DISCUSSION DOCUMENT

Curriculum Framework For Teacher Education

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Preface

The leaders of freedom struggle anticipated the need for educational expansion in free India. They gave considerable thought to the shape, design and content of an indigenous education system. The constitutional commitment of universalisation of elementary education in India within ten years of the commencement of Constitution remains unfulfilled till today despite concerted efforts. There has been a steady growth of primary education in terms of enrolment and retention but school education, particularly the elementary education continues to remain a major concern before the nation. Besides, providing access and equality of opportunity to every child in the 6-14 years age group, the quality and relevance are equally significant issues. Evidently, quality of school education is linked to the quality of teachers, academically as well as professionally. With more than 4.4 million teachers in nearly one million schools, the task of bringing qualitative change is indeed, a challenging one.

Several efforts have been made to upgrade the quality of teacher education in the country. In 1978, a document 'Teacher Education Curriculum—a framework' took a comprehensive view of the existing realities and perceived futuristic scenario. Though there was a subsequent modification of this document in 1988, most of the universities and teacher training institutions are either following the 1978 document or are yet to take adequate steps to upgrade their curricula in accordance with the changing contexts.

Two decades is considerably a long period for a curriculum framework to serve without revision and transformation. It is increasingly being felt by the teacher educators and educationists that a fresh look to teacher preparation both the pre-service as

well as in-service is urgently needed. The objectives of teacher education, its structure, design and content of the programmes shall have to respond to the technological advancements, the changing socio-cultural and economic contexts. The developments in other related fields, like, communication technologies and consequent emergence of global consciousness, too, have a bearing on teacher education programmes. That the teachers of future shall need to review their survival skills at regular intervals, is a stark reality.

The National Council for Teacher Education (NCTE), in its present formulation as a statutory body, initiated consultations and discussions with educationists, teacher educators, teachers and educational planners on the strategy to be adopted to develop a curriculum framework for teacher education which may respond to the demands of the 21st Century. It emerged that the issues be identified and included in the discussion document which may provide the bases for a nationwide debate leading to a curriculum framework. Those engaged in the task of teacher preparation have an opportunity to come forward with concrete suggestions on different aspects of teacher education. The thrust of discussions, necessarily, has to be on the nature and relevance of contexts, types of programmes, transactional strategies including practical work, etc. Again, the discussions will focus on the linkages between education and community, socio-cultural contexts and the emerging economic perceptions. The components of teacher education programmes, such as, subject matter content, pedagogical courses, student teaching and practical work have to correspond to the pertinent contexts, concerns and issues and have to be rooted in the regional, and socio-cultural plurality of the nation. It also needs to emphasise new techniques, technologies, skill development, upgradation of knowledge and capacity for self-motivated learning.

One of the major issues before the nation is that of providing equality and social justice to all. Issues, like poverty, population, and minorities have to be taken cognizance for comprehensive understanding of the social realities by the teachers. A scientific approach to the process of development and the change will have to be developed, reinforced and renewed at regular intervals. For the empowerment of teachers, the issues, like human rights,

gender sensitivities and children with special needs will have to be addressed to.

The professional status of teachers and teacher educators needs to be upgraded for ensuring quality education and thereby helping in establishing the credibility of the education system as a whole. Professional organisations of teachers on the one hand and institutions of higher education on the other need to contribute effectively by way of research studies, surveys and innovations.

This document attempts to highlight the significance and relevance of these factors in teacher education and raises issues for further elaboration and clarification. The major sections are devoted to the curriculum, its transaction, in-service education, preparation of teachers for alternative systems and for students with special needs as also education of teacher educators. There may be several other issues which may emerge during the course of discussions and may find a place in the curriculum framework.

After a countrywide debate and discussion, the curriculum framework thus developed, will present a national consensus in respect of guidelines for improving teacher education, for designing futuristic programmes, developing curriculum and working out relevant transactional strategies. It would also emphasise the need for flexibility, harnessing local initiatives for effective decision making and resource utilisation.

The NCTE has initiated this task at the very initial stages of its operationalisation with the help of experts from the field. I must express my sincere appreciation for the work done by them. I am also thankful to the NCTE staff, specially Shri S.K. Grover, and Dr. K. Walia who deserve a special mention.

The document is being presented for a nation wide debate with a view to soliciting ideas and suggestions for facilitating the task of NCTE in preparing the curriculum framework on Teacher Education.

J.S. Rajput
Chairman
National Council For Teacher Education

New Delhi
October 2, 1996

We place on record our grateful thanks to all the experts who have contributed ideas in various consultations organised by the NCTE. Eminent and distinguished educationists graciously agreed to be members of the Drafting Committee. They toiled tirelessly in the summer months of 1996 to give the present shape to this document. In deference to their wishes, their names are not being mentioned at this stage.

J.S. Rajput

Abbreviations

B.Ed.	-	Bachelor of Education
CABE	-	Central Advisory Board of Education
CBSE	-	Central Board of Secondary Education
CET	-	Centre for Educational Technology
CIET	-	Central Institute of Educational Technology
CTE	-	College of Teacher Education
DIET	-	District Institute of Education and Training
DPEP	-	District Primary Education Programme
EFA	-	Education for All
IASE	-	Institute of Advanced Study in Education
IGNOU	-	Indira Gandhi National Open University
M.A.	-	Master of Arts
M.Ed.	-	Master of Education
MLL	-	Minimum Levels of Learning
M.Phil.	-	Master of Philosophy
NCERT	-	National Council of Educational Research and Training
NGO	-	Non-Governmental Organisation
NIEPA	-	National Institute of Educational Planning and Administration
NPE	-	National Policy on Education
OBC	-	Other Backward Classes
PMOST	-	Programme of Mass Orientation of School Teachers
SC	-	Scheduled Caste

SCERT	-	State Council of Educational Research and Training
SIE	-	State Institute of Education
SIET	-	State Institute of Educational Technology
SITE	-	Satellite Instructional Television Experiment
SOPT	-	Special Orientation Programme for Primary Teachers
ST	-	Scheduled Tribe
SUPW	-	Socially Useful Productive Work
UEE	-	Universalisation of Elementary Education
UGC	-	University Grants Commission
UNESCO	-	United Nations Educational, Scientific and Cultural Organisation

1 The Context

Introduction

1.01 The 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 efforts to transform the nature and functions of education—both formal as well as non-formal—at various stages/levels in keeping with the cherished values and aspirations of the people. The constitutional commitment to the Universalisation of Elementary Education (UEE) and the Delhi Declaration in respect of Education For All (EFA) are being hailed as positive steps for ensuring the country's overall development. The UEE and EFA have implications for the growth of education at secondary and tertiary levels. Wider accessibility to quality education is considered essential for satisfactory development. This has necessitated improvement in the system of teacher education so as to prepare teachers of quality.

Various Commissions and Committees appointed by the Central and the State Governments in recent decades have all emphasised the need for quality teacher education suited to the needs of the educational system—both formal as well as non-formal.

India has indeed a monolithic system of education. There are of now as many as 5.9 lakh Primary Schools, 1.7 lakh Elementary Schools and 95 thousand High/Higher Secondary Schools in the

country. As against this there are 1221 teachers training institutions for preparing elementary teachers and 633 colleges of education/ university departments preparing teachers for secondary and higher secondary schools. Out of about 4.4 million teachers in the country nearly 2.9 million are teaching at the primary/elementary level. A sizeable number of them are untrained or poorly 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 very dismal. It is estimated that not more than 40% of the teachers are provided in-service teacher education in an organised manner. Regarding non-formal education, though a number of models are in vogue in various states in the country, precious little has so far been done for preparing teachers and other functionaries for the non-formal system.

Some steps have, of course, been taken for improvement in the system of teacher education in recent decades. Four-year integrated teacher education programmes were started in the Regional Colleges of Education. The B.Ed. (Elementary) and the B.Ed. (Special Education) programmes have been started in certain universities. The University Grants Commission set up a task force for preparing improved courses in teacher education at various levels and the Group reports are now available. However, there is a feeling that all is not well with teacher education.

The National Policy on Education 1986 up-dated in 1992 has emphasised teacher education as a continuous process, its pre-service and in-service components being inseparable. The NPE, among other things, has pointed out the following in respect of teacher education:

(*a*) Professional commitment and overall competencies of teachers leaves much to be desired;

(*b*) The quality of pre-service education has not only not improved with recent developments in pedagogical science, but has actually shown signs of deterioration;

Source: Selected Educational Statistics, 1995-96, MHRD, Govt. of India, New Delhi.

(c) Teacher education programmes consist mainly of pre-service teacher training, with practically no systematic programmes of in-service training, facilities for which are lacking.

Nearly 400 District Institutes of Education and Training (DIET) have been established in pursuance of the NPE. The DIETs are charged with the responsibility of organising pre-service and in-service education of elementary school teachers. Likewise, Colleges of Teacher Education (CTEs) and Institutes 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. However, the programmes of these institutions need guidance for launching quality programmes which require constant monitoring.

The National Council for Teacher Education (NCTE) has been in existence for the last more than two decades and has taken steps as regards quality improvement in teacher education. Among other activities NCTE's efforts to prepare Teacher Education Curriculum Framework in 1978 and revising it in 1988 are considered milestones in teacher education. Consequently, teacher education curricula witnessed changes in teacher preparation programmes in various universities/boards in the country. However, since the NCTE did not have statutory powers, not much substantial work was done as a follow-up. Now when the NCTE has been made a statutory body, and the teacher education programmes are deficient to meet the educational and social demands, a fresh look at the curriculum framework has acquired a place of prominence and priority.

1.02 Teacher Education as an Integral Part of Educational and Social System

The education of teachers is an integral part of the educational system, which in itself is closely linked with the social system. Any curriculum of teacher education, which is not in conformity with the changing educational and social realities of a given society, the ultimate determinants of its quality and character, therefore, become unproductive.

1.03 Teacher Education and National and Social Goals

Ideally speaking, the educational system needs to be designed by every society to meet its own requirements. There are a variety of factors and forces operating in any society which affect education more than those operating within the system of education itself. A curriculum of teacher education which does not appropriately respond to these 'external and internal factors and forces', and fails to transmit the cultural heritage, does not fulfil the aspirations and expectations of the people. It may not prepare teachers fully capable of serving the assigned purpose. The curriculum of teacher education is an important instrument for the realization of national and educational goals. Any change in the educational system, demands a corresponding adjustment in the curriculum of the teacher education. Curriculum renewal, therefore, needs to be planned as a continuous process.

1.04 Plural Society and National Integration

To establish a secular, socialist and democratic society in India, to ensure equality of status and opportunity, freedom and justice to its citizens, and to obliterate every kind of discrimination, are the constitutional obligations of the State. For achieving these objectives, the closed backward looking, unjust and stagnant society has to be transformed into the one which is open, forward-looking, just, and progressive. To strengthen national and social cohesion in a diverse and plural society, to accelerate the process of economic growth, to improve the life of the down-trodden and the people living below the poverty line, to remove the widely p evalent ignorance, superstition and prejudices from the masses, to inculcate the scientific temper and to develop a critical awareness about the realities of Indian life are some of the issues which call for immediate attention. The teachers and the teacher educators have a special role to play in this venture.

1.05 Homogeneous Curriculum in a Heterogeneous Society

Any attempt to impose a rigid, uniform and common curriculum on a plural and heterogeneous society is not desirable. The danger of social fragmentation cannot be averted by imposing

a highly homogeneous curriculum when the society itself is based upon diversity and heterogeneity. The teacher education has to take note of this situation. The Indian reality demands that diversity has to be utilised for the promotion of national and social cohesion.

1.06 Nature of the State and Nature of Polity

The Indian State is secular. The Indian society, however, is religious. There is a contradiction between the nature of the State and the nature of the polity. Education and for that matter the teacher education are powerful means of promoting secular consciousness among teachers who, in turn, would promote the same among their pupils.

1.07 Human Resource and Economic Development

There are problems that seek their immediate solution and demand a realistic coordination between the economic planning and man-power planning. Education is an effective means of both human resource development and economic development. The vocationalization of education and introduction of socially useful productive work in secondary schools will have to be given a meaningful direction. The attitude towards the 'manual labour' needs a transformation. Dignity of labour and morality of workmanship will have to be inculcated. It needs to be examined in specific terms as to whether the curriculum of teacher education, can be so modified as to promote such attitudes as are necessary for the emergence of a new economic order.

1.08 Migration from Rural to Urban Areas and Alienation of Educated Youth

The flight of educated rural youth from the village to the city creates not only imbalance of population scenario and turns the city over-populated but also makes the rural areas devoid of skilled, trained and educated man-power. The fruits of education do not infiltrate the village community. In the cities these young men get marginalised, face the problems of unemployment, adjustment, acceptability and habitation resulting into severe

alienation. The Indian education has urban orientation. A fresh look into whether the curriculum of teacher education can be recast or/and methodology of transacting the same adjusted/ modified so as to enable teachers to give a rural bias to whatever subject they teach for reorienting the youth, as and when needed.

Indian education being still colonial in its nature and complexion, often produces young men and women who may become alienated and misfit in the society. They get cut off from their family, community, social group and culture. Alienation leads to anarchic and adventurous behaviour resulting in the development of destructive tendencies on the one hand and increases monotony in life on the other. This is a burning problem which education has created and it needs an urgent solution.

1.09 Unemployment

The present educational system of the country tends to make the youth unemployable. The vocational stream at the plus 2 stage needs to be streamlined. This calls for, among other things, special programmes in teacher education.

1.10 Individual Freedom and Social Compulsions

The democratic socialist society which the founding fathers of Indian constitution envisaged to establish in the country attempts 'to achieve a synthesis between individual freedom and social compulsion'. It visualises a planned social order which imposes some kind of restrictions on the individual and his freedom. But excessive restriction on man makes him devoid of individual initiative and creativity and retards the development of personality. Freedom beyond a point may not always lead to responsible and restrained behaviour. Both the approaches can achieve only partial success in the absence of proper education. 'Whether the curriculum of teacher education can be so modified as to make provisions for arresting the development of possessive tendencies and liberating those that are creative and constructive to solve the problem,' needs to be discussed.

1.11 The Philosophy of Equality and Its Ramifications for Teacher Education

In any hierarchical society like India equality, though philosophically professed, is yet far from being realised and practised. The essence of equality does not lie in extending identical or equal treatment to all. Equality, therefore, demands a positive discriminatory treatment. It is a process. The Indian teacher needs an orientation in the philosophy of equality so that it may get acceptance. It is, therefore, necessary to examine whether curriculum of teacher education can lay proper emphasis on different aspects of equality (not to be confused with identity) with all its manifestations.

For all practical purposes, a sizeable number of girls do not attend school. It is clear that the girl child shall not be able to reach the school as long as the women have a lower status in society. The gradual but steady rise in the women's movements, both within India and at the global level, has begun to challenge the patriarchy which is at the foundation of continued subjugation of women in most of the societies. Teacher education curriculum needs to acknowledge the central need to sensitise the teachers (including the women teachers) towards the issues of women empowerment and the growing challenge to patriarchy.

One of the paramount considerations in education and teacher education would be a realistic perception and understanding of the situations being faced and likely to be faced by the children in future. With more than 1/3 rd of the school age children outside the school system and alarmingly high dropout rates, the situation is going to be tough, necessitating extra efforts in planning and professional inputs. There would be other sensitive and critical issues like that of population and poverty. The case of the girl child would determine the extent of success of educational endeavours. The country needs more women teachers, particularly in remote, rural and far flung areas. Teacher education, therefore, needs to respond to the sensitivities of the Indian Child who would be facing a very different world in the initial stages itself. The issues of poverty and inequality can neither be ignored easily nor solved instantly. The task of teachers, in this context becomes sensitive, complex and challenging in the coming decades.

1.12 The Philosophy of Social Justice

The impact of inclusion of the philosophy of 'social justice' has to be properly understood along with its consequences. The reservation policy of the State for the SCs and STs along with the reservation for the OBCs has tended to transform the nature of the educational system. A large number of first generation learners and teachers now find their place in educational institutions. They have to increasingly get acceptability. Its another impact is on the academic standards which needs to be maintained. The conflict between quality and excellence on the one hand and the growing number and quantity on the other has to be reconciled.

1.13 Role of Teacher Education, Values and Nation Building

A nation is made great by its people, who in turn, develop in themselves the qualities of head and heart, who have courage and conviction to act according to the accepted norms of behaviour and who are men and women of character. There has been a persistent erosion of values in the society which need to be re-defined and re-installed. It is through education and as of necessity through teacher education programmes that this task can be accomplished. But in what ways, remains to be thought of in order to arrive at workable propositions.

1.14 The Scientific Philosophy and Nature

The scientific philosophy propounded by Bacon, Des'cartes and Newton which the world believed and practised for a long time has put man against the nature and disturbed the old harmony that existed between the two. The exploitation of nature became man's sole concern. The imbalances in the ecosystem and degradation of the environment are some of its consequences. The large scale pollution of air, water and food materials, the 'Green House Effect', rise in temperature, change in weather chart, damage to the ozone layer, erosion of soil, increase of carbon and nitrogen contents in the air, growing intake of poisonous substances by man and diminution of non-renewable forms of raw materials and sources of energy are going to create serious problem for man. Environmental awareness has now become necessary. Let

us, therefore, examine whether the curriculum of teacher education can take a realistic note of the 'crisis of environment' and help in developing consciousness among the prospective teachers.

1.15 Panchayati Raj and Traditional Power Structure

The 73rd Constitutional Amendment introducing Panchayati Raj leading to the decentralization of political and administrative power, a right step in the direction of 'participatory democracy', is an effective means to bring it to the grass roots. The reservations in the Panchayati Raj system to certain categories of people is breaking down the traditional power structure in the rural areas. It has, however, developed misconceptions and apprehensions among the teachers, specially at the elementary level, that local politics will interfere with their work. The teachers will have to develop positive attitude towards it and some kind of emphasis has to be laid on it. All these changes call for a new relationship between the school and the local community.

1.16 Teacher in the Community

The teacher is an academic and an intellectual. He/she cannot maintain stony silence at the events that are taking place in the society. As an enlightened person it is his/her moral duty to pass an unbiased judgement and impartial criticism on social events. The academic and social issues are not so independent of each other as people are accustomed to imagine them to be. On the contrary, they are inter-related and inter-dependent. The right of teachers to examine the social events has to be defended. 'An unexamined life', says Socrates, 'is not worth living'. The role of the modern teacher is not confined to teaching alone. He/she is expected to participate in the development programmes of the community life. The question arises as to how this could be integrated with the teacher education programmes..

1.17 Teachers for the 21st Century

The teachers who are being educated today will have to pass the major part of their lives in the education system—formal/ non-formal during the twenty-first century. If the present rate of explosion of scientific and technological 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 challenge of electronic media and information technology. In course of time, students will not come to teachers that often for the acquisition of knowledge, as other efficient avenues for the same would be available to them. They would come just for seeking information about the 'sources of knowledge'. The changes likely to occur in the twenty-first century need to be visualised and suitably incorporated in the curriculum of teacher education.

1.18 Education: Theory and Practice

It is felt that education and society need to be in consonance with each other. But in reality whatever is being taught in the schools gets little opportunity for practice. This needs to be examined from the point of view of teacher education curriculum. Let the philosophy of teacher education and its curriculum be oriented, not in despair and disappointment, but in hope.

1.19 Changes in Schools Demand Concomitant Changes in Teacher Education

Education of teachers is not an end in itself. Its target is the school, where it is expected to shape the destiny of pupils and prepare citizens for the nation. 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 great extent from the pre-primary to the +2 stage. There has been an increase not only in the quantum of knowledge, being transmitted and negotiated but also in the nature and purpose of this knowledge. Certain new subjects have replaced the old ones whereas certain others have changed their context, orientation, theme and philosophy. These changes at the school level, out of necessity, demand a new pedagogy and evaluation techniques. But the changes at the level of teacher education are lagging far behind the changes demanded by the school system. It is, therefore, essential that the curriculum of the teacher education be suitably

reoriented so as to respond 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 the teacher education activities and programmes.

1.20 Competencies and Skills in Education of Teachers Unrelated to Work Situations

It is unfortunate that the teachers and the teacher educators both tend to get alienated from the mainstream of academic life after a few years of joining their profession. At a time when the knowledge in different disciplines is increasing, they do not keep pace with the new developments in their respective disciplines. The methodology learnt in the teachers' training institutions to transact curriculum is sparingly practised. The teacher, when he joins the school system, finds the education received at the training institutions of little use. The curriculum of the teacher education has to guard itself against obsolescence of knowledge of the teacher educator and the irrelevance of the pedagogy. It is really a serious problem. The content- cum-methodology approach has not solved it because in practice these are being dealt with separately. The pedagogical analysis approach, which aims at integrating methodology with content, needs to be stressed and strengthened. It is, therefore, necessary that the courses of teacher education be made so challenging that the teacher educator remains academically alert and sensitive and the teachers practice whatever has been taught to them in these institutions.

1.21 Vagueness in Curriculum

The curriculum of teacher education does not adequately distinguish among the terms like "elective", "optional" and "specialization" resulting into differential treatment of subjects in respect of their nature and scope. Likewise, community work, community development, community experience have been vaguely understood, differently interpreted and poorly operationalised. The way SUPW has been conceived and the way it is being practised, the two are at variance. The curriculum of teacher education in practice, at present does not demand rigorous work from trainees and does not develop professionalism.

1.22 Universalisation of Elementary Education

The universalisation of education at the elementary level is going to raise another problem. The country will need many more elementary school teachers than at present, beyond the present capacity of training institutions. While alternative training programmes/strategies may be thought of as a short term measure for the training of voluntary teachers, the preparation of additional trained teachers must remain the responsibility of teacher training institutions.

Apart from the obvious demand for a quantum jump in the number of trained teachers, UEE calls for transformation in the role of a teacher. The prevailing role of teacher being confined to teaching the children who already have access to schooling may not be adequate anymore. The future teacher would have to be actively engaged in the task of deformalising as well as reconstructing both the school and the learning process in consonance with the changing social reality. The teacher would also be enabling the school to enlarge its capacity to reach out to all the children in a concerned locality. For these purposes, the teacher would have to be empowered in new conceptual, pedagogic and socio-cultural dimensions. The Teacher Education curriculum, therefore, has to be re-organised both structurally and pedagogically. The possibility of each Teacher Education institution evolving a field laboratory (say a block, an urban locality or a school cluster) for UEE and linking its academic programme pedagogically with the field projects undertaken by student-teachers, needs to be worked out, rather systematically. This would help lay the foundation of the triangular relationship among the community, school and the Teacher Education curriculum in a symbiotic/dialectic framework.

1.23 Facing the Challenges of Science and Technology

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 theories of heredity, learning, mental health, attention and motivation should be given a fresh look in the light of the scientific researches.

1.24 Manpower Planning in Teacher Education

The absence of manpower planning in teacher education and lack of proper co-ordination between planning and human resource development have been a matter of serious concern. In certain parts of the country the trained teachers have to wait for several years to get employment and by the time they are employed, the training effects are practically lost. Yet there are certain other sectors where there is acute scarcity of trained teachers.

1.25 Mismatch Between the Training and Nature of Work in Teaching

Another area of concern is a mis-match between the training and the nature of work in teaching. As for instance, the B.Ed. trained teachers (exclusively trained for Secondary classes) are seen employed in the pre-primary and primary schools. In addition to stage specific training programmes, it may be thought of to introduce specialised training for pre-primary and elementary school teachers in the B.Ed. programme.

1.26 Education as a Life-Long Process and Need for In-service Education

A learning society visualises education as a life-long process. This is equally applicable to teacher education. The current policy stipulation on inseparability of the pre-service and in-service education of teachers needs to be given pragmatic shape at the implementation stage. The curriculum of pre-service and in-service teacher education could be redesigned to maintain the continuity between the two.

1.27 Institutional Autonomy

Academic freedom and institutional autonomy are not the legal and constitutional rights. However, these are ethical and moral concepts, nonetheless. The teacher is expected to earn the academic freedom by his/her work. No external authority can grant it. Freedom and accountability go together. They are mutually supporting and the programme of teacher education has to make a realistic note of this situation.

1.28 Teaching as a Profession

Globally, teaching is now being recognised as a profession. But the education of teachers in our contexts has yet to develop the main attributes of a profession, such as, the systematic theory, authority, community sanction, ethical code and culture, generating knowledge through research and specialisation. Some people do believe that formal training is not necessary for becoming a good teacher as it does not necessarily cater to the development of one's personality and sharpening of communication skills and commitment to a code of conduct. It is for consideration as to what steps need to be taken in respect of training programmes, duration of the course, student teaching/ internship, etc., so as to develop professional ethics among teachers.

1.29 Towards Evolving a Culture-Sensitive Pedagogy

India and many other countries of South-East Asia have a very rich cultural heritage, and are largely multicultural and pluralistic societies. Every region and state has its typical cultural identity, and there is a need to exploit this cultural identity as a basis for developing meaningful, 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. For instance, a child in a tribal society may process information in an altogether different manner as compared to the children from the urban area and high socio-economic stratum. Our pedagogy should be based in the tribal culture as well as in the culture of the urban society. It is in this context that special mention may be made of some cultural practices such as story-telling, dramatics and aesthetics which should become a strong basis of our pedagogy rather than one uniform, mechanistic way of student learning. In sum, the cultural plurality should get embeded in the pedagogical practices.

1.30 Research and Innovations

One of the major inputs towards enhancing the quality of teaching and learning in schools as well as the teacher training institutions would be the extent to which research outputs and

the outcomes of innovations are utilized by the system. An obvious prerequisite would be an indigenous system of researches in teacher education institutions working at different levels. No doubt, researches on teacher education have been and are being conducted in universities, national level institutions and other establishments, their utility for the teacher educator or the classroom teacher remains rather low. 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. This is one important factor which has dissipated the research efforts to a great extent. Majority of the researches are undertaken to obtain a degree and hence the focus on its possible utility and relevance gets misplaced.

There is a definite requirement of bringing in research methods and methodologies in appropriate form in teacher education at pre-service and in-service programmes. To an extent, it finds a place in master level courses like M.Ed. and M.A., though in certain universities the course requirement on research 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, curriculum issues, evaluative procedures and practices, training strategies, classroom practices, etc. The areas of teacher preparation for special education of 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 and gainful use.

The concept of field interaction and lab area approach in the context of establishment of DIET's is indeed timely. Researches, innovations and surveys must become an integral part of the training programmes of teacher training institutions irrespective of the stages for which it prepares its teachers. The trainees need to be familiarised with innovations in general and innovative

practices in teacher education in particular. The prospective teachers need to internalise an element of motivation and self-assurance so that in schools they could also innovate, experiment and achieve results.

1.31 Need for a Fresh Look

The curriculum of teacher education is under constant criticism. The changes in the school and social system occur earlier and the teacher education follows them later so an educational lag between the two continues. The curriculum of teacher education, therefore, does not meet the expectations either of the school or of the society.

The curriculum of teacher education of 1978 was the outcome of pooled wisdom and expertise of eminent educationists whose efforts produced this useful document. But this curriculum needs another look in the light of the N.P.E., its revised version, and new thrusts posed by the political and economic decisions taken at the level of the State. Its reconsideration has, therefore, become necessary.

1.32 Gaps Identified

According to the National Policy on Education, 1986, a curriculum of teacher education, which is cut off from the school system and society, serves no useful purpose because of its internal weaknesses, which in the main are the following:

- Teacher education has not been conceived as an integral part of the educational and social system.
- It is conventional, by and large, in its nature and purpose.
- It does not adequately meet the requirement of the school system.
- It does not meaningfully reflect the national values and goals.
- It is heavily loaded with disconnected informations rendering it difficult to be transformed into knowledge or theories.

- It lacks appropriate blend of theory and practical components.
- The result of the latest researches which have significant bearing upon the theory and practice of education do not find adequate place in it.
- It fails to develop the competencies/skills for becoming an effective teacher.
- The latest educational developments are not sufficiently reflected.
- It is terminal in the sense that it does not lay emphasis on continuous and life-long learning.
- It does not lay emphasis on in-service training.
- It does not inculcate professional values.
- It does not lead to integration of physical education with education which needs to be given priority as recommended by the Committee on Physcial Education set up by the CABE in 1993.

1.33 Critical Concerns

The factors and forces influencing teacher education are many, some of which have been mentioned in the preceding sections, certain others are being enumerated hereunder:

- In case the eligibility qualifications for entry into teacher training institutions are lowered, more academic and professional components will have to be added to the curriculum.
- In case the duration of the programme is increased, the training inputs including the contents will also need enrichment.
- The quantum of knowledge, methods for its transaction and the nature of the theoretical and practical components has to be stage-specific.
- The expectations about the role performance from the teacher influence the teacher education plans and programmes.

- The teacher training plans and programmes will have flexibility in accordance with the availability of resources.
- The education of teacher educators has been, by and large, a neglected sector, which needs careful planning and orientation.

In this discussion document no attempt has been made to propose specific curriculum patterns with the intention that a variety of patterns would emerge as an outcome of discussions. Let us rise to the occasion unitedly and help in transforming the programme of teacher education for greater empowerment of the younger generation.

2 The Pre-Service Teacher Education Curriculum

2.01 Introduction

Having gone into the exercise of delineating some significant concerns related to teacher education in the previous section, it has been attempted in this Section to derive the scope and objectives of teacher education in general and stage specific programmes in particular. The basic features of the context and the concerns underlying teacher education in a way, reflect the scope and also lead to derivation of objectives.

Teacher education, by its very nature, is interdisciplinary. The major areas of interdisciplinarity implicit in teacher education programmes include philosophy, psychology, sociology, anthropology, economics, history and culture. These constitute what is called the foundation courses and are basic to exciting educational thinking. In addition to this, the recent researches in medical and life sciences are opening new avenues of knowledge which are very relevant to education. The scope of the curriculum, therefore, gets enlarged. The country needs different kinds of teachers to manage its educational programmes. In addition to the formal system, it needs teachers for physical education, music, art, painting, dance, SUPW and vocational subjects and teachers functionaries for the non-formal stream, like, distance education, correspondence education, adult education, open learning system and teachers for pupils with special needs which will be dealt with separately.

In addition, teacher education has an important component of practical work including varied forms of student teaching, field work, working with the community, SUPW etc.

2.02 The General Objectives

The general objectives of teacher education as derived from the context, concerns and scope and applicable to various stages/ levels may be as follows:

- To develop a critical awareness among the teachers and teacher educators regarding the realities of Indian life.
- To promote such capabilities in them as may be necessary for the realization of national values and goals as enshrined in the Constitution of India.
- To enable them to act as agents of modernization, social change and development and transmittance of the national and cultural heritage.
- To cultivate rational thinking and scientific temper.
- To promote among them the managerial and organizational skills as required in the contemporary Indian educational contexts.
- To develop among them the capabilities needed for performing their role in a dynamic society in order to meet the challenges of continuity and change.
- To make them aware of the environmental and ecological problems and enable them to find out their suitable solutions.
- To develop interest/capacity for involvement in community life and draw its resources for the welfare of the school for meaningful education.
- To develop competencies and skills needed for becoming an effective teacher.
- To enable them to impart knowledge and reconstruct experiences.
- To inculcate positive attitudes towards students.
- To develop the capacities to organise supplementary educational activities.

- To develop interest and skills for undertaking action research/research.
- To inculcate among the teachers a sense of value judgement, value commitment and value transmission.
- To enable teachers to develop aesthetic sense among students.
- To foster their interest in in-service education/life-long learning.
- To sensitise pupil teachers towards the promotion of patriotic feelings, national integration, world peace and protection of human rights.
- To plan and organise for capacity building with a view to enabling them to look into the students' needs in physical education and helping them in this regard.

While the objectives of stage specific curriculum have commonality with the general objectives, each stage has specific objectives of its own.

2.03 The Specific Objectives of Pre-School Teacher Education Curriculum

- To sensitise pupil-teachers towards physical, mental, moral, social, aesthetic and linguistic development of children.
- To enable pupil-teachers to help in inculcating useful social habits for the development of children.
- To acquire knowledge for understanding the psychological make up of children.
- To cultivate social sensitivity, affection for children and respect for their uniqueness.
- To be able to organise different types of activities for the development of children individually and collectively.
- To acquaint them with the principles of child care and child health.
- To empower pupil-teachers for promoting creativity, inventivenes and developing imagination among children.
- To enable them to select/prepare and use different kinds of teaching aids and resource materials for the children.

- To develop skills and competencies in making learning a joyful activity for children.

2.04 The Specific Objectives of Elementary Teacher Education Curriculum

- To equip teachers with sufficient theoretical and practical knowledge and skills.
- To develop a proper understanding of the psychological and sociological principles implicit in the elementary education.
- To empower teachers for promoting all round development of children.
- To generate the capacities for greater motivation, aspiration and a sense of value commitment.
- To enable teachers to manage learning resources and organise experiences for children at this stage with the focus on the minimum levels of learning.
- To enable teachers to foster problem-solving ability among pupils.
- To acquaint them with methods and techniques of handling children with special needs.
- To develop among them the capacity to solve the social and emotional problems of children.
- To enable pupil-teachers to organise supplementary educational activities for this group of pupils.
- To enable them acquire necessary skills so as to develop curiosity, imagination and self-confidence among children.
- To enable them to perform their varied roles in the educational system as well as in society.
- To develop communication skills.
- To foster the desire for life-long learning.
- To motivate them to undertake action research and employ innovative practices.
- To enable them to use community resources as educational inputs.

2.05 The Specific Objectives of Secondary Teacher Education Curriculum

- To develop among teachers a clear understanding of the psychology of their students.
- To enable them to understand the process of socialisation.
- To develop in them an understanding of the principles of pedagogy, curriculum development, its transaction and evaluation.
- To enable them to make pedagogical analysis of the subjects they are to teach at the secondary stage.
- To develop the skills for guidance and counselling.
- To enable them to foster creative thinking among pupils for the reconstruction of knowledge.
- To acquaint them with the factors and forces (within the school and outside) affecting educational system and class room situation.
- To acquaint them with educational needs of special groups of pupils.
- To enable them to utilise community resources as educational inputs.
- To develop communication skills and to use the modern information technology.
- To enable them to undertake action research and use innovative practices.
- To foster in them a desire for life-long learning.

2.06 The Specific Objectives of Senior Secondary Teacher Education Curriculum

2.06.1 Academic Stream

In addition to the objectives enunciated for secondary teacher education curriculum it may also include the following:

- To promote academic interests and values among teachers.

- To develop knowledge of the subject, clarify its objectives, evolve a suitable methodology of instruction and sharpen the communication skills.
- To develop in them reading and reference skills.
- To enable them to develop love for knowledge among students.
- To develop skills for curriculum development and transaction.
- To enable them to use and develop various types of tests.
- To enable them to reconstruct knowledge and experience under new contexts.

2.06.2 Vocational Stream

In addition to the objectives of secondary teacher education curriculum, the following objectives may also be included:

- To make them understand the philosophy and social relevance of vocational education.
- To develop a sense of workmanship and dignity of labour
- To impart knowledge and develop skills necessary for teaching vocational subjects.
- To give them relevant information for attaining success in a vocation of their choice.
- To develop faith in the efficiency of vocational education.

2.07 Stage Specific Curriculum Structures

Based upon the general objectives and stage specific objectives of teacher education, the following curriculum structures are being suggested for discussion and further deliberation:

2.07.1 Pre-school Stage

- Emerging Indian Society
- Pre-school education in India—status, problems and issues

- Psychology of the child
- Early childhood care
- Methods and Techniques for facilitating the growth and development of the pre-school child through activities for:
  - Physical Development
  - Mental development
  - Emotional development
  - Language development
  - Social development
  - Neuro-muscular co-ordination
  - Self-expression
  - Habit formation
  - Training observation
- Practical Activities, such as,
  - Art and Clay work
  - Paper and Pencil work
  - Scissors and Paste Work
  - Music and Dance
  - Story telling
  - Games and sports
  - Field trips
  - Block making and related games.

2.07.2 *Elementary Stage*

- Emerging Indian Society
- Elementary education in India—status, problems and issues
- Psychology of teaching and learning (with special reference to child)
- Health Education and School administration
- Education of children with special needs
- Pedagogical analysis of elementary school subjects with focus on MLLs.

- School experiences/internship
- Socially useful productive work with focus on school-community relationship
- Organisation of supplementary educational activities
- Organisation of activities directed towards physical development, social development, emotional development, personality development and leadership, creativity, etc.
- Practical work.

2.07.3 Secondary Stage

- Emerging Indian society
- Secondary education in India—status, problems and issues
- Psychology of teaching and learning
- Curriculum, pedagogy and evaluation
- Pedagogical analysis of two school subjects
- Practical work
  - Internship for school experiences
  - Field work with community based programmes
  - Creativity and personality development programmes
  - Socially Useful Productive Work
  - Sessional/practical work
- Specialised Programme (academic and practical—one of the following)
  - Pre-school education
  - Elementary education
  - Educational Technology
  - Vocational education
  - Adult Education
  - Non formal education
  - Environmental education
  - Population education

- Physical Education
- History and Problems of Education.

2.07.4 Senior Secondary Stage (Academic Stream)

- Emerging Indian society
- Senior Secondary Education in India—status, problems and issues
- Psychology of teaching and learning
- Curriculum, pedagogy and evaluation
- Pedagogical analysis of one subject at the Senior Secondary Stage
- Practice of Teaching—one school subject at the +2 level
- All other components and specialised programmes for the secondary school with enrichment.

2.07.5 Senior Secondary Stage (Vocational Stream)

(a) For those having a degree or diploma in a vocational subject

- Emerging Indian society
- Vocational education in India: status, problems and issues
- Psychology of teaching and learning
- Curriculum, pedagogy and evaluation
- Methods of Teaching a particular vocational subject
- Practice of Teaching (as in secondary school)
- Other components relevant to vocational education the same with enrichment as for the secondary stage.

(b) For those having no degree or diploma in a particular vocation after +2

- Emerging Indian society
- Vocational education in India: status, problems and issues
- Psychology of teaching and learning

- Curriculum, pedagogy and evaluation
- Methods of Teaching a particular vocational subject
- Other components relevant to vocational education the same with enrichment as for the secondary stage
- Apprenticeship programme in a vocational establishment
- Practice teaching of a vocational subject.

2.08 Basic Assumptions for the Curriculum Framework

The intended curriculum framework, in addition to the contexts and concerns, overall and stage specific objectives and curriculum structures envisages certain assumptions characterised by the following:

- The curriculum reflects the realities of the national life and acts as an input to realise the national goals and fulfils the aspirations of the people.
- It reflects the latest developments in the field of teacher education.
- Its various components are so interlinked as to lead towards the realization of the disciplinary goal of education.
- Its transaction attempts to establish a viable integration of theory and practice of education.
- The curriculum is futuristic in nature.
- The curriculum provides varied educational experiences needed for a teacher in his work place and is consistent with the structural requirements of the school system.
- It is flexible enough to enable teachers and teacher educators to experiment with new ideas.
- It is realistic and based upon the actual availability of resource materials human and non-human.
- It attempts to ensure that pre-service and in-service education of teachers are inseparable as envisaged by the National Policy on Education (1986, 1992).
- It sets achievable goals for various stages of teacher education.
- It prepares teachers for meeting the needs of students in physical education.

2.09 Institutional Functions

It is visualised that the following institutional functions are implicit in the transaction of the curriculum. The teacher education institution:

- Provides for both the pre-service and in-service education.
- Provides training and orientation programmes to the functionaries of alternative strategies of education.
- Caters to organise programmes for heads of institutions and supervisory staff.
- Offers courses for community leaders, voluntary agencies and parents.
- Provides academic support to schools and other agencies engaged in education of children and adults.
- Undertakes research and experiments with innovative educational ideas.
- Acts as a resource centre for education for a specific area.
- Offers consultancy and guidance services.
- Organises need-based programmes for educational administrators, planners, curriculum designers, evaluators, etc.
- Imparts training for other areas of education, like physical education and special education.
- Acts as a link between the school and the university system.

2.10 Teacher Profile

As a consequence of the impact of the intended curriculum, the emerging profile of a teacher will be approximating the following:

Social Profile of the Teacher

- Capable of appreciating the aspirations and expectations of the community.
- Acts as a change agent for modernization and development.

- Capable of developing proper relationship with the local community, providing guidance and leadership to it and utilizing its resources for the development of school for relevant education.

Educational Profile

- Capable of organising, selecting and using learning resources with a view to facilitating learning.
- Effective communicator, designer and evaluator of curriculum.
- Capable of evaluating, academic/professional performance.
- Effectively transacts curriculum, organises supplementary educational activities and compensatory educational programmes for the special category of learners.
- Contacts, advises and guides parents regarding the education of their wards.
- Understands the import of inter-relationship between 'culture and education', 'culture and personality' and 'culture and values'.
- Capable of organising games, sports and other recreational activities for facilitating physical growth and personality development.
- Capable to reconstruct knowledge/experiences under different situations.

3 In-Service Teacher Education

3.01 Introduction

Within the overall framework of teacher education programme, in-service teacher education has a crucial role. It is not only a cliche but a reality that those who teach should never cease to learn. Teaching acquires new colour if the teacher continues to learn.

The National Policy on Education (1986) has thoughtfully observed that "Teacher Education is a continuous process and its pre-service and in-service components are inseparable." This implies that no watertight boundaries may be created between them. Although overtly simple and strategically visionary, this statement, when translated into practice, becomes technically complex and administratively difficult. All our efforts, however, need to be directed to making Pre-service and In-service Teacher Education a seamless web.

At present, there are approximately 7.6 lakh elementary and 95 thousand secondary, senior secondary schools having about 44 lakhs teachers. Although most of the teachers are trained and qualified, there are States, like Tripura, Arunachal Pradesh, Meghalaya and Sikkim where the percentage of untrained and unqualified teachers at primary level constitutes 69%, 56%, 55% and 60% respectively. The percentage of untrained teachers in the secondary schools is quite high, for instance, in Manipur it is 70% and in Meghalaya 64%. In some States, there are instances where

non-matric and non-plus two (+2) pass persons have been employed as teachers in primary schools. In-service programmes, therefore, are needed urgently.

In the professional updating of teachers, changes in the educational structure, curriculum framework, transactional strategies, evaluation techniques and management processes play significant role. New advances which come up on the educational horizon have to be addressed to and teachers made aware through programmes of in-service education.

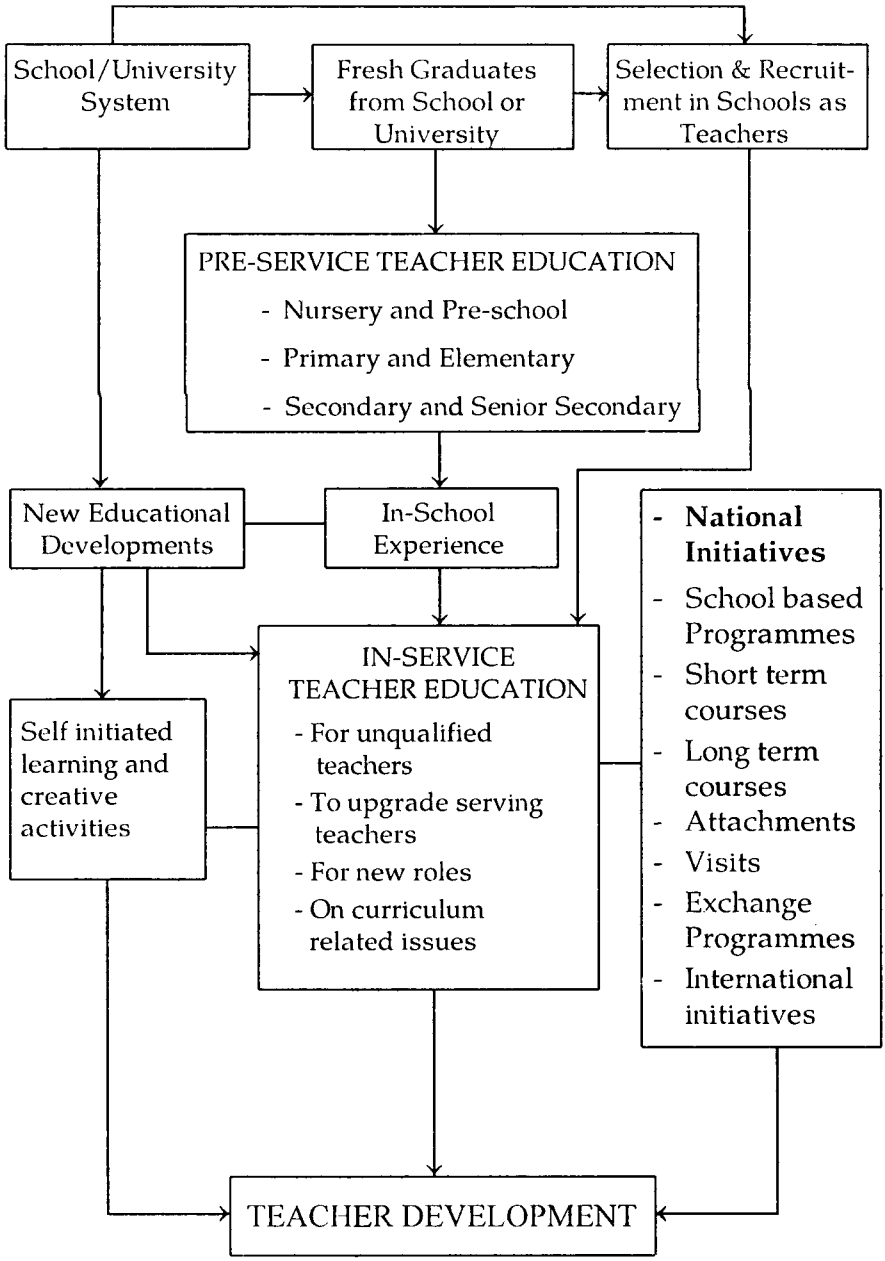
Pre-service and in-service programmes need not be dealt within isolation of each other; as staff development begins with pre-service and gets reinforced through in-service programmes. It, however, does not mean that there is a simple linearity between pre-service and in-service programmes. There is an element of 'change' and 'continuity' in the two subsystems. The element of change in in-service programme is occasioned due to emergence of new issues/themes/learning areas. The element of continuity surfaces because pre-service education, by and large, deals with the general aspects while the in-service programmes provide for renewal and upgradation of skills and competencies and focussed inputs generally, are designed. The in-service programmes are also launched to renew and sustain the 'Survival Competencies' which teachers learnt years ago. Both the pre-service and in-service programmes would be effective only when school experiences are utilised maximally.

The following schematic diagram on the next pageexplains the inter-relatedness of various components of teacher development.

3.02 The Major Milestones in the Field of In-service Teacher Education

The need for in-service education was visualised as back as 1949 when the University Education Commission observed "A teacher to keep alive and fresh should become a learner from time to time." However, the first structural arrangement was made between 1955-58 by establishing 74 Extension Services Centres and 23 Extension Services Units attached to graduate training colleges. Historically, it was the first step to promote in-service teacher education. With the setting up of Extension Centres the

COMPONENTS CONTRIBUTING TO TEACHER DEVELOPMENT



In-service Teacher Education got institutionalised. With the passage of time, the scheme got diluted and it virtually stands depleted now.

The second step, massive and momentous, was taken in 1961 by establishing NCERT including its four Regional Colleges as an apex institution to launch programmes both pre-service and in-service . The National Institute of Education of the NCERT was the premier department to launch training and research programmes for in-service training. Following the national model the States were also galvanised to set up State Institutes of Education (SIEs). Later on, these institutes were upgraded into SCERTs which are now responsible for in-service of teachers at the State level. The NCERT in collaboration with State Govts. set up Centres for Continuing Education in 1978 to offer learning facilities to teachers. The project, however, could not survive.

The third milestone in the delivery of In-service Teacher Education programmes was the establishment of the Centre for Educational Technology in 1973 with a view to using mass media to support and enrich primary education and teacher education. The institution (CET) under the well-known SITE programme trained 45000 primary school teachers in 6 States using multi-media. In 1983, The CET evoived into CIET and now has six State level counterparts known as State Institutes of Educational Technology (SIET). These institutes develop programmes for teachers and telecast through Satellite TV on every Saturday. With this step began the systematic use of Educational Technology in Teacher Education programmes at the national and state levels.

The fourth step was taken when the Govt. of India established IGNOU as a National Open University to launch various programmes including in-service teacher education programmes through open distance mode. The IGNOU is planning to launch in-service training programmes for teachers through interactive video technique.

The need to set up a Council for Teacher Education was felt as back as 1973 when NCTE was established in NCERT as a non-statutory body to advise the Ministry of Education on all matters relating to Teacher Education. In 1993 Govt. of India by an Act of Parliament established the National Council for Teacher Education (NCTE) as a statutory body with a mandate to undertake planned

and coordinated development of teacher education at all levels including in-service training and maintain standards and recognise institutions. This is the 5th milestone in the national initiatives to streamline and strengthen In-service Teacher Education.

3.03 The Context

The 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 and the teachers are required to execute new and different roles. Advances in the fields of curriculum, evaluation, audio-visual aids, telecommunication, etc., demand updating and orientation of teachers. An innovation at a macro level would invariably fail if teachers are not equipped and properly oriented to implement that innovation. In the Indian context, the developments, such as, the 10+2+3 scheme, the making of science compulsory up to the class 10 standard, new practices in evaluation like internal assessment, question banks, continuous and comprehensive evaluation and grading, introduction of new topics like environmental education, population education, computer education, etc., demand continuous in-service training of teachers.

The National Commission on Teachers recommended that promotion (upward mobility) of teachers would also depend upon the completion of certain number of in-service programmes. This stipulation itself demands regular in-service programmes of teachers.

In-service programmes need to be built around 'transformational objectives', i.e., increasing motivational level, enriching self-concept, developing climate of enquiry and making teachers reflective practitioners. The thrust of transformational objectives is to develop such qualities in teachers as would enable them to become receptive, innovative and dynamic.

Due to advances in tele-communication and open market policies the world is gradually becoming a global village. Globalisation and liberalisation are becoming key words. Teachers and teacher educators, therefore, would be required to be conversant with international trends and develop competencies in internationalism, multi-culturalism and multi-racialism.

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When in-service education is contextualised within the social reality of the educational world, it is seen that training is imparted in a slipshod manner and the trainees react to it with apathy and indifference. If this culture of training is to be corrected, lot of efforts will have to be put in to bring professionalism in training technologies and in building incentives into the system.

3.04 The Objectives

In order that in-service education becomes a comprehensive scheme of teacher development, it has to have a broad range of objectives as follows:

- To upgrade the qualifications of unqualified teachers through programmes and courses enabling teachers to earn '+2' Certificate or Graduation Degree.
- To upgrade the professional competence of teachers trained years ago or trained in slipshod manner.
- To prepare for new roles.
- To provide knowledge and skills relating to curriculum/ changes, i.e., content, process and evaluation of curriculum.
- To train for contemporary thematic issues, like, minimum levels of learning, operation blackboard scheme, teaching students of deprived groups, meeting educational needs of children with learning problems, training and developing inquiry skills, use of mass media in education, community participation for educational development, etc.
- To develop a training culture in respect of how to impart training professionally and how to receive and react to training.

3.05 Models

The existing in-service programmes can be grouped under some categories/models such as:

(i) Conventional Campus Models

Institutions like NCERT, NIEPA, NCTE, SCERT, DIET, Extension Deptt. of Teacher Colleges organise In-service Training

Programmes specially on thematic issues, like, continuous and comprehensive evaluation, interactive teaching, grading and credit systems, communication approach in language teaching and discovery approach in science teaching, etc. These in-service programmes are generally of short duration and are arranged in the institutions. Besides, conventional audio-video aids, the trainers sparingly use audio-video programmes. The modality is generally through lectures with some semblance of interaction.

(ii) Media Supported Models

In this model emphasis is given on use of electronic and mass media, like radio, broadcast and telecast. The best example of the model is found in the SITE project and the Classroom 2000+. In both the projects a large chunk of instruction was transmitted through audio-video programmes or telecasts.

(iii) Project Based Models

In the past NCERT with the support from the Ministry of Human Resources Development launched two important projects known as Programme of Mass Orientation of School Teachers (PMOST) and Special Orientation Programme for Primary Teachers (SOPT). Both the models used cascade approach.

(iv) NGO Models

There are NGOs like Sandhan (Lok Jumbish, Rajasthan, Jaipur), Eklavya (Bhopal), J. Krishnamurthy Foundation (Varanasi), etc., imparting in-service education. Each agency operates within its overall objectives, available resources and specific model.

(v) School Cluster Models

Under the DPEP Project, school clusters are utilised to impart in-service teacher education. This model has some similarities with "School Complex" idea of the Education Commission of 1964-66 and the 'School Cluster' idea of Andhra Pradesh Primary Education Project.

Notwithstanding the above five models, one may categorise these models from a different angle, i.e., direct versus cascade models, face to face versus distance education models, centrally designed and locally supported versus locally designed and centrally supported models and so on.

3.06 Strategies

Implementing in-service programmes in an efficient manner demands professional skills. The trainers and the trainer of trainers should be exposed to those skills and prerequisites that are needed to execute in-service programmes efficiently. These include appropriate planning, selection of appropriate resource, persons, putting in place, matters relating to logistics, and an element of inbuilt evaluation.

(i) Locale

National apex institutions as NCERT, NIEPA, IGNOU, NCTE, CBSE and UGC are the agencies which train resource persons or trainer of trainers. At the State level SCERT, State Deptt. of Education, State Boards of Secondary Education are agencies which train teachers and teacher educators. After establishing DIETs, training has gone to the level of districts. This new facility is most welcome. In fact, there is a need to go even further and decentralise training facilities at the block and school cluster level. As a matter of fact decentralisation should go to institutional level and each school should be a place for in-service teacher education.

(ii) Target Groups

Historically, in-service training programmes began with training of teachers in institutional matters. Subsequently after the establishment of NIEPA, Head Masters, Principals, Dy. Directors, Inspectors of School and other supervisory staff were also brought into the fold of training. The themes included administration, supervision and management of schools.

Besides teachers, supervisors and administrators, there are other categories of people who must be regularly brought into

in-service programmes. The first category of people would include Pramukh, Pradhan, Sarpanch, etc., who have the responsibility to look after primary level education. The other category would be that of teacher educators.

Yet another category of persons that needs to be inducted in in-service programmes are librarians, hostel wardens, ground level administrative staff, clerks and head clerks and office bearers of parent teacher associations and the like.

(iii) Modalities

Besides a few programmes organised by IGNOU, all other in-service programmes are face-to-face in mode. There is an urgent need to develop distance education techniques in all in-service programmes. The role of distance education techniques will vary from programme to programme. Distance techniques bring down expenditure as well as the duration of in-service programmes.

(iv) Transactional Strategies

If one surveys the methodologies used in in-service programmes, one would come to the sad conclusion that most of the programmes use teacher oriented and didactic lecture method, that there is no interactive teaching; that audio-visual aids are not used effectively; that reading materials and support materials are often missing (and if available are of poor quality). Even in lecture methods many trainers fail to make them lively and interesting. Hardly there is any humour and touch of scholarship. Techniques, like, buzz session, brain storming, panel discussions, symposia, seminars are used minimally.

In-service programmes should not only have focus on interactive and participatory teaching but should also focus on how can in-service teacher education programmes transform the trainees in terms of motivation, realistic perception of self-concept and how can in-service teacher education programmes stimulate the trainees to construct their own meaning and interpret data from their own perspective. Such an approach which is essentially 'constructivist' and 'meaning making' approach is most needed.

As far as possible the focus of in-service programmes should be to develop:

- Personality of the trainees
- Their motivation in matters relating to professional and self growth
- Their insight and updatedness in the subject matter
- Their improved awareness about social realities and
- Their communication and evaluative skills.

While executing training programmes, focus of the training, should not be only on skills or on knowledge but it also needs to adopt a triple pronged policy of emphasising knowledge, processes and values simultaneously. If trainers do not build intellectual humility, pursuit of excellence and love for perseverence there are chances that the negative values of snobbishness, self-complacency and easy way of doing things may adversely inflate their ego and may percolate down to diluting the training effects.

3.07 Quality Assurance and Performance Indicators

Normally, success of any in-service teacher education programme is assessed by collecting perceptions of trainees and by taking the views of resource persons. In some cases, success of the programme is also assessed by looking at whether the programme was launched on time, completed on time, attended by all participants, etc.? These are partial and ad hoc indicators.

A comprehensive view may focus on the following four aspects:

- What have been the outputs of the programme?
- How has the programme been implemented (process aspect)?
- What inputs have been provided to launch the programme?
- What is the context?

Each programme may be evaluated on the following basis of the criteria:

- Has the programme been launched properly in terms of duration, resources and objectives?

- Has the programme given quality results?
- Has the necessary inputs been provided to the programme?
- Has the programme been implemented efficiently (keeping in view internal efficiency)?
- Is the programme relevant to the existing educational context?
- Does the programme satisfy the need of all or most of the teachers?
- Is the programme cost effective?

3.08 Issues

It is assumed that in-service teacher education is an important segment in teacher development; that it has live relations with pre-service education; that it has potential for teachers to grow and develop; that at least each teacher undergoes in-service education after say 4-5 years.

The following issues emerge:

- Whether in-service teacher education can be located in schools and school clusters as nodal points of training?
- If yes, whether this scheme can be launched in one district each of the educationally backward States?
- Whether some of the in-service teacher education programmes as based on and evolving out of pre-service programmes can be accredited so that a teacher can get appropriate degree or diploma?
- Whether the pre-service institutions can be made bimodal for delivering both pre-service and in-service courses?
- Whether the distance and telecommunication technologies can be built in the in-service programmes?
- How can we promote training culture, i.e., how should training technologies be professionalised and how trainees should be involved and made interested?
- Whether it is possible to internalise the training culture in the in-service teacher education programmes?

4 CurriculumTransaction

4.01 Introduction

The curriculum, in the current context, refers to the totality of academic, practical and supplementary activities a teachers' training institution offers to its students. These activities which, in essence, are the components of curriculum, may be categorised as theory of education, student teaching and other related practical activities.

4.02 Theory of Education

Education as a field of specialised studies is multidisciplinary in its 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 complimentary character of theory and practice needs to be emphasised at every step. The prospective teachers are encouraged to organise, express and communicate their ideas clearly in a 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 the cultivation, formation and development of the power of mind in contrast with the prevalent tendency of aiming at the success in examination alone.

The teacher educators will be required to have clarity of thought in respect of components of a course, objectives of

teaching, and their relevance to educational and social goals. One of the approaches to teaching a theoretical course may be thought of in terms of the modular approach. Each module envisages as a complete teaching unit, yet at the same time, it is a part of the total syllabus with built-in linkages and feed-back mechanisms. Learning through this approach can be reinforced by library work, seminar readings, tutorials and small group discussions. Self-study and self-motivated learning, needless to say, become an integral part of the curriculum transaction. Its outcomes would reflect better understanding of concepts and centrality of the content.

The interdisciplinary 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 the transaction strategies for better stamping in of knowledge.

There may be, in addition, other approaches, i.e., alternative approaches to curriculum transaction which call for discussion in each specific context.

4.03 Student Teaching and Other Related Practical Activities

The practice of teaching, as prevalent in most parts of the country at various stages/levels of teacher preparation continues to remain the weakest link in the entire system of teacher education. This is so, despite the recommendations of various committees and commissions including the NPE 1986/92 and the corresponding Programmes of Action.

There is no denying the fact that practice of education is as important as its theory. Each good theory leads to a 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.

4.04 Student Teaching

The student teaching has moved little beyond what Herbart had formulated long ago in today's contexts with some

modifications here and there. Micro-teaching and allied techniques, aimed at improving teaching skills have helped to an extent. The content-cum-method approach, wherever attempted, remained limited to the introduction of an additional component of content without achieving the objective of integration. The problem-solving approach, discovery method, competency based teaching learning and the indigenous contributions, like those of Tagore, Aurobindo and several others have the potential for bringing in innovative ideas in teacher education. The application of educational technology, informatics, cybernetics and programmed learning techniques have not made much headway for a variety of reasons, such as, apathy, lack of resources, conservative outlook, etc. The learning resources wherever available in the training institutions as also in the schools have been rarely utilised.

Prerequisite to preparing a prospective teacher for student teaching can be thought of in terms of providing certain inputs such as, induction programme, an exposure of school experiences with special focus on the educational environments of the school, socio-economic and cultural background of the community constituting the catchment area, observation of classroom teaching and other related activities, etc. 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, model/ demonstration lessons, preparation of lesson plans in a way as to encompass teaching for cognitive, affective and psychomotor development.

Conventional practices for preparing lesson notes as prevalent in today's contexts leave little scope for innovative and creative teaching. It is need of the hour to make use of recent findings and developments of knowledge in the field of teaching and learning and attempt to incorporate these selectively.

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-tutorial, tutorial and post tutorial 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 in teaching.

The various aspects as referred to above will have to be suitably adapted to varying structures and designs at different stages/levels of teacher education.

4.05 Practical Work Other than Classroom Instruction

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

4.05.1 School Experiences

Efforts need to be directed towards developing in a teacher-trainee certain competencies and skills which would be helpful in the shaping of a teacher for 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/ registers, management of laboratories/library, preparation/ repair/selection of instructional aids/equipments, selection/ 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 competitive sports and games, organisation of educational tours, etc.

4.05.2 Community Experiences

Interaction between the institution and community is gaining importance in the modern contexts. One can think of several activities promoting school-community relationship, such as, celebration of birthdays of children, celebration of parents day, activating parent-teacher association for the welfare of the schools, organisation of school and community games/sports/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/social forestry (which necessarily employs community participation), etc.

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, SUPW programme, health awareness programmes, etc. It is expected that organisation of such activities would lead to developing self confidence and initiative among teacher-trainees and also develop in them culture-specific values.

4.05.3 Personality and Leadership Development

Socially useful productive work can be thought of as a powerful medium for personality development. There can be a variety of activities which are necessarily school based and which may be included under socially useful productive work, like maintenance of the school plant including its playgrounds, cleanliness, repair of furniture and production of material to be used as instructional aids. Various other individual and group activities, such as, organising scouting, girl guiding, red cross, first aid activities. It will be a great educational experience if community visit, field work, nature study, school co-operatives, saving bank, games and sports and other co-curricular activities are carefully organised as a part of the programmes leading to development of leadership qualities.

4.05.4 The Transaction Modes

The modalities to be employed for organising activities other than teaching for all round capacity building and empowermert

of a teacher-trainee will involve joint supervision by the teacher educator and a school teacher. The prospective teacher will have to be acquainted with various types of school experiences during the period of practice teaching, use of community resources for the welfare of the school, interaction between the community and the school for improving the quality of life of the community, flexible approach to organising various programmes according to local needs and resources.

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, students 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 teacher-trainee 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 use 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 maintenance of cumulative and comprehensive evaluation records, maintenance of school records and is 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 the

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 community related practical work may include interaction between school teacher and intending teacher and members of the community representing parents, panchayats, senior citizens of 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. 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.

The transactional strategies for the practical work other than teaching may be thought of in a variety of ways depending upon the nature and type of experience relevant to the school or the community. One can also think in terms of the competencies implied by specific activity or activities, its mode of transaction and evaluation differently in different situations.

4.06 Socially Useful Productive Work

To come to its present form, the S.U.P.W. has undertaken a long journey. From Marx's 'combination of productive labour' and learning to Wood Abbots '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 'S.U.P.W.' The central purpose behind it is to shift the centrality of education from excessive verbalism to practicality. Now S.U.P.W. has become an integral part of education at the school level if not practically then theoretically. It has raised certain academic questions/issues apart from the availability of teachers and other resources. These questions/issues may be summarised as follows:

- 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 community resources available for S.U.P.W. in community and breaking the status quo for promoting economic and social mobility?
- How to combine community and school-based S.U.P.W. 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/vocation?
- What is its impact on culture and values?

4.07 Value Education

The rapid erosion of values in the society is causing concern, necessitating imparting of value education. Accordingly, a definite place is given to value education in the section on curriculum transaction.

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 among their students.

In this context it is for the consideration whether values can be directly taught or caught and the ways in which prospective teachers become capable of imbibing values among students in the schools.

5 Teacher Preparation for Alternative Systems/ Approaches in Education

5.01 Introduction

The weaknesses and deficiencies of the formal system has led to a search for alternatives in education to augment the effort. 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 existing models of teacher preparation. Since they are required to perform functions, different in nature, therefore, their training has essentially to be job specific. Developing skills and competencies in the personnel involved in alternative strategies demand preparation and use of learning materials specific to their requirements.

5.02 Non-formal Education

Non-formal education consists of an organised and systematic educational activity carried on outside the framework of the formal system. It provides learning experiences to particular sub-groups in the population. It is not incidental but planned, purposive and organised. Initially, it was not examination oriented but now its potentialities are being utilised to achieve this end also.

In certain respects formal and non-formal education are similar as both are organised to augment, promote and facilitate learning that individuals cannot as readily or quickly acquire through exposure to environment. However, they differ in their institutional managements and organisation of the course contents. The training of the functionaries has to take note of this. The objectives of the training of the functionaries, therefore, may be the following:

- To familiarise the functionaries with the latest developments in knowledge and technology specific to their job performance.
- To develop among them the critical awareness about India's social reality.
- To acquaint them with the special requirement of the groups they have to deal with.
- To provide them informations and skills as may help in the socio- cultural development of the clientele.
- To enable them to draw support from a wide variety of sources.
- To develop among them sympathetic attitudes towards the under-privileged sections of society.
- To promote among them the desire to actively participate in the developmental activities.

5.03 The 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 Indian Constitution and the national development
- Indian economic planning and its impact on economy and society

- educational development and systems of contemporary Indian education
- Indian agriculture and its common problems
- environmental and population crises
- human psychology and human behaviour
- a knowledge of contemporary India, the global events and futurology
- communication skills, use of media and educational technology
- production of instructional materials
- practical/field work.

5.04 Methods and Approaches

- Organisation of refresher courses and orientation programmes in the method and content for the functionaries in the area
- summer schools and short term training programmes
- seminars, symposia and workshops
- extension lectures by experts
- use of supplementary educational devices, media and educational technology.

5.05 Transactional Modalities

- May be included as a specialised branch of study at the teachers' colleges specially B.Ed., M.Ed., M.A. (Education), M.A. (Community Development) and M.A. (Rural Economics).
- Resource Persons may include Principals and school teachers, teacher educators, experts from different academic disciplines and administration.
- Involvement of NGOs/voluntary agencies.
- Evaluation of participants.

5.06 Adult Education

To achieve its present status, adult education has undertaken a long journey. From the simple literacy campaign during the

thirties when it separated itself from 'further education' it came to 'functional literacy' during the sixties and became more comprehensive during the seventies. Now, it includes functional literacy, numeracy and technocracy. From the UNESCO point of view, it is seen as an integral part of life-long education. 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 now includes adults of all ages and specifically those in the age group 15-35. 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 students and have not been exposed to formal education. The knowledge gained and skills developed from it are utilised in a variety of situations. Thus, it has become need-based. Adult education has become a much broader concept than what it was earlier. Now it embraces the whole life of men and women. This has repercussions for the training of functionaries.

5.06.1 The Objectives of Adult Education Functionaries

The objectives of the training of the functionaries of the adult education may be derived from the objectives of Adult Education as given below:

- To enable them to develop social awareness.
- To develop skills related to functional literacy programmes.
- To liberate adults from the bondage of prejudice, bias, ignorance, superstition, etc.
- To prepare them for the participation in developmental activities.
- To develop among the learner the desire and potentialities of learning to learn.
- To enhance their economic efficiency and inculcate positive morality.
- To inspire the adult learner with the sense of patriotism, global consciousness and the will to live together.
- To promote among them a sense of national and social cohesion.

- To enable them to combine personal dignity with civic morality.
- To understand the learners and their needs.
- To develop in them awareness of human rights.
- To enable them to understand environmental and population problems.
- To develop humanistic values and commitment to the development of fellow beings with a sense of social commitment.

5.07 Training Programme

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

- Psychological and sociological principles involved in adult learning.
- Problems and issues of adult education.
- Indian Heritage—Unity and diversity of India.
- Freedom Movement, Indian Constitution, administrative system of India including Panchayati Raj.
- Contemporary India and the World.
- Science, Technology and their impact on society with special reference to India.

  Planning and Developmental Activities in India.
- Economic and Social Problems.
- Problems of women, minorities and the under-privileged sections of the society.
- Acquaintance with various methods of teaching adults.

5.08 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

- Debate and Discussion
- Tours and Excursions
- Library work, laboratory work and actual experience of work situations
- Linguistic Pedagogy

5.09 Distance Education

Originally designed to provide alternative avenues for higher liberal education, distance education now has developed as an almost parallel system from elementary to tertiary sectors including professional and technical education. Initially, it focussed its attention on the education of those who could not avail the benefits of the formal system of education for a variety of reasons. Of late it has become a system by it own right having distinct objectives and programmes.

5.10 The Objectives and Scope of Distance Education

- To provide knowledge and expertise to those who are deprived of taking advantage of the formal system.
- To promote the habit of life-long learning and thus to establish a learning society.
- To impart latest information and skills in their respective areas.
- To prepare literature and source materials.
- To facilitate learning at one's own pace and convenience by being flexible about the time constraints.

Scope of Distance Education

Distance Education encompasses, in the modern context, the following dimensions of human needs:

Personal — Satisfaction of the personal needs, remedial and compensatory education, extension of formal education-both immediate and proximate for one's development.

Economic — Occupational reorientation, preparation for responsibilities needed for jobs through training and education.

Vocational — Attainment of professional and vocational qualifications and updating of competencies to remove anachronism in knowledge and expertise, social-adaptation to changing circumstances, development of social attitudes and habits, an awareness of personal and social ethics and values, promotion of social understanding and skills and inculcating a sense of social commitment.

Academic — Modernization of knowledge.

Futuristic — Developing a futuristic attitude and reconstruction of knowledge to meet new requirements of the future society.

Cultural — Maintenance and transformation of culture, utilisation of leisure and liberation from the superstition and prejudices.

5.11 Methods Adopted in Distance Education Programme

- Correspondence-cum-contact programme
- Use of Print and Electronic Media
- Lectures by experts
- Assignments and their evaluation for guidance
- Open learning methods/techniques.

5.12 Training Programme for the Teachers of Distance Education

The teachers of the distance education have altogether a different type of people to deal with. The beneficiaries differ from each other in age, ability, aptitude, socio-cultural background, economic status and psychological make-up. The face-to-face interaction with the teachers is only occasionally possible. What possibly needs to be done in this regard, is as follows:

- Institutions of teacher education undertake researches in the area of distance education.
- Specialised educational programmes for all stages of teachers in this area be offered at all level of teacher's

training colleges [some colleges have already optional/ specialization at the B.Ed., M.Ed. and M.A. (Education) level].

- The writers of the course materials/lessons be given training.
- Knowledge of psychology, sociology, anthropology and culture be provided to them.
- The latest techniques of teaching, use of audio-visual aids, educational technology, programmed instruction and cybernetics be imparted to them.
- They learn various techniques of self-learning.
- They be so equipped as to enthuse their students to derive learning experiences from different situations.
- To enable them to make the best use of the correspondence-cum-contact programme.

5.13 Content

It will be essentially need-based content in accordance with the nature and type of the programme.

6 Preparation of Teachers for Students with Special Needs

6.01 Introduction

A major assumption of democracy is equality of educational opportunity 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. Children in all societies fall under three categories with major variations among each: the normal children, the children with certain deficiency and handicaps and the children with exceptional abilities. Educational provisions for the teachers of normal children have been given earlier. A synoptic view of the education of teachers for children with special needs, that is, the handicapped and children with exceptional abilities is indicated as follows:

6.02 The Handicapped or Disabled Learners

The learners, such as, suffering from deficiency of one kind or the other may be of various categories,

- Children with speech and hearing difficulties
- Visually handicapped children
- Mentally handicapped children

Mention of teacher education for students with special needs and physical education is being made in view of their importance. The details need to be worked out separately.

- Orthopaedically handicapped
- Emotionally disturbed children
- Dyslexic children
- Delicate children, etc.

These children differ from the normal group in their psychological, physiological, sociological, emotional and mental make-up and are also different from one category to the other because every kind of disability is a special problem and calls for its own educational arrangement, within certain broad framework.

6.03 Objectives (General)

A different kind of teacher is required to teach these children. The educational provisions for these teachers will have to be made separately with a specialised knowledge of the category of children they have to deal with. The objectives of education of teachers for special children with special needs, in addition to the general objectives for all categories of teachers, will be the following:

- To enable the pupil-teachers to understand the nature and the cause of the disability.
- To develop among them the knowledge of their psychological and sociological make-up.
- To enable them to provide education for their rehabilitation.
- To develop affection and sympathetic attitude towards such children.
- To equip, the pupil-teachers with competencies and skills needed for the preparation and use of teaching aids, technology and support materials.
- To enable them to develop curriculum and organise co-curricular activities.
- To enable them to develop self-respect, self-reliance and vocational competence among the disabled.

6.04 Curriculum Structure

- Contemporary Indian Society.
- Special Education (with reference to the relevant disability) Status, Problems and Issues.

- Psychology of Teaching and Learning of the disabled with reference to a particular type of disability).
- Curriculum, Pedagogy and Evaluation.
- Specialisation in one area of disability.

Practical

- Method of Teaching—one subject or more as per stage level
- Vocational Proficiency
- Organisation of Co-curricular activities
- Case studies, action research and field work
- Administration and interpretation of psychological tests to identify the disability (relevant to a specific disability).

(Details to be worked out separately)

6.05 Learners with Exceptional Abilities

There are children who possess certain special abilities, much above the average, in different fields. They are referred to as gifted and the creative. In the common school system they find themselves misfit as their educational needs are not properly met. They are seldom provided the opportunities for the realisation of their potentialities. As a result, their education remains neglected. Proper educational arrangements for such children will have to be made and the teachers will have to be specially prepared for this purpose.

6.06 The Objectives

The objectives of teacher education for the gifted/creative may be the following:

- To develop among the prospective teachers the capactiy to identify the special talent and potentiality of the gifted and the creatives.
- To enable them to understand their socio-psychological characteristics.

- To acquaint them with their special educational needs and make suitable educational provisions for the same.
- To enable them to evolve suitable curriculum, methods of teaching and evaluation techniques for them under the common system of education.
- To foster the growth of their abstract thinking, intellectual potentiality and problem-solving abilities.
- To enable them to nurture the creative potential.
- To ensure their proper socialization and guard against the egocentric tendencies.

6.07 Curriculum Structure

- Contemporary Indian Society.
- Education of the gifted children and the creatives.
- Psychology of teaching and learning of the gifted and the creative child.
- Curriculum, pedagogy and evaluation.

Practical Activities

- Pedagogical analysis of one or two subjects depending on the stage level.
- School and community experiences.
- S.U.P.W./work experience.
- Personality and leadership development.
- Specialized Programmes for the following:
  - development of creativity
  - art of abstract thinking
  - promotion of reasoning and analysis
  - ability to draw conclusion
  - programme for self-learning
  - programme for socialisation
  - development of social sensitivity.

(Details to be worked out separately)

7 Physical Education

7.01 Introduction

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

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

7.02 The Objectives

In keeping with the importance of physical education and its characteristic features the teacher education

programme needs to be designed by keeping the following objectives in view:

- to ensure good health and physical fitness among students.
- to promote social virtues, like cooperation, sociability, leadership, obedience, fellow feeling, acceptance of authority, respect for rules, etc.
- to develop emotional stability, self-control, equanimity and emotional maturity.
- to promote mental health, power for taking quick decision, correct judgement and power of concentration.
- to enable them to enjoy leisure and to train them in organizing recreational activities.
- to inculcate among them democratic values and positive attitude towards life.
- to strengthen their character, power of will and personality dynamism.
- to ensure their allround development.

7.03 Curriculum Structure

7.03.1 Theory

(*i*) The Contemporary Indian Society.

(*ii*) Physical Education : Principles, Problems and Issues.

(*iii*) Psychology of Physical Education Games and Sports.

(*iv*) Curriculum, Pedagogy and Evaluation in Physical Education.

Specialisation—Any two of the following:

(*v*) Health Education and Community Health.

(*vi*) Anatomy and Physiology.

(*vii*) Sports Medicine.

(*viii*) Organisation and Supervision of Physical Education.

7.03.2 Practice of Physical Education

- Practice of Physical Exercises (Western and Indian both).
- Games including Indian Games.
- Sports including Indian Sports.
- Practice of Asans.
- All others as per B.Ed. Programme.

(Details to be worked out separately)

8 Education of Teacher Educators

8.01 Introduction

The role of the teacher educator is of prime importance for effective implementation of teacher education curriculum. His/her education and training is crucial and indeed a prerequisite for any substantial and implementable changes in the training and orientation of teachers.

Shortly there would be nearly 2000 teacher training institutions in the country with nearly 30000 teacher educators. With increasing emphasis on in-service teacher education, these 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 material development, 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 much 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 much deeper understanding of the issues pertaining to drop-outs and non-enrolment in their specific regions or areas.

They need adequate professional competence to conduct such 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. Teacher educators have to be fully familiar with the school realities, social environment and community expectations. Only then, they would be able to really perform their challenging tasks. On the professional side, teacher educators need to be actively associated with policy formulations, implementation strategies and monitoring of programmes.

8.02 Shortcomings of the Existing System

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. For instance, the qualifications of teacher educators at these stages vary from matriculation to masters or a research degree. Likewise, the training background also varies by way of certificates, diplomas or degrees that a teacher educator possesses. At the pre-primary stage, for example, one comes across teacher educators who have passed high school/higher secondary examinations 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/level. As regards the primary/elementary stage, the teacher educators, no doubt, 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 training qualifications prescribed are not stage specific and mostly unsuited to the education of teachers for pre-primary/primary stage.

This situation calls for well planned programmes of education and training for teacher educators. At present, the only programme which is often treated as preparing teacher educators is that of M.Ed. A close scrutiny of the curriculum of most of the M.Ed. programmes would reveal that these have not been designed to prepare teacher educators. There are some programmes where provisions do not exist for writing a dissertation. The product of such programmes would certainly not be in a position to teach research methodology confidently or initiate projects of research and development. In these programmes training strategies are also not emphasised. At the Master's level capacity to carry out research and innovation needs to be acquired by all. Training in curriculum development, training material development cannot be ignored. Similarly, evaluation material, if developed at this stage could result into more effective utilisation of evaluation in training institutions. Such aspects could be discussed in detail.

Another area which requires serious thinking is the total lack of availability of institutional infrastructure focusing on various components of preparation of teacher educators. The university departments of education or Institutes of Advance Studies in Education are expected to work specifically in training strategies, curriculum development, evaluation strategies, etc. in the context of teacher educators. The situation as indicated above is also generally applicable to our programmes at the post-graduate level.

8.03 A Fresh look into Teacher Educators Education and Training

The teacher education programmes have necessarily to correspond to the pattern and programmes of school education. Likewise, the education and training of teacher educators have to be in consonance with the teacher education programmes meant for preparing teachers for various stages.

The underlying principle implicit in the statement made here demands a well planned strategy for developing and implementing programmes for the preparation of teacher educators at the B.Ed./M.Ed./M.A. (Education)/M.Phil. level.

8.04 In-service/Continuing Education of Teacher Educators

The present provision for continuing education of teacher educators is inadequate in respect of both, the quality and the content. The DIETs, SCERTs and Academic Staff Colleges have been functioning for quite some time but a lot needs to be done to provide for quality education and training.

There are no definite policy guidelines for the in-service education of teachers of primary/elementary stages. Planning in respect of teacher educators needs to be evolved at different stages and levels.

The major thrusts in respect of programmes for teacher educators among others, may be as follows:

(*i*) Designing short term programmes for those who are already placed in these institutions.

(*ii*) Specific short term induction programmes for those who do not have the experiences for the stage they are supposed to be working at.

(*iii*) Identification of certain university departments of education and Institutes of Advance Studies 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 technologies, media and others.

(*iv*) 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.

The fact that our education system has inadequate facilities for teacher preparation and orientation, 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 and their quality and character, therefore, depend on the professional education of teacher educators. Moreover, the new curriculum will be implemented by the teacher educators. It is necessary, therefore, that their education should be given a new orientation and new shape and improved qualitatively and adjusted properly with the demands of the new curriculum.

8.05 The Objectives

The objectives of the education of Teacher Educators may be as follows:

- To develop in prospective teacher educators necessary skills and competencies needed for preparation of teachers.
- To impart the latest knowledge of the relevant disciplines.
- To upgrade their knowledge of Indian society and education in comparative perspective.
- To relate education and the national needs and develop a critical awareness about Indian realities.
- To enable them to develop new pedagogy relevant to India's needs specially for the poor, destitutes, oppressed and the under-privileged groups.
- To understand the needs and problems of teachers, teacher education institutions, schools and the community.
- To enable them to understand the relationship between Indian culture, modern science and education.
- To develop the capacity of elaboration, examination, interpretation and communication of ideas.

- To promote among them the global perspective of educational development with special reference to the third world countries.
- To empower them to use Indian educational experiences in the contemporary Indian context.
- To enable them to undertake meaningful educational research for improving the conditions of education and society.
- To empower to imbibe and impart values enshrined in Indian Constitution.
- To develop among them the capacities to re-interpret Indian heritage, culture and values to meet the requirements of Indian society at present.
- To develop among them the desire for life-long learning for removing anachronism from them.
- To enable them to appreciate and adopt modern technology and innovative practices in Indian context.
- To enable them to reconstruct knowledge in Indian context.

To realise the aforesaid objectives the following curriculum structure may be considered for the preparation of the teacher educators for secondary school teachers, which may be suitably adjusted for other stages :

8.06 Course Structure

Compulsory

- Philosophy of Education (Indian and Western)
- Educational Sociology, Social and Cultural Anthropology
- Psychology of Education (including the researches in life and medical sciences having their bearing on education)
- Comparative Education (Educational systems of the developed and developing countries)
- Research Methodology and Statistics (Research methods may be taught in the light of compulsory and specials subjects)
- Dissertation, Field Work or Practical.

In addition, specialised programmes, like the following may be offered:

Specialisation

- Psychological Services
- Management, Finance and Planning of Education
- History and Problems of Education
- Teacher Education and Educational Technology
- Pedagogical Analysis of School Subjects—one or two
- Curriculum Development, Transaction and Evaluation
- Education of Children with Special Educational Needs
- Educational Experiments
- Alternative Education.

8.07 The Profile

The likely profile of the teacher educator on the implementation of the curriculum will be approximating the following:

- Will be socially aware and conscious.
- Will possess the ability to reconstruct educational experiences.
- Will be able to understand the impact of society on education and vice versa.
- Will be able to understand the forces and factors affecting educational system.
- Will acquire an understanding of the social role to be played by teacher education.
- Will be able to remove isolation of teacher education.
- Will possess knowledge, skills and competencies necessary for teacher educator.
- Will possess necessary academic background to improve the condition of teacher education.
- Will be able to undertake meaningful research in education.
- Will be able to Indianise teacher education and educational system.

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- Will be able to develop relevant pedagogy.
- Will be able to reconstruct knowledge as per requirement of the country.
- Will be able to train teachers to use relevant educational technology.
- Will possess the capacity to undertake new experiments in teacher education.
- Will be able to make a synthesis between tradition and modernity.