

# **In-service Teacher Education Through Distance Mode : An Innovative Model**

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**In-service Teacher Education :** The status of the teacher reflects the socio-cultural ethos of society and no pupil can rise above the level of its teacher (NPE' 1986). The usefulness and effectiveness of the education system largely depends upon the active, influential, resourceful and competent teachers. Therefore, giving opportunity to the right kind of professionals through the best possible training can really enhance the quality of the education system. Researches have often emphasized the importance of a link between the quality of education and the adequacy of professional training of teachers. Professional training of teachers is closely linked to the quality of initial training, in-service education, and professional and technical support made available to the teachers. Our society is not static. Societal goals, educational structure, curriculum framework, transactional strategies, evaluation techniques and management policies are continuously changing. New advances are emerging on the horizon of education. In the above contexts, initial teacher training of suitable duration cannot sustain the *survival competencies* of the teacher for the long race. No pre-service teacher education program can claim that a teacher who has received it can teach for the next four decades or so without any additional academic or professional input. In-service education can only serve this purpose.

## **Agencies Providing In-service Teacher Education**

Various in-service education programmes for teachers at different levels i.e. pre-school to university have been organized from time to time with the objective of quality improvement of teacher education. Various agencies engaged in providing in-service education such as : District Institutes of Education and Training (DIETs) providing in-service education to the elementary and primary school level teachers. Institutes of Advanced Studies in Education (IASEs), Colleges of Teacher Education, and department of education of various universities are also providing in-service education at the secondary school level. Apart from the above, various national level agencies like, NCERT, NIEPA, NCTE, CIEFL, International agencies like, UNESCO, UNDP, UNICEF, SIDA, etc., State level agencies like SCERTs, SIEs, SIEMATs and Non-government organizations like Ek Lavya, AIMINSIGHTS, Sandhan, etc. are continuously providing in-service education to teachers on a massive scale.

In-service programmes of different duration : too short-term, short term, long-

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term, part-time, full-time, own-time, and so on have been provided. Most of the programs are non-formal in nature i.e., they did not lead to any degree.

**Paradigm Shift in Teacher Education :** Throughout the world education is undergoing a paradigm shift. Instruction-centered college/university education is shifting towards a learner-centered integrated network model, which is based on access to learning resources and on student initiative. The human society at large seems to have accepted the norms like, education for masses and equality of educational opportunity. With this approach in the new millenium, all our activities are becoming highly knowledge based. Rapid globalization, liberalization and a market-oriented economy have added new dimensions to our activities. So the knowledge and skills of every professional, including teachers need to be continuously updated. Continuous updating can only occur if learning is life long and continuous. This is very difficult through face-to-face mode. Besides, infrastructural facilities of face-to-face institutions are insufficient to provide in-service education on a continuous basis to such a large quantum of teachers. Infrastructure facilities are not adequate even to provide 'one-shot' training of suitable duration to teachers through face-to-face mode. Many of our teachers especially lady teachers are unable to attend programmes organized beyond their work place. In-service crash training programmes of conventional kind are of too short a duration to have any tangible impact. They are also too expensive and too slow in reducing the number of teachers needing training or retraining. To overcome such limitations of traditional models of training, alternative approaches have been sought. The most widely used alternative is *distance education*. Coupled with open learning it provides structural flexibility. It has the capacity to deal with diversified teacher groups through the use of various communication technologies with the expectations of cost savings. It has the capability to reach the teacher "on the job" without harnessing the classroom teaching.

**Need of a Systemic Model for Teacher Development :** Teacher development programme is a long-term commitment of time, energy, experiences and resources. Efforts have been made to systematize in-service education of teachers both at the macro and micro levels. Efforts have been made to conceptualize and develop a paradigm for in-service education of primary teachers through open learning using distance mode (Menon, 1997; Deshmukh, 1998; IGNOU, 1998). But hardly there is any effort is made for continuous professional development of teachers. The following model can give a new direction for the professional development of teachers continuously through distance mode.

**Suggested Model for Teacher Development Through Distance Mode :** The Proposed model for teacher development through distance mode tries to systematize

in-service teacher education programme. It seeks to upgrade the knowledge, understanding and skills of teachers continuously. The model suggests the designing of teacher education programmes for different levels of schooling from the pre-primary to senior-secondary level. The model consists of four phases - *planning, preparation, process, and evaluation*. These are interlinked sequentially.

**Planning :** Planning is the foundation stone of quality assurance in distance education. In order to achieve the desired output systematic planning is quite essential. Strategic planning to produce fundamental decisions that shape and guide the programme for effective growth of teachers and continuous updating of teacher is needed. Everyone in the organization needs to be involved in the planning process directly or indirectly. A number of factors need to be taken into account before the programme is launched viz, *social demand, educational demand, available resources and teachers' profile*.

**Meeting Social Demand :** India is a multi-cultural and multi-religious country. One of the main objectives of education is to preserve and transform the cultural heritage of the society. Education cannot be made separate from society. Planners and organizers should do in-depth study of the social and cultural issues. What the society demands from the institution? What do they expect from teachers? What do they expect from children ? These questions should be kept in mind while planning the programme.

**Meeting Educational Demand :** Educational demand of a nation depends upon its resources i.e., man power and material. In meeting demands of course planning a course designer need to keep in mind the following preconditioning:

- i) The twentieth century has witnessed many innovations in the field of education. Ever changing physical, technological and social environment force the teacher education system to change continuously.
- ii) New branches are emerging in the field of school education such as computer education, management, sex education etc. Teachers have to acquire necessary knowledge and skills in these fields.
- iii) Classroom size is increasing. Teachers are expected to manage multi-graded classes. Human values are deteriorating. Teachers have to retain necessary values among children.

**Utilization of Available Resources :** A thorough analysis of existing resources is needed for running the programme. Planning should be made for optimum exploitation of both physical and human resources for the benefit of the teacher education programme. Besides, the cost analysis of the programme has to be done.

To increase the access to distance education with limited resources, various collaborating agencies with similar philosophy can be invited.

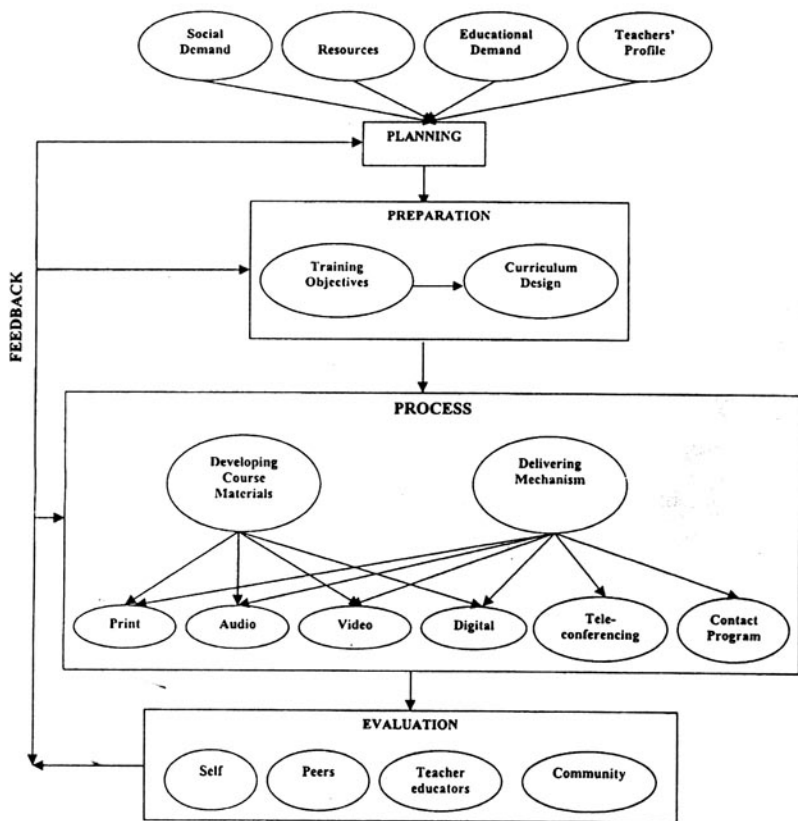


Fig. 1 : Model for teacher development through distance mode

**Understanding Teachers Profile :** One will have to understand and visualize the target group i.e., in-service teachers, which is heterogeneous in nature. Total profile of the teachers—socio-economic-educational background of the teacher should

be a major input towards the development of such programme. Teachers from different background or different levels (primary/secondary, etc.) need different educational inputs. Planning for professional development of urban teachers should be different from rural teachers or remote area teachers. The planners should not only find time but also should have the right type of inclination to do the group and sub-group composition analysis task. Such analysis makes the level of understanding deeper which in turn enables them to design the programme.

**Preparation of the Programme :** After doing the programme planning, next step is the preparation of the programme. Here the *training objectives* are prepared by assessing the training needs of the teachers. *Suitable curriculum* will be designed to fulfill the objectives in the following steps :

**Preparation of Training Objectives :** Both long-term and immediate training objectives should be prepared before implementing the programme. Objectives are to be designed in terms of knowledge, skills, attitude and values on the basis of social demand, teachers' requirement and on systems' requirement. Heterogeneity of the target group should be kept in mind in the preparation of objectives.

**Designing Curriculum :** Curriculum designing for teacher development will comprise of training strategy, material and method, followed by evaluation of the teachers' growth as well as of the programme evaluation. The design should be at the local level. Variations in specific school systems viz.—Public school, State government school, Kendriya Vidyalaya, Navodaya Vidyalaya, recognized school, Ashram school, rural school, urban school etc. have to be borne in the mind before designing the curriculum. Besides, the study of entry behaviour, visualization of the expected terminal behaviour and a thorough analysis of the societal needs and resources would enable the planners to offer a more relevant curriculum with assured quality control with logical flow. Each objective dictates a set of topics/ activities, which can be called as content of the program. One has to do content analysis for designing the curriculum. Content analysis has 3 aspects. Each topic and sub-topic is to be analyzed to study the knowledge aspect (knowledge analysis), the job aspect (job analysis), and the skill aspect (skill analysis). Therefore, curriculum design needs a lot of effort. New advances are emerging on the educational horizon. Advances in the fields of school curriculum, new practices in evaluation, use of audio-visual aids, new thinking, new changes should be incorporated in the curriculum.

**Process of Course Designing :** The third important phase of the model is the process of teacher development programme. Process tells us the dynamics of the various instructional inputs involved in the curriculum transaction. This includes mainly two components - *developing course materials and delivering mechanism*.

**Developing Course Materials :** Developing course materials in distance education format is not an easy task. It is quite different from traditional classroom teaching learning materials. Course materials include print, audio, video, and digital. Each material has its own advantages and limitations. Different strategies are required for developing different types of materials. The criteria of selection of proper media/materials should be as follows :

- i) *Availability of infrastructure and trained manpower;*
- ii) *Accessibility of the materials.*
- iii) *Cost-effectiveness with respect to time and money; and*
- iv) *Validity of the materials.*

The main focus of the process of course designing depends on the self-based in-service education. Since, the teachers will have to learn from the supplied materials and multi-media packages, care should be taken to ensure that the material is *self-explanatory, self-contained, self-directed, self-motivating, self-evaluating, and self-learning*. Further, the teacher's motivation in professional development, interest in the teaching job, wish and will to improve school practices, etc. have to be sustained. Moreover, best experts/practitioners are to be invited to contribute to provide a wide variety of ideas and techniques.

**Delivering Mechanism :** After the preparation of materials there should be proper networking for wide and rapid dissemination. Multiple delivery system should be evolved to access the teacher at his doorstep. A variety of strategies should be adopted to reach the teacher at his home as well as at worksite through postal, telephone, satellite, or through Internet. The worksite may be the nearby teacher training institution or the existing school. It should be continuous and far-reaching. The most powerful electronic media is *teleconferencing* and *interactive video* for professional development of teachers. Teleconferencing and *contact program* should be arranged from time-to-time. During teleconferencing, precautions should be taken to minimize the transmission loss. A wide range of activities should be performed by teachers during contact programme such as, use of local resources and waste materials, community work, action research, development of interpersonal skill, simulated teaching, dramatization and other role playing activities. The interaction with peers in small group discussion on matters of professional development can be effective during contact programme. Proper library, laboratory facilities, and faculty for practical demonstration of important teacher tasks are necessary.

**Evaluation of the Course :** Evaluation is one of the most essential components of the in-service teacher education programme. Evaluation of *trainees, trainers, media and materials* and other components should be done from, time-to-time. Continuous

monitoring and evaluation of media and materials, full record of inservice programmes, quality of the programme, and participation of the teachers has to be done. Evaluation of overall *programme effectiveness and achievement of training objectives* has to be done both formatively and summatively. The entire system of distance in-service teacher education must be subjected to periodic evaluation to enable the system to produce quality. Evaluation will not be done only by teacher educators but also by the teacher him/herself, by the peers and by the community will evaluate the progress of the teacher and the efficacy of the programme. Training programme may be evaluated by their processes rather than by results or inputs. Prasad and Ramakrishna (1995) have suggested some of the benchmarks for evaluation, which are listed below :

1. The Goals and Sub-Goals of the training programmes Check-list :
  - a) *Are the goals clear and specific.*
  - b) *Are they relevant .*
  - c) *Are they attainable.*
2. The Background Materials Check-list :
  - a) *Are the materials relevant.*
  - b) *Are the materials sufficient.*
  - c) *Do they generate any self-learning activities.*
  - d) *Do they generate intellectual curiosity.*
3. The Target Group Check-list :
  - a) *Is the programme a felt-need of the participants.*
  - b) *Is the programme integrated with the career development of participants.*
  - c) *Are the participants sufficiently motivated to learn.*
4. Methods of Training Check-list :
  - a) *Are the methods appropriate for participatory learning/experience-sharing.*
  - b) *Are the methods appropriate for achieving the goals of the programme.*
  - c) *Are the multi-media support materials used in the programme.*
  - d) *How far are the distance mode and face-to-face mode integrated .*
  - e) *To what extent are new technologies used.*
  - f) *How far is the design of the programme linked to its objectives .*
  - g) *How far is the content related to the goals.*
  - h) *Are the trainers competent to deliver the goods.*

- i) *How far are the appropriate administrative arrangement made for training*
  - j) *To what extent are the conditions conducive to learning*
  - k) *What are the opportunities for associational learning ; and*
5. Feedback on Training programme Check-list :
- a) *What are the responses of participants to the programmes*
  - b) *What are the perceptions of the heads of the units about the impact of training on the trainees working in their units.*
  - c) *What are the impressions of resource persons ; and*
  - d) *What is the assessment of organizers about the programme.*

There is hardly any system for the *evaluation of teacher educators*. They should also be evaluated for their performance to enhance their quality. Tests should be given to evaluate the knowledge and understanding gained by the teacher. Different forms of assessment should be given. Through assignment, teacher can display some kinds of mastery and understanding in written form. Project/research work of the teacher can be assessed by assessing his project report. During face-to-face interaction, teaching skills of teachers can be assessed. A certificate should be issued on satisfactory results in the test to enhance the self-esteem of teachers. In-service courses should be given recognition by universities/ other affiliating agencies for award of credit points on satisfactory completion of the course. The quality of the teachers will get enhanced as a result of such teacher development processes. Getting feedback from evaluation, it may lead to desirable modification/changes in the model.

## **Conclusion**

With the outdated modes, methods, or models of in-service teacher education of limited time duration, the country should not expect to compete with the world in the process of teacher development in the new millenium. We must think big to become a major player in the next century. It is expected that if the model is implemented properly, it could be useful in providing necessary inputs on a continuous basis for enhancing survival competencies of teachers. The model is organizationally flexible in approach, convenient in implementation, cheaper in terms of time, money and effort and acceptable by teachers, peers and stakeholders. The distance education personnell are likely to accept the model in a much serious manner.

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