TEACHERS TRAINING IN TECHNICAL EDUCATION :
NEED FOR PRIVATE SECTOR INTERVENTION

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ABSTRACT

The phenomenal growth of polytechnics and engineering colleges in the country in the last decade has brought into clear focus the many inherent weaknesses of the Technical Education System. This article focuses attention on one of the many problems namely, the lack of a coherent and meaningful policy for training and retraining of teachers to jack up the quality of the passouts which is found to be generally falling year by year. Private initiative which came forward to start these colleges should also come forward now to collectively establish the required support services including training of teachers.

1.0 BACKGROUND :

The rapid growth of technical institutions (both polytechnics and engineering colleges, mostly under private managements) in the country in recent years (especially in the four states of Maharashtra, Karnataka, Tamilnadu and Andhra Pradesh) has been hailed as an apt response to privatization policy of the Government in tune with the ever increasing demand for Technical Education. The AICTE which gave clearances to these colleges took appropriate steps to see that its space, faculty, equipment, books and other norms are followed. What was totally forgotten/ignored is that concomitant with the growth of the institution, there has to be a matching growth in the support systems for Technical Education and no conscious efforts were made by any agency to make sure that sufficient numbers of competent teachers were available and likewise there is no corresponding growth in the suppliers of laboratory equipment and machinery, publishers and suppliers of books etc.. As a result, we see the institutions tottering for lack of support facilities and some how managing to produce graduate and diploma holders of substandard quality.

It was in this scenario that the distinguished Editor of The Journal of Engineering Education, in his Editorial (1) of April 1996 issue brought to our attention the lack of a clear cut policy by the Govt. of India / AICTE in respect of Training

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of Teachers for Polytechnics and Engineering Colleges, despite the fact that the activity is going on for the past 30 years at the TTTI's and more recently by the ISTE, Academic Staff Colleges and others. Since we cannot discuss teacher - training in isolation without bringing in other related issues pertaining to teachers, this articles attempts to look at the problem in a holistic manner so that suitable alternative solution can be generated.

2.0 TEACHERS

It is a widely known fact that there is an acute shortage of teachers in almost all institutions, the shortages in some cases touching 50%. While in Government institutions, severe budget cuts have left many unfilled vacancies, in private institutions, it is financially stringency and commercial outlook which are responsible for below normal faculty strengths. As a result, the existing few faculty are always over loaded and teaching tends to be of poor quality reduced often to mere dictation of class notes.

2.1 Teachers Selection & Availability :

It is a well-known truth that the supply of teachers to Technical Institution has not grown much to meet the demand of newly started colleges. This has laid to supply and demand mismatches resulting in favouritism, politicalisation, casteism and other forms of malpractices, totally throwing to winds the essential quality criteria for the recruitment of teachers.

With regard to availability it is again no wonder that most top ranking Engineering graduates prefer to go abroad or take up lucrative jobs in management, computer software or in industry and it is only the second rate graduates who opt for the teaching profession. Thus the vicious circle of poor teacher quality producing poor graduates who as teachers produce even poorer graduates operates accentuating the system's problems considerably. If this phenomenon can not be cured and has to be endured, we must at least have a proper mechanism for the training and retraining of teachers at periodical intervals to shore up the quality of the student passouts which is the ultimate objective of these institution.

2.2 Teachers Salaries & Perks :

One of the factors that attract engineering graduates to the teaching profession is undoubtedly the pay scale. While in engineering colleges the UGC pay scales are more or less uniformly followed in the case of polytechnic teachers the implementation of AICTE pay scale has been left to the whim and fancy of the state governments which more often than not preferred not to introduce these scales for fear and additional financial implications. Even under the World Bank Project where salaries of newly appointed teachers was made reimbursable (2) several states decided not to implement AICTE pay scale and as a result teaching position in polytechnics have remained totally unattractive. There is also the added negative feature that career promotions in the education sector are more slower than in industry. Good quality always has a price and if the state governments and managements of private colleges are really keen on quality they have to pay the price for it.

3.0 PRESENT ATTITUDES TOWARDS TEACHER TRAINING :

Assuming that this lack of quality in teachers has to be put up with (though it is better to find ways and means to avoid it), the only other alternative left is to compensate for the same to the extent possible through appropriate Training Programmes for teachers not with standing the fact that training can not wipe out every lacuna (both inherent and man-made) in the system. Yet, we should, keep in mind that to overcome each of these lacuna a special type of training programme has to be designed.

The main problem with teacher training is however that the attitudes of the powers that be in Technical Education and the bureaucrats in the state government towords teacher training have not changed much even at the threshold of the 21st century. These negative and some what skewed attitudes are best illustrated by the following statements commonly heard

1. In these days of resource of crunches, training is the luxury that we can not afford.

2. If training is offered free of cost (to us), we don't mind utilising it, but on our part, we do not wish to invest funds on this activity.

3. Training courses for senior government officials and for bureaucrats is O.K., especially if the courses are organised abroad or in popular hill stations in India during summer months.

4. If deputation for training programmes is a must, we will send some one who is more of a nuisance the institution, so as to get rid of him in even for a short while.

5. I don't want to attend long term training programmes because I will be transferred from this place on completion of the course and this will dislocate my family.

6. I am already working with a 30% staff shortage and no 'training reserve' is provided in the sanction strength. In this situation how can I depute anybody for training ?

Because of these and other negative perceptions training of teachers is still being considered more of a burden than a necessity. Few people at the helm of affairs consider it an investment in human resources which is more vital than an investment in physical resources. Unless these attitudes change for the better, facilities created for training of teachers will not be utilised effectively and fully.

4.0 PRESENT SITUATION IN THE TTTIs :

The four regional TTTIs in the country were created by the Govt. of India for the very purpose of providing training facilities to teachers in polytechnics and is funding the conduct of relevant training courses. However education being a state subject it has not been able to prevail upon the states to use these facilities optimally and also provide suitable financial incentives or promotional avenues for those teachers who undergo training. The states responded some what reasonably as long as training was given free of cost. Under the World Bank Assisted Project the situation changed some what and training

had to be paid for, though it is reimbursable by the Bank, there was initial opposition from many states. Now, they seem to have got re-adjusted to the altered situation but whether this practice of paying training costs will continue after training project ends remains to be seen.

The TTTIs had come forword to extend the benefits of their courses to polytechnics in the private sector also, but initially, the ministry positively prevented them from doing so even on payment basis. However in the current scenario of privatisation and resource generation drive in TTTIs offering long-term as well as short-term courses to private polytechnics is certainly possible provided the managements are willing to meet the costs.

As far as engineering colleges are concerned, no formal arrangements exist at present to conduct staff development programmes except the Academic Staff Colleges of the Universities and the Summer & Winter Schools conducted by ISTE. These mechanisms are grossly inadequate and some permanent arrangements have to be thought of. It may perhaps be ideal and economical for the Govt. Of India to designate the four TTTIs as Resource Institutions or Academic Staff Colleges in respect of engineering Colleges in each region and request the TTTIs to offer formal training programmes to this sector also. This decision may, however require acceptance by the colleges themselves and appropriate change in the policy and objectives of the TTTIs.

5.0 PRIVATE INITIATIVES :

The unprecedented growth in private technical institutions in the country has thus created problems of providing support services to these institutions on a massive scale. Providing faculty development opportunities to the teachers of these institutes is but one part of the problem. In a situation like this, the normal procedure is to permit government training institutes to extend their facilities to private institutions also on payment. A parallel can be drawn from what happened in the airlines sector. When a number of private airline operators came into existence recently and their pilots needed to be trained, the Indian Airlines Training School at Hyderabad was asked to provide these training facilities to the private airlines also on suitable payment terms. By the same token, the four TTTIs can and should be pressed into service to cater to the needs of the private polytechnics and engineering colleges also. There is however a question of load and it is not known what will be the size of the demand and whether the TTTIs can take up this extra load.

Simultaneously, it is also worthwhile exploring whether there can be a similar institution like the TTTIs established in the private sector to cater to this growing demand. Although this might look like an expensive proposition to begin with, the initial investment will become worthwhile and economical in the long run. The establishment of such an institute in the private sector will also help generation of healthy competition in the training sector and result in further improvement of quality and standards in technical teacher training.

6.0 SUGGESTED FRAMEWORK :

Once it is agreed in principle that private sector intervention in providing support services to the Technical Education System is desirable it is preferable to think in terms of the overall range of support services required and plan for the same instead of looking only at the teacher training aspect. It is proposed that the managements of private technical institutions should all come together and jointly establish a TRUST which could be designated as 'NATIONAL TRUST FOR PRIVATELY MANAGED INSTITUTIONS IN TECHNICAL EDUCATION.' A detailed description of the mission, objective and activities in draft are given in Annexure I

It may noted that this trust will be a composite body providing a wide spectrum of support services to privately managed Engineering Colleges and Polytechnics on payment basis. The range of services could include but not necessarily be limited to :

- Assistance to new institutions with regard to AICTE norms and standards.

- Supply of typical architectural designs and drawing for institutional buildings.

- Providing standard lists of equipment, machinery and library books together with details of standard suppliers and cost estimates.

- Providing assistance in establishing specialised units such as Computer Centres, LRDCs, etc.

- Conducting recruitment of staff for a particular institution or maintaining a roaster of suitable candidates for various faculty positions to facilitate recruitment

- Conducting need-based teacher training and management training programmes for various categories of staff.

- Conducting entrance examinations for selection of students in accordance with particular rules and regulations, if necessary.

- Conducting accreditation exercises and making recommendations to the AICTE

- Conducting research studies into the problems of management and functioning of the institutions with an emphasis on quality and standards.

- Designing & producing prototypes of specialized equipment required for any institution (ex : Polytechnic for the handicapped) etc.

Depending upon the initiative and capability of the trust, other activities could also be taken up.

7.0 NEED FOR A POLICY :

It is needed a pity that through the Govt. Of India has introduced a policy of liberalization and privatization more than four years ago, a clear and unambiguous policy with respect to private institutions in Technical Education has not yet been spelt out by the Ministry of HR. This policy should specify what kind of private institutions and courses will be given permission by the AICTE under what conditions, what types of infrastructure they are expected to possess and what kind of support services including staff recruitment, development

and deployment will be required, their management and control mechanisms, affiliation to universities etc. In the absence of such a policy, the establishment of institutions is going on in a haphazard manner and severe problems of support services are cropping up resulting in detrimental effects on the quality of the passouts. The sooner this is done, the better it will be for the system in general.

8.0 CONCLUSION :

One of the avowed objectives of privatization in Technical Education is the availability of high quality institutions which can cater to the growing demand for technical courses with privately managed institutions unfettered by governmental regulations and control. This has not happened yet in a big way although a few colleges with high corporate reputation have emerged, By and large privatilization has only led to further deterioration in quality and led to the perception that these colleges have only come up to make quick profits by 'selling' education to those who can pay the quoted prices. This situation has to change and voluntary bodies like the TRUST now suggested could act as a self control mechanism to regulate institutional functioning and maintenance of standards compatible with developed countries in this promising area of education.

REFERENCES :

1. "Need for a AICTE Policy on Teacher Training in engineering Education" - Editorial in the Journal of Engineering Education (quarterly), Vol. IX No. 4, April 1996.

2. World Bank Project for Technician Education (Phase I) - Project Agreements, August 1990.

ANNEXURE - 1

NATIONAL TRUST FOR PRIVATELY MANAGED INSTITUTIONS IN TECHNICAL EDUCATION

This trust is being conceived a purely voluntary and private body created by the private managements of polytechnics and engineering colleges for their own benefit and for general upliftment of the quality and standards of Technical Education in the country on par with those in developed countries.

A. MISSION :

To promote healthy and orderly growth of the Technical Education System in accordance with international standards with a special emphasis on quality and excellence and provide all necessary management and support services to a achieve this goal.

OBJECTIVES :

The objectives of the trust would be:

1. To provide all necessary help and consultancy to

   - organisation proposing to start new polytechnics and engineering colleges.

   - existing organisations to improve the functioning of selected institutions to become centres of excellence.

   - existing institutions for formulati-

ng proposals/projects for specific developmental activities funded by govt. or other national / international agencies.

2. To provide all support services for staff recruitment, development / training and establishment of various educational services on an individual or collective basis.

3. To assist the state/central Govts. in conducting institutional evaluation and accreditation whenever required.

4. To conduct research studies into the special management and educational problems of privately managed institutions.

5. To bring out suitable journal and releted publications to dissminate information and provide a forum for exchange of views on the problems of Technical Education in the country with special reference to quality and excellence.

6. To collaborate with other national and international agencies for the general improvement of Technical education.

7. To work for an effective system of interaction between institutions, industry and the community in general for mutual as well as national benefit.

C. METHODOLOGY :

In order to achieve the above objectives, the following could be some of the mechanisms adopted by the Trust :

1. Prepare a constitution indicating the membership, management, rules and regulations etc.

2. Set up appropriate auxiliary bodies such as Consultancy Centre, Training Institute, Resource Development Centre, Publication Unit, R & D Unit, Management Development Unit etc.

3. Ensure that all managements of private polytechnics and engineering colleges support the Trust and they become active members of the same.

4. Make effective use of professionals in Technical Education to support and work for the Trust in various capacities. (full use of retired experts from IITs, RECs, TTTIs. Engineering Colleges and Polytechnics is recommended)

5. Establish a Liaison Unit for linkages with Industry & Community and identify joint activities and projects,

6. Obtain a certain amount of non-recurring capital for the Trust by donations from philanthropic organisations, industries, business houses etc. and use these funds for infrastructure development.

7. Make arrangements to meet the recurring costs by charging the same as fees for consultancy work, training programmes, projects etc. as per actuals.

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