment	IV:Wisdom	V:Certainty
1. Management Understanding and Attitude	No comprehension of autonomy as a mngt tool. Trend to blame environment.	Recognising that autoomy mngt may be of social value but provides no time/money to make it all happen.	Becomes more supportive helpful for improving programmes.	Participating. Understands absolute of autonomy. Recognises personal role.	considers autonomy an essential part of Socio-economic system.
2. Facilities Organisation Status.	No comprehension of facilities organisation for effective performance.	A strong leader is appointed but with little freedom for staffing and organising.	Leader reports to mngt with feedback. His role is recognised.	Freedom to leader for staffing and organising	Leader on Board of Directors Prevention is main concern
3. Problem Handling.	Fire fighting technique Lots of yelling and accusation.	Teams are set up. Long-term solutions not soicited.	Corrective action. Sound communication. Orderly resolving of problems.	Early problem identification. Suggestions welcomed.	Except in most unusual cases, problems are prevented.
4. Cost of Education per student per year.	Reported : unknown. Actual : Rs 35,000	Reported Rs15,000 Actual : Rs 25,000	Reported : Rs 12,000 Actual : Rs 20,000	Reported Rs.12,000 Actual : Rs.15,000	Reported : Rs 18,000 Actual : Rs 18,000
5. Productivity Improvement Action	No organised action. No understanding of such actions.	Trying obvious motivational short-range efforts.	Implementing of a programme with understanding and setting up each step.	Continuing the programme and starting make certain.	Productivity improvement a normal and continuing action.
6. Summation of Institute's Status in Society & Market	We do not know why are we failing to serve the society.	It is absolutely necessary to have with autonomous institute ?	The commitment observed. Problems resolved.	Quality students a routine part of functioning.	We know why our students are in great demand.
7. Linkage with other Agencies.	We do not know if such linkage is helpful to grow	Linkage is necessary. But how to achieve it ?	Plan of action for linkage but little suport from mngt.	Freedom to leader to set up linkage.	Linkage is a must. A part of functioning.