

GUIDELINES FOR ORGANISING CONTINUING EDUCATION PROGRAMMES BY THE POLYTECHNICS IN THE CONTEXT OF WORLD-BANK ASSISTED PROJECT FOR STRENGTHENING TECHNICIAN EDUCATION

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ABSTRACT

Under the World-Bank Assisted Project for Strengthening Technician Education, continuing education of working personnel has been identified as a key area in view of emerging technologies of the twenty-first century. Identified polytechnics in the country have been entrusted with the task of meeting this challenge by organising and conducting relevant and need-based continuing education programmes for the middle level manpower in industries. The present paper attempts to provide some guidelines and role clarity to the polytechnics for the effective implementation of this thrust.

1. INTRODUCTION

In view of the onslaught of emerging technologies and consequent 'information explosion' in the fields of science and technology in the recent past and at present, the technical manpower needs continuous updating in order to keep pace with these developments. The work force in industries and their management look forward for avenues which could fulfil this need of theirs. In addition, the engineering manpower in industries must have opportunities for horizontal and/or vertical mobility from the point of view of their professional growth, career advancement, and for adopting to changing job patterns within industries.

Presently, there are no formal schemes for providing opportunities for updating through systematic continuing education programmes that take into account all its dimensions to meet the need and aspiration of personnel

working in industries, organised and unorganised sectors.

In order to meet this demand of the industries and other sectors, continuing education of working personnel has been identified as an important thrust area under the on-going World Bank-Assisted Project for strengthening Technician Education. The identified polytechnics in the country therefore have to meet this challenge and take up the onerous task of organising continuing education programmes for the working personnel. This thrust is aimed to meet the following objectives.

2. OBJECTIVES OF CONTINUING EDUCATION PROGRAMMES

- i) Updating/up grading the knowledge, skills and competence of middle level technicians in industries/other sectors to enable them to do their existing functions more efficiently.

- ii) Extending their knowledge and expertise to acquire new knowledge and skills, required in the existing job likely to introduce new technologies.
- ii) Preparing them for wider responsibilities in engineering, management and other allied fields.
- iv) Enabling them to appreciate the impact of engineering in society.
- v) Providing opportunities for playing their full role in the profession and in the society at large.

Thus continuing education programmes might allow one person to complete a level of formal education, another to acquire knowledge and skills in new field, another to improve his professional qualifications etc. The purpose is to keep upto date, maintain competence, to be able to do one's job more effectively and efficiently, both in the stable and changing situations.

3. TYPES OF CONTINUING EDUCATION PROGRAMMES

Continuing education programmes could be conducted either face to face in a classroom situation (called Contact Mode) or from a distance (called Distance Mode) or Distance-cum-contact Mode or entirely through self directed learning. However all deliberations in this paper pertain to continuing education programmes conducted face-to-face.

Based on the duration, these programmes can also be classified as -

- i) Short Term Programmes - ranging from 1 day to 4 weeks or so
- ii) Long Term Programmes - above 4 weeks.

In the short-term programmes generally a certificate of having attended the programme is given at the end without much formal evaluation of the participants. In the long term programmes there is a formal assessment of

the participants and a Certificate/Diploma etc. is awarded at the end by Assessment Agency/Board or the organisation conducting the programme. While the seminars, short courses, workshops, conference etc. fall in the first category, the Part-Time Diploma Programmes and Diploma Programmes by Distance Mode etc. fall in the second category.

4. TARGET POPULATION FOR THE CONTINUING EDUCATION COURSES

Keeping in view the infrastructural facilities, expertise and clientele, it is suggested that the Continuing Education Courses should be conducted by the polytechnics particularly for middle level manpower in industries including technicians, supervisors, chargemen, foremen, sub-engineers, assistant engineers etc. or equivalent cadre possessing an ITI Certificate or Diploma/Degree qualification in engineering.

5. ORGANISATIONAL STRUCTURE : STATE LEVEL CONTINUING EDUCATION CENTRE

As per provisions under the World-Bank Assisted Project for promoting Continuing Education in the states, a Continuing Education Centre has been established in each state. The centre identifies the nature and titles of the programmes to be offered and also coordinates the implementation of the same. It also provides guidelines to the polytechnics for mounting continuing education courses for the local / nearby industries based on the needs of that area. The progress of the Continuing Education Programmes and other activities under the World-Bank Assisted Project is monitored at the State level by State Project Implementation Unit (SPIU) set up for the purpose.

Continuing Education Department has

been established in each of the identified polytechnics of the states. The activities of this department are to be coordinated by Training and Placement Officer (T.P.O.) in the institute. He is supported by the faculty and staff of other departments in this endeavour. The Principal of the polytechnics should be the Chief Executive for this activity and should be the overall incharge for organising and conducting continuing education courses in his/her polytechnic.

For mounting continuing education programmes or the industries in its catchment area, the polytechnic has to seek support,

guidance and cooperation from various agencies. It may also be called upon to collaborate with other organisation/industries etc. for the various activities in the programme. The following main roles/responsibilities are envisaged of the various agencies/organisations in the Technician Education System for promotion of continuing education of engineering manpower.

6. ROLES/RESPONSIBILITIES OF VARIOUS AGENCIES/ ORGANISATIONS FOR PROMOTION OF CONTINUING ENGINEERING EDUCATION

S.No.	Agency/Organisation	Roles/Responsibilities
1.	Directorate of Technical Education (DTE)	- Providing infrastructure and necessary administrative and financial sanctions
2.	State Project Implementation Unit (SPIU)	- Monitoring and evaluating the progress of this activity
3.	Continuing Education Centre (CEC)	- Identifying continuing education needs of the industries at the State level - Providing norms and guidelines for conduct of continuing education programmes by the polytechnics. financial sanctions
4.	Continuing Education Department (CED) of Polytechnic Level	- Identifying continuing education needs of local industries in the catchment area of the polytechnic. - Organising and conducting continuing education courses for the clients industries. - Evaluating the courses conducted for further improvement financial sanctions
5.	Curriculum Development Centre (CDC)	- Assisting in developing curricula for continuing education courses as per needs of industries

S.No.	Agency/Organisation	Roles/Responsibilities
6.	Learning Resource Development Centre (LRDC)	- Assisting in development of print and non-print materials for continuing education courses
7.	Industry-Institute Interaction Centre (IIIC)	- Assisting in identification of continuing education needs of industries - Marketing of continuing education programmes being conducted by polytechnics
8.	Technical Examinaton Board (TEB)	- Evaluation of participants/ programmes - Award of certificates/Diplomas to participants
9.	Indian Society for Technical Education (ISTE)	- Providing continuing education course materials to polytechnics as per their needs
10.	Technical Teachers Training Institute (TTTI)	- Providing assistance and guidance in all activities related to continuing education programmes - Conducting training programmes for polytechnics for their staff development - Helping polytechnics to prepare continuing education course materials to be disseminated in Continuing Education Programmes - Providing a platform for interaction for the various agencies in the Technical Education System.

7. STRATEGY FOR IMPLEMENTATION

For organising and conducting continuing education programmes at the institutional level i.e. polytechnic, it is suggested that a 'Continuing Education Cell' be formed in the polytechnic consisting of the following :

- i) Principal - Chief Coordinator
- ii) T.P.O. - Coordinator

- iii) All HODs - Members
- iv) Workshop - Member Supdt.

TPO should coordinate the activities under the guidance of the Principal. Each major department in the polytechnic will take a responsibility of conducting atleast one continuing education programme in a year to begin with and it will be supported by all other

departments with Principal as the Chief Executive of these programmes.

Principal will arrange to maintain a separate head of expenditure for continuing education and will meet all related expenditures from this fund as per norms suggested by the "Continuing Education Cell" of the institute within the framework of CEC in the state. The savings of a particular programme will go to the fund under the head of continuing education. As per norms decided payment to the internal as well as external staff / experts could be made. For conducting the continuing education programme in a polytechnic a conference room should be made up which should have a seating capacity of about 50 participants. It should be furnished with chairs suitable for taking notes and should have facilities of T.V., VCR, OHP Slide Projector, Black Board etc. The conference room should have a pleasant look with an aesthetic appeal conducive for academic transactions.

8. FUNDING OF CONTINUING EDUCATION PROGRAMMES

Continuing Education programmes are of self-supporting nature and all the expenditure incurred in the various activities of the programmes is to be met from the revenue received as registration/course fees of the participants. This premise presupposes that developmental cost is very little. Also this assumes that there will be an assured participation of some minimum number of participants. However it may happen that after a course is announced and some expenditure incurred on that count, there is no encouraging response from the targetted population. In such a situation, programme may have to be cancelled or postponed. To set the ball rolling, some sort of 'reserve fund' or 'seed money' is envisaged for mounting continuing education courses in the initial phase. This seed money which

may be around Rs.25000/- may be provided to every polytechnic undertaking continuing education programmes. The initial expenditure done could be met from this fund till such time the amount is collected through registration and course fee of participants.

It is just possible that some programmes may end up in loss. Such exigencies could also be met from the reserve fund. However to sustain this thrust, it is necessary that most of the proposals are economically viable. That depends upon the ingenuity of the persons organising the programme, how much sensitive and aware they are about the need of their clients and how much support, cooperation and participation they are able to secure from the client organisations. In addition to this some governmental agencies like State Councils of Science and Technology provide funds for organising short courses, seminars, workshops etc. The possibility of getting financial assistance from such agencies could also be explored.

9. CONCLUSION

Continuing Education of personnel working in industries/other sectors is the need of the hour, which demands that adequate investments, financial and human should be made in this venture. As it has been rightly said "If investing in Continuing Education of Engineering Manpower is costly, not doing so is costlier". Polytechnics can work as effective providers of continuing education. Both institutions and industries will benefit from this activity. Under the World-Bank Assisted Project for Strengthening Technician Education, this task should be taken up by the polytechnics with a renewed vigour and sense of commitment. Only if, all concerned and connected with this thrust join hands with a missionary zeal, we shall be able to make a mark in this area. ■