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Curriculum Framework  
For  
Quality Teacher Education



**NATIONAL COUNCIL FOR TEACHER EDUCATION**

10/2/00

NCTE document 98/30

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D-10151  
30-66-98.

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Publication Cooperation

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Published by Member Secretary, National Council for Teacher Education, C.2/10, Safdarjung Development Area, Sri Aurobindo Marg, New Delhi-110016 and Printed at **Tan Prints India (Pvt.) Ltd.**, A-44, Mangolpuri, Industrial Area-II, New Delhi-110 034.

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## *Preface*

Enlightened, emancipated and empowered teachers lead communities and nations in their march towards better and higher quality of life. They reveal and elaborate the secrets of attaining higher values in life and nurture empathy for the fellow beings. Teachers are the torch bearers in creating social cohesion, national integration and a learning society. They not only disseminate knowledge but also create and generate new knowledge. They are responsible for acculturating the role of education. No nation can even marginally slacken its efforts in giving necessary professional inputs to its teachers and alongwith that due status to their stature and profession.

The educational expansion, universalisation of elementary education, vocationalisation of secondary education, higher and professional education and overall quality of education are major challenges before the country. Evidently the quality of education is a direct consequence and outcome of the quality of teachers and teacher education system. The task of bringing qualitative change in institutional efficacy of the teacher education system in itself is a huge and challenging one. The last five decades have witnessed several attempts to change, modify and indigenise the inherited system of teacher education. The system, however, continues to function more or less on the same

principles, similar content and approaches characterised by continuity and unwillingness to change. Over the years the magnitude of the task has increased manifold.

The existing programmes of teacher education at primary and secondary stages are generally based upon the teacher education curriculum framework brought out by the NCTE in 1978. There was another attempt to revise the curriculum in 1988. Most of the institutions now conduct programmes and courses which were revised prior to 1988 document. The developments and changes over the last two decades require a fresh look at teacher education. The feeling has been echoed by sensitive and concerned teachers and teacher educators. The establishment of the NCTE as a statutory body in 1995 has brought this issue at the centre-stage. Consequently, NCTE began the process of nation-wide consultations to evolve a strategy to develop a new curriculum framework on teacher education. After several consultations, a discussion document was developed and published in September 1996.

The discussion document was an outcome of a strategy which envisaged intensive national level consultations with institutions of teacher education at various stages with eminent teacher educators, teachers and thinkers in education. Accordingly, a discussion document was made available to all the teacher training institutions in the country seeking their views on the shape of future teacher education. This was done by means of a structured questionnaire with full flexibility to communicate their views in any way and on any aspect they considered fit. More than 200 eminent educationists, thinkers, teachers and teacher educators were individually consulted. In addition, ten workshops at



regional and national levels were organised at various places in the country with the help and collaboration of several institutions and organisations including university departments, SCERTs, teacher education institutions, school managements and principals, Indian Association of Teacher Educators and All India Primary Teachers Federation. These were organised at Ahmedabad, Annamalai, Patna, Varanasi, Shillong, Udaipur, Goa, Warangal, Thiruvananthapuram and Bahadurgarh. The recommendations and suggestions which the NCTE received were analysed and studied. The discussion document was accordingly recast in the form of a tentative curriculum framework. This was presented to eminent educationists in a national seminar held at Delhi in March, 1998. The scholars examined the document and made suggestions which were incorporated after discussion by the drafting committee.

The foremost consideration in preparing the document has been the need for creating and ensuring autonomy to the institutions, organisations and other bodies responsible for curriculum development in teacher education. Such an autonomy should lead to an inbuilt accountability assuring the optimal efficiency of these institutions. Every effort has been made not to be prescriptive. The document reposes full faith in the capacity and capability of teacher educators to evolve a detailed curriculum based on the suggestions contained in it. Such a curriculum would respond to the specific regional needs and aspirations of the people and the requirements of a developing learning society. It would augment the inherent strength of Indian nation which is characterised by unity and diversity. It would help curriculum developers to evolve sensitive, need-specific and relevant pedagogy. They will

have the necessary understanding and the vision that would take note of perceived future scenario. It expects teachers and teacher educators to experiment with new ideas and alternative practices for bringing improvement in the programme of teacher education. The intention to protect academic freedom and practise institutional autonomy is coupled with the fond hope that the outcome would be characterised by quality with greater professional responsiveness, responsibility and intrinsic sense of accountability to the learning society and the system.

The programmes suggested are not classroom-based alone but also expect to receive greater inputs from outside the institutions in close tandem with social, cultural and economic imperatives that are directly linked to the education system. It would greatly reduce isolation of the teacher education system in practical terms and would liberate the teachers and teacher educators from the prescribed traditional pedagogical transactional strategies and evaluation principles. It would lead to greater innovativeness, self-assurance and self-confidence on their part. When thoroughly analysed and understood, the curriculum framework could provide sufficient insight to prepare reflective, reverberative and contemplative practitioners in classrooms and outside. It could lead to the development of dynamic and futuristic pedagogy and include acquisition of competencies needed for effective performance with inbuilt commitment to realise the broader objectives of education and teacher education.

An examination of the curriculum framework would reveal that it envisages a curriculum rooted in Indian reality and culture and

promotes a mutually supportive system of teacher education in which the training institutions and community interaction is implicit in a much larger magnitude. Every activity in teaching and learning needs to aim at preparing teachers who would continually attempt to develop scientific temper, spirit of inquiry and excellence in all spheres of activity. While the curriculum framework focusses on affective and conative domains by highlighting commitment and performance, it also apportions adequate weightage to the cognitive through the development of scientific and technological literacy, use of information technology and emerging communication systems.

While the objectives for each stage are context-based, stage-specific transaction strategies have been suggested which have tremendous scope for refinement at the time of development of the total curriculum by the institutions and individuals concerned. It introduces the concept of pedagogical analysis in a focussed perspective and highlights its significance in preparation of teachers with incisive and analytical competencies. This would be highly needed for future teachers who will have to regularly bring new ideas and concepts in the curricula and at the same time learn to discard what becomes redundant. This document highlights with due prominence programmes and strategies that are critical to the awareness of fundamental rights and commitment to fundamental duties, particularly the aspects of national development, secularism, national integration, social cohesion and value inculcation.

Developed on the foundations of trust, autonomy, flexibility and accountability, the objective of this framework is to generate fresh thinking and action. It highlights the need for value inculcation within

the constitutional ideology and Indian ethos. It aims to prepare futuristic, dynamic and forward-looking teachers with high level of competencies, commitment and willingness to perform.

After dissemination of this framework, the NCTE would collaborate with institutions to organise intensive discussions on its content and evolve strategies to bring about the changes suggested along with other innovations that may emerge in future.

The NCTE expresses its gratefulness to all those who have participated in the process of nation-wide consultations. It also places on record its gratitude to the members of the drafting committee who have worked painstakingly in developing the earlier discussion document and also the present framework. Prof. C.L. Anand, Prof. O.S. Dewal, Prof. J.N. Joshi and Prof. S.N. Singh are senior educationists of the country who are highly respected for their scholarship, understanding and commitment. They were ably assisted by the NCTE team consisting of Shri S.K. Grover and Dr.K.Walia who all deserve appreciation for their efforts.

New Delhi

August 15, 1998

J.S. RAJPUT  
Chairman, NCTE

## **DRAFTING COMMITTEE**

<i>Prof. J.S. Rajput</i>	<i>Chairman</i>
<i>Prof. C.L. Anand</i>	<i>Member</i>
<i>Prof. O.S. Dewal</i>	<i>Member</i>
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## **PROJECT COORDINATION AND ACADEMIC SUPPORT**

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# *One*

## CONTEXT AND CONCERNS

### 1.1 Introduction

Teacher education is an integral component of the educational system. It is intimately connected with society and is conditioned by the ethos, culture and character of a nation. The constitutional goals, the directive principles of the state policy, the socio-economic problems and the growth of knowledge, the emerging expectations and the changes operating in education, etc. call for an appropriate response from a futuristic education system and provide the perspective within which teacher education programmes need to be viewed.

When India attained freedom, the then existing educational system was accepted as such because it was thought that an abrupt departure from the same would be disturbing and destabilising. Thus a predisposition to retain the system acquired preponderance and all that was envisaged by way of changes was its rearrangement. Consequently, education including teacher education largely remained isolated from the needs and aspirations of the people. During the last five decades certain efforts have been made to indigenize the system. The gaps, however, are still wide and visible. The imperatives for building the bridges may be as follows:

- to build a national system of teacher education based on India's

- cultural ethos, its unity and diversity synchronising with change and continuity;
- to facilitate the realization of the constitutional goals and emergence of the new social order;
  - to prepare professionally competent teachers to perform their roles effectively as per needs of the society; and
  - to upgrade the standard of teacher education, enhance the professional and social status of teachers and develop amongst them a sense of commitment.

These are but a few of the major concerns which call for an immediate action. A comprehensive, dynamic and responsive system of teacher education needs to be continually evolved keeping the overall scenario in view.

## **1.2 Scenario of Teacher Education**

The need for improved levels of educational participation for overall progress is well recognised. The key role of educational institutions in realising it is reflected in a variety of initiatives taken to transform the nature and function of education — both formal as well as non-formal. Universal accessibility to quality education is considered essential for development. This has necessitated improvement in the system of teacher education so as to prepare quality teachers.

Various Commissions and Committees appointed by the Central and the State Governments in recent decades have invariably emphasised the need for quality teacher education suited to the needs of the education system. The Secondary Education Commission (1953)



observed that a major factor responsible for the educational reconstruction at the secondary stage is teachers' professional training. The Education Commission (1964-66) stressed that 'in a world based on science and technology it is education that determines the level of prosperity, welfare and security of the people' and that 'a sound programme of professional education of teachers is essential for the qualitative improvement of education.'

India has a large system of education. There are nearly 5.98 lakh primary schools, 1.76 lakh elementary schools and 98 thousand high / higher secondary schools in the country, about 1300 teacher education institutions for elementary teachers and nearly 700 colleges of education/ university departments preparing teachers for secondary and higher secondary schools. Out of about 4.52 million teachers in the country nearly 3 million are teaching at the primary/elementary level\*. A sizeable number of them are untrained or under-trained. In certain regions, like the North-East, there are even under-qualified teachers. As far as in-service education is concerned the situation is not very encouraging. It is estimated that on an average 40% of the teachers are provided in-service teacher education once over a period of five years. Regarding non-formal education, though a number of models are in vogue in various States in the country, much more needs to be done to prepare teachers and other functionaries for the system.

The Programme of Action (POA), 1992, emphasised on teacher education as a continuous process, its pre-service and in-service

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\*Source : Selected Educational Statistics, 1996-97, MHRD, Govt. of India, New Delhi.

components being inseparable. The POA, among others, has pointed out the following in respect of teacher education :

- Professional commitment and overall competencies of teachers leave much to be desired ;
- The quality of pre-service education has not only not improved with recent developments in pedagogical science, but has actually shown signs of deterioration;
- Teacher education programmes consist mainly of pre-service teacher training, with practically no systematic programmes of in-service training facilities for which are lacking;
- There has been an increase in sub-standard institutions of teacher education and there are numerous reports of gross malpractices; and
- The support system provided by the State Councils of Educational Research and Training (SCERTs) and the University Departments of Education has been insufficient and there is no support system below the State level.

In pursuance of the NPE, 1986, a major step was taken by the Central Government to enhance the professional capacity of a large number of teacher education institutions. Nearly 430 District Institutes of Education and Training (DIETs) have already been established by 1997-98. The DIETs are charged with the responsibility of organising pre-service and in-service programmes in addition to being the nodal resource centres for elementary education at district level. Likewise, Colleges of Teacher Education (CTEs) and Institutions of Advanced Studies in Education (IASEs) have been given the responsibility of

introducing innovations in teacher education programmes at the secondary and higher secondary stages and in vocational education.

The National Council for Teacher Education (NCTE) as a non-statutory body (1973-1993) took several steps as regards quality improvement in teacher education. Its major contribution was to prepare Teacher Education Curriculum Framework in 1978. Consequently, teacher education curricula witnessed changes in teacher preparation programmes in various universities and boards in the country. A similar effort was made in 1988.

During the last decade, new thrusts have been posed due to rapid changes in the educational, political, social and economic contexts at the national and international levels. Curriculum reconstruction has also become imperative in the light of some perceptible gaps in teacher education. Teacher education by and large, is conventional in its nature and purpose. The integration of theory and practice and consequent curricular response to the requirements of the school system still remains inadequate. Teachers are prepared in competencies and skills which do not necessarily equip them for becoming professionally effective. Their familiarity with latest educational developments remains insufficient. Organised and stipulatory learning experiences, whenever available, rarely contribute to enhancing teachers' capacities for self-directed life long learning. The system still prepares teachers who do not necessarily become professionally competent and committed at the completion of initial teacher preparation programmes. A large number of teacher training institutions do not practise what they preach. Several of the skills acquired and methodologies learnt are seldom practised in

actual school system. This highlights the need to bring realism and dynamism in the curriculum.

### **1.3 Constitutional Goals**

The Constitution of India solemnly resolves “to constitute India into a sovereign, socialist, secular and democratic republic and secure to all its citizens: justice—social, economic and political; liberty of thought, expression, faith, belief and worship; equality of status and of opportunity; and to promote among them all fraternity assuring the dignity of the individual and the integrity of the nation.” These are the main goals which the nation expects to be realised through education. Teacher preparation must not lose sight of this basic thrust so as to empower teachers to inculcate the same among the students.

In order to reinforce faith in democratic socialism, secularism, justice, liberty, freedom etc. the role of education needs to be understood in its true perspective. Democracy is a process of building consensus among the citizens on matters of common concern. It expects high morality from them, protects the interest and preserves their uniqueness, dignity and individuality. Quality of democracy depends on its citizens willing to discharge their responsibilities towards the self, the family, the community, the nation and humanity at large. Democracy is a way of life and its values need to be imbibed through education and practised in the day-to-day life. Democratic socialism attempts to achieve a synthesis between individual freedom and social compulsion and combines liberty with responsibility and authority with accountability. The Indian situation demands citizens capable of making conscious and purposive efforts directed towards social cohesion and living together harmoniously.

Indian Society is plural and heterogeneous with an underlying current of unity. The imposition of a homogeneous and uniform curriculum of teacher education may prove counter-productive under this situation. Except for identifying certain basics and essentials, regional autonomy must be exercised for developing region/culture specific curriculum of teacher education. Indian reality demands that plurality should be used for strengthening national solidarity and social cohesion.

The Indian state is secular. The Indian society, however, is religious. To resolve this dichotomy between the state and polity, the principle of equal respect for all the religions\* has been accepted. This is the essence of Indian secularism. The teachers themselves have to internalise the imperatives of secularism in national context and interpret the same effectively to the learners. That alone would develop the right attitudes among all citizens irrespective of their own backgrounds. In India religion is also the source of value and morality. The teachers have to develop values and morality in a different context. Teacher education has to respond to this reality.

Justice, liberty, equality of status and opportunity and promoting fraternity constitute another set of inter-related goals. Justice protects the rights of the weak and ensures impartiality. To ensure justice and fulfil the constitutional commitments in this regard, certain positive and legal provisions have been made by the State. (Special measures such as reservation in educational institutions, financial support, scholarships,

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\*सर्व धर्म सम्भाव

hostel facilities, etc. have been extended to the under-privileged groups like Scheduled Castes, Scheduled Tribes, Other Backward Classes etc. It implies change in attitudes and values through education, in which the role of teachers needs to be stressed. Liberty of thought, expression, faith, belief and worship is another constitutional goal which education is expected to help realise. Indian Constitution ensures equality of status and opportunity to all its citizens. The objective is to minimise social and economic disparities, inequality of power and life chances by positive discrimination in favour of the weak. The education of teachers should equip them with the competencies needed to deal with discrimination, disparities and inequalities. Fraternity stands for acceptance of universal brotherhood, respect for human personality and feeling of oneness irrespective of linguistic, racial, cultural and religious diversities.

The Constitution of India specifically lays down the fundamental duties of every citizen. These are pre-requisites for overall development of the nation. Teachers of India are supposed to lead young generation by their own example and conduct by following the noble ideals which inspired our national struggle for freedom. Teacher education must equip every school teacher with capabilities to inculcate amongst young children the commitment to protect the sovereignty and integrity of India and the willingness to defend the country and render national service when called upon to do so. Every citizen has to imbibe the spirit of common brotherhood amongst people of India regardless of religious, linguistic and other diversities. Practices derogatory to the dignity of women must be eliminated. Equally significant is the need to preserve the Indian heritage of composite culture and conserve and improve the natural environment. Education that promotes these attributes can build

a nation that consistently attempts to rise to higher levels of endeavour and achievement.

#### **1.4 Teacher Education and Problems of the Nation**

It is universally acknowledged that education is an effective means for social reconstruction and to a great extent it offers solutions to the problems a society is faced with. These problems may be economic, social, cultural, political, moral, ecological and educational. Since the teachers play a major role in education of children, their own education becomes a matter of vital concern. Teacher education must, therefore, create necessary awareness among teachers about their new roles and responsibilities.

Education of teachers needs to strengthen and stress upon the main attributes of a profession such as the systematic theory, rigorous training over a specified duration, authority, community sanction, ethical code and culture, generating knowledge through research and specialisation. It is acknowledged that formal professional training on continuous basis is necessary for becoming a good teacher as it caters to the development of one's personality and sharpening of communication skills and commitment to a code of conduct.

***Economic Problems*** :Poverty, unemployment and low rate of growth and productivity are some of the major economic problems of the country which have led to the compulsions of the backward economy. These problems seek immediate solution and demand a realistic co-ordination between economic planning and manpower planning. Education can help find solutions if it is properly coordinated with

manpower needs. Introduction of work education and vocationalisation of education in secondary schools will have to be given a modern and meaningful direction. The attitude towards the work culture needs a transformation. The Indian society needs education with special emphasis on science and technology, vocational inputs and realistic work experiences. Teacher education curriculum, therefore, has to promote such attitudes as are necessary for the emergence of a new economic order. Along with the vocational competencies and skills a new work culture will have to be created which necessarily involves the inculcation of dignity of work, the spirit of self-reliance and scientific temper among students. The courses of teacher education need to be enriched to enable teachers to understand the attributes of modernity and development.

***Social Problems*** : Casteism, communalism and regionalism are some of the problems in the body politic of the society which misguide the youth. Increasing delinquency, violence, terrorism and fissiparous tendencies and use of inappropriate means to get one's ends served are threats to national integration and social cohesion. Democracy, violence and terrorism cannot coexist. Education has to develop a peace loving personality and the programme of teacher education has to contribute in this regard.

The explosion of population with all its allied disturbing trends is not only neutralising the economic gains but also creating many problems for the country. Indian society still suffers from evils like child labour, child marriage, untouchability, discriminatory treatment to women, violation of human rights, etc. and most of the people are unaware of their legal rights.



Modern model of development which puts man against nature by making it an object of exploitation has disturbed the harmony and equilibrium between the two. Its consequences are visible in serious environmental degradation, pollution and ecological imbalances.

Strengthening national and social cohesion in a diverse and pluralistic society, accelerating the process of economic growth, improving life of the downtrodden and the people living below the poverty line, removing the widely prevalent ignorance, superstition and prejudices from the masses, inculcating scientific temper and developing a critical awareness about the social realities of Indian life are some of the issues which call for immediate attention. Teachers and teacher educators have a special role to play in such efforts.

***Problems of Cultural Reconstruction :*** Education is the process of transmission of dynamic and responsive components of cultural heritage and its continuous enrichment. There is a need to re-interpret the Indian culture in its distinct identity and composite strength. Its capacity to absorb the sublime from the other cultures needs to be highlighted. The teachers will have to play their role in cultural transmission and reconstruction.

***Crises of Values and Morality :*** There has been a persistent erosion of values in the society. In the present day context certain values need to be redefined and reinstalled. There are situations when the values imparted and inculcated in schools are not generally practised in society. Value education demands a planned and purposive approach. It is through education and, as of necessity, through teacher education

programmes that the task of inculcating values can be substantially accomplished. Whereas values are emotive, the other related significant dimension is that of moral education which is essentially conative in character. Morals are situation-specific and demand immediate decision and action and yet there are morals which are considered to be eternal and universal. Through committed teachers, the art of ensuring moral development in a secular, multi-religious and multi-ethnic society needs to be cultivated.

### **1.5 Problems within the Education System**

The nation has yet to fulfil the constitutional commitment to provide free and compulsory education to all children till they attain 14 years of age. India is also a party to the global commitment for achieving the goal of Education for All by the year 2000. The education system however, has to respond to several major issues and problems which have hindered the progress in this regard. Maintenance of educational standards against the pressure of increasing enrolment. relevance and quality of school education. efficacy of school functioning under the decentralized role of political power through the enactment of Panchayati Raj Act are some of the pertinent issues. In addition, specific requirements and needs of social and economical groups of the society and of the minority communities, vocationalization of education, scientific and technological literacy, alienation of youth, rush for urbanisation, perceived urban orientation of educational system and its inflexibility to respond to rural, tribal and regional requirements are some of the dominant issues. These would determine the nature and shape of teacher education

programmes and the efficacy and functioning of teachers in their new and emerging multifaceted roles.

***Isolation of Teacher Education*** : Teacher education institutions which were considered 'islands of isolation' have gradually developed linkages with schools, peer institutions, universities and other institutions of higher learning as also the community. However, much remains to be done in this direction. The curriculum of the school, its actual transactional modalities, examination system, management processes and its ethos need to be the main thrust areas of teacher education programmes. To achieve these ends, teacher educators need to be made conversant with various aspects of school experiences. It is observed in day-to-day functioning that teacher educators often tend to lose contact with content areas relevant to their own disciplines resulting into gaps in communication and latest information. It is, therefore, a felt need in the present day context that teacher education institutions keep in continuous touch with institutions of higher learning and peer institutions for effective transmission of knowledge and its upgradation.

The breaking of isolation from the community is essential for enabling teachers and teacher educators to reconstruct pedagogical and educational principles and practices in the light of experiences gained from mutually beneficial community interactions. Teacher as a professional and as an intellectual cannot remain indifferent to the events that are taking place in society. The academic and social issues are inter-related and inter-dependent. In contemporary context, the role of the teacher is no longer confined to teaching alone. The teachers are expected to play an active role in the developmental activities responding to progress of the community.

***Expanding Scope of Teacher Education:*** Education of teachers is not an end in itself. Its target is the school. Any change in the nature, purpose, quality and character of the school demands a concomitant change in teacher education, specially in its curriculum. The implementation of the 10 + 2 scheme at the school level has transformed the complexion of education to a considerable extent from the pre-primary to the + 2 stage. There has been an increase not only in the quantum of knowledge, but also in its nature and purpose. In addition, new transactional techniques and strategies have also been evolved. Certain new subjects have replaced the old ones whereas some others have changed their context, content, orientation, theme and philosophy. These changes at the school level, out of necessity, demand a new pedagogy and innovative evaluation techniques. But the changes at the level of teacher education have not adequately responded to the emerging realities at the school level. All that the teachers are expected to do in their work places need to be reflected in teacher education activities and programmes.

The teaching community has to face the challenges thrown by science and technology. There has been an explosion not only of scientific and technological knowledge but also in the means and techniques of acquiring knowledge. The scientific researches and developments related to theories of heredity, learning, mental health, neurology, attention, motivation etc. can no longer be treated alien to teacher education programmes.

***Evolving a Culture-Specific Pedagogy:*** Every region and state has its typical cultural identity, and there is a need to utilise the same as

a basis for developing meaningful and relevant pedagogies. Since there is no one universal way in which the children learn, there is a strong need for looking into the cultural context in which a child is placed. A child in a tribal society may process information in an altogether different manner as compared to the one from the urban area and high socio-economic stratum. Pedagogy, therefore, should be culture-specific. Instead of using one uniform, mechanistic way of student learning, cultural practices such as story-telling, dramatics, puppetry, folk-play, community living, etc. should become a strong basis of pedagogy. Cultural specificity should get embedded in the pedagogical practices which should be evolved for tribal, rural, urban and other ethnic groups and communities.

### **1.6 Inseparability of Pre-service and In-service Education**

A learning society visualises education as a continuing activity. This is equally applicable to teacher education. Policy stipulation on inseparability of the pre-service and in-service education of teachers and emphasis on continuing education need to be given a pragmatic shape at the implementation stage. The curriculum of pre-service and in-service teacher education has to be redesigned to maintain continuity between the two. Teachers who are being educated today will have to devote major part of their life to education during the twenty-first century. If the present rate of explosion of knowledge continues, in a few years, the teachers will find themselves in a world where their present knowledge and teaching skills, to an extent, would become obsolete. They will have to face the challenges of electronic media and information technology and use them meaningfully for educational purposes.

## 1.7 Research and Innovations

One of the major inputs towards enhancing the quality of teaching and learning in schools as well as teacher education institutions would be the extent to which research outputs and the outcomes of innovations are utilized by the system. Researches on teacher education have been and are being conducted in universities, national level institutions and other establishments but their utility for the teacher educator or the classroom teacher remains rather low. Majority of the researches are undertaken to obtain a degree and hence the focus on its possible utility and relevance gets misplaced. The situation is compounded by non-availability of appropriate dissemination mechanisms like journals, publication of findings in different forms and opportunities to the target group to get an access to these. Institutional capabilities and resources need to be augmented, enabling them to undertake relevant researches.

There is a definite requirement of bringing in research methods and methodologies in appropriate form in pre-service and in-service teacher education programmes. To an extent, it finds a place in master level courses in education, though in some universities the same is not insisted upon. The structure and design of future courses and programmes need to take this aspect into account. Preparation of teacher educators can no longer be completed without adequate grounding in various aspects of research. Researches must respond to policy issues and curriculum, evaluative procedures and practices, training strategies and classroom practices, etc. The areas of teacher preparation for children with special needs, gifted children and children from groups with specific cultural, social and economic needs can no longer be ignored.

Surveys and studies also need to be encouraged. These may be exploratory or diagnostic in nature. The new initiatives and innovations need to be encouraged and studied. Wherever considered appropriate, these could be brought into the system of teacher education for wider replicability and gainful use.

The concept of field interaction and laboratory area approach in the context of establishment of DIETs is indeed timely. Researches, innovations and surveys must become an integral part of the training programmes of teacher education institutions irrespective of the stages. The trainees need to be familiarised with innovations, in general, and innovative practices in teacher education, in particular.

### **1.8 Other Critical Concerns**

Among so many other factors and forces influencing teacher education, some of the most important are :

- gradual change-over from conventional programmes of teacher education to integrated courses to ensure greater professionalism;
- increased duration of teacher education programmes to accommodate proper assimilation of the emerging professional inputs;
- stage-specific theoretical and practical components, transactional strategies and evaluation;
- plans and programmes of teacher education to respond to the expected role performance of the teacher;
- flexible and pragmatic approach to plans and programmes of teacher education; and
- proper planning and orientation of education of teacher educators.

## **1.9 Spectrum of Institutional Functions**

In the light of context and concerns, the teacher education institutions will acquire a wider spectrum of functions and a greater room for responsibilities. The spectrum of specific functions will have to be resolved depending upon the specific institutional capabilities. It is visualised that the following institutional functions will have to be undertaken by different institutions according to the availability of their resources to :

- develop capability to provide both for pre-service and in-service education;
- provide training and orientation programmes to the functionaries of alternative educational strategies aimed at achieving universal elementary education and eradication of illiteracy;
- organise programmes for heads of schools and school complexes and supervisory staff;
- offer courses for community leaders, voluntary agencies and parents;
- provide academic support to schools and other agencies engaged in education of children and adults;
- undertake research and experiments with innovative educational ideas;
- act as a resource centre for education for a specific area;
- offer counselling and guidance services;
- organise need-based programmes for educational administrators, planners, curriculum designers, evaluators, etc.;
- impart training for other areas of education like physical education and special education; and
- act as a link between the school and the university system.



## 1.10 Commitment and Performance in Teacher Education

A major concern in school education is the quality and relevance of education being imparted to young learners. Every learner is supposed to acquire mastery level learning in identified competency areas. NCTE has analysed the existing curriculum of teacher education from the point of view of competency areas. It has emerged that to enhance the quality of school education, equal emphasis needs to be given to competencies, commitment and willingness to perform. A curriculum framework based upon competencies, commitments and performance has been developed. Competency areas namely contextual, conceptual, content, transactional, competencies related to other educational activities, developing teaching learning material, evaluation, management, working with parents, with community and with other agencies have been identified as critical to teacher preparation at the elementary stage

Acquisition of competencies alone will not be sufficient until and unless the teacher is fully committed. Teacher commitment areas identified include commitment to the learner, commitment to the society, commitment to the profession, commitment to attaining excellence for professional actions and commitment to basic values.

Alongwith competency and commitment areas, performance areas have also been identified. These include classroom performance, school level performance, performance in the out-of school educational activities, parents-related performance and community-related performance. Teacher education institutions could identify details in each of the three major categories. For each competency, commitment

and performance area, the existing curriculum needs to be analyzed. Whenever certain unit of curriculum is taken up for transaction, its relationship to commitment and performance has to be examined. Such an approach would provide an opportunity to the training institutions to prepare teachers who are not only competent but are also committed and both these aspects are reflected in their performance leading to higher learning attainments by all children.

### **1.11 Breaking the Barriers**

The critical analyses of the context and concerns presented in the preceding sections help in developing a vision for teacher education in future. In the Indian situation, the basic character of the framework must provide for adequate and inbuilt flexibility for incorporating the regional and local specificities. Total trust in the capabilities of institutions and organisations to develop an indigenous, comparable and area-specific curriculum has to be the guiding principle.

Teacher education has to be conceived as an integral part of educational and social system and must primarily respond to the requirements of the school system. It can no longer remain conventional and static but should transform itself to a progressive, dynamic and responsive system. National values and goals need to be meaningfully reflected and their inculcation attempted with care and caution. The theoretical and practical components need to be balanced appropriately. The theory and practice of education has to be enriched with the latest research findings not only in the field of education but also in the allied disciplines and areas. While it is essential to develop identified competencies to prepare effective teachers, it is equally necessary to

develop commitment and build capacity to perform as integral part of teacher preparation. The teachers have to keep abreast of the latest developments not only in their field of specialisation but also in areas of educational development and social and cultural issues through continuous in-service orientation. Emphasis on continuing life long learning has to become an essential concern of teacher education. A nation concerned with erosion of values needs teachers who are professionally committed and prepared to present a value-based model of interaction with their learners. The basic tenets identified in the national basic education scheme - Head, Heart and Hand need now to be linked to another 'H' - highways. Information highways, websites and internet are going to become terms of common usage in teacher education. For a sound mind, we need a strong hand and a vibrant heart. Areas like physical education and vocational education will continue to gain greater emphasis in the years to come and will serve as the basis for developing competencies and skills in addition to commitments and values.

A comprehensive theoretical base is essential for a teacher to assume professional role and develop capacity to conceptualise inputs from other disciplines as well and evolve strategies to utilise them. A true professional is capable of perceiving complexities and uncertainties in the society, has a thorough grasp of the subject, possesses skills to make critical diagnosis, takes decisions and has courage and conviction to implement such decisions.

## *Two*

### **PRE-SERVICE TEACHER EDUCATION**

#### **2.1 Introduction**

Teacher education by its very nature is inter-disciplinary. The major areas of inter-disciplinarity implicit in teacher education programmes include philosophy, psychology, sociology, anthropology, economics, history and culture. Recent researches in medical and life sciences are opening new avenues of knowledge which are relevant to education. Besides, teacher education has an essential and inalienable component of practical work including student teaching, internship, field work, working with the community, work education, etc. The country needs teachers with different orientations and specialisations to manage educational programmes. In addition, the teachers are also needed for physical education, music, art, painting, dance, work education and vocational subjects and also for the non-formal stream, distance education, adult education, open learning system, etc. The scope of teacher education curriculum, therefore, gets enlarged.

The curriculum for teacher preparation, in future has to encompass the broader canvas which is consistently emerging before the teachers and shall continue to change at a much faster pace in times ahead. Teachers shall have to take a global view of the new trends, strategies and practices, and focus on indigenous heritage and thoughts which could fit

in the local and national situations. Transplantation of alien educational ideas and practices has not been found rewarding in the developing countries. Consequently, the emerging structures and designs of the curriculum shall lay greater emphasis on the ideas, practices and experiences that have emerged in India through the contributions of thinkers like Mahatma Gandhi, Vivekanand, Rabindra Nath Tagore, Zakir Hussain, Sri Aurobindo, Giju Bhai and many others.

The teacher education programmes shall focus on competencies and commitment in much greater magnitude in future. Such a transformation in teacher preparation strategies would emerge only after due familiarity and adequate appreciation of indigenous thoughts developed over the decades in India. Gradually an indigenous approach and strategy would emanate and replace the alien practices that have remained in vogue in teacher education for quite a while.

## **2.2 Teacher Profile**

The profile of a teacher which emanates from the context and concerns, necessarily implies additional roles, besides the conventional ones. The following capabilities and competencies need to be highlighted.

- inculcating the intrinsic and extrinsic values of professional competency, professional commitment and professional ethics;
- creating and reconstructing knowledge;
- selecting, organising and using learning resources;
- effectively transacting curriculum, selecting and organising educational activities and programmes for learners with special needs;

- using media and appropriate instructional technologies;
- communicating effectively and responding to the challenges of continuity and change;
- counselling students for personality development, adjustment and learning attainment;
- conducting research, especially action research and initiating innovative practices;
- organising student activities;
- inculcating a sense of value judgement, value commitment and value transmission;
- understanding the import of inter-relationship between culture and education and 'culture and personality';
- fostering interest in life long learning;
- understanding the aspirations and expectations of the community and establishing mutually supportive linkages between the school and the community; and
- acting as a change agent for modernisation and development.

The educational programmes for prospective teachers, therefore, need to be so designed as to develop in them the requisite potential and capabilities.

### **2.3 General Objectives**

The general objectives of teacher education derived from the contexts, concerns and issues of education, teacher education and the perceived profile of the teacher could include the following:

- to promote capabilities for inculcating national values and goals as enshrined in the Constitution of India;

- to enable teachers to act as agents of modernisation and social change;
- to sensitize teachers towards the promotion of social cohesion, international understanding and protection of human rights and rights of the child;
- to transform student teachers into competent and committed professionals willing to perform the identified tasks;
- to develop competencies and skills needed for becoming an effective teacher;
- to sensitize teachers and teacher educators about emerging issues, such as environment, ecology, population, gender equality, legal literacy, etc.;
- to empower teachers to cultivate rational thinking and scientific temper among students;
- to develop critical awareness about the social realities; and
- to develop managerial and organisational skills.

## **2.4 Characteristics of Curriculum Framework**

The context and concerns, the teacher's profile and both the general and specific objectives help one to define the boundaries of a curriculum framework. The perceived characteristics of the envisaged curriculum framework would suggest that it :

- reflects the Indian heritage, acts as an instrument in the realisation of national goals and fulfils aspirations of the people;
- responds to the latest developments in the field of education;
- establishes integration of theory and practice of education;
- provides multiple educational experiences to teachers;
- enables teachers to experiment with new ideas;

- ensures inseparability of pre-service and in-service education of teachers;
- sets achievable goals for various stages of teacher education; and
- provides for use of communication technology.

## **2.5 Teacher Education for Early Childhood Stage**

The need for early childhood education has long been emphasised on the argument that it would lead to providing healthy and wholesome learning environment. It is also considered as a preparatory stage for the realisation of Universalisation of Elementary Education\ In order to provide healthy and enriched childhood to young learners, a new type of teacher, specifically sensitized about the perspectives of child development, will be required.

The enrichment programmes for early childhood education have been launched under Integrated Child Development Scheme through Anganwadis, Day Care Centres, Balwadis, Pre-primary Schools run by the State Governments, Municipal Corporations, Voluntary Agencies and Private Agencies. All such efforts, though not adequately provided for, are continuing with diverse approaches without making a synergic impact. Concerted efforts are needed for organising early childhood education in a planned manner. It presupposes pooling of resources by the community as well as the concerned agencies.

In order that early childhood education becomes a reality, in terms of its(organisation and accessibility) one of the significant inputs in making a success story of it is that of a professionally trained and committed teacher. The professional preparation of teachers for this



stage, (hitherto unplanned and uncared for,) demands thoughtful planning of training sequences, relevant to the developmental needs of early childhood, interwoven with commonalities and specificities.

**Specific Objectives :** The objectives of teacher education specific to early childhood include the following :

- to prepare teachers for facilitating physical, mental, moral, social, aesthetic and linguistic development of children;
- to acquaint them with the knowledge of child psychology;
- to cultivate social sensitivity, affection for children and respect for their uniqueness;
- to acquaint them with techniques of caring for children and enable them to identify their needs;
- to provide experiences and organise activities that promote children's self-concept, creativity and inventiveness;
- to enable them to select, prepare and use different kinds of resource materials;
- to develop a sense of involvement with and appreciation of local resources (human and material) and their utilisation;
- to develop an acquaintance with basics of scientific and technological literacy;
- to develop a repertoire of children's games, songs and literature; and
- to empower student-teachers towards creating learning readiness among young learners.

**Curriculum Framework :** The framework given here is suggestive and not a prescriptive one. It has considerable space for

flexibility, innovation and use of locally available community resources. The following curriculum framework is suggested for formulating a Plan of Action for developing programmes and activities, devising strategies, of negotiating the curricular inputs and the methods of obtaining feed-back. These are pre-requisites for improving the interaction processes directed towards the realisation of optimum enrichment of experiences at the early childhood stage.

Inclusion of the following components of theory and practice are suggested:

***Theory***

- Emerging Indian Society
- Early Childhood Education: Scope, Nature, Status, Problems and Issues.
- Psychology of the Child and Learning during early years (implementing developmentally appropriate curriculum).
- Planning, management and administration of Early Childhood Care and Education (ECCE) programmes
- Methods and materials for facilitating the growth and development of pre-school child through activities for:
  - Physical development
  - Mental development
  - Emotional development
  - Aesthetic development
  - Language development
  - Social development
  - Moral development
  - Neuro-muscular co-ordination
  - Self-expression

- Health and Hygiene
- Habit formation
- Observation
- Sensory-Motor Training

***Practical Work***

- Drawing and Painting
- Music
- Creative activities
- Story telling
- Dance and Drama
- Games and Physical Activity
- Plays
- Field trips
- Block making and related games
- Activities for children with special needs

Practicum : Teaching, placement and internship.

Practical experiences: Observation, planning and implementing programmes related to activities for children.

***Rationale*** : The current areas suggested in this framework have been specially designed for understanding early childhood care and education in its realistic perspective. No formal teaching is visualised at early childhood stage. It is not a stage for introducing three R<sup>s</sup>. In the preparation of teachers for this stage, therefore, the main thrust will be on sensitizing prospective teachers about change and its implications - cultural, social, economic, etc. as also with the change in the learner

through motivation and learning. The future need will be to empower the teacher to observe the change, interpret it and adopt, adapt, modify, consolidate, accelerate or reject it. It is not intended here to suggest details of the programmes and theoretical content. It is, however, expected that the course on Emerging Indian Society will enable the intending teachers to know about the rights and duties of the child, human rights, legal literacy, community dynamics, knowledge of national and local festivals, emerging trends in community life and social living, prominent personalities in various walks of life, familiarity with factors and forces affecting environmental and population equilibrium, knowledge and appreciation of places of historical and cultural significance and landmarks and trends of development.

Another theoretical input which is intended to be given to the prospective teachers is regarding knowledge of nature and scope, status, problems and issues concerning early childhood education in India. These need to be understood in terms of Indian reality and perspective, foundations of child behaviour etc. In addition, it may include, among others, progress of early childhood education, its historical development, problems, need for looking at it from the point of view of diversity, flexibility, local relevance and specificities and the agencies involved in the process of promoting early childhood education.

Basic to designing programmes and activities for children at this stage is thorough understanding of various aspects of growth and development of the child which the prospective teachers will be required to internalise. Since it is being recommended for the intending teachers of pre-schoolers, it will be necessary to know about the fundamentals of

early childhood care and education. Most of the training programmes of teachers for this stage will have major concentration on organisation and activities as mentioned above. In addition, the teachers will be required to have a practical training at early childhood education centres and the like. At this stage, greater emphasis will be given on propagation of early childhood care.

### ***Transacting the Curriculum***

**Theory :** India is a conglomeration of diversities with a variety of manifestations and is yet bound by a thread of commonality. The teacher is expected to recognise commonalities and specificities in order to shape the personality of children for living together in a perpetually changing complex society. The suggested theoretical components included in the framework are essentially meant for broadening the intellectual horizons of intending teachers who will become conversant with the culture and traditions of the country with due appreciation of the diversities. The seeds of democratic living are sown from the beginning of childhood and education needs to be regarded as a vehicle for maintaining equilibrium in the growth of individuals from childhood to adulthood.

It would be worth experimenting with modular approach of teaching combined with interventions of realistic nature by way of educational excursions, field trips, visit to museums, zoo, mountains, forests, and intermediary interventions with real life situations and through audio-video devices, wherever possible. Teaching in teacher training institutions be directed towards empowering prospective teachers

to enable them to use their experiences in actual work places for enhancing growth and development of young children.

There is to be a planned amalgam of theory and practice in a way that these two constitute a continuum of experiences. The teaching of theoretical components, in addition to what has been elaborated above, will combine various methods and approaches like lecturing, tutorials, seminars, term papers, discussion groups, gaming, role playing etc.

***Pedagogy :*** The teachers at this stage are initiated and introduced to the art of teaching. Teaching to them is romance, innovativeness and inventiveness. It is love for children, caring for children and seeking optimum enrichment of experiences for children. It is providing happiness to children and making their stay in schools joyful. The early childhood education includes transacting developmentally appropriate curriculum which includes within its fold concept development, convergent and divergent thinking, creative activities, language acquisition etc. It is an arduous task of equipping prospective teachers with competencies and skills needed for making the learning experiences of a child joyful and memorable. It must be admitted that the training of pre-school teachers is complex and full of challenges.

The pedagogical aspects of training will be planned around activities and programmes for children, attending to their needs, identifying their background and interests by gender, identifying children with special needs and devising strategies for their optimum growth and development, organising games, recreational activities, plays etc.

**Practicum** : Theory and practicum have to be linked and integrated in the training process. Much of what goes by way of practicals is intrinsically related with pedagogy and much of the essence of pedagogy lies in the practical work. The practical work may include comprehensive case studies of children including children with special needs, gifted children, children coming from different socio-economic and cultural backgrounds etc. Development and use of schedules, assessment checklists and other evaluation tools and techniques will form an important aspect of the practicum. The maximum utilisation of environmental and community resources can be done only when the teacher is thoroughly conversant with environmental resources. Community survey, therefore, is one of the several activities of practical work which requires systematic exploration.

The practical work of the prospective teachers will centre around evolving and devising programmes and activities for physical, psychomotor, cognitive, emotional and other aspects of development. Health and hygiene, habit formation are certain other areas which require practical work. In addition, art, drawing and painting, using clay/plasticin, music, dance, recreation, story telling, games and physical activity are a variety of examples of other practical experiences which a student teacher will be required to undertake for creative expression of children.

**Evaluation:** Evaluation for the theoretical component may include assessment of sessional work, term papers, participation in seminars, discussion groups etc. besides semester examinations which can be oral, written, practical and objective type. The written tests have

to be reliable, valid and representative of the totality of experiences. Different tools and techniques of evaluation can be used for assessing the pupils' growth. Visits to and participation in activities of Anganwadis, Balwadis, Day Care Centres will make a part of training towards understanding the dynamics of working with children and educating them. The evaluation of this component will be in the form of cumulative records of performance of the intending teachers. External evaluation of practical activities will defeat the purpose as the practical work is, by and large, activity-based. It is essentially sessional work, day-to-day internal assessment, feed back and monitoring. A record of some of the activities is all that may be suggested for the purpose of evaluation in this regard.

## **2.6 Elementary Teacher Education Curriculum Framework**

The constitutional provision of providing free and compulsory education to all children upto 14 years of age includes both the lower primary and upper primary classes, that is, from class I to class VIII. There seems to be a compelling need for having multiple models for preparing teachers for primary and upper primary classes. Incidentally, in a number of Elementary Teacher Education Institutions (ETEIs) in the country, the nomenclature of the training programme for pre-service training of primary school teachers has been changed to pre-service training of elementary school teachers. But, in actuality, the transformation in programmes has yet to take place effectively.

There are three distinct possibilities of designing courses in teacher education for the elementary stage:

- Teacher education programme exclusively for primary school stage (Classes I to V);



- Teacher education programme for elementary school stage (Classes I to VIII); and
- Teacher education programme exclusively for upper primary school stage (Classes VI to VIII).

In view of the requirements of Universal Primary Education and Universal Elementary Education, only the first two alternatives are being recommended. However, the third suggested above could be attempted by offering credit oriented modular courses after successful completion of primary teacher education programmes. Significantly, we have nearly 5.98 lakh primary schools which are mostly in rural areas as compared to upper primary schools numbering about 1.76 lakhs only\*.

## 2.7 Teacher Education for Primary Stage

**Specific Objectives :** The formulation of curriculum framework for this stage (classes I to V) has been guided by general and specific objectives of teacher education and the perceived characteristics of curriculum development. The specific objectives of primary teacher education may be to :

- develop understanding of the psychological and sociological foundations relevant to the primary stage;
- enable teachers to manage appropriate resources for organising learning experiences of children;
- acquaint them with methods and techniques of caring for children with special needs;

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\* Source : Selected Educational Statistics, 1996-97

- enable them to acquire necessary skills so as to develop curiosity, imagination and creativity;
- develop in them the capacity to understand and analyse the social and emotional problems;
- develop communication skills;
- enable them to establish mutually supportive linkages with the community focussing on the objective of UPE/UEE;
- enable them to understand implications of research for teaching-learning, undertake action research and use innovative practices; and
- enable them to organise games, sports, physical activities and other co-curricular activities.

Keeping in view the teacher profile, particularly the facilities and resource management aspects, general and specific objectives of teacher education, the following framework, which is flexible with ample scope for adaptation and for making it relevant to local environment, is being suggested :

### ***Curriculum Framework***

#### ***Theory***

- Emerging Indian Society
- Primary Education in India : status, problems and issues
- Psychology of Teaching and Learning with special reference to children of age group 6-11 years
- Assessment, Evaluation and Remedial Teaching
- Health and Physical Education
- School Management
- Education of Children with Special Needs

- Guidance and Counselling
- Content Areas for Primary Schools
- Action Research

### ***Practice Teaching***

- Pedagogical Analysis of Primary School Subjects
- Practice Teaching in Schools
- Observation of Model Lessons

### ***Practical Work***

- School Experience inclusive of Internship
- Work Education
- School-Community Interaction
- Action Research Studies (planning and execution)
- Organisation of relevant educational activities

***Rationale :*** The teacher needs to be empowered through training inputs to gain greater insights into the complexities of the society and the historical perspective of the developmental process. The paper on Emerging Indian Society is being introduced at this stage with the purpose of making the teachers aware of the contextual realities in which they have to work. The paper would take into account the rights and duties of children, human rights education, values and their broad features, perspectives of educational, social, economic and political development in the country, significant landmarks in the process of development in various fields including science and technology etc. The theoretical component is essential for understanding the learner, the community and the society, the internal and external forces impinging

upon the school and the internal and external variables operating upon the learner. The inclusion of Courses on Psychology of Teaching and Learning, Health and Physical Education, Education of Children with Special Needs has been made for accommodating this point of view in the Framework.

In the proposed training programmes, the prospective teachers would be imparted training in a manner that theory and practice are organically integrated. Correlation within the curricular areas of learning and external environment is established. Psychology of Teaching and Learning, School Organisation and Pedagogical Analysis of primary school subjects will provide a sound base for the adoption of integrated approach to teaching and learning and for establishing meaningful and interactive bonds between theory and practice. The intent of including Action Research and Education of Children with Special Needs is guided by the fact that every student teacher is expected to know the elements of action research, surveys, community services etc. and is capable of educating children with special needs. Additional areas may be included for making the course content relevant and region specific.

### **Transacting the Curriculum**

*Theory* : Transactional strategies invariably need to emphasise interactive, participative and activity-oriented approach. The transaction of curriculum will have place to place intra and inter-content variations. The theoretical component of the curriculum can be transacted by lecture-discussion, self-study approach, seminars, media supported teaching wherever possible, tutorials and through practical activities. It is expected that the intending teachers acquire, during the course of

training, mastery of competencies and skills that are basic to the making of an effective, reflective and committed teacher.

***Pedagogy*** : Practice teaching remains to be a weak link of curriculum transaction. This point of view has been substantiated and re-inforced by field surveys conducted by NCTE at different places throughout the country. In this framework, pedagogical analysis of school teaching subjects has been thought of as an essential component of practice teaching. By way of pedagogical analysis, a student teacher becomes conversant with the objectives of teaching a unit, the entry behaviour of pupils, classroom management and evaluation strategies. With this background of having looked into the pedagogical aspects of school teaching subjects, the student teacher is likely to become more effective and confident in the classroom. As a necessary part of the training of primary school teachers, knowledge of content is given due importance during the course of training. Mastery of subject matter, the insight gained through pedagogical analysis and the foundation courses when thoughtfully integrated and used for classroom instruction will lead to improving the quality of education.

***Practicum*** : Practical work is an essential component for internalising the theoretical concepts. It will have to be planned on each aspect of the theoretical inputs. In addition, practical activities centring around different school experiences, work education, school community interaction, action research projects and other educational activities directed towards development of the personality of students will also be undertaken by the intending teachers. It needs continuous planning, analysing, monitoring and evaluation throughout the duration of the

course which will necessitate the involvement of teacher educators more vigorously than it is at present.

***Evaluation*** : It is expedient to employ formative evaluation for obtaining continuous feedback, motivating students and guiding their efforts. There is an increasing felt need to replace external examination by an internal continuous and comprehensive examination system. External system of evaluation, until such time it is replaced, may be perceived as a corrective, moderating and balancing factor. It, therefore, needs to be carefully planned and testing tools made valid and reliable. In different situations, evaluation of theoretical component may be based on essay questions, short answer type questions, objective type questions, objective-based questions, oral examinations, participation in discussion groups, etc.

Evaluation of practice teaching can be done internally, externally or through judicious combination of both. Gradual transition to continuous and comprehensive internal evaluation of practice teaching and assigning grades instead of marks would be a professionally sound step. Evaluation of practical work would also be done internally.

## **2.8 Teacher Education for Elementary Stage**

***Justification*** : The justification for suggesting a separate model of teacher education curriculum for the elementary stage, in addition to the one suggested for primary stage, is given below:

- There is a constitutional commitment for providing compulsory education to all children upto 14 years of age.
- The gradual transition of the teaching and learning processes from

concrete operational stage of development to abstract reasoning process and change over of teaching-learning strategies from one stage to another needs to be ingrained in the minds of teachers for ensuring a continuum of learning experiences from class I to class VIII and matching the learning experiences with maturity of the learners. The present status does not reflect the gradual transition implicit in the development of thought processes from one stage to another.

The formulation of the curriculum framework for the elementary stage will also be guided by the general and specific objectives of teacher education and the characteristics of curriculum development.

***Specific Objectives*** : The specific objectives, relevant to the stage, may be to :

- develop understanding of the psychological and sociological principles relevant to elementary stage of education;
- enable teachers to select, prepare and use appropriate resources for organising learning experiences;
- acquaint them with methods and materials of teaching children with special needs;
- develop among them the capacity to solve the social and emotional problems of children;
- enable them acquire necessary skills so as to develop curiosity, imagination and self-confidence among children;
- develop communication skills;
- enable them to mobilise and utilise community resources as educational inputs;

- enable them to organise supplementary educational activities;
- undertake action research projects;
- enable them to establish mutually supportive linkages with the community; and
- enable them to organise games, sports, physical and other co-curricular activities.

## ***Curriculum Framework***

### ***Theory***

- Emerging Indian Society
- Elementary Education in India - status, problems and issues
- Psychology of Teaching and Learning with special reference to learners of age group 6-14 years
- Health and Physical Education
- School Management
- Education of Children with Special Needs
- Assessment, Evaluation and Remediation
- Guidance and Counselling
- Action Research

### ***Practice Teaching***

- Pedagogical analysis of elementary school teaching subjects
- Practice Teaching in schools
- Observation of Model Lessons

### ***Practical Work***

- School Experience inclusive of internship
- Work Education
- School-Community interaction



- Organisation of educational activities
- Organisation of games, sports and physical education activities.
- Action Research proposals and studies.

It is expected that detailed curriculum plan would adequately provide for aesthetics, culture, arts, music, dance, drama, value inculcation etc.

***Rationale*** : The course on Emerging Indian Society will enable the prospective teachers to understand the demands that the society expects of education to fulfil. Similarly, proposed course on 'Elementary Education in India - status, problems and issues' will promote the capacity to examine if these expectations can really be met. The course on Psychology of Teaching and Learning will teach them how to formulate their teaching strategies to promote learning among children. Health and Physical Education will enable them to plan exercises for development of their sound physique. They will be able to deal with children with special needs and adopt problem solving approach, a capacity built by Action Research. The course on counselling and guidance will enable them to help children when confronted with problem of any kind.

The pedagogical analysis will provide the prospective teachers an understanding of the complexity involved in the teaching of subjects at the elementary level. This will enable them to plan their educational strategies. A critical observation of model lessons and practice teaching in the actual classroom situation will make them effective and competent teachers.

Internship in a school will offer the prospective teachers the varied experiences needed for working in a school. They will internalise educational value of the work and experience the dignity of manual work. The school community interaction would not only promote the interactive support between them but also enable them to evolve suitable pedagogy for children. The organization of educational activities will develop the capacity for planning and undertaking such activities as are essential for the development of personality of the student. The theoretical and practical courses suggested in this frame are capable of preparing a competent elementary school teacher.

***Transactional Strategies*** : The prospective teachers are to be prepared so as to enable them to perform successfully in the pre-instructional, instructional and post-instructional phases of teaching. For this, several well-designed approaches like lecture, discussion, cooperative study, self-study, project method etc. may be adopted. Depending on the nature of the subject, the teachers may combine different strategies and instructional aids, utilize media supported teaching, organise field trips and practicals and demonstration techniques. In this process, due attention be given to children with special needs. The curriculum transaction will have to be adjusted with the needs of students and the locally available resources.

During the process of teaching and learning, the existing transactional strategies marginally promote the capacity for independent study, self-discovery and self-study and rarely seek prospective teachers' participation and remain one way traffic with the result that the subject matter communicated is partially assimilated and not fully utilized.

Teacher education has to inculcate professional commitment, develop competencies and make teacher reflective to deal with specific situations.

Practice teaching, the weakest link of teacher education, possesses the potentiality of converting itself into a strong component, if properly organized. The process of curriculum transaction needs improvement and enrichment. Pedagogical analysis of teaching subjects is sure to refine teaching and learning as it will transform the teachers' performance and develop competencies not covered by the method-cum-content approach. With the background of pedagogical analysis of model demonstration lessons given by the teacher educator, the classroom performance is sure to improve, if it is supervised in detail by the subject specialist.

Work education is an important component of practical work and its potentiality has to be utilized by teacher education for developing certain qualities of character. Community surveys help formulate a proper social perspective. The mutually supported school and community interaction helps the teachers to evolve suitable teaching strategies.

The teachers will be required to organise educational activities in school. They have to learn to plan and organize such activities as are essential to provide opportunities for self-expression and lead to development of personality of students. They have to be trained for utilizing supplementary materials essential for accelerating and promoting learning among students.

The teachers will be required to facilitate physical, social,

emotional and aesthetic development of students. Their creative and constructive potentialities have to be fostered. Practical activities suggested in the document will help achieve these ends. It is, therefore, necessary to organize these activities on continuing basis. The influence of teachers' personality and behaviour has lasting impact on students. In the selection and adoption of transactional strategies, the teacher has to ensure that teaching becomes participatory, cooperative, activity-centred and joyful.

***Evaluation*** : The success or failure of curriculum transaction is ascertained by evaluation done by means of valid and reliable tools. At this stage, evaluation has to be continuous, formative and comprehensive to bring improvement in the teaching learning process. Systematic evaluation will enable a teacher to select proper teaching strategies and effect suitable changes in the curriculum process.

The evaluation of pupil teachers at the elementary stage will not differ much from the primary stage and the same principles and similar practices, which have been adopted at the primary level, may be utilized at this stage also.

## **2.9 Teacher Education for Secondary Stage**

For teaching at the secondary stage, the qualification most sought after is one year B.Ed. which is, in fact, meant for this stage alone. However, there are at present, several variations for first degree level qualification in Teacher Education such as B.Ed. (Elementary), B.Ed. (Special Education), each of one year duration; B.Ed. through correspondence or distance education mode of two years duration.

Certain other variations in the form of vacation or part-time courses were also available before the NCTE norms came into force. In addition, there are four-year integrated courses both for elementary and secondary stages.

Teacher education programme at the secondary stage, like at all other stages, will include theory, practice teaching in schools and practical work in the light of context, concerns, profile of teachers and general and specific objectives.

**Specific Objectives :** The specific objectives at this stage may be to :

- enable the prospective teachers to understand the nature, purpose and philosophy of secondary education;
- develop among teachers an understanding of the psychology of their pupils;
- enable them to understand the process of socialisation;
- equip them to acquire competencies relevant to stage specific pedagogy, curriculum development, its transaction and evaluation;
- enable them to make pedagogical analysis of the subjects they are teach at the secondary stage;
- develop skills for guidance and counselling;
- enable them to foster creative thinking among pupils for reconstruction of knowledge;
- acquaint them with factors and forces affecting educational system and classroom situation;
- acquaint them with educational needs of special groups of pupils;
- enable them to utilise community resources as educational inputs;

- develop communication skills and use modern information technology for school purposes;
- develop aesthetic sensibilities; and
- acquaint them with research in education including action research

### ***Curriculum Framework***

#### ***Theory***

- Emerging Indian Society
- Secondary Education in India - status, problems and issues
- Psychology of Teaching and Learning
- Guidance and Counselling
- Assessment, Evaluation and Remediation
- Curriculum Design and Development
- School Management
- Comparative Education
- Action Research

#### ***Optional Courses*** - any two of the following :

- Pre-school Education
- Elementary Education
- Educational Technology
- Vocational Education
- Adult Education
- Non-formal Education
- Distance Education
- Environmental Education
- Computer Education
- Education of Children with Special Needs

- Health and Physical Education
- History and Problems of Education
- Population Education

### ***Practice Teaching***

- Pedagogical analysis of two school teaching subjects
- Practice teaching in schools
- Observation of Model Lessons

### ***Practical Work***

- Internship and school experiences
- Field work with community based programmes
- Creativity and personality development programmes
- Work education
- Sessional/practical work
- Physical education games and sports and other school activities
- Aesthetic development programmes and activities.
- Action research studies

***Rationale*** : A teacher helps in improving the quality of human life in the context of multiple internal and external forces impinging on man and society. The course on 'Emerging Indian Society' would develop an insight into the nature of Indian society, its variety and complexities and make teacher education programme relevant to the community. Ingenuity of the teacher lies first in understanding the national ethos and then in the planning for teaching within this framework as a professional.

A professionally trained teacher is expected to identify the strengths and weaknesses of secondary education in India and, after having gained insight into the status, problems and issues concerning education at this stage, develop mental make-up for evaluating the system and utilising the same for promoting excellence in education.

A teacher in the classroom has to make adjustments in teaching strategy according to the nature and scope of the curriculum and evaluate the success of teaching in terms of students' growth. The foundations of curriculum, pedagogy, evaluation and remediation need to be laid down firmly during the course of professional preparation of teachers. What kind of pedagogical strategy will give optimum results in specific units of curriculum and in what ways the outcomes need to be evaluated will be the main thrust.

Distinct departure from the existing programme is noticeable in including a course on psychology of teaching and learning. The teaching of educational psychology to the B.Ed. trainees was done extensively even earlier but without establishing linkages with actual teaching and learning. The attempt to put teaching and learning together does not in any way undermine the importance of educational psychology. Now the basic thrust will be on the teaching-learning processes, group dynamics, learners' background, internal and external forces of the institution and the community. Psychology of teaching and learning would require adjustments at different levels of schooling and for different grade levels. Foundation courses lend support to refining the education processes implicit in teaching and learning. Comparative perspective of educational systems in the developing and developed countries would



enable teachers to acquire a global vision of contemporary context and gain greater insight into ways of improving the quality of education.

The understanding of some specific areas of education in detail and in depth is needed for becoming an effective teacher. Guided by this consideration and having been supported through field interactions with different target groups, courses on pre-school education and elementary school education have been included as optionals. Teachers will also be required to get indepth understanding of areas like non-formal alternatives to school education. Similarly, avenues for indepth studies in emerging areas of concern like vocational education, environmental education, population education etc. have also been suggested.

The message of educational technology has to reach the classroom in the form of its application. The prospective teacher has to be so equipped, during the course of training, as to be able to think of using appropriate educational technology for improving the quality of instruction and obtaining optimum results in terms of the students' growth.

Physical education has been considered as an integral part of education. In each system of schooling tremendous amount of emphasis is laid upon building up the cognitive base of students while the affective and psychomotor dimensions of human personality do not receive adequate attention. A teacher fashioned in the culture of physical education would, with great concern, be conscious of catering to the physical dimension of human personality. The inclusion of this course,

however, may not be taken as an alternative to preparing teachers for teaching Physical Education.

***Transacting the Curriculum*** : The impact of teacher training programmes has not been perceptible over the years in terms of transacting the curriculum in schools. Lecture method, mostly taken recourse to by teacher educators, is generally not supplemented by using instructional materials. Interactive teaching, co-operative teaching-learning, self-discovery approaches seldom find place in the day-to-day teaching practices. What is of importance and calls for top priority, in the training programme, is to lay appropriately proportioned emphasis on 'why to teach', 'how to teach' and 'what to teach' aspects of teaching. It has to be reflected in the teaching-learning situations planned by the teacher educators.

***Theory*** : Education, as a field of specialised studies, is interdisciplinary in its very nature. Since different branches of learning are involved in understanding the presage, process and product variables of education, it is essential that formulation of teacher education programmes adopts a holistic approach in order to promote proper understanding, insight and thinking on matters pertaining to this field. The complementary character of theory and practice needs to be emphasised at every step. The prospective teachers may be encouraged to organise, express and communicate their ideas clearly in the class. It has to be accepted as a communicative process of an intensive teacher-learner dialogue and renewal of a two-way process as opposed to 'the banking concept' of teaching. The emphasis must be laid on cultivation, formation and development of the power of mind in contrast to the prevalent tendency

of aiming at success in the examination alone. Student teachers will have to employ the use of divergent thinking and problem-solving strategy in classroom transactions.

The teacher educators will be required to have clarity of thought in respect of components of the course, objectives of teaching, and their relevance to educational and social goals. One of the approaches may be the modular one. Each module, though a complete teaching unit in itself, remains a part of the total syllabus with built-in linkages and feedback mechanisms. Learning through this approach can be reinforced by library work, seminar readings, tutorials and small group discussions. Self-study and self-motivated learning become integral part of curriculum transaction. The outcomes would result in better understanding of concepts, leading to better mastery learning.

The inter-disciplinary approach in teaching has to be accepted and implemented for developing comprehensive understanding and vision of educational studies. Learning outcomes have to be assessed continuously, which is the basic tenet of the modular approach. This would help in modifying, adjusting and improving transaction strategies for better acquisition of knowledge. Universities have the options to evolve their own examination system. Too much reliance on external examinations, however, would inhibit the progress of moving in the direction of quality education.

***Student Teaching and Practical Activities*** : There is no denying the fact that practice of education is as important as its theory. Each good theory leads to good practice and vice-versa. To strike a

balance between theory and the practice of education, therefore, is a matter of judicious planning and scheduling in order to give proper direction to teacher education.

Changes in the pattern and practices of student teaching have been only peripheral. The content-cum-method approach, wherever attempted, remained limited to the introduction of an additional component of content without fully achieving the objective of integration. The problem-solving approach, discovery method, competency based teaching learning and indigenous contributions like those of Gandhi, Tagore, Aurobindo, Zakir Hussain and several others have the potential for bringing in innovative ideas in teacher education. The application of educational technology, informatics, telematics, cybernetics etc. have yet to make a discernible headway. The learning resources, wherever available in the training institutions and the community as also in the schools, have not been optimally utilised.

Pre-requisite to preparing a prospective teacher can be thought of in terms of providing certain inputs such as induction programme, exposure to school experiences with special focus on educational environment of the school, socio-economic and cultural background of the community constituting the catchment area, observation of classroom teaching and other related activities. Induction programme might include acquainting the intending teachers with the school settings, the school programmes - curricular and co-curricular. In addition, they will be prepared for actual classroom teaching and the roles they are expected to assume during the course of practice teaching/internship by way of focussed discussions, demonstration lessons, preparation of lesson

plans so as to encompass teaching for cognitive, affective and psychomotor development.

Practice teaching is essentially a joint responsibility of teacher training institution and the school involving teacher educators, prospective teachers and school teachers. Teacher educators will help in facilitating and guiding the activities as implied by the pre-instructional, instructional and post-instructional phases through which a student teacher has to progress. The role of a school teacher in this joint effort lies in extending cooperation to the teacher educator and the intending teacher. Various aspects, as referred to above, will have to be suitably adapted to varying structures and designs at different stages of teacher education.

Practical work other than classroom instruction can be viewed in terms of school and community experiences and activities related to personality and leadership development.

Efforts need to be directed towards developing in the teacher trainee certain competencies and skills which would be helpful in the shaping of the teacher for an effective role play. It is essentially directed towards capacity building which may embrace, among other competencies, managerial skills, organisational efficiency, leadership skills, democratic attitudes, innovative and creative abilities etc.

The teachers' role, which they will be required to play in the school situation other than classroom teaching, may extend to a variety of activities, such as maintenance of school records and registers,

management of laboratories and library, preparation, repair and selection of instructional aids and equipments, selection and preparation of textual materials, preparation of tests and assignments, admission and selection of students, maintenance of progress reports of students, preparation of school budget and development plans, beautification of school and classroom management etc. The institutional activities within the school environs may include dramatic clubs, stage activities, literary activities, inter-house activities and sports and games, organisation of educational tours, etc.

***Community Experiences*** : Interaction between the institution and the community is gaining importance in the modern context. One can think of several activities promoting school-community relationship, such as celebration of birthdays of children, celebration of parents day, activating parent-teacher associations for the welfare of the schools, organisation of school and community games, sports and other functions, utilization of community resources for education, understanding the background of children, celebration of national days in collaboration with the community, environmental education, adult literacy, plantation and social forestry.

Likewise, community involvement and school development activities may lead to community awareness generating competency through community-institution interaction activities; mobilizing community resources for organising literacy programmes, environmental education, work education programme, health awareness programmes, etc. It is expected that organisation of such activities would lead to developing self-confidence and initiative among student teachers and

also develop among them positive attitude towards plurality of cultures.

**Practical Work:** The modalities to be employed for organising activities other than teaching for all round capacity building and empowerment of a teacher trainee will involve joint supervision by the teacher educator and the school teacher.

The transaction modes, for example, for motivating adults for making them literate can be through mass participation, folk songs, street plays etc. The identification of various sports and a variety of activities for cleanliness in the community, collecting success stories and disseminating them in the community, preparing simple write-ups of all the activities undertaken; utilizing community resources for the developmental needs of library building, student scholarships, awards, student aid funds, celebration of festivals etc; student-parent-community contact programmes and organisation of welfare shows for better institution-community participation are certain other strategies of transaction of practical work.

It is expected that a student teacher undertakes several practical activities which facilitate instruction as also those that relate to management. Relevant to teaching and learning, the intending teacher develops competencies, like identification of support material, skills in preparation of indigenous and low-cost materials, judicious choice and utilisation of material for enhancing the learning and use of community resources for education. The likely activities may include preparation of an inventory of community resources, instructional material, development of software and use of hardware. The teacher trainee also gets acquainted

with the techniques of diagnosis, remediation, guidance and counselling, classroom interaction inclusive of understanding of context variables implicit in the process of teaching and learning, knowledge of educational rules and regulations/laws in addition to the maintenance of cumulative and comprehensive evaluation records, maintenance of school records and being conscious of professional accountability and ethics. It is hoped that most of the activities will be undertaken by the teacher trainee during the internship period of a reasonable duration. Some of these activities will have to be integrated with practice teaching. For meaningful organisation of practical work, pre-internship stage may be utilised for demonstration lessons, lectures, simulation, role playing, micro-teaching etc.

The transactional mode of the community related practical work may include interaction between school teacher and intending teacher and members of the community representing parents, panchayats, senior citizens, voluntary organisations etc. Student teachers may undertake a case study of a school (generally a practising school) for identifying its strengths and weaknesses, needs and problems, specific learning problems, such as drop-outs, drug abuse, behavioural problems, learning difficulties etc. Street plays can be organised by the student teachers to sensitize the community in the ways in which community resources could be utilised and also motivate the community members for greater participation in the school welfare activities.

**Work Education** : To come to its present form, work education has undertaken a long journey. From Marx's 'combination of productive labour and learning' to Abbot Wood's 'vocationalisation', it came to



Gandhi's 'handicraft as the medium of education' and again took the form of Kothari's 'work experience' which Ishwar Bhai Patel thought to be devoid of 'social value' and coined the term 'Socially Useful Productive Work' (SUPW). Its central purpose, however, is to shift the centrality of education from excessive verbalism to practicality. It has raised certain academic questions apart from the availability of teachers and other resources. These questions may be like :

- how to integrate it with other curricular and co-curricular activities?
- how to inculcate dignity of labour and morality of workmanship among students and teachers ?
- how to utilise the available community resources for work education and for breaking the status-quo for promoting economic and social mobility?
- how to combine community and school based work education programmes?
- how to make synthesis between its educational, economic and social values?
- how to enable teachers to understand the relationship between human personality and a particular type of work?
- how to assess its impact on culture and values?

Work education is a powerful medium for personality development. There can be a variety of activities which are necessarily school based and which may be included under work education like maintenance of the school plant including its playgrounds, cleanliness, repair of furniture and production of material to be used as instructional aids. It will be a great educational experience if community visit, field work, nature study, school co-operative saving bank, games and sports

and other co-curricular activities are carefully organised as part of the programmes leading to development of qualities needed for the success of work education.

***Value Education*** : The rapid erosion of values in the society is causing concern, necessitating imparting of value education. It is generally agreed that cognition is basic to volition which, by implication, would mean that prospective teachers are expected to understand critical issues, regarding values—concept, types, and problems—involved in imbibing the values. It is also expected of them to be well-versed with the values enshrined in our Constitution and the values that have the cultural contexts and can be derived from our heritage.

In the process of capacity building of intending teachers, what is of importance is to ensure that they become capable of understanding the import of value education, interpreting values in the contemporary contexts and evolving strategies of imbibing these by their students.

What is even more important here is to help the students not only understand their fundamental duties towards the school, the home, the society and the nation but also to translate them into action in their behaviour and conduct as an integral part of their character in order to spontaneously inculcate in them the highest value of living a transparent way of life as the strength of their personality as human beings.

***Increased Duration of B.Ed. Programme*** : An overview of the preceding details would bring into focus the duration required to

transact the curriculum to ensure achievement of objectives of teacher preparation at this stage. Through the national consultations initiated by the NCTE, a strong consensus emerged in favour of enhancing the duration of B.Ed. programme from one year to two years.

The new curriculum frame not only transforms the nature and content of the traditional foundation courses but also includes several additional components. Emerging Indian Society will deal with factors and forces operating in the Indian society leading to the emergence of a new social order. The psychology of teaching and learning has been given a new thrust. It will also include findings of researches in life sciences, medicine, neurology, genetics and communication technology particularly their relevance for teaching and learning. A new course on Secondary Education has been included to provide deeper understanding of issues involved in education at this level. Likewise, Guidance and Counselling has been incorporated to make teachers more functional in their jobs.

The course on Curriculum Design and Development will promote the capacity of curriculum development evaluation and transaction. A component of Assessment, Evaluation and Remediation has been added. The school management has been incorporated as a compulsory course because all the teachers must possess its knowledge and acquire its techniques. A new component of action research has been included to develop the problem solving approach. Comparative education has been added to broaden the outlook of student teachers and to develop their insight into educational problems and issues.

A number of optional subjects out of which the students will select only two has been suggested in the frame. These optionals are intended to develop certain additional competencies among the prospective teachers. The whole spectrum of theoretical courses has, therefore, not only been enriched but also given a professional shape and outlook which cannot be achieved within the short period of one year.

The practice teaching is now not merely confined to the teaching of certain subjects. Pedagogical analysis of the subjects offered for practice teaching has also been made compulsory. The prospective teacher will analyse the subject before going to class and evolve a need-based pedagogy and transactional strategy. The teacher educators will now deliver model lessons of different types in actual classroom situation and the prospective teachers will not only learn the technique but also make its critical appraisal and evaluation to be subsequently discussed with the teachers. Teacher educators supervising the pupil teachers in the classroom will discuss their observations with them for providing proper feedback to improve their performance. The practice teaching will, thus, require thorough preparation, detailed supervision and adequate time. Its gain would, obviously, be acquisition of higher level of teaching competencies.

The practical work has been made comprehensive and meaningful. Internship programme shall be enriched to provide all the experience that a teacher needs. After completion of the period of internship, the prospective teacher will acquire necessary experiences for working in school and the training received would be complete as against the partial one at present. The implementation of internship in this format will also

need increased duration.

The field work, community interaction, school community relationship and similar other programmes will enable the pupil teacher to develop a need based pedagogy. The organisation of physical education and other educational activities, work education, sessional and practical work related to practice teaching and the optional subjects, the formulation of programmes for the development of personality, creativity and aesthetic sensibility and action research will lead to the promotion of skills and competencies needed by a teacher. The practical activities mentioned above will enhance the competence of teachers. The duration of the B.Ed. programme will, therefore, have to be increased.

Besides these, a perceptible change in the pedagogy of teacher education itself has been suggested. Its centrality has shifted from the training colleges to schools and its transactional strategies have been transformed. The teacher educators have to make pedagogical analysis of the subjects to be taught and achieve integration between the theory and practice and the methodology of teaching. They are expected to evolve a culture-specific and need-based pedagogy and develop the potentiality needed for independent learning and self-study for which a number of suggestions have been made. The lessons will have to be supervised intensively and formative approach has to be adopted. The teacher educator has now to devote more time in the preparation and planning of his own activities for the professional uplift of the prospective teachers by developing certain additional competencies. All these demand more rigour and need more time.

Professionalism involves its own compulsion and pressure. It needs a change in attitudes and value systems of the teachers. They have to earn social sanction from the community by improving the quality of their work. The scope of teacher education has been enlarged. Teachers have to perform many additional roles in society. Apart from teaching, they have to act as the agents of change and modernisation, cultural reconstruction and social development to earn recognition as a professional from the society by acquiring new competencies and commitment. They have to become effective and result oriented to enhance their knowledge and develop skills for its communication. These are not possible to be achieved within the short span of one year. Hence the need to increase the duration of the present B.Ed. programme from one year to two years. Existing programmes of two years duration leading to Bachelor's degree in education like B.P.Ed. may continue to be of the same duration.

Two years' B.Ed. programme will provide a strong base for pursuing M.Ed. course, duration for which may continue to be the same as at present.

### **2.10 Teacher Education for Senior Secondary Stage**

Teacher education programmes have to respond to three major determinants: the stage-specific developmental characteristics of the students, the courses of study they pursue and the academic qualifications the prospective teachers possess. At the senior secondary stage all the three become distinctly different from that of the secondary schools which offer a common curriculum upto class ten. The main features of the three determinants are :

***Characteristics of Students at + 2 Stage :*** The development of students at this stage of adolescence is characterized by :

- maturity of body and brain;
- development of abstract thinking and logic;
- goal fixation and symbolization;
- self-consciousness, self-identity and self-assertion;
- sex-consciousness and sex interest;
- personal preferences and choices, ideal formation and differentiation;
- peer group influences, strong likes and dislikes, reactions and adventurism;
- changes in reference group, imitation of adult behaviour and roles and a tendency of defiance;
- moral reasoning and challenging attitude towards the established ideas, practices and authority;
- self-esteem and ego-involvement;
- attachment to friends;
- self-defence and self-exhibition;
- argumentation and rebelliousness; and
- fixation of ideas, development of aptitudes and demarcation of academic or vocational preferences.

In short, they acquire many characteristics of youth and adults. Their educational potentialities, inclinations and preferences become evident.

***Course of Study :*** For the students of +2 stage, two types of courses - academic and vocational - have been designed.

### ***Academic Stream***

The characteristics of the responding courses are in their having :

- differentiated, demarcated and specific contents;
- subject and discipline orientation preparatory to specialization;
- enriched and comprehensive curriculum with goal specificity;
- regrouping of subjects into compulsory and optionals;
- emphasis on abstract and creative thinking and higher mental faculties to deal with complex ideas and complicated concepts; and
- directed focus towards higher studies.

### ***Vocational Stream***

The main characteristics of vocational courses are in their being :

- job oriented;
- skill based;
- useful;
- practical;
- manipulative;
- rich in economic values;
- employment or self-employment oriented;
- terminal in nature; and
- suitable for middle level workers in economy;

***Teacher Characteristics*** : In order to deal with the above, the teachers of academic stream require :

- enriched and higher academic qualifications and standards;
- additional teaching competencies;
- different curriculum transactional strategies and modalities; and



- competency to promote desire for pursuing higher studies and develop academic interests and pursuit of independent study.

To deal with the vocational subjects, different kinds of teachers are required, possessing :

- expertise in a vocational subject;
- capacity to inculcate workmanship and dignity of labour;
- ability to transfer skills from one trade/vocation to another;
- competencies to explain scientific principles involved in a trade or vocation;
- capability to impart knowledge and skills for achieving success in a trade or vocation;
- desire to produce educated citizens, not simply narrow specialists or trade's men;
- ability to inspire students for constant upgrading of their skills; and
- an understanding of the inter-relationship between culture and the vocation.

***Rationale for Separate Teacher Education Programmes for the +2 Stage*** : At present , there exists a common programme for the education of teachers for the secondary and senior secondary schools. It is undifferentiated and generalized. However, the courses at the senior secondary stage have been enriched. Their nature and goals are different. They have been divided into two broad streams. The characteristics of students have also changed. Under these circumstances certain additional competencies are needed for teachers teaching at this stage. Hence, separate programmes for teachers of the academic and vocational streams.

## **2.11 Teacher Education for Senior Secondary Stage— Academic Stream**

**Objectives :** The objectives of teacher education for the academic stream may be to :

- develop among teachers an understanding of the nature, purpose and philosophy of the academic stream;
- develop necessary competencies and skills for curriculum development, transaction and evaluation;
- communicate difficult concepts and complex ideas;
- inspire students for higher and independent study and promote library and laboratory skills and habits;
- develop abstract, creative and critical thinking among students;
- enable them to reconstruct knowledge and experience;
- enable them to develop and use different kinds of tests; and
- foster academic interests and values.

### ***Curriculum Framework***

#### ***Theory***

- Emerging Indian Society
- Senior Secondary Education - status, problems and issues.
- Psychology of Teaching and Learning
- Curriculum, Pedagogy and Evaluation
- Research Methodology
- Methods of Teaching of one subject at the +2 stage

***Optional :*** One from :

- Educational Evaluation
- Educational Technology

- Population Education
- Environmental Education
- History and Problems of Education
- Comparative Education
- Educational Management, Planning and Finance
  - Innovations in Education
  - Physical Education
  - Computer Education

### ***Practice Teaching***

- Pedagogical Analysis of one subject at this stage
- Practice teaching

### ***Practical Work***

- Internship and school experiences
- Project work in the method and content
- Sessional and practical work in the area
- Action research
- Field work
- Organization of student and physical education activities
- Personality and leadership development programmes
- School and community relationship programmes
- School development plans/projects
- Library and Laboratory work
- Preparation and use of tests
- Preparation and use of teaching aids/instructional technology

***Rationale*** : An understanding of the emerging Indian society and factors and forces operating behind it are essential for developing educational insight among teachers. The knowledge of various components of senior secondary education in the academic stream will enable them to understand its nature, purpose, philosophy and problems. They will be aware of the curriculum, pedagogy and evaluation techniques relevant to this stage and acquire the knowledge of psychology of teaching, learning and transacting the curriculum and action research to solve day-to-day problems. Teachers will acquire knowledge of the methods of teaching in depth and develop related competencies by means of the specialized programmes. Practical work, pedagogical analysis of the subject and practice teaching in the class under the supervision of the expert will inculcate, among them, the needed competencies. The related practical activities like action research, field work, project work and sessional and practical work will develop problem solving approach. The preparation and use of instructional technology will make them more effective in the classroom. The preparation and administration of teacher-made objective tests will transform their approach to evaluation. They will be able to guide the students how to use library and laboratory for independent studies. The theoretical and the practical components mentioned in this curriculum frame will thus make them competent and reflective teachers.

### ***Transacting the Curriculum***

***Theory*** : For the purpose of transaction, a course may be divided into units and then the modular approach may be followed. Pupil teachers may be encouraged to pursue independent and group studies. Seminars and workshops may be arranged. Lectures should only be

indicative. The teacher may start the lecture analytically and through interactive interventions arrive at synthesis at the end. The skills of listening, drawing conclusion, conceptualisation and identifying the central theme and its relevance to life be established. After each lesson, reference materials may be suggested. The main thrust of transactional modality will be on the development of abstract, critical and creative thinking alongwith inculcation of habit of precision and comparison and use of appropriate words and concepts.

***Practice Teaching and Practical Work :*** Pedagogical analysis should precede *the* actual teaching. The notes of lesson may be only indicative. Its centrality should be focussed on the realisation of objectives. Supervision shall be the joint responsibility of the school and the training college. At least three-fourth of the lessons will be supervised by the expert in detail. Its nature should be formative. The projects shall be completed under the guidance of an expert and sessional/practical work shall be properly planned. The organisation of the student and physical education activities and services will be supervised by the teacher educators.

***Evaluation :*** Multiple approach will be adopted for the purpose of evaluating achievement for the theoretical content. It will be continuous as well as annual, internal as well as external. Teacher-made objective type of tests, diagnostic and prognastic tests, etc. shall be used for the purpose. The essay type question will also be used for identifying abilities not detected by other tests. Continuous progress record of the students maintained by the teacher will be considered at the time of evaluation of the practice of teaching. The different kinds of practical work, project report, sessional work, tests and records of various

activities shall be evaluated by experts in the area internally and continuously for giving proper feedback. The evaluation strategy at this stage shall aim at identifying the students' teaching potentialities at the senior secondary stage.

**Implementation Strategy :** A separate B.Ed. programme as envisaged in the framework may be organised by colleges of education and university departments of education. The teachers who have undergone a B.Ed. course for secondary stage and Master's degree in any of the academic subjects may subsequently undergo a bridge course or earn additional credits needed for developing competencies relevant to this stage under a specially designed programme of suitable duration.

## **2.12 Teacher Education for Senior Secondary Stage— Vocational Stream**

The focus of vocational courses is on self-employment or employment which demand different capabilities, competencies and practical and academic skills from the teachers. The teachers of vocational subjects should not only possess high competency in a trade or vocation but also be able to enthuse their students to undertake it as a career and develop qualities essential for achieving success in this area. The preparation of teachers for teaching vocational subjects, therefore, becomes an important function of teacher education programme at this stage.

**Objectives :** The objectives of the vocational stream would be to :

- make the teachers understand and appreciate the philosophy, purpose and need of vocational education and its relevance in Indian

- context;
- enable them to impart knowledge and develop necessary competencies;
  - enable them to develop an understanding of the scientific principles involved in a trade or vocation;
  - develop among them the necessary skills and values for success in a vocation;
  - enable them to foster among their students the desire to achieve high productive skills and competencies;
  - empower them to induce their students for self-employment;
  - develop insight among the students to transfer their vocational skills from one area to another;
  - enable them to develop the spirit of self-reliance and self-confidence among the students; and
  - enable them to organise on-the-job training and apprenticeship programmes for students.

## ***Curriculum Framework***

### ***Theory***

- Emerging Indian Society
- Vocational Education : status, problems and issues
- Psychology of Teaching, Learning and Developing Vocational Competencies
- Entrepreneurship
- Organizational Behaviour
- Management
- Project Formulation
- Marketing and Advertising

- Computer Education

### ***Practice Teaching***

- imparting theoretical knowledge about a trade or vocation
- developing skills and competencies in a trade or vocation
- teaching workshop practices

### ***Practical Work***

- Organising
  - apprenticeship
  - on-the-job training
  - workshop practices
- Formulating and implementing projects
  - vocational projects
  - projects in imparting vocational education
- Advertising
- Marketing
- Elementary Financial Management
- Working with Computers

***Rationale*** : The suggested curriculum, with all its theoretical and practical components, will develop among the teachers of vocational subjects knowledge, skills and competencies needed for a teacher of this stream. The teacher will not remain a narrow technician but would possess a broader educational outlook. The success of vocational education depends on obtaining practical skills and competencies on which enough emphasis has been laid. The apprenticeship programme, on-the-job training and workshop practices have been given due



importance. Teachers will be able to teach elementary financial management, advertising, conducting market survey and project formulation for starting a vocation. They will also acquire knowledge about management, entrepreneurship and organizational behaviour with reference to a vocation. All these will make them competent teachers of vocational subjects.

***Transacting the Curriculum*** : Curriculum transaction will highlight the application aspect of theory to actual practice. Demonstration shall be one of its techniques. Practice of teaching shall be arranged in actual work situation by way of apprenticeship. Laboratory and workshop will be fully utilised. Projects will contain all the details.

The evaluation of theoretical component will be done as in the academic stream. But the practice of teaching and practical activities will be performance oriented. Both process and the product will be evaluated. The workshop practices and work done during apprenticeship will be evaluated and quality of the product will be judged jointly by the teacher educator and the technical expert.

This programme is for the education of teachers who have already acquired degree or diploma in a vocation or trade. In case of teachers who have no such previous training, an alternative programme of increased duration may be designed. An alternative and more effective programme of teacher preparation for vocational education may be a 4 or 5 year integrated programme.

### **2.13 Tasks Ahead**

In the preceding sections it has been attempted to modify the curriculum framework in keeping with the emerging challenges and demands for better schooling and quality education. Teacher education in India, with a view to making it relevant to the school system as well as training needs for preparing teachers at different levels, will have to be further restructured, reorganised and revamped. Multiple models of teacher education may have to be evolved by the universities and other agencies including National Council for Teacher Education. The innovative models to be undertaken have to be relevant from the point of view of the teacher educator as well as those who will assume the role of professionals, requiring interdisciplinarity, broader vision, goal consciousness and commitment. These would lead to the improvement in the standards of teacher education and develop professional competencies. Another significant feature of such models would be their being feasible and cost effective. The detailed course outlines will be developed by the universities through their various academic bodies. It, however, pre-supposes that the duration is suitably adjusted with the entry qualifications. Mis-matches between the needs of teacher education institutions and the professional preparation of teacher educators working in such institutions will have to be bridged.

There are several workable propositions for evolving a variety of models like school based models, community based models, discipline-oriented models, integrated models, comprehensive models etc. Needless to say, it would be necessary to initiate integrated and comprehensive programmes of teacher preparation both in academic and vocational streams. The stage-specific and the need-specific models will have to be

evolved. These innovative models should be promoted and financially supported.

## 2.14 Eligibility and Duration

The suggested eligibility qualifications and duration for various teacher education programmes are summarised as follows :

### Suggested Eligibility Qualifications and Duration for Teacher Education

	Level of the Teacher Education Course						
	Pre-Primary	Primary	Elementary	Secondary	Senior Secondary	M.Ed. (General)	M.Ed. (Teacher Education)
	General Courses						
Eligibility	10+2	10+2	10+2	Graduate	Post-Graduate	Graduate with first degree in education	Post Graduate with first degree in education
Duration	2Yrs.	2Yrs.	2 Yrs.	2 Yrs.	2 Yrs.	1Yr.	1 Yr.
	Integrated Courses						
Eligibility	10	10	10	10+2		-	-
Duration	4 Yrs.	4 Yrs.	4 Yrs.	4 / 5 Yrs.		-	-

Weightages for various components of the different course structures may be arranged so as to give total weightage of 40% to theory,

20% to pedagogical analysis of school subjects, 20% to practice teaching and 20% to other practical work in accordance with time allocation and scheme of examination. This distribution, however, would not be applicable to pre-primary teacher education programmes for which theory and practice would have 30% and 70% weightages respectively.

There has been a strong demand from a large section of teacher educators and educationists to increase the duration of B.Ed. course from one year to two years. However, change-over from one year to two years' duration may require two-three years preparatory time. It is, therefore, recommended that the two year B.Ed. courses may be instituted after careful planning, development of detailed curriculum, suitable augmentation of infrastructure and necessary orientation of teacher educators during the next two/three years. During the intervening period, the suggested general teacher education programmes may be offered. However, if some institutions have the necessary infrastructure, staff and other resources and are willing to start these two year programmes early, they need to be encouraged and assisted.

## *Three*

### **IN-SERVICE TEACHER EDUCATION**

#### **3.1 Introduction**

In-service teacher education, within the overall framework of teacher development, has a crucial role to play. It is no cliché but a reality that those who teach should never cease to learn. The National Policy on Education, 1986, stipulates that teacher education is a continuous process and its pre-service and in-service components are inseparable. The initiatives taken in setting up District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs), and Institutions of Advanced Study in Education (IASEs) are some of the major developments in this regard.

Professional development of teachers begins with pre-service and gets renewed through in-service programmes. It does not, however, mean that there is a simple linearity between the two. There are elements of 'change' and 'continuity' in teacher education system which necessitate renewal and upgradation of skills and competencies. The in-service programmes are also organised to sustain the 'survival competencies' acquired by teachers years ago during their pre-service education.

### **3.2 Rationale**

In the professional updating of teachers, changes in the societal goals, educational structure, curriculum framework, transactional strategies, evaluation techniques and management processes play significant roles. New advances emerging on the educational horizon have to be addressed to and the teachers have to be made aware of the same as well.

Teacher development is a complex process. Teachers update themselves by putting in various efforts of self-learning, peer learning and interactions with the community. Other alternatives to professional development are participation in recurrent programmes, extension activities and continuing education programmes.

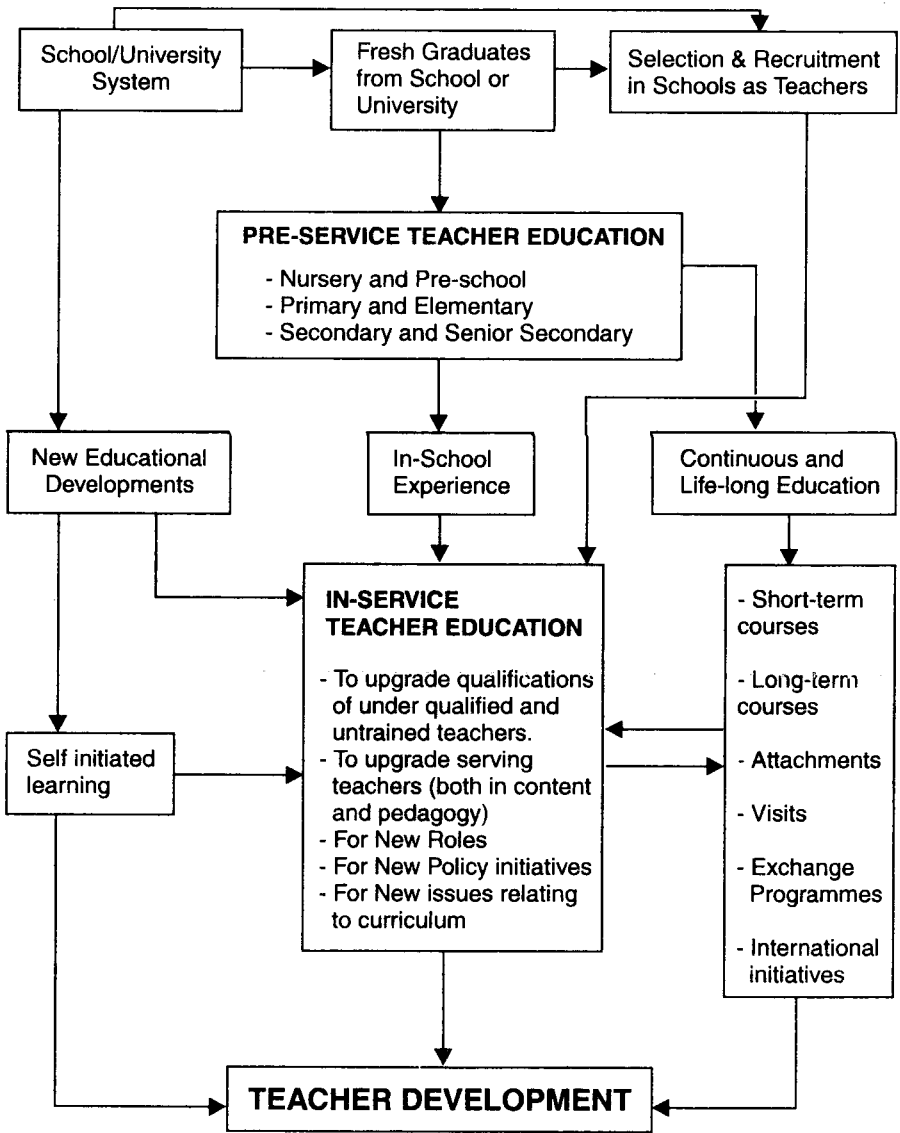
In-service teacher education programmes are essential in view of obsolescence as well as explosion of knowledge and are necessitated on account of changes in educational and social realities. Whenever teachers are required to execute new and different roles or get promoted to a position that requires new set of competencies, participation in appropriately designed in-service programmes is called for. Advances in the fields of curriculum, evaluation, audio-visual aids, telecommunication, etc. demand updating and orientation of teachers. Innovations, both at macro and micro levels, would fail if the teachers are not equipped and properly oriented to implement. In the Indian context, developments such as the 10+2+3 pattern, the making of science compulsory upto class X, new practices in evaluation like internal assessment, question banks, continuous and comprehensive evaluation, scaling and grading, introduction of new areas like

environmental education, population education, computer education, AIDS education, gender sensitivity etc. demand in-service training of teachers.

In-service training programmes are offered in various ways. Resource institutions at the national level offer orientation programmes of varying duration for different target groups.

Besides this modality, there are others like attachments, visits, national exchange programmes and international study visits which form a significant component of in-service programmes. Pre-service and initial teacher education is reinforced by self-initiated learning, in-service teacher education programmes and recurrent and continuing education. Self-initiated learning involves study on one's own for professional development. Recurrent and continuing programmes are organised through seminars, workshops, orientation courses etc. as per the professional requirements. The diagram given overleaf indicates various components which contribute to teacher development.

## COMPONENTS OF TEACHER DEVELOPMENT





In the changing context of globalisation, liberalisation and advances in tele-communication, teachers and teacher educators need to become conversant with international trends, internationalism, multiculturalism, multi-racialism and other pluralities. Both pre-service and in-service teacher education programmes should be receptive to new thinking and new changes. However, reforms and innovations in education can reach schools in large magnitude and expeditiously through in-service education programmes.

### **3.3 Functions**

In-service teacher education broadly performs the following functions:

- updates teachers in issues concerning content, methodology and evaluation;
- upgrades serving teachers in tasks with which they are currently occupied;
- initiates and orients teachers to new roles and technologies; and
- provides opportunities for unqualified or under-qualified on-the-job teachers to update and upgrade their knowledge.

While content, design and duration of each programme would be determined by one or more functions identified above, long range efficacy of any programme would also be judged by its impact on the following :

- personality of the trainees ;
- motivation and commitment in matters relating to professional and self-growth ;
- awareness of social realities; and

- communication and evaluative skills.

### **3.4 Objectives**

In-service teacher education has to be organised to :

- upgrade the qualifications of under-qualified and/or untrained on-the-job teachers;
- upgrade the professional competence of serving teachers;
- prepare teachers for the new roles;
- provide knowledge and skills relating to emerging curricular changes - content, process and evaluation;
- make teachers aware of critical areas and issues, like, competency-based learning, multi-grade, multi-level and multi-channel teaching, teaching students for the disadvantaged groups, meeting educational needs of children with learning problems, developing inquiry skills, use of mass media in education, community participation and educational development of dyslexic children; and
- overcome gaps and deficiencies of pre-service education.

In-service programmes need to be built around ‘transformational objectives’, that is, increasing motivational level, enriching self-concept, building climate of inquiry and making teachers reflective practitioners. The thrust of transformational objectives is to develop such qualities in teachers as would enable them to become receptive, perceptive, reflective, innovative and dynamic.

### **3.5 Strategies**

Strategies adopted in in-service teacher education programmes would vary programme-wise and theme-wise. One has to judiciously

select an appropriate training strategy or a mix of training strategies keeping in view the theme, programme duration, background of participants, availability of resource persons, support material and technologies of training at hand. Training strategies would range from lecture-cum-discussion to project work, library work, group interaction and field visits.

There may be many models of in-service training. Some of these are :

***Face-to-face Institutional Model*** : In this model, the training institution offers in-service training programmes at its premises using direct face-to-face training approach. It is most effective when the number of participants is around 30 to 40. Besides lecture-cum-discussion mode, many other transactional strategies are also used, namely project method, case method, library work, peer learning sessions, buzz sessions and other small group techniques. The merit of this approach is that there is a direct and sustained interaction between the participants and the resource persons. The limitation of this approach is that it cannot be used when the institution wants to train a very large number of participants within a short time.

***Cascade Model*** : In this model, the number of persons to be trained is very large and the training design is built on two or three tier systems. In the first lap, the key resource persons are given training. They train resource persons who, in turn, train teachers. The advantage of this model is that a large number of teachers can be trained within a short duration of time. However, it has its limitations. Knowledge and

information passed on at the first tier of key resource persons and then at the second tier of resource persons get somewhat diluted resulting in transmission loss of training effectiveness.

***Media Based Distance Education Model*** : With the advent of satellite technology and computers many training programmes are imparted using electronic media. Audio-conferencing and tele-conferencing are already being used. In these, the electronic media play the key role and the print material a supportive role. The advantage of this model is that the training objectives can be achieved within a limited time period. The constraint of this approach, however, is the limited availability of the technology itself and its high initial investment.

Besides the above three models, some other important considerations also contribute to the effectiveness of an in-service training programme. These are :

- (i) ***Locale*** : Training institutions at the national, state and district level organise training programmes generally at their respective institutions. These institution based trainings have their own strengths in terms of availability of resources. Their limitations are that they dislodge participants from their work place. This approach is often known as the off-site approach. On the other hand, many institutions organise training programmes at the school itself, using the on-site approach. Thus, the participants are not dislodged from their work place. Extension programmes and on-site programmes take training to the doorsteps of schools/ institutions.

- (ii) **Target Groups** : At present, in-service programmes are organised largely for teachers. A few programmes are also organised for headmasters, principals and other supervisory staff. This net has to be widened and many more categories of personnel have to be brought into its fold. In-service teacher education programmes ought to be offered to all teachers working at pre-primary, primary, elementary, secondary and senior secondary levels. These could cater to teachers working in formal schools, non-formal centres, open and distance teaching institutions and institutions of physical education, adult education, special education etc.

Teacher educators, in general, have limited exposure to in-service education. There is a need to train teacher educators at all levels. In fact, an apex institution needs to be set up for training of teacher educators. Alternatively, some selected institutions may develop special expertise in training of teacher educators. Such institutions would have to develop relevant support material and undertake critical research studies relevant to in-service programmes of teacher educators.

Besides teachers, supervisors and administrators, there are other categories like Zila Pramukh, Pradhan, Sarpanch etc. connected with Panchayat Raj system who have the responsibility to look after primary level education. Depending upon the resources available, the staff of the support system including librarians, hostel wardens etc. should also be exposed to various programmes to enhance their professional competence.

- (iii) **Transactional Strategies** : An effective in-service education and training programme would use various transactional strategies like case study method, brain storming sessions, panel discussions, seminars, symposia, small group techniques, project work, library work and lecture-cum-discussion sessions.

The organisers and the resource persons can make an in-service teacher education programme more effective and interesting if the age, experience and background of the participants are appropriately used at the planning phase. Since in-service participants bring a lot of experience and way of looking at educational events, they can significantly contribute to the design and development of the programmes.

- (iv) **Content** : Content of in-service programmes would depend upon objectives of each programme which could be grouped under the following major categories :
- school subjects;
  - pedagogy and methodology;
  - emerging issues; and
  - teacher's new role.

The focus of in-service programmes is on developing competencies and commitments. The overall aim of in-service programmes is to enable teachers to improve their classroom activities, out-of-the-classroom activities, school activities and community activities.

- (v) **Evaluation and follow-up** : Evaluation is a weak link in many in-

service training programmes. In most of the cases, in-service programmes are evaluated, if at all, on an *ad hoc* basis. Each in-service teacher education programme should have monitoring as an integral component so that effectiveness of a programme can be properly assessed and appraised. Programme evaluation should assess whether the required inputs were provided to the programme on time, the logistics properly looked after and coordinated, the reading materials provided to participants etc. Another aspect of programme evaluation should be to assess the gains of each participant and yet another subtle aspect is the impact evaluation to assess the impact of the programme at the grassroot level and in the field situation.

Success of an in-service teacher education programme may be assessed by collecting perceptions both of trainees and resource persons. A comprehensive view on quality assurance could be obtained by taking note of the following:

- how has the programme been implemented?
- what is the context? Is the programme relevant to the existing educational context ?
- has the programme been planned properly in terms of objectives, duration and resources ?
- does the programme satisfy the need of all or most of the participants?
- is the programme cost-effective?

### **3.6 Pointers for Future**

- Education and training programmes become more productive and

effective when programme planning is participative and transactional strategies are interactive. The need of all in-service teacher education programmes must emerge from the grassroots. For example, under the centrally sponsored teacher education programme, District Institutes of Education and Training are expected to organise programmes for teachers in such a way that every elementary teacher gets a chance to participate in the programme of his or her choice at least once every five years. In this venture, a state level coordinating agency like SCERT can play a facilitative and co-ordinating role to ensure that only need based in-service programmes are launched.

- In some States, due to certain reasons and other considerations, untrained and under-qualified teachers get recruited. These untrained and under-qualified teachers need training and content upgradation. The backlog of untrained and under-qualified teachers has to be cleared at the earliest.
- Whenever teachers are promoted from elementary level to secondary level or from secondary level to senior secondary level, intensive in-service training programmes should be designed and offered to them. Whenever a teacher takes up a new educational assignment say as headmaster or principal, he/she would require task oriented in-service training.
- There is a need to make a shift in organising programmes from training institutions to schools and school clusters. Concerted efforts may be made in this direction.



- Development of support material is very important for in-service education. Unless quality support materials are developed, face-to-face training alone may not be enough. Good quality support material in the form of print, video cassette and computer programmes have to be designed, developed and disseminated.
- Some in-service programmes be made credit oriented. On successful completion of specified programmes, the participants may be considered for professional mobility.
- Participation in in-service programmes within a stipulated period should be made obligatory and appropriate incentives be thought of.
- Organising in-service training programme by using mobile training teams may also be thought of.

## *Four*

### **TEACHER PREPARATION FOR ALTERNATIVE SYSTEMS**

#### **4.1 Introduction**

Global upsurge for universal education, explosion of knowledge, expectation and aspirations for better quality of life have led to the exploration of alternatives to the formal system which suffers from inherent inadequacies of rigidity and structural deficiencies. These alternatives include non-formal education, adult education, distance education etc. While a good deal of work has been undertaken to spread and improve education through various alternatives, a major problem has been lack of trained functionaries. However, these functionaries cannot be prepared on the formal models of teacher preparation. Since they are required to perform functions of different nature, their training has essentially to be job-specific. Developing skills, competencies and commitments in the personnel involved in alternative strategies demand preparation and use of teaching and learning materials to be specifically designed for the programmes.

#### **4.2 Non-formal Education**

Non-formal education consists of an organised systematic and planned educational activity, essentially characterised by inbuilt flexibility and carried on outside the framework of the formal system. It provides

learning experiences to children in the age group of 6-14 years who are not able to avail themselves of the facilities of formal schooling. Children from the non-formal system are eligible to appear in the examinations leading to certification to join the formal stream.

In certain respects, formal and non-formal education are similar as both are organised to augment, promote and facilitate learning. They differ in their institutional management and organisation of the course content. The training of the functionaries at different levels including instructors, supervisors, material writers, project officers and managers is significant.

### ***Objectives***

The objectives of the training of the non-formal functionaries may be to :

- familiarise the functionaries with the latest developments in knowledge and technology specific to their job performance;
- develop among them critical awareness about India's social reality;
- acquaint them with special requirements of the groups they have to deal with;
- provide them with such knowledge and skills as may help in the socio- cultural development of the clientele;
- enable them to draw support from a wide variety of sources;
- develop, among them positive attitudes towards the under-privileged sections of society; and

- promote, among them, the desire to actively participate in the developmental activities.

### **Course Content**

The curriculum for the functionaries of the non-formal education would be need-based and job-specific, depending on the nature of the task they have to perform. However, there are certain essentials which need to be considered. These include :

- a sound background in India's composite culture, its unity and diversity;
- science as an element of thought, its role in history and its impact on society;
- Indian national movement and Constitution of India;
- economic planning in India and its impact on economy and society;
- national development problems and issues;
- educational development, and systems of contemporary Indian education;
- environmental and population related issues;
- basics of human psychology and behaviour;
- communication skills, use of media and educational technology;
- production of instructional materials;
- Identification of learners' needs and community interaction; and
- practical/field work.

### **Transactional Modalities**

- organisation of induction and recurrent orientation programme of suitable duration;

- organisation of refresher courses and orientation programmes in the method, and content;
- utilisation of community resources - human and material;
- summer schools and short term training programmes;
- seminars, symposia and workshops;
- interaction with local experts and skilled persons;
- use of supplementary educational devices, media and educational technology; and
- evaluation.

### **Methods and Approaches**

- non-formal education may be included as an optional/compulsory course in all teacher education programmes and also in courses like MA (Education), MA (Community Development), MA (Social Work), MA (Rural Economics), etc.
- Resource persons may include principals and school teachers, teacher educators, experts from different academic disciplines and administration and social activists.
- Participation of non-governmental organisations and voluntary agencies may be encouraged in implementation of the programme.

### **4.3 Adult Education**

To achieve its present status, adult education has undertaken a long journey. Literacy campaigns during the thirties' led to the strengthening of social education. In the sixties', it took the shape of functional literacy programme which was further reinforced to include functional literacy, numeracy and technocracy. It is now seen as an integral part of life-long learning. It duplicates certain functions of non-

formal and continuing education. Adult education is expected to provide the skills needed to survive in the modern world for leading an effective and 'good life'. It includes adults of all ages. National literacy programmes focus specifically on those in the age group of 15-35 years in the Indian context. It aims at developing the capacity of 'learning to learn', with or without the help of adult educator. Adult education concerns those who are not full-time learners and have not been exposed to formal education. The knowledge gained and the skills developed from it are utilised in a variety of situations. Thus, it has become need-based.

### **Objectives**

The objectives of the training of adult education functionaries may be to :

- enable them to develop social awareness;
- develop skills related to functional literacy programmes;
- liberate adults from the bondage of prejudice, bias, ignorance, superstition etc.;
- prepare them for participation in developmental activities;
- develop, among the learners the desire and potentialities of 'learning to learn';
- enhance their economic efficiency;
- inspire the adult learners with the sense of patriotism, global consciousness and the will to live together;
- promote among them a sense of national and social cohesion;
- enable them to combine personal dignity with civic responsibility;
- understand the learners and their needs;
- develop awareness of human rights and legal literacy;

- enable them to understand environmental and population concerns; and
- develop in them humanistic, moral and ethical values.

### **Training Programme and Content**

The programme should be participatory, flexible, relevant, diversified and need-based. It might include, among others, the following :

- Psychological and Sociological Principles of Adult Learning.
- Problems and Issues of Adult Education.
- Indian Heritage.
- Freedom Movement, Indian Constitution, Administrative System of India including Panchayat Raj.
- Contemporary India and the World.
- Scientific and Technological Literacy.
- Planning and Developmental Activities.
- Economic and Social Problems.
- Problems of women, minorities and the under-privileged sections of the society.
- Acquaintance with approaches and methods of teaching adults.
- Right to information, social activism and legal literacy.

### **Transactional Modalities**

For the functionaries in this field, it is essential to promote their capacity of 'learning to learn'. Lectures should, therefore, be reduced to the minimum and emphasis should be laid upon self-learning through techniques like :

- workshops, seminars, debates and discussions;

- tours and excursions;
- library work, laboratory work and actual experience of work situations;
- basics of language learning;
- organisation of refresher courses and orientation programmes;
- short term training programmes;
- extension lectures;
- use of supplementary educational devices, media and educational technology; and
- evaluation.

### **Methods and Approaches**

- Adult education may be included as an optional/compulsory course in all teacher education programmes and also in courses like MA (Education), MA (Community Development), MA (Social Work), MA (Rural Economics), etc.
- Resource persons may include principals and school teachers, teacher educators, experts from different academic disciplines and administration and social activists.
- Participation of non-governmental organisations and voluntary agencies may be encouraged in implementation of the programme.

### **4.4 Distance Education**

Distance education is emerging as an alternative to the formal education system. The emphasis on education for all, explosion of population along with the desire for education, limitation of the formal system in providing greater accessibility and the rising expectations from education are some of the factors for its increasing demand. The



new communication technology has brought it within the reach of all. Originally designed to provide alternative educational avenues to the poor and the working people for higher education, it has now developed as a parallel system in India from the primary to the tertiary levels and covers not only liberal but also scientific and professional studies.

Distance education implies the provision of educational opportunity for the learner, from a distance by means of multiple media such as self-learning materials, audio-visual gadgets and short-term personal contact programmes. Information technology and cybernetics are simultaneously being utilised for upgrading both knowledge and skills.

In order that learning through distance education mode becomes effective, the following categories of functionaries need special inputs of training in:

- development and production of reading materials including assignments;
- organisation and conduct of personal contact programmes;
- production of radio, television and computer programmes;
- use of teaching aids, technological gadgets and tele-conferencing; and
- academic counselling and resource persons manning regional/ study centres.

### **Objectives**

Objectives of the training programme for distance teacher educators may be to :

- enable the distance educators to understand the nature and purpose

- of distance education;
- develop, among them, the technique to prepare self-learning and self-instructional materials;
  - facilitate learning at one's own pace;
  - promote the habit of self-appraisal;
  - organise personal contact programmes;
  - identify and utilise learning resources;
  - enable them to establish a healthy linkage with the formal system and make distance education an effective means for national and social development;
  - train them to make use of various interactive techniques; and
  - enable them to prepare, utilise and evaluate the assignments.

### **Courses, Modalities and Strategies**

These will be need-based and have to be evolved depending upon specific requirements of the target groups, nature and extent of resources and professional support available and the potentialities of the identified approach courses on distance education may be included at graduate and post-graduate levels. Considerable experience has been gained in the area by organisations like National Open School (NOS), Indira Gandhi National Open University (IGNOU) and others. Expertise exists to plan and design effective programmes in these sectors.

## *Five*

# **PREPARATION OF TEACHERS FOR STUDENTS WITH SPECIAL NEEDS**

## **5.1 Introduction**

Democracy intrinsically implies provision of equality of educational opportunity to all according to the learner's age, ability, and aptitude. It envisages equality not only in terms of access but also in achievement and the life chances. Every child in the classroom is unique and, therefore, deserves individual attention. There are also children having mild or moderate disabilities who can be served by the general classroom teachers only if they are properly sensitised to the needs of such children. Similarly, gifted and talented children also need to be identified and provided necessary educational inputs. In addition, there may be children lagging behind due to specific learning difficulties which may have remained unidentified.

## **5.2 Objectives**

Teachers with different skill levels are needed for special education programmes. Most of the general classroom teachers require sensitisation programmes whereas some teachers require specialised training to deal with the severely disabled children.

The general training objectives in the area of special education are to :

- create an awareness among all student teachers about education of children with special needs;
- equip student teachers with skills to manage mild and moderately disabled children in the general classrooms;
- prepare resource teachers to serve specific categories of disabilities; and
- prepare multi-category resource teachers to serve more than one category of disability.

The general training objectives will lead to the course objectives, which will vary between the levels of training like sensitisation, single category specialisation, multi-category specialisation. The course objectives may be to :

- understand the nature and causes of disability;
- acquire knowledge about the physiological and psycho-social implications of disability;
- understand the educational implications of various disabilities;
- develop positive attitudes towards students with disabilities;
- acquire skills to identify and assess levels of disabilities and provide appropriate educational services;
- apply the knowledge and skills acquired in the rehabilitation of students with disabilities;
- acquire competencies and skills to prepare and use relevant teaching-learning aids, technology and support materials;
- develop skills in management of children with multiple disabilities;
- familiarise with education policies and programmes of the State

- and Central Governments regarding disabled children;
- understand practicalities of integrated education of disabled children;
  - acquire techniques in educational assessment, evaluation and placement of disabled children; and
  - develop skills in encouraging family and community participation in rehabilitation of the disabled.

### **5.3 Curriculum Framework**

#### ***For all teachers***

The curricular input of special education in general teacher preparation programme right from the pre-primary to secondary levels may be as follows :

#### ***Theory***

- Development of special education in the emerging Indian society
- Handicapping conditions
- Trends and issues in special education
- Psycho-social aspects of disability
- Curriculum development and its adaptation to different disability areas
- Instructional and evaluation strategies
- Management of children with disability.

#### ***Practicum***

- Practice Teaching in a mainstream class
- Visits to special education institutions
- Identification of disabled children using functional assessment

procedures

- Preparation of teaching-learning materials
- Case study and project work

### ***For Special Teachers***

#### ***(Pre-service)***

For each category of impairment and disability, special courses shall have to be designed to prepare specialised teachers. Products of such courses would qualify to work as resource teachers in general schools and general classroom teachers in special schools.

#### ***Areas***

- Visual Disability
- Hearing Disability
- Mental Retardation
- Learning Disabilities
- Dyslexia
- Locomotor and Neuromuscular Disabilities

The curricular input for special teachers of disabled children may be as follows :

#### ***Theory***

- Nature and characteristics of specific disability
- Social aspects of disability
- Medical aspects of disability
- Psychological aspects of disability
- Curriculum construction and adaptation
- Plus-curricular areas

- Methodology of teaching
- Management of disabled children
- Special areas of concern : Student Activities and Physical Education
- Rehabilitation process
- Therapies

### ***Practicum***

- Observation of disabled children
- Practice teaching with appropriate adaptations for children with special needs
- Use of aids and appliances relevant to the area of specialisation
- Preparation of instructional materials
- Case study and project work
- Use of functional assessment procedures and identification of disabled children
- Visit to special education institutions and rehabilitation programmes
- Vocational modifications; removal of architectural barriers in access to the playground, dining hall, toilet, etc.

***In-service :*** In-service programme is needed for all serving teachers to renew and upgrade their skills in dealing with children with special needs. In-service programme becomes imperative for the special education teachers to update themselves with the latest innovations and techniques of teaching in the field of special education. These would also apply to preparation of multi-category special teachers.

## **5.4 Teachers for the Gifted**

In every society or school, one can find children who are much

above the average and possess certain special abilities. They are referred to as gifted or talented children. It has been observed that generally teachers are not properly trained to nurture the talent of such children. Every society needs the gifted and the talented for its progress. It is, therefore, necessary that proper provisions are made for their education.

In India, certain schools have been started for education of the gifted and talented children. In these schools as well as in the general schools, the teachers are appointed from the general pool of trained teachers whose training, by and large, is not oriented towards meeting the educational requirements of such children. Since giftedness and talent, like disability, have different shades and colours, the preparation of teachers should also be multi-dimensional.

### ***Teacher education for the Gifted in Common School System*** ***Objectives***

- to develop among the prospective teachers the capacity to identify the special talent and the potentiality of the gifted and talented;
- to enable them to understand the psycho-social aspect of children;
- to develop among them the capacity to identify learners' needs and make suitable educational provisions;
- to empower them to evolve suitable curriculum, appropriate methods of instruction and evaluation and to promote self-learning; and
- to enable them to promote proper socialisation among students.

To achieve the above objectives the following may be included in the general teacher education programmes :

- Giftedness - Meaning and Concept,
- Identification of the Gifted and the Talented,



- Methods of Nurturing Talents of the Gifted,
- Continuous Monitoring,
- Case Study and Project Work.

***Teacher Education for the Gifted in Specialised Institutions/Classes***  
***Objectives***

- to develop among the prospective teachers the capacity to identify special talent and potentiality of the gifted and creative children;
- to enable them to understand the psycho-social aspects;
- to develop among them the capacity to identify their needs and make suitable educational provisions;
- to empower them to evolve suitable curriculum, appropriate methods of instruction and evaluation and to promote self-learning;
- to enable them to improve power of abstract thinking, critical faculty, originality and creativity among their students;
- to build capacity among the prospective teachers to foster the problem-solving attitude among the students; and
- to enable them to promote proper socialisation among the students.

***Curriculum Framework*** : To sensitise teachers in catering to the requirements of the talented and gifted children, relevant components from the following curriculum frame have to be incorporated in the curriculum already identified for each stage. The suggested curriculum structure is only indicative.

***Theory***

- Education of the Gifted and Talented Children—status, issues and problems

- Psychology of Teaching and Learning of the Gifted and the Talented (This course would be talent-specific)

### ***Optionals***

- Psychology of Thinking
- Psychology of Creativity

### ***Practical***

- Pedagogical analysis of one or two school teaching subjects
- School and Community Experience
- Work Education

***Activities*** : Specialised activities may be undertaken for the development of the following :

- Creativity
- Abstract thinking
- Reasoning, analysis, synthesis and evaluation
- Judgement
- Self-learning and self-evaluation
- Socialisation
- Intellectual independence

### ***Training Strategies***

- Special inputs on the gifted and talented in elementary level teacher training (certificate/diploma)
- Optional paper in B.Ed. on gifted and talented
- B.Ed. (gifted and talented) in specially identified institutions
- In-service education programmes.

## *Six*

# **EDUCATION OF TEACHERS FOR PHYSICAL EDUCATION**

## **6.1 Introduction**

Physical education is an integral part of the education system. It aims at building a sound body, a sharp mind and a wholesome personality. It is essential for the cultivation of vitality, courage, self-confidence, cooperativeness, leadership, obedience, discipline and positive attitude towards life and the world. The great educational thinkers like Plato, Rousseau, Gandhi, Aurobindo and Russell have laid great emphasis on it. Physical education stresses :

- development of sociability, obedience and discipline, acceptance of authority, positive attitude, equanimity, rapport with others and group consciousness.
- development of emotional stability, control over one's own feelings and temptations.
- development of mental health, ability to take immediate decision and prompt action.
- cultivation of the power of concentration.
- inculcation of democratic values.
- development of neuro-muscular skills.
- formation of character and development of will-power.

Development of physical fitness and health of students is not the responsibility of the teachers of physical education alone. In fact, every teacher has a role to play in this direction, especially at the elementary stage and must have substantial exposure to physical education and health education. The teachers other than physical education teachers also need to take interest in games, sports and physical activities.

Every prospective teacher, irrespective of the level, needs to be made conversant with the basics of physical education. In addition, every trainee is required to participate in at least one major group game and two items of sports. It needs to be provided for in the curriculum with a view to enabling them to generate a climate for promotion of physical activities.

Curriculum for Physical Education should be viewed from the following two angles:

- a) Physical education as an integral part of teacher education programmes at all levels; and
- b) Physical education specifically for preparing teachers of physical education.

## **6.2 Physical Education as an Integral Part of Teacher Education**

**Objectives :** The objectives of physical education as an integral part of teacher education may be to :

- enable teachers to be conversant with the basics of physical education;
- enable them to understand the relationship between general education and physical education; and

- enable them to organise games, sports and physical activities

The expected outcome of such an approach will lead to universalisation of physical education activities in schools.

### ***Strategies***

- Inclusion of physical education component in teacher education at all levels.
- Compulsory participation in at least one major group game and two items of sports.

### **6.3 Teachers of Physical Education at the Elementary Stage**

These courses leading to a certificate or diploma are being suggested for the teachers of physical education at the elementary stage.

### ***Objectives***

The programme aims at realising the following objectives :

- to enable prospective teachers to understand the nature and purpose of physical education at elementary stage;
- to develop among the students awareness of basic principles of health, hygiene and nutrition;
- to enable them to develop good health and sound physique of students;
- to foster interest in physical exercises, games and sports;
- to inculcate the spirit of healthy competition and leadership;
- to develop team spirit and fellow feeling;
- to promote among them the competencies for organizing different kinds of activities in physical education;

- to enable them to develop among students physical and mental alertness; and
- to enable them to develop emotional stability and self-control.

### ***Curriculum Framework***

#### ***Theory***

- Emerging Indian Society
- Physical Education : status, issues and problems
- Psychology and Sociology of Physical Education
- Methods and Techniques of Physical Education
- Basics of Anatomy, Physiology and Kinesiology
- Health and Safety Education
- Management and Organization of Physical Education
- Yoga - basics of theory and practice

#### ***Practice Teaching and Practicals***

- Demonstration
- Coaching
- Organization of games and sports
- Organization of indigenous and local games and sports
- Organization of community games and sports
- Lessons in Yogic exercises
- First aid, care of minor injuries, bandage and massage
- Upkeep and use of materials and equipment
- Marching
- Swimming
- Gymnastics
- Relaxation exercises

## **6.4 Teachers of Physical Education at the Secondary Stage (B.P.Ed.)**

B.P.Ed. programme is intended to prepare the teachers of physical education for the secondary schools.

### ***Objectives***

The programme aims at realising the following objectives :

- to enable teachers to understand the nature, purpose and philosophy of physical education at the secondary stage;
- to prepare teachers of physical education with broader educational perspective;
- to develop potentialities for planning and organising physical education programmes and activities;
- to develop capacity to organize leisure and recreational activities;
- to empower them to inspire their students to actively participate in physical and yogic exercises, games and sports;
- to enable teachers to develop personality, character, will-power, democratic values and positive attitude towards life among their students;
- to make teachers capable of imparting basic knowledge about health, hygiene and nutrition;
- to develop skills and competencies to organise school and community games and sports;
- to cultivate the spirit of sportsmanship, mental and physical alertness, scientific temper and optimism;
- to promote mental health, power of self-decision and self-control, correct judgement and action, emotional stability and equanimity, respect for others and acceptance of authority and rules;

- to promote appreciation and interest for indigenous games, sports and yogic exercises; and
- to create awareness about health and hygiene in the community.

### ***Curriculum Framework***

#### ***Theory***

- Emerging Indian Society
- Foundations of Physical Education
- Management of Physical Education, Games and Sports
- Kinesiology and Physiology of Exercises
- Anatomy, Physiology and Health Education
- Psychology and Physical Education
- Guidance and Counselling in Physical Education
- Evaluation in Physical Education
- Adapted Physical Education

#### ***Specialization***

- Sports Medicine
- Rules of Games and Sports
- Science of Training and Coaching
- Yogic Education and Indigenous Games
- Education of Athletes

#### ***Practicals and Practice Teaching***

- Demonstration
- Practice of Coaching
- Organization of Games, Sports and Recreational Activities
- Organisation of Meets/Camping



- Participation and Training in major games and sports
- Participation and training in major indigenous games, sports and yogic exercises
- Track and Field Events
- Gymnastics and Tumbling
- Marching and Calisthenics
- Defensive Martial Arts
- Aquatics
- First aid, bandage and massages
- Care and Management of minor injuries
- Conditioning Exercises
- Relaxation Exercises

## **6.5 Teacher Educators for Physical Education**

**Master's course in Physical Education (M.P.Ed.) :** The Master's programme is intended to prepare teacher educators for physical education.

### ***Objectives***

Its objectives may be to :

- enable prospective teacher educators to understand the nature, purpose and philosophy of physical education;
- develop competencies necessary for physical training and coaching;
- develop knowledge, skills and competencies necessary for imparting physical education;
- enrich knowledge of personal and community health;
- promote the capacity to organise games, sports and recreational activities;
- provide knowledge of sports medicine and physiotherapy;

- develop competence to undertake research in physical education, games and sports;
- enable them to prepare good athletes;
- inculcate the spirit of sportsmanship;
- foster interest in physical education and appreciate its role in school and society;
- prepare for evolving stage-specific curriculum, pedagogy and evaluation techniques in physical education; and
- to develop an understanding and appreciation of indigenous approach to physical education, exercises, games and sports.

### ***Curriculum Framework***

#### ***Theory***

- Emerging Indian Society
- Physical Education in Historical, Philosophical and Social Perspectives
- Psychology and Physical Education
- Physiology of Exercises
- Curriculum Development in Physical Education
- Evaluation in Physical Education
- Mechanical and Scientific Principles of Coaching
- Research Methods in Physical Education

#### ***Specialization***

- Management of Physical Education, Games and Sports
- Sports Medicine
- Physiotherapy
- Principles and Practice of Yogic exercises and Indigenous games

and sports

- Training Methods : Exercises, Games and Sports
- Rules and Regulations of Games and Sports

***Dissertation/project work***

***Practical Work***

- Demonstration
- Advanced Coaching
- Organization of games and sports meets, camps and recreational activities
- Tests - Development, administration and scoring
  - Sports Skills tests
  - Major Fitness tests
  - Strength tests
  - General Motor Ability tests
  - Psychomotor tests
  - Cardiovascular tests
  - National Physical Fitness tests
- Physiotherapy
- Dislocation Reduction
- Yogic Therapy
- Hydrotherapy
- Electrotherapy
- Relaxation
- Massage
- Bandaging
- First Aid and Care for minor injuries
- Reconditioning

***Transaction and Evaluation*** : Detailed curriculum planning will accord due consideration to region or area specific practices and approaches to transactional strategies. Explanation, demonstration, participation, performance and evaluation would be major components of transactional strategies. Corrective measures and remediation inputs would flow from evaluation leading to attainment of levels of performance. Group evaluation and community appreciation would provide the much needed motivation both to the teachers and the trainees.

## *Seven*

### **EDUCATION OF TEACHER EDUCATORS**

#### **7.1 Introduction**

The role of teacher educators is of prime importance for effective implementation of teacher education curriculum. Education and training of teacher educators is a pre-requisite for effective changes in the training and orientation of teachers. India has a large system of teacher education. There are more than 2000 elementary teacher education institutions, colleges of education and university departments of education. Nearly 30,000 teacher educators are engaged in the preparation of school teachers. In addition, there are teacher educators working in pre-primary training schools as well as institutions concerned with the preparation of teachers for the education of children with special needs and alternative education such as non-formal education, distance education etc.

It is well recognised that the overall quality in education mainly depends on the quality of teachers and a sound programme of professional preparation of teachers is essential for imparting quality education. However, teacher educators' own education leaves much to be desired. Teaching is an art which can be inculcated through a series of well designed activities in respect of education and training of teachers and is equally valid for professional preparation of teacher educators.

The teacher educators would not only be training pre-service and in-service trainees but would also be associating themselves with several other activities. New strategies and techniques of developing the material, the changing approach to evaluation, intensive interactions with the community, creating an activity-based environment in the training institutions, acquiring skills for resource mobilisation and several other such competencies at mastery level would be essential for professionals to function as teacher educators. Changes in the school curricula would be faster in the near future. Corresponding changes in training programmes and strategies shall have to be perceived and given a shape by the teacher educators.

In the context of universalisation of elementary education, teacher educators will be expected to display a deeper understanding of the issues pertaining to access, participation and attainment in their specific regions or areas. They need adequate professional competence to conduct surveys and studies that would reveal the region specific and area specific issues and problems which would help the functionaries of the education department and the community. They will prepare the trainees in responding to these issues during the training period and also in schools subsequently. The professional quality of teacher educators will determine the quality of the training of teachers, both pre-service as well as in-service. The professional level at which teachers are prepared would, in turn, determine the quality of school education. Again, teacher educators have to be fully familiar with the school realities, social environment and community expectations to realistically perform the challenging tasks before them. On the professional side, teacher educators need to be actively associated with policy formulations,

implementation strategies and monitoring of programmes.

## **7.2 Existing System**

At present, the only programme which is often treated to be preparing teacher educators is the M.Ed. Scrutiny of the curriculum of most of the M.Ed. programmes would reveal that these have not been specifically designed to prepare teacher educators. There are some M.Ed. programmes where provisions do not exist for writing a dissertation. The products of these programmes would certainly not be in a position to conduct research, initiate innovation on their own and induct teacher trainees in these areas which are essential functions of teacher educators.

Prior to establishment of the National Council for Teacher Education (NCTE) as a statutory body, the National Council for Educational Research and Training (NCERT) acted as its secretariat and organised several professional development programmes for teacher educators in areas like micro-teaching and simulation, student teaching and evaluation, preparing research proposals, improvement of teacher education curricula and so on. The University Grants Commission (UGC) has been organising national and regional level workshops for improvement of the teacher education programmes. Through various schemes, it offers financial support for seminars, workshops and research projects for teacher educators for such themes as higher education, educational technology, non-formal education, population education, environmental education, research methodology etc. The National Institute of Educational Planning and Administration (NIEPA) organises programmes for Principals of Colleges of Education, Heads of University Departments of Education and other administrators concerned with

teacher education. The SCERTs and State Boards of Teacher Education organise continuing education programmes for teacher educators on teaching methodologies for new subject areas and on innovations in education. Some University Departments of Education organise seminars, workshops and orientation programmes for teacher educators on teaching, development of instructional skills, interaction analysis, teaching behaviour, educational technology, guidance and counselling and research methodology. Certain Colleges of Education and University Departments of Education have been upgraded as Colleges of Teacher Education (CTEs) and Institutions of Advanced Study in Education (IASEs) for taking up innovations in teacher education. NCTE, after its establishment in 1995 as a statutory body, has initiated several programmes aimed at enhancing professional competence of teacher educators. These include seminars and workshops in the area of human rights and national values, indigenous thoughts in education, indigenous approach to teacher preparation, institutional networking and capacity enhancement and production of good quality enrichment materials for teacher educators. These institutions have considerable experiences in organising training and development activities. Based upon the experience gained they will have to evolve programmes of sequential nature with in-built mechanism for assessment and impact evaluation.

In the absence of an appropriate policy of recruitment, specially at the pre-primary, primary and elementary stages of teacher preparation, the manpower in the institutions of teacher education does not necessarily possess the professionally required qualifications for the preliminary stages. At the pre-primary stage one comes across teacher educators who have passed high school or higher secondary examination and



possess a certificate in teacher training, not necessarily meant for the pre-primary stage; graduates or those with higher qualification with absolutely no training background or with the background not appropriate for that stage or level. As regards the primary and elementary stages, the teacher educators, generally, possess graduate or higher qualification with teacher training mostly at the B.Ed. level. There are serious lacunae in the recruitment policies in as much as the professional qualifications prescribed are not stage-specific and mostly not suited to the education of teachers for the stage or level concerned. This situation calls for fresh thinking regarding recruitment policies for teacher educators and well-planned programmes of education for teacher educators.

### **7.3 Rationale and Objectives**

Education and training of teacher educators has to focus its attention on the new role of teacher educators, on the problems which reflect the emerging global trends in education and the overall needs and aspirations of the people. It has also to deal with specific problems confronting teacher education institutions and to make teacher education more responsible and responsive. It has to encourage teacher educators' continuing professional growth also. In addition, there are certain practical problems as well. For instance, what would be the basic qualifications of teacher educators at various stages of teacher preparation? What would be the requirements in respect of the core education courses and for the organisation of procedures and practices in the institutions. Answers to several of such issues have to be sought in the very rationale of providing professional education.

The rationale behind the education and professional training of

teacher educators lies in providing qualitative instruction through well-designed programmes of professional education. The following questions are relevant for designing a programme for education of teacher educators :

- What should education of teacher educators exactly aim at?
- What are the significant issues and problems concerning the education of teacher educators?
- What are the possible models of both pre-service as well as in-service education of teacher educators?
- What types of patterns, contents and techniques are envisaged for the training of teacher educators?
- What are the possible agencies and organisations which could be profitably employed in providing continuing and recurrent in-service education to teacher educators?

Based upon the issues raised above, a comprehensively identified list of objectives for the programmes of preparation of teacher educators would be to :

- develop competencies and skills needed for the preparation of teachers and teacher educators;
- enable them to organise competency-based and commitment oriented professional programmes;
- enable them to develop pedagogy relevant to the education of teacher educators;
- acquire an understanding of the needs and problems of teacher educators and teacher education institutions;
- develop skills related to management of teacher education institutions;
- develop competencies of curriculum development and preparation

- of learning and evaluation materials;
- enable teacher educators to acquire capabilities to organise in-service continuing education programmes;
  - enable them to organise need-based and commitment oriented on the job training;
  - develop competencies for evaluating educational programmes and teaching learning materials;
  - develop the capacity of examination, analysis, interpretation, elaboration and communication of educational ideas;
  - relate education and the national needs and develop critical awareness about Indian realities;
  - enable them to understand the relationship between Indian ethos, modern technology and education;
  - promote the global perspective of educational development with special reference to the developing countries;
  - enable them to undertake meaningful educational research;
  - develop capacities to reinterpret Indian heritage, culture and values to meet the requirements of the present-day Indian society;
  - develop capabilities for self-directed and life-long learning;
  - enable them to appreciate and adopt emerging communication technology and innovative practices in the Indian context.

#### **7.4 Evolving Models of Pre-Service Education for Teacher Educators**

The present system of pre-service education of teacher educators is characterised by lack of perspective in terms both of contents as well as qualifications. For instance, while it is well accepted that the B.Ed. qualification entitles a person to teach at secondary stage, it is doubtful

if the M.Ed. programme adequately prepares a person to become a teacher of secondary school teachers. The existing M.Ed. programme has little provision of training in, and in working out, teaching and evaluation strategies suited to the needs of teacher trainees. And yet one finds M.Ed. degree holders entrusted with the responsibility of teacher preparation not only at secondary stage but also at the pre-primary, primary and elementary stages of teacher preparation. Likewise, while the B.Ed. qualification legitimately entitles a person to teach at the secondary stage, it cannot, at the same time, be accepted as a good enough qualification for being a teacher educator at the primary stage. The existing B.Ed. programme is designed mainly to teach high school students and not for preparing primary school teacher educators. Thus, it is imperative that the professional qualification of teacher educators is made stage-specific suited to the needs of teacher trainees of different categories.

It is time for seriously considering designing of definite programmes to prepare teacher educators rather than depend on the conventional B.Ed. or/and M.Ed. courses. Education of teacher educators has necessarily to correspond to teacher preparation programmes. It is, nonetheless, necessary to consider alternatives and institute programmes like M.Ed. (Teacher Education) catering to the needs of stage-specific and category-specific preparation of teacher educators alongside general M.Ed. programmes. M.Ed. (Teacher Education) could be conducted for the following specific categories and areas:

- M.Ed. (Pre-primary)
- M.Ed. (Elementary)
- M.Ed. (Secondary and Senior Secondary)

- M.Ed. (Special Education)
- M.Ed. (Distance Education)
- M.Ed. (Physical Education)

Existing M.Ed. courses in Indian Universities are, by and large, academic in nature and not adequately professional in content. In as much as the Master's level courses in Education need to be formulated for making them professional courses, some additional areas of study will have to be introduced with changed orientation.

### **7.5 Curriculum Framework**

The course structure in respect of the above alternative M.Ed programmes has to correspond to the course structure of teacher education at various stages and categories. For instance, the M.Ed (Elementary) programme may comprise the following courses :

- Contemporary Indian Society
- Philosophy of Education
- Educational Sociology, Social and Cultural Anthropology
- Child Psychology including researches in life and medical sciences having bearing on elementary education and psychology of teaching and learning with reference to the child
- Curriculum Development, Transaction and Evaluation
- Comparative Education with reference to the developed and developing countries.
- Pedagogical Analysis of School Subjects
- Research Methodology
- Dissertation
- Field Work, Practical and Internship

Coverage, emphasis and focus in the above courses will be on elementary education sector.

### ***Optional Courses***

- Management, Finance and Planning of Education
- History and Problems of Education
- Educational Technology
- Education of Children with Special Needs
- Alternative Education
- Guidance and Counselling
- Pre-School Education
- Secondary Education

These are some of the areas. More of these could be added. Further, several courses within each area could be devised.

The Course Structure in M.Ed (Pre-Primary), M.Ed (Secondary) etc. be suitably adjusted accordingly with reference to the stage or category concerned.

## **7.6 Strengthening the Programmes**

An altogether fresh look is necessary first for developing need-based programmes for the preparation of teacher educators and then working out well planned strategies for implementing these programmes. Needless to say that the preparation of teacher educators would concern itself with the relevant theoretical courses as well as the consonant practicum. At the theoretical level, the choice of pedagogical inputs has to be guided by various contexts and their educational and professional

concerns. In addition to theory courses, specialisation courses with reference to teacher education have to be included. The theoretical courses will have a bearing on the practice of teacher education. It will be necessary to develop competencies and skills, in the prospective teacher educators, relating to their work situations. What goes on in teacher training institutions by way of educational programmes and activities has to be reflected in the education and training of teacher educators. It essentially implies that the preparation of teacher educators has to be made an integral part of the system of teacher education.

It will be pertinent to evolve a pedagogy relevant to the stage or category specific programmes. It will lay due emphasis on societal goals, values specially those enshrined in the Indian Constitution, higher order learning processes, curriculum development and theory and practice of educational research including action research. Competence to carry out research and innovations needs to be acquired by all. Training in curriculum development and preparation of learning materials is an inalienable aspect of the entire process of teacher education. Similarly, development of evaluation materials would result into more effective utilisation of evaluation in teacher education institutions.

The practical work has, among other things, necessarily to include internship programme by way of attachment to the stage-specific and category-specific teacher education institutions. This will give the prospective teacher educators an adequate knowledge of the total functioning of teacher education institution, the improvements needed and also provide insights into the problems and issues concerning maintenance of the institutional plant, classroom management,

organisational climate of the institution etc. As for practice teaching, the main thrust has to be on a variety of techniques such as team teaching, micro-teaching, panel discussion, seminar, demonstration etc. as integral part of classroom-teaching-learning-evaluation procedures. Practical work, other than internship and practice teaching, has to develop competencies and skills in organising activities concerning work education and working with community as per practical work requirements in the teacher education institutions.

### **7.7 Thrust in In-service and Continuing Education**

The present provision for continuing education of teacher educators is inadequate in respect both of quality and content. Planning in respect of in-service education of teacher educators needs to be evolved for different stages and levels. The major thrust in respect of programmes for teacher educators, among others, may be :

- Designing short-term programmes for those who are already placed in these institutions.
- Specific short-term induction programmes for those who do not have the experience for the stage they are supposed to be working at.
- Identification of certain university departments of education and Institutions of Advanced Study in Education as institutions which may work mainly for teacher educators. They may focus on induction training, recurrent training, orientation programmes, research studies and surveys, curriculum development, preparation of training materials, evaluation strategies and techniques, use of educational technology, media and others.
- Establishment of institutions for preparation of teacher educators



for special education at different stages. These may be open to primary and secondary trained graduates willing to become teacher educators. Such programmes need to be designed with particular focus on the practicum that would familiarize the trainees with school situations in totality.

- Networking of various institutions and organisations for designing and carrying out collaborative programmes by pooling and sharing of resources.

The fact, that our education system has inadequate facilities for preparation and orientation of teacher educators, has been a major factor for not taking due care of the education and training of teacher educators in several respects. With the policy focus changing to quality and relevance of education, it is necessary that only those who are professionally competent, committed and willing are charged with the responsibility of preparing teachers for the nation. Teachers for various stages, levels and categories are prepared professionally by teacher educators. The quality and character of teachers would, thus, largely depend on the professional education of teacher educators. Towards this, it is, therefore, necessary that their education should be given a new orientation and be improved qualitatively and adjusted properly with the demands of the new curriculum.

## *Eight*

### **MANAGING THE SYSTEM**

This Curriculum Framework is characterised, among other things, by ample measure of flexibility and responsiveness to the needs of teacher education system in the country. Teacher education institutions and organisations at various levels will initiate the process of development of curriculum after indepth perusal of this document. The exercise has to be need-based and in tune with demands and directions of the National Policy on Education. The extent of success in implementation would largely depend on the support and assistance provided by the management system.

Imposition of a rigid and uniform management system, ignoring the regional variations and cultural diversity of Indian society, may not be conducive to achieving the targets of teacher education. Consultative policy planning and decentralised implementation are bound to be more acceptable and productive. Institutional autonomy for the experimentation of innovative ideas and practices needs to be assured. This, however, would be possible only if autonomy and corresponding accountability are blended together. Accountability within the system is to be transparently reflected and judged to the extent to which it responds to the regional expectations and requirements. The system need not merely

be concerned with the needs of the present but also be dynamic and forward looking.

### ***Objectives***

Its objectives would be to :

- contribute effectively in development and promotion of professional efficiency among teachers and teacher educators;
- promote the sense of commitment and belongingness;
- assure optimal utilisation of resources;
- increase their general awareness about education and society;
- enhance institutional linkages with other institutions and the society;
- make the system functional at the optimum level;
- correlate teacher education and manpower needs;
- achieve a mutually supportive collaboration with different agencies engaged in human resource development and welfare activities; and
- help and participate in enhancing overall institutional efficacy.

***Curriculum Planning*** : While developing the curriculum of teacher education, disciplinary and professional components need to be interwoven to improve the quality. An attempt of this kind will give it a more meaningful direction. Research findings in the areas of life sciences, anthropology etc., when included in the curriculum of teacher education, will increase its relevance and make it more functional. The use of indigenous educational thought will enhance its relevance to the Indian situation. Various types of dichotomies and misconceptions need to be carefully identified and subsequently weeded out from the content of studies.

The increased duration of the programme of teacher education may be properly utilised for the professional development of teachers. It would also require inclusion of additional inputs of theoretical, pedagogical and practical components and proper allocation of time and resources for improving the quality of teacher education.

***Implementation Strategies*** : Any sudden and abrupt departure from the prevailing practices would only destabilise the existing programme and may prove to be counter-productive. The teachers must be fully exposed to the philosophy and purpose of this curriculum framework. A time bound programme for its implementation should be prepared, its priorities be fixed and the strategies be evolved after careful planning. The gaps of the existing system be identified and removed.

In this document, certain alternative models of teacher education have been proposed. It will depend on the concerned organisation/ institution to select one or the other for implementation after due consideration of the possible professional gains and availability of resources and expertise.

A favourable climate at the national level needs to be created for implementation of the recommendations. Seminars and meetings of teachers, teacher educators, administrative functionaries at the State level will have to be arranged. The regional language versions of this document will be widely circulated. The NGOs working in the field of education and other welfare activities may be involved. The meetings of Education Secretaries, DPIs, Principals of DIETs, CTEs/IASEs, Directors of SCERTs, Chairmen of Faculties of Education, Heads of

Departments of Education and conveners of the Boards of Studies may be arranged. Short term training programme in the form of seminars, workshops, summer schools and orientation courses may be organised. These exercises of awareness generation will prepare institutions, universities, State Government bodies and others to evolve specific plans of implementation in their own areas. The NCTE should take the responsibility of assisting in the preparation of relevant materials. The professional association of teachers and teacher educators will have to come forward and play a constructive role for upgrading the quality of teacher education. For putting the suggestions into actual practice, supplementary materials will be required in the form of teachers' guides, handbooks etc.

***Role of the State :*** Within the educational system, there is a need to create a separate cadre of teacher educators with an inbuilt provision for upward mobility. Such an arrangement is bound to be more professional. With improved professional competencies, they would perform better as supervisors, administrators and policy planners.

Improvement in the standard of teacher education may require additional inputs in terms of money, material and manpower. Arrangements for these will have to be made and the priorities of implementation will have to be fixed. The changes which require no financial involvement should be implemented first. The optimum use of money, men and material be made by curtailing non-academic expenditure. Whenever required, adequate inputs for the professional development of teachers be made available. The expenditure on education, particularly on teacher education, is an investment in the nation's future.

Institutions willing to launch innovative pre-service, in-service teacher training programmes specially of long duration, should be given financial assistance over a period of time. This special assistance should come from the centrally sponsored schemes.

NCTE has the mandate to ensure planned and co-ordinated development of teacher education. Since the task is massive, there is a need to revive the concept of establishment of State Boards of Teacher Education (SBTEs). These Boards, in close collaboration with SCERTs and NCTE, may draw state level long term plans to ensure that:

- Pre-service and in-service become mandatory and mutually reinforcing.
- Comprehensive plans are developed for teachers at all levels so that every teacher gets an opportunity to participate in in-service programmes and undertakes continuing education programmes.
- Multi-channel learning, distance education techniques and communication technologies should be fully utilised.
- Quality study materials be developed and made available to all teacher resource centres.

Curriculum development is a continuous process and demands Systems approach. Merely by periodic summative evaluations, implementation of the curriculum cannot be assured. It needs a system view to look at all components simultaneously like curriculum structure, curriculum content, teacher training, support materials and evaluation strategies. Monitoring and feedback should become important segments of the developmental process. Each university or State Board needs to evolve micro-level monitoring systems. At some stage, meta-level

monitoring systems be designed to ensure that quality teacher education is imparted to every serving and to all the prospective teachers and teacher educators.



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