

**Restructuring and Reorganization of the  
Centrally Sponsored Scheme  
on  
Teacher Education**

**Guidelines for Implementation**

**June, 2012**



Government of India  
Ministry of Human Resource Development  
Department of School Education and Literacy



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“The status of the teacher reflects the socio-cultural ethos of a society; it is said that no people can rise above the level of its teachers. The Government and the community should endeavor to create conditions which will help motivate and inspire teachers on constructive and creative lines. Teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of and the concerns of the community. Teacher Education is a continuous process, and its pre-service and in-service components are inseparable” (National Policy on Education, 1986)

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## Chapter I : Policy Perspective

### Historical background and policy perspective of the Teacher Education Programme

The earliest policy formulations emphasized the need for teacher education to be “...brought into the mainstream of the academic life of the Universities on the one hand and of school life and educational developments on the other” (Kothari Commission, 1964-66). It is indeed a matter of concern that teacher education institutes continue to exist as insular organizations even within the University system where many are located. Recognising ‘quality’ as the essence of a programme of teacher education, the Commission recommended the introduction of “integrated courses of general and professional education in Universities...with greater scope for self-study and discussion...and...a comprehensive programme of internship.”

1.2 Subsequently, while observing that “...what obtains in the majority of our Teaching Colleges and Training Institutes is woefully inadequate...” the Chattopadhyaya Committee Report (1983-85), reiterated the need “...to enable general and professional education to be pursued concurrently...” and emphasized that “...an integrated four year programme should be developed carefully...(while also making it) possible for some of the existing colleges of Science and Arts to introduce an Education Department along with their other programmes allowing for a section of their students to opt for teacher education.”

1.3 The National Policy of Education (NPE 1986/92) recognized that “...teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs of and capabilities of and the concerns of the community.” The policy further states that “...teacher education is a continuous process, and its pre-service and in-service components are inseparable. As the first step, the system of teacher education will be overhauled.”

1.4 The Acharya Ramamurti Committee (1990) in its review of the NPE 1986 observed that an internship model for teacher training should be adopted because “...the internship model is firmly based on the primary value of actual field experience in a realistic situation, on the development of teaching skills by practice over a period of time.”

1.5 Commenting on how the inadequacy of programmes of teacher preparation lead to unsatisfactory quality of learning in schools, the Yashpal Committee Report (1993) recommended that “...the content of the (teacher preparation) programme should be restructured to ensure its relevance to the changing needs of school education. The emphasis in these programmes should be on enabling the trainees to acquire the ability for self-learning and independent thinking.”

1.6 The National Curriculum Framework (NCF) 2005 provides a comprehensive approach to child centred education. The perspective on education has shifted from rote-based transmitting of information to making teaching a means of harnessing the child's creative nature. There is unprecedented public demand for quality education. NCF, 2005 with its focus on the concerns of the learner and the teacher provides a new opportunity to intervene in the otherwise neglected sector of teacher education. Connecting knowledge to life outside the school and enriching the curriculum by making it less textbook-centered are two important concerns of the NCF. In order to help children move away from rote learning, teachers will need to be prepared to give children the opportunity to derive meaning from what they read, see, hear and experience. This is possible only when teachers are able to play an active role in the design of learning materials, and have the knowledge and skills to organize meaningful learning experiences and to use evaluation as means to improve their own performance. For this to happen, the teacher needs several support mechanisms, including a pool of learning resources to choose from, the skills to identify developmentally appropriate text materials, a critical and analytic mind and the opportunity to engage children with learning resources outside the classroom.

1.7 The critical engagement of university-based academics and professionals has been characteristic of the articulation of the National Curriculum Framework, 2005, its precursor - the 21 position papers on critical areas of school education and the NCERT's new school textbooks. Academics from across different disciplines of central and state universities along with school practitioners have participated in this mammoth exercise through the aegis of the NCERT but without an enabling provision for an official and collective institutional mandate that such challenging tasks demand. Indeed, in each of these engagements, which need not be taken to be separate and sporadic 'tasks' - whether it is the academic restructuring of elementary textbooks, or its associated orientation of teachers - Universities have a major institutional role to play, significantly now, even more at the national level.

1.8 Education is a multidisciplinary area in that it has to draw on other disciplines such as psychology, sociology and philosophy. While this has helped in giving the discipline a more comprehensive and inclusive character; it has not enabled a dialogue towards a discourse that is distinct and is capable of addressing 'real' issues. Inter-disciplinarity has been largely an exercise in collating different strands of knowledge from diverse disciplines within the educational umbrella, but has not forged a blurring of boundaries, enabling inter-disciplinary enquiry. Our own context, where millions of children may enroll in school but are evidently 'not learning', underscores the importance of problematising, the question of 'school knowledge' and redefining our understanding of 'learning', through an inter-disciplinary engagement with the learner. While the NCF, 2005 has situated the curriculum

debate in this frame, the Teacher Education Curriculum debate needs to be brought in this frame as well

1.9 An interdisciplinary platform for teacher education, educational research and practice needs to be established through structures that make provision for widening the base for the intake of teacher educators and teacher trainees. This can be done through a focus on +2, undergraduate and lateral disciplinary entry in courses on education especially in areas of critical gaps in the social sciences, sciences, mathematics and languages. Interdisciplinary postgraduate programmes of study in elementary and secondary education with specialization in Curriculum Studies, Pedagogic Studies and Assessment need to be designed such that students may opt for credit courses offered in different Departments of the University. This would help develop a cadre of professionals such as curriculum developers, pedagogues in sciences, social sciences, languages and mathematics; facilitate students to engage with critical areas of research in the field, thereby developing the discipline through the creation of a body of knowledge in the Indian context. This will not only enable education for social transformation but university-linked social action for educational transformation; linking social and natural science research with educational theory and practice and developing a forum for the development of Education as an interdisciplinary area, rather than a generalist area of knowledge.

1.10 The Report by NCERT (August, 2009) on Comprehensive Evaluation of the Centrally Sponsored Scheme on Teacher Education has set out the immediate tasks which a reform agenda must face as under:

1. To enhance the institutional capacity available at present for ensuring the adequate supply of trained teachers for all levels of school education;
2. To utilize all possible kinds of institutions, including university departments of education and teacher training institutions in the private sector, for in-service training of the existing cadre at all levels, in addition to State institutions, including CTEs;
3. To recognize teacher education (for all levels of school education, from pre-school to senior secondary) as a sector of higher education and to facilitate co-operation and collaboration between institutes of teacher training and colleges of general education or universities with a view to enabling interaction between different departments of a local college (or university) (e.g. sciences, languages, social sciences) and the institute of teacher training.

4. To envision a comprehensive model of teacher education, utilizing the Chattopadhyay Commission Report and updating its perspective, and ensuring that progress towards a new, comprehensive model is paralleled by necessary modifications in policies of teacher recruitment, deployment and service conditions, including emoluments;
5. To prepare a curriculum policy and framework for teacher education which is consistent with the vision of the NCF, 2005, and to translate it into imaginative syllabi and textbooks for pre-service courses and sets of in-service training material suited to diverse conditions and needs; and
6. To bring about synergy between institutional structures operating at different levels, e.g. NCERT and NCTE at national level, SCERTs and boards of education at State level, DIETs and under graduate colleges at the district level and so on.

1.11 The National Council of Teacher Education (NCTE) has developed the National Curriculum Framework of Teacher Education, 2009. This framework has been prepared in the background of the NCF, 2005 which necessitated an altered framework on Teacher Education which would be consistent with the changed philosophy of school curriculum recommended in the NCF, 2005. While articulating the vision of teacher education, the framework has some important dimensions of the new approach to teacher education, as under.

- (a) Reflective practice to be the central aim of teacher education;
- (b) Student-teachers should be provided opportunities for self-learning, reflection, assimilation and articulation of new ideas;
- (c) Developing capacities for self-directed learning and ability to think, be critical and to work in groups.
- (d) Providing opportunities to student-teachers to observe and engage with children, communicate with and relate to children.

1.12 The Framework has highlighted the focus, specific objectives, broad areas of study in terms of theoretical and practical learnings, and curricular transaction and assessment strategies for the various initial teacher education programmes. It also outlines the basic issues that should guide formulation of all programmes of these courses. The Framework has made several recommendations on the approach and methodology of in-service teacher training programmes and has also outlined a strategy for implementation of the Framework.

1.13 The Right of Children to Free and Compulsory Education Act, 2009, which has come into force with effect from 1<sup>st</sup> April, 2010, has important implications on the teacher

education system in the country. The Act inter alia provides as under :

- (a) the Central Government shall develop and enforce standards for training of teachers;
- (b) the Central Government shall provide technical support and resources to the State Government for promoting innovations, researches, planning and capacity building;
- (c) The Appropriate Government (Central Government and State Governments) shall provide training facility for teachers;
- (d) The Central Government shall notify an academic authority to lay down minimum qualifications for a person to be eligible for appointment as a teacher.
- (e) All teachers should acquire the prescribed minimum qualification within a period of five years.

#### Guiding principles for teacher education under the RTE Act

1.14 The Bordia Committee report, entitled “Implementation of RTE Act and Resultant Revamp of SSA” (2010) enumerated the following principles:

- (a) Holistic view of education, as interpreted in the National Curriculum Framework 2005, with implications for a systemic revamp of the entire content and process of education with significant implications for curriculum, teacher education, educational planning and management.
- (b) Equity, to mean not only equal opportunity, but also creation of conditions in which the disadvantaged sections of the society – children of SC, ST, Muslim minority, landless agricultural workers and children with special needs, etc. – can avail of the opportunity.
- (c) Access, not to be confined to ensuring that a school becomes accessible to all children within specified distance but implies an understanding of the educational needs and predicament of the traditionally excluded categories – the SC, ST and others sections of the most disadvantaged groups, the Muslim minority, girls in general, and children with special needs.
- (d) Gender concern, implying not only an effort to enable girls to keep pace with boys but to view education in the perspective spelt out in the National Policy on Education 1986 /92; i.e. a decisive intervention to bring about a basic change in the status of women.
- (e) Centrality of teacher, to motivate them to innovate and create a culture in the classroom, and beyond the classroom, that might produce an inclusive environment for children, especially for girls from oppressed and marginalised backgrounds.



- (f) Moral compulsion is imposed through the RTE Act on parents, teachers, educational administrators and other stakeholders, rather than shifting emphasis on punitive processes.
- (g) Convergent and integrated system of educational management is prerequisite for implementation of the RTE law. All states must move in that direction as speedily as feasible.

## Chapter II : Current Perspective of Teacher Education in India

### Background

The RTE Act attaches great significance to the role of teachers in reforming elementary education. Section 23 highlights the need for making available professionally trained teachers for the schooling system; however recognising that some States may not have the capacity for professional training of teachers in the numbers required, the Act provides that the Central Government may give relaxation for a period not exceeding five years, within which period all teachers would need to acquire the prescribed qualifications. Section 24 specifies the academic duties of teachers, including inter alia timely completion of curriculum, provide additional support, where required, ensure contact with the parents of children. Section 27 prohibits teacher deployment for non-academic work and Section 28 bans teachers from giving tuitions.

2.2 The status of teacher availability across states needs to be analyzed in the context of the RTE provisions. Data on teachers working in elementary education is available from two sources i.e. SES and DISE, both of which sources have limitations since they do not provide stage wise break-up of teachers in composite schools. SES provides data on teachers by institutions, but not by stages of education. DISE gives data on teachers working in institutions categorized as primary, primary with upper primary, upper primary with high school, etc, but DISE also reports teachers as predominantly teaching at primary and upper primary section, and may therefore report an over-estimation of teachers at either of the two stages. According to SES data, there are 67.23 lakh teachers in 2009-10 (pre-primary to higher secondary).

### Teacher vacancies

2.3 It is estimated that in 2009-10 there were 5.23 lakh teacher posts vacant under State quota, with large inter-state variations. Uttar Pradesh had a vacancy of 1.65 lakh teachers, followed by West Bengal (52,764), Bihar (51,074), Orissa (37,901), Chhattisgarh (34,985) and Rajasthan (29,356). There are also large intra-state variations, especially between rural and urban schools, in the deployment of teachers. Considering that Section 25 of the RTE Act mandates every school to maintain PTR norms specified in the Schedule within six months of its commencement, every State Government will need to initiate preparatory action to (i) review its existing recruitment and deployment policy and guidelines, to remove imbalances in teacher deployment, (ii) ascertain the exact requirement of posts to be filled in each school

## Requirement of Additional Teachers

2.4 Estimates prepared by NUEPA and MHRD in 2009 showed that implementation of the RTE Act would require the appointment of 5.1 lakh additional teachers across the country. During the last two years, the State Governments have assessed the requirements of additional teacher requirement in class I-VIII and during 2010-12, around 8.17 lakh additional teacher posts have been sanctioned under the combine RTE-SSA programme.

## Teacher Qualifications

2.5 Section 23(1) of the RTE Act provides that the Central Government shall notify an academic authority which will lay down the minimum qualification for a person to be appointed as a teacher in elementary school. This provision has far reaching implications for teacher recruitment in the years to come. The Central Government appointed the National Council for Teacher Education (NCTE) as the academic authority to lay down the teacher qualifications. The NCTE, vide its Notification dated 23<sup>rd</sup> August, 2010 laid down the teacher qualifications. These were modified on 29<sup>th</sup> July, 2011. One of the essential conditions specified in the Notification is that a person has to qualify a Teacher Eligibility Test (TET) conducted by the appropriate Government, in accordance with Guidelines prepared by the NCTE. The Guidelines on TET were circulated on 11<sup>th</sup> February, 2011, and thereafter the Central Government and several State Governments have conducted the TET.

2.6 The provision of section 23(1) would ensure that (a) there exists a national level teacher qualification norm, which would be applicable to all elementary schools in the country; (b) State Governments would be under obligation to recruit only those persons as teachers who possess the prescribed qualification, subject to the relaxation granted by the Central Government under section 23(2); and (c) All aided and unaided schools would also have to adhere to the provisions of sections 23(1) and 23(2).

## Reforming existing Teacher Education Institutions

2.7 The proliferation of self-financing institutions granted recognition by the NCTE for various teacher education courses has raised serious doubts about the teaching and training capacity available in these institutions and quality of courses transacted by them. While a large number of persons are provided degree/diploma in teacher education, it is not certain whether all or most of them have the attitude, ability and subject knowledge required for become good teachers. The position of courses recognized by the NCTE on an all-India basis is tabulated below.

### Course-wise recognition granted by NCTE upto 31.07.2011

Course	No. of Govt. institutions	Approved intake	No. of private institutions	Approved Intake	Total Intake (Govt. + pvt.)
<b>Elementary (D.Ed.)</b>	757	49,089	4,831	2,98,278	3,47,367
<b>secondary (B.Ed.)</b>	224	20031	5,730	6,09,486	6,29,517
<b>M.Ed.</b>	102	3672	790	25,285	28,957
<b>B.P.E.D.</b>	19	1284	538	28,150	29,434
<b>Others</b>	76	16760	800	51,422	68,182
<b>Total</b>	1178	90836	12,689	10,12,621	11,03,457

2.8 There is undoubtedly need to create a strong monitoring mechanism coupled with a mechanism whereby all institutions are subjected to a transparent accreditation process for quality assurance by which services and operations of an educational institution offering teacher education are evaluated by an external body to determine if applicable standards are met. The accreditation process would encompass curricular aspects, teaching-learning and evaluation systems, research and extension, infrastructure and learning resources, student support and progression, governance and leadership, and innovative practices

#### Teacher Education capacity and teacher shortages: Inverse relationship

2.9 One of the major problems confronting the States with large teacher vacancy is the inadequate number of teacher education institutions (and their annual intake capacity) vis-à-vis the annual demand for teachers. This is particularly true for States of Bihar, Jharkhand, Orissa and Chhattisgarh. The imbalance in respect of these States is evident from the following Table.

State	Annual intake for D. Ed.	Annual intake for B. Ed.	Annual intake for M. Ed.	Teacher Vacancy
Assam	1,320	4,310	85	42,550
Bihar	2,000	6,210	75	2,62,351
Jharkhand	1,460	5,550	100	43,839
Orissa	3,290	1,775	170	25,138
Chhattisgarh	2,070	10,280	520	62,466
West Bengal	4,180	13,505	200	1,80,945

2.10 The problem is compounded by the inadequate availability of teacher educators, particularly in the States of Assam, Bihar, Jharkhand and Orissa. In view of the specific provision of section 25 of the RTE Act, there is an urgent need to find credible solution to teacher shortages in these States. In the medium to long run, State Governments will have to enhance the capacity to prepare teachers, both by increasing the annual intake in the present institutions and by increasing the number of teacher education institutions. For this, the Central Government should provide adequate resource support to the State Governments under the Centrally Sponsored Scheme on Teacher Education, which may require appropriate revision. For ensuring adequate supply of teacher educators, the Central Government/NCTE, in consultation with State Governments, could consider (a) inviting applicants from other States by advertising vacant posts in national dailies for wider publicity; (b) relaxing the retirement age (enabling the present lot to continue for a longer period); (c) hiring retired persons with requisite qualification; and (d) making the qualification more flexible to allow a wider set of persons to work as teacher educators. This could be considered as a special drive for a few years till adequate capacity is developed.

2.11 In the short run, however, the high deficit states will have no option but to recruit a large percentage from amongst persons not having professional qualification. However, to ensure quality only persons who qualify the TET should be appointed and institutions be identified which can enable such persons to acquire the minimum qualification through distance mode. Care must also be taken that the distance mode course is of high quality and there is periodical monitoring of the progress of the training programme, both in respect of the institution imparting the programme and of the teachers undergoing the training.

### Contract Teachers

2.12 Recruitment of contract teachers, i.e. teachers whose pay and service conditions are substantially adverse vis-à-vis the regular teachers, has been a matter of great concern and discussion in the recent past. Low salary and insecurity of tenure are features of the system of appointment of contract teachers and are regarded as disincentives for talented persons to join the teaching profession. In Government schools in 2007-08, 14.10% of teachers were contract teachers, their numbers being as high as 49.44% in Jharkhand, 36.89% in Uttar Pradesh, 34.44% in Jammu & Kashmir and 28.82% in Orissa.

2.13 The RTE Act (section 23(3)) provides that the salary and service conditions of teachers would be as prescribed by the appropriate Government. Given the anomalies that the system of contract teachers creates in the teaching profession, and thereby on quality of teaching, States would be well advised to prescribe uniform salary and service conditions for teachers, as also take steps to create an environment for (a) attracting the most talented in

teaching profession; (b) improving recruitment policies; and (c) exploring possibilities for improving career structures for teachers.

2.14 With regard to attracting the best talent in the teaching profession, international comparisons show interesting results. In South Korea top 5% of the student cohort become teachers, with a starting salary of 141% of the per capita GDP. In respect of Finland and Singapore, these figures are top 10% and top 30% respectively with starting salary of 95% of per capita GDP. Apart from good starting compensation, other factors that contribute to attracting persons in the teaching profession are (i) opportunities to work collaboratively, rather than in isolation; (ii) physical infrastructure, such as accommodation, conducive classroom conditions; (iii) system of rewards and incentives for good performers; (iv) social status in the local community and involvement in key decision making process.

### Teacher Recruitment

2.15 Recruitment policies need to be improved, especially in light of the requirement of maintaining the PTR in all schools within six months of the commencement of the RTE Act. State Governments could consider establishing a fast track Empowered Committee to undertake the process of recruitment of teachers under a transparent process. Further, taking forward the spirit of decentralized decision-making and important responsibilities assigned to local authorities under the RTE Act (section 9), it is important that local authorities be made the appointing authorities for school teachers. This would also improve accountability of teachers and closer supervision and monitoring of their performance.

### Pre-service Teacher Education

2.16 The availability of institutional capacity for teacher preparation varies across States and can be categorized according to the availability of such institutions vis-à-vis teacher demand and percentage of untrained teachers.

#### Category A

2.17 States such as Andhra Pradesh, Delhi, Gujarat, Haryana, Himachal, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu and Uttarakhand can be grouped Category A with low percentage of untrained teachers and sufficient capacity (to prepare teachers) vis-à-vis the demand for teachers. Table below gives the details in respect of these States.

State	Untrained teachers	Annual D.Ed. Capacity	Annual B.Ed. capacity for	Teacher Vacancy
Andhra	37,245 (10.89%)	14,052	62,921	15,379
Delhi	459 (1.14%)	2,390	7,185	10,074
Gujarat	5,997 (3.03%)	33,840	31,735	11,695
Haryana	1,830 (2.40%)	14,380	47,990	16,096
Himachal	4,333 (9.01%)	2,875	8,305	3,312
Karnataka	1,195 (0.62%)	52,536	42,667	18,253
Kerala	1,525 (2.85%)	10,900	22,510	3,013
Madhya Pradesh	27,222 (10.25%)	18,810	40,685	89,224
Maharashtra	3,438 (1.20%)	81,888	60,263	32,852
Punjab	1,998 (2.14%)	3,975	22,800	23,557
Rajasthan	7,747 (2.88%)	6,957	31,970	51,100
Tamil Nadu	2,278 (1.58%)	64,288	71,534	14,495
Uttarakhand	2,550 (5.65%)	300	6,792	15,903

2.18 The strategy in respect of these States should be straightforward as they do not have to build additional capacity in the near future (other than Madhya Pradesh), either for preparing more trained teachers or for training the untrained teachers. They need to concentrate on the following issues.

- (i) Expediting the process of filling teacher vacancies, ensuring that only trained persons are deployed as teachers and instituting a transparent system of recruitment through appropriate modification/changes in the existing recruitment Rules.
- (ii) Expediting the process of filling up of vacant posts of teacher educators in the DIETs, by creating a separate cadre of teacher educators;
- (iii) Making financial commitments for filling posts of teachers and teacher educators and ensuring that salaries given to the teachers with similar professional qualification, responsibility and experience are treated at par in terms of pay and other service conditions.
- (iv) Initiating a process of curriculum renewal through (i) redesigning the course content/curriculum of the teacher education course in accordance with the principles laid down in the NCFTE, 2009; (ii) preparing resource material for

the student-teachers and teacher educators; (iii) improving the functioning of the DIETs; (iv) undertaking capacity building of teacher educators, through faculty development programmes, exposure visits, developing institutional arrangements with Education Departments of Universities and with RIEs, etc.

- (v) Monitoring the quality in self-financed teacher education as has been initiated in Andhra Pradesh and Gujarat. The objective would be to create an environment which compels these institutions to improve their quality.
- (vi) Re-designing distance education courses for untrained teachers

### Category B

2.19 Category B would comprise States with high percentage of untrained teachers and low teacher preparation capacity vis-à-vis the teacher demand. Assam, Bihar, Jharkhand, Orissa, Chhattisgarh, Jammu and Kashmir, Uttar Pradesh and West Bengal fall in this category, as evident from the following Table (position as in 2009).

State	Untrained teachers	Annual D.Ed Capacity	Annual B.Ed capacity	Teacher Vacancy
Assam	8,758 (11.43%)	1,320	4,310	42,550
Bihar	1,73,167 (51.51%)	2,000	6,210	2,62,351
Chhattisgarh	33,714 (29.98 %)	2,070	10,280	62,466
Jharkhand	73,281 (54.50%)	1,460	5,550	43,839
Orissa	33,401 (17.64%)	3,290	1,775	25,138
Uttar Pradesh	1,36,088 (27.29%)	18,775	1,22,900	3,12,222
West Bengal	1,68,138 (40.50%)	4,180	13,505	1,80,945

2.20 These States need to be dealt with in a focused manner, requiring various types and levels of intervention, large financial outlays, strong support from the Central Government and separate strategies for short, medium and long term.

### Filling up teacher vacancy in short run

2.21 In view of the low existing teacher education capacity and the necessity of filling up posts in a time bound manner, most of these States may have to fill up vacant posts, in the short term, (in the next 6 months to one year) from amongst persons who do not have the



prescribed professional qualification (in respect of the States which have been granted relaxation by the Central Government u/s 23(2) of the RTE Act. However, while filling up the posts, State Governments need to ensure that (a) information regarding filling up of posts is given wider publicity, so that eligible persons from other States can apply and are considered; (b) preference is given to persons with prescribed professional qualification; (c) recruitment process is transparent; (d) minimum academic qualification specified in the NCTE Notification is adhered to, so that the teachers after appointment have only have to acquire the professional qualification. State Governments will need to amend recruitment rules and commit greater financial resources for the appointment of teachers.

### Building additional capacity for preparing teachers

2.22 In the medium and long term, all these State Governments will have to build capacity, either directly or indirectly, for preparing more teachers. State Governments will need a multi-pronged strategy:

- a. Operationalising DIETs which, though sanctioned, are not functioning, either due to delay in civil works or lack of teacher educators, as in the case of Bihar and Jharkhand;
- b. Revitalising the other state-run teacher education institutions
- c. Identifying DIETs and other state-run Teacher Education Institutions which have the capability to increase annual teacher-trainee intake with additional investment in infrastructure and recruitment of teacher educators;

2.23 The Central Government will have to play a supportive role in enabling the State Governments to build and expand the capacity for teacher preparation. The Centrally Sponsored Scheme on Teacher Education would need to be revised providing inter alia for (a) greater financial support to the State Governments for establishment of DIETs; (b) Allowing more teacher education institutions to be set up; (c) Greater financial support for improvement of infrastructure and other facilities in the existing DIETs;

### Training of untrained teachers

2.24 One of the biggest challenges confronting these States is training for the large number of untrained teachers. The problem becomes accentuated because most additional teachers who will be recruited would be from amongst persons who do not possess the prescribed professional qualification. These teachers, because of the sheer numbers, cannot be trained in the traditional face-to-face mode, without loss of teaching time in schools. The only viable

alternative is enable these teachers to acquire the professional qualification through the distance mode.

2.25 Several State Governments have initiated training of untrained teachers through IGNOU's open distance programme. However, the Central Government will have to play a strong supportive role to facilitate State Governments accomplish this task in a time bound manner. The Teacher Education Scheme of the Central Government may be revised to specifically provide financial assistance to State Governments for training of untrained teachers. Simultaneously, State Governments will need to prepare/redesign their training strategies, by coordinating with the State Open Universities and IGNOU for preparation of high quality modules and resource material for the training programme. The National Institute of Open Schooling (NIOS), with its wide reach, could also be identified for conducting the training programmes. Necessary approvals from NCTE would obviously have to be obtained for conducting the programmes.

2.26 Over the last one-year, several States, including Uttar Pradesh, Madhya Pradesh, Orissa, Chhattisgarh, Bihar, Assam, Jharkhand, West Bengal have prepared strategies for enabling the existing untrained teachers to acquire the D.Ed qualification through the distance-cum-contact mode. These States have collaborated with examining bodies (IGNOU, SCERT, State Board, State Open University, etc.) and taken steps for instituting reforms in the syllabus, developed resource material in local language, identification of study centres and mentors. The NCTE has already given approvals to the States of Uttar Pradesh, Madhya Pradesh, Assam, Chhattisgarh, Orissa.

### Category C

2.27 The States of the North-Eastern Region (other than Assam) form Category C. In these States, the problem is essentially of large percentage of untrained teachers and inadequate training capacity, both for preparing trained teachers and for training the untrained teachers. However, they do not have the problem of large teacher vacancies. Nonetheless, these are States with difficult geographical terrain, language complexities and conflict situations, and therefore need to be considered with care and sensitivity.

State	Untrained teachers	Annual D.Ed Capacity	Annual B.Ed capacity	Annual M.Ed capacity
Arunachal	8,758 (59.74%)	295	300	0
Manipur	4,133 (29.43%)	400	930	50
Meghalaya	13,494 (60.37%)	574	400	0
Mizoram	2,854(25.70%)	330	150	0
Nagaland	3,668 (30.80%)	210	280	0
Sikkim	1,481 (19.27%)	90	300	25
Tripura	8,704 (29.25%)	480	350	20

The strategy in respect of these States would include:

Expansion of capacity to prepare teachers:

2.28 A major problem in capacity expansion in these States can be traced to the NCTE Regulations on land area and building size. Given the difficult geographical terrain, the State Governments find it difficult to meet the NCTE infrastructural norms, both for establishing new institutions or for expanding capacity in existing institutions. NCTE could consider relaxing the infrastructural norms for institutions of the NE States. The second major problem is the lack of adequate facilities for preparing teacher educators. The combined capacity for M.Ed intake in these seven States is only 95. Clearly, this constitutes a major bottleneck in capacity expansion for the NE Region. While it may not be prudent to relax the minimum qualifications for teacher educators, some other solutions need to be found. These would include (a) relaxing the retirement age; (b) hiring retired persons with requisite qualification; and (c) making the qualification more flexible to allow a wider set of persons to work as teacher educators. In the medium to long run, these States will have to expand the capacity of preparing teacher educators.

Financial support by the Central Government:

2.29 Capacity expansion in these States would require strong financial support from the Centre. Possibilities of convergence with other Departments, such as DONER and the North Eastern Council could also be explored for providing greater financial assistance.

Recruitment policy on teachers:

2.30 In several NE States recruitment policy does not taken into account the need to recruit trained persons as teachers. While this is now changing because of the NCTE

Notification, all the NE States will require to undertake necessary changes in the recruitment policy so as to appoint only qualified persons as school teachers. In fact, some of the NE States have Class X pass persons as school teachers which makes the matter more complicated and time consuming as these teachers need to acquire both the academic qualification and the professional qualification in order to meet the provisions of the RTE Act.

### Training of untrained teachers:

2.31 In developing strategies for training untrained teachers most NE States have mainly relied on the 6-month CPE course developed by IGNOU. Discussions with the State Governments have highlighted two major problems in the effectiveness and coverage of the course. Firstly, programme design, curriculum and resource material is excessively theoretical with little practical application, and trainees experience difficulties in completing the course. IGNOU should, in consultation with a University of NE Region (such as NEHU) or the SCERTs of that Region revisit curriculum, syllabus and resource material. Secondly, the present NCTE norms regarding location and facilities of the study centres restrict the number of such centres, creating difficulties for trainees from remote and hilly areas in attending these contact sessions. This aspect also needs to be re-visited. In case of Manipur and few other States which send their untrained teachers for the face-to-face Diploma course in the DIETs, the problem is of teacher absenteeism, which makes it difficult to allow a large number of untrained teachers to undertake the Diploma course.

### In-Service Training of teachers

2.32 For in-service training, the country has a large network of teacher training institutions (TTIs), which provide annual in-service training to school teachers. The spread of these TTIs is both vertical and horizontal. At the National Level, the National Council of Educational Research and Training (NCERT), along with its 6 Regional Institutes of Education (RIEs) prepares a host of training modules and undertakes specific programmes for training of teachers and teacher educators. Institutional support is also provided by the National University on Educational Planning and Administration (NUEPA). Both NCERT and NUEPA are national level autonomous bodies.

2.33 At the state level, the State Councils of Educational Research and Training (SCERTs) prepare modules for teacher training and conducts some specialised courses for teacher educators and school teachers. The Colleges of Teacher Education (CTEs) and Institutes for Advanced Learning in Education (IASERs) provide in-service training to secondary school teachers and teacher educators. At the district level, in-service training is provided by the District Institutes of Education and Training (DIETs). The Block Resource Centres (BRCs)

and Cluster Resource Centres (CRCs) form the lowest rung of institutions in the vertical hierarchy for providing in-service training to school teachers.

2.34 Financial support for in-service training is provided by the Central Government through the SSA and the Centrally Sponsored Scheme on Teacher Education. Under the SSA, 20 days in-service training is provided to school teachers, 60 days training for untrained teachers and 30 days orientation for freshly trained recruits.

#### Restructuring BRCS and CRCs

2.35 The NCERT in its Report of August 2009 on Comprehensive Evaluation of the Centrally Sponsored Scheme on Teacher Education has underscored the need to restructure the existing BRCs and CRCs to revamp the present system of in-service training of untrained teachers. The Report states that “Block and Cluster Resource Centers were established during DPEP in some selected districts after which these centres were expanded across the country as part of the SSA programme, for improving the quality of elementary education. Thus, the staff duties and responsibilities are presently based on the SSA Framework of Implementation and its objectives. But due to successful implementation of SSA programme the enrolment at secondary stage has increased. Besides this, universalisation of secondary education is also under active consideration. Keeping this in view, there is an urgent need to change the role and functions of BRCs and convert these into Block level Institutions of Teacher Education (BITEs).” Strengthening and streamlining the roles and functions of BRCs need special attention. An important requirement is that BRCs and CRCs work in close coordination with the DIETs.

2.36 The Revised SSA Implementation Framework of SSA (2011) has recommended strengthening of the BRCs, Urban Resource Centres (URCs) and CRCs for providing academic support to teachers. BRCs/URCs and CRCs are the most critical units for providing training and on-site support to schools and teachers. Given the significance of these structures SSA, will strengthen faculty and infrastructure support to BRC/URC and CRCs. States must focus on improved selection criteria for the coordinators and faculty of BRC/URC and CRCs. The selection criteria should take into consideration experience, qualifications and aptitude for training and research. States must provide for constant skill enhancement of BRC/URC and CRC coordinators and faculty. Functional linkages between BRCs/URCs and CRCs and DIETs and district level resource groups should be strengthened. The norms governing the support under SSA for BRC/URC and CRC have been specified in the Framework.

2.37 The major role of BRCs should be to

- a. function as a repository of academic resources including ICT, science & math kits, teaching learning resource material in different curricular areas, including pre-school material, and material for children with special needs;

- b. maintain and constantly update databases of education experts from nearby Teacher Education institutions, NGOs, Colleges/ Universities who could participate in Resource Groups for different subject areas and themes;
- c. ensure regular school visits and on-site academic support to address pedagogic issues and other issues related to school development; (d) organise in-service teacher training based on teacher needs as observed during school visits;
- d. participate in monthly teacher meetings organised at the cluster resource centres to discuss academic issues and to design strategies for better school performance;
- e. consult with school management committee, community members and local authority for formulating school development plans; and
- f. design a comprehensive quality improvement plan for the block/cluster and implement it in a time bound manner.

2.38 The major role of CRCs should be to

- a. function as academic resource centers with adequate resource/ reference materials for concerned teachers;
- b. undertake regular school visits and provide onsite academic support to teachers;
- c. organise monthly meetings to discuss academic issues and design strategies for better school performance.
- d. visit and hold meetings with members of the SMCs and other local bodies for school improvement, support SMC in school development plan
- e. ensure that the special training programmes are properly designed and implemented in the cluster for out-of-school children and securing their admission to age-appropriate classes.

### Challenges in Teacher Education

2.39 The RTE Act mandates the Government the need to invest in quality schools — through adequate and child friendly infrastructure, curriculum and school practices. The Act mandates qualified teachers who are able to engage in providing education which supports the development of all children, especially children belonging to marginal and disadvantaged/ under-privileged communities and children with special educational needs. Achieving the objectives of the Rte Act therefore requires urgent investment in developing good teachers. The challenges for SCERTs, DIETs, IASEs and CTEs, the BRCs and CRCs, the Institutions of Higher Education, the Universities, colleges and teacher education institutions, and Non Government Agencies (NGOs) include:

- (a) Enabling all teachers in schools to be qualified as per the requirements of the RTE Act.

- (b) Reforming and renewing curricula for Pre-Service Teacher Education (PSTE) at the elementary and secondary education levels
- (c) Regulating the quality of PSTE in all institutions
- (d) Improving the quality of In-Service Teacher Education (ISTE) and directing it towards overall teacher professional development and school improvement.
- (e) Overseeing the quality of school education to support equity and encourage community involvement.
- (f) Developing the professionalism and capacity of teacher educators
- (g) Reforming School Curricula, pedagogy, assessment and examination
- (h) Developing inter-linkages across Departments and institutions engaged in teacher education and teacher training at the State and sub-State levels.

## Chapter III : Background of the Centrally Sponsored Scheme on Teacher Education

The Centrally Sponsored Scheme of Restructuring and Reorganisation of Teacher Education was initiated in 1987 pursuant to the formulation of the National Policy on Education, 1986. The National Policy on Education (NPE) stated that improvement in the status and professional competence of teachers is the cornerstone of educational reconstruction. It envisaged teacher education as a continuous process with pre-service and in-service training being its inseparable components. It emphasised the significance and need for a decentralised system for the professional preparation of teachers, and it was in this context that District Institutes of Teacher Education (DIETs), Colleges of Teacher Education (CTEs) and Institutes of Advanced Study in Education (IASEs) were established.

3.2 In its original form, the scheme comprised of five components, namely (a) setting up 400 District Institutes of Education and Training (DIETs), (b) strengthening 250 Colleges of Teacher Education (CTEs), and development of 50 of them as Institutes of Advanced Studies in Education (IASEs), (c) strengthening of State Councils of Educational Research and Training (SCERTs), (d) orientation of five lakh school teachers every year, (e) establishment and strengthening of Departments of Education in Universities. The Scheme has been continued with modifications in the 8th, 9th and 10<sup>th</sup> Five Year Plan periods. It was revised in 2002 for the X Plan comprising of the following components (a) establishment of DIETs, (b) upgradation of Secondary Teacher Education Institutions into CTEs and IASEs, and (c) strengthening of SCERTs. As on date, 571 DIETs, 104 CTEs and 32 IASEs have been sanctioned under the Scheme; the state-wise position is at Annexure I.

### Evaluation of the Scheme

3.3 The Teacher Education Scheme has been evaluated by independent bodies at various points in time. The National Institute of Educational Planning and Administration (NIEPA) had evaluated the DIETs in November, 1997. The NCERT conducted a study on the DIETs, CTEs and IASEs in 1999-2000. The Teacher Education Resource Group, under the National Council for Teacher Education (NCTE), which was entrusted by the Ministry of Human Resource Development to undertake a Mid-Term Review of the Scheme during the X Plan, submitted its Report in August, 2007. The Scheme was last evaluated in 2008-09 by the NCERT and its findings were reported in August, 2009. The Report of the NCERT is available on the website [www.teindia.nic.in](http://www.teindia.nic.in). The main recommendations made in the Report are summarized as under :

- (a) The Scheme should having a sharing pattern of 75:25 between Centre and States (90:10 for NE States)
- (b) The existing institutions of DIETs should be strengthened in several ways, including providing them an extended mandate of imparting in-service



training to secondary and senior secondary school teachers, improving their infrastructure and reorganizing their organizational structure.

- (c) A small percentage of DIETs (10%) could be considered, in the short run, for up-gradation so as to perform additional functions of secondary level pre-service training, 4-year integrated Elementary Teacher Education programme and pre-school teacher education course. DIETs should have linkages with Universities, Colleges and well established private institutions; support to be provided to these institutions;
- (d) Existing CTEs and IASEs should be strengthened and more such institutions could be established depending on the specific needs of the States;
- (e) Establishment of a DIET in a block in 196 identified districts with Minority/SC/ST concentration. In the remaining blocks of the country, Block Institutes of Teacher Education (BITEs) should be established for providing in-service training to teachers at levels of the school. The existing BRCs would get subsumed in the BITEs.
- (f) The SCERTs need to be re-vitalised as lead state-level academic institution and should develop links with Universities. All existing State Institutes of Education (SIEs) to be upgraded as SCERT;
- (g) Curriculum and syllabus of pre-service teacher education courses should be revised in light of NCF-2005. Programmes of Teacher Education Institutions (TEIs) should focus on education of children with special needs;
- (h) For attracting good professionals, pay scales of the faculty of the TEIs should be upwardly revised; salary and pay scales of UGC could be followed for the academic positions. The posts of the TEIs should be encadred. Career Advancement Scheme should be provided for internal upward mobility.
- (i) Funding procedure should factor in regional variations and provide extra funds to meet local necessities. Central funds should be routed directly to State Education Secretaries, then to the SCERTs for onward disbursement to the IASEs, CTEs and DIETs. State budget heads should factor in the state's share and Central assistance

### Revision of the Scheme

3.4 The Scheme has been revised for the XII Plan in order to meet the exceptional challenges for the Teacher Education system arising from the massive spatial and numerical expansion of schooling facilities at the elementary and secondary levels and the corresponding increase in the demand for teachers. Modification of the scheme was also critical in the context of the policy decision for universalisation of secondary education. The revised Scheme is guided by the following factors :

- (a) To meet the quantitative and qualitative challenges of teacher preparation mandated under the RTE Act;
- (b) To integrate teacher education with overall education development in the States;
- (c) The need for expansion of capacity of teacher education institutions, especially in some of the deficit States of East and North-Eastern Region;
- (d) Address the problem of large number of untrained teachers and the possibility of large number of persons being recruited (because of the Pupil Teacher Ratio (PTR) specified in the RTE Act) without possessing the prescribed professional qualification;
- (e) Expanding institutional capacity to provide in-service training for secondary school teachers in light of the Rashtriya Madhyamik Shiksha Abhiyan;
- (f) To link elementary teacher education with the higher education system
- (g) To develop and put in place a mechanism to monitor the implementation of the Scheme on various physical and financial parameters with pre-defined outcomes for improving the overall quality of various activities of the teacher education institutions.

3.5 The revised Scheme has been formulated in pursuance of the RTE Rules, 2010 under section 38 of the RTE Act, notified on 8<sup>th</sup> April, 2010. Rule 6 of the said Rules inter-alia provides the Central Government shall, in consultation with the State Governments, and such other academic authorities it may consider necessary, prepare a Scheme(s) for providing pre-service and in-service training of teachers of schools specified in sub-clauses (i) to (iii) of clause (n) of section 2 of the Act, including a monitoring mechanism in accordance with the standards of training. The main components of the revised Scheme are as under :

- (i) Strengthening and up-gradation of State Councils for Educational Research and Training/State Institutes of Education
- (ii) Strengthening of existing IASEs and up-gradation of Departments of Education of Universities into IASEs :
- (iii) Strengthening of CTEs and establishment of new CTEs
- (iv) Strengthening of existing DIETs and extending their mandate for training of teachers at the secondary level
- (v) Establishment of Block Institutes of Teacher Education (BITEs) in 196 identified SC/ST/ Minority concentration districts as elementary pre-service teacher education institutions
- (vi) Identification of 50 lead institutions, including Departments of Education in Universities, NUEPA, NCERT, Academic Staff Colleges and other institutions in the non-Government sector to conduct refresher courses for teacher educators.
- (vii) Provide hardware support, namely provisioning of satellite transmission facilities in the DIETs and provisioning of software support for developing content for

orientation of teacher educators and teachers.

- (viii) Giving SCERTs and DIETs the mandate to involve not-for-profit organizations for conducting innovative field based programmes relating to teacher education, collaboration in in-service and pre-service teacher education, undertaking impact assessment studies and designing & developing locally relevant material for teachers and student-teachers of teacher education institutions.
- (ix) Developing and putting in place a comprehensive monitoring mechanism.

## **Chapter IV : District Institutes of Education and Training (DIETs)**

### **Background**

The DIETs were envisioned in the National Policy of Education, 1986, and were created by the Government of India, Ministry of Human Resource Development in the early 1990s to strengthen elementary education and support the decentralization of education to the district level, under the Centrally Sponsored Scheme on Teacher Education, and following the Guidelines suggested in the 'Pink Book' (Government of India, 1989).

4.2 The DIET is located at an important level of decentralization - the District. However, they have remained marginal to the key activities of the States in teacher professional development and school improvement; they are inadequately integrated into the State's systems. The multiple tasks linked to departmental programmes with different foci draw the DIET in different directions and produce divergent institutional goals. Furthermore, outdated institutional structures also create expectations regarding work which are not realized or realizable, and contribute to a sense of dysfunctionality. Administrative tasks assigned to the DIET, although they keep the DIET connected to the wider state machinery, take away institutional time and energy in routinised work that lack academic purpose. There is therefore a need to reformulate the vision of this institution so that DIETs can contribute to fulfilling the mandate under the RTE Act in matters relating to continuous teacher professional development, school support and improvement.

### **Institutional Vision and Identity**

4.3 The vision for the DIETs that was articulated in the NPE 1986(modified in 1992) was for a strong district institution that would support pre-service and in-service work with teachers (clause 9.6) at the elementary education level. "Within a multi-level framework of educational development, central, state, district and local agencies will participate in planning, co-ordination, monitoring and evaluation" (clause 10.6). To support the universalisation of quality education and achieve quality in adult and life-long education, DIETs were visualized as a way to infuse the system with the following essential inputs:

- (i) Provision of Pre-service and In-service teacher Education Programmes.
- (ii) Organizing District level and State Level Educational Researches on issues pertaining to enrollment, retention, achievement, gender parity, proficiency and Drop outs.
- (iii) Facilitating Collaborative Action Researches to enable practising

teachers to address class room issues.

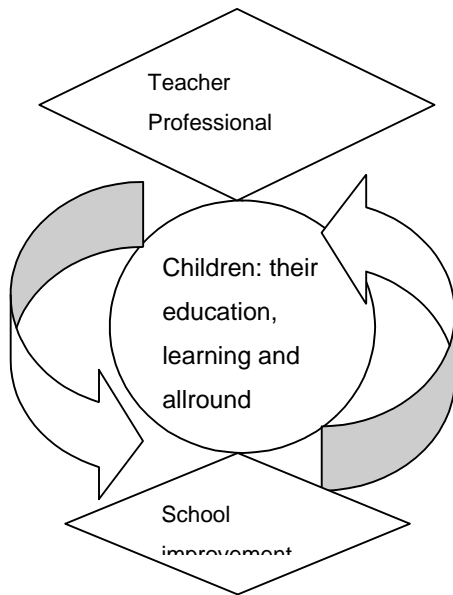
- (iv) Scouting Innovative Practices of Primary/Upper Primary teachers and disseminating them among their colleagues by organizing periodical District level Seminars and releasing News bulletins which carry information on Innovative class room processes.
- (v) Providing Resource Support to Non-Formal Education Sector by extending DIET expertise in developing curriculum and supplementary Learning Materials to adult learners
- (vi) Designing and developing trainer Manuals for Anganwadi workers and for addressing Social concerns such as Crisis and Disaster Management, Gender Sensitivity, Leadership Manual for School Heads etc.

4.4 The Right of Children to Free and Compulsory Education (RTE) Act, 2009 is a right to quality education, which requires the state to invest in, regulate and monitor school quality, curriculum and pedagogy, and the provision of well educated professional teachers. The design of the Sarva Siksha Abhiyan (SSA), with the outreach activities that take place through the Block and Cluster Resource Centres, requires a District Institution that can strengthen and oversee in-service work with teachers and give overall direction and support to Block level school improvement initiatives. “DEO ... would liaise with DIET and in cooperation with that Institute oversee the functioning of BRCs and CRCs” (Bordia Committee Report, April, 2010, p.82). The design of the Rashtriya Madhyamik Siksha Abhiyan (RMSA) also requires district support and the “success of the Madhyamik Shiksha Mission also depends on the availability of necessary infrastructure, facilities and a range of pedagogic equipment in teacher training institutions such as DIETs, CTEs and IASEs” ( clause 5.12, RMSA). The development of the public education system in each state, and the role of the centrally supported SSA and RMSA in achieving this, call for specific academic interventions and supports to be coordinated and conducted at the district level. A vibrant academic resource institution at the District level would be an asset for a variety of activities at the District.

4.5 DIETs in conjunction with other institutions at the State, District and Sub-district levels need to play complementary and coordinated roles so that overall the needs of schools and teachers are met without suboptimal and repetitive, overlapping functions. Distinctiveness, clarity of focus and forms of action are essential for institutional identity internally and to form the basis of coordination with other institutions.

4.6 The DIET requires an overall academic focus area which would form its key purpose, based on which its larger role in the landscape of educational practice can take shape. This would also enable the DIET to converge its various activities or plans, design its own Annual Work Plan (AWP), and build collaborative linkages

with other organizations. The overall institutional design, expectations and functions should follow from its focus, and become the basis of its relationship to other institutions. The core institutional focus of a DIET is continuous teacher professional development, which would directly/indirectly impact on school improvement programmes. Both are important and linked to each other, and converge as they bring back the focus on teachers as central to school quality.



### Key activities and Programmes

4.7 The focus areas visualized for the DIETs are based on NCF 2005, NCFTE, 2009, *The Reflective Teacher* (a manual for in-service training) NCERT, 2007, the operational guidelines for BRC-CRCs (GOI, 2010) and other such recent documents that have been providing ideas regarding the directions for teacher professional development work. These are elaborated as under:

#### (1) Pre-service teacher education (PSTE)

4.7.1 The SCERT of all States must initiate a review and reformulation of the elementary teacher education curriculum and urge Universities to review the D. Ed curriculum in the light of the NCFTE, 2009. DIETs must contribute to the revitalization of PSTE through their own DEd program by applying quality standards in all respects. They must play a leading role in implementing curricula reformed in the light of NCFTE 2009. The inclusion of the following kinds of learning opportunities for student-teachers would be the mark of such a revised curriculum:

- (a) Observe and engage with children, communicate with and relate to children
- (b) Understand the self and others, one's beliefs, assumptions, emotions and aspirations; develop the capacity for self-analysis, self-evaluation, adaptability, flexibility, creativity and innovation.
- (c) Develop habits and the capacity for self-directed learning, have time to think, reflect, assimilate and articulate new ideas; be self-critical and to work collaboratively in groups.
- (d) Engage with subject content, examine disciplinary knowledge and social realities, relate subject matter with the social milieu of learners and develop critical thinking.
- (e) Develop professional skills in pedagogy, observation, documentation, analysis and interpretation, drama, craft, story-telling and reflective inquiry.

4.7.2 The PSTE programme should empower students to address themselves creatively and sensitively to a range of issues that will arise in classrooms and enable the success of a diverse student population including first generation school goers, in the spirit of the Right to Education.

4.7.3 The experiences of PSTE student-teachers should be enriched with opportunities to participate in action research and documentation activities of the DIET. Student-teachers can contribute towards documenting local knowledge resources such as local histories, geography, the local flora and fauna, stories and folk lore, and creating a range of digital resources using ICT etc. Appreciating local language forms and making the classroom multilingual would also be a valuable effort. This would contribute to their classroom pedagogy and also enrich the resource centre.

Curricular Areas: Two-year D. Ed Programme	
Child Studies: Two Courses 1. Childhood and the Development of Children 2. Cognition Learning and the Socio-cultural context	12. Mathematics Education for the Primary School Child 13. Pedagogy of Environmental Studies 14. Pedagogy of English Language
Educational Studies: Four Courses 3. Educational Society, Curriculum and	Optional Pedagogy Courses 1. Social Science Education 2. Language Education

Learners 4. Towards Understanding the Self 5. Teacher Identity and School Culture 6. School Culture, Leadership and Change	3. Mathematics Education 4. Science Education
Contemporary Studies: Two Courses 7. Contemporary Indian Society 8. Diversity, Gender and Inclusive Education	Practicum 1. Creative Drama, Fine Arts and Education 2. Children's Physical and Emotional Health, School Health and Education 3. Work and Education
Curriculum and Pedagogic Studies: Ten Courses 9. Proficiency in English 10. Pedagogy across the Curriculum 11. Understanding Language and Early Literacy	School Internship

(2) In-service teacher education (ISTE)

4.7.4 The in-service teacher education programmes would work for the development of Master Resource Persons (especially for training at the block level) as well as direct work with teachers with a view to continuously enhance understanding of and better quality of planning and implementation of all parts of the curriculum. DIETs are also expected to organize specially designed courses for Head Masters, Officers of the Education Department upto Block level, members of VECs, SMCs, Community Leaders, Heads of PRIs, BRC/CRC coordinators.

To Enact a Shift in Perspectives and Practices	
From	To
Teacher directed, fixed designs	Learner-centric, flexible processes



Learner receptivity	Learner agency, participation in learning
Knowledge as “given”, fixed	Knowledge as constructed, evolving
Learning as an individual act	Learning as a collaborative, social process
Disciplinary focus	Multidisciplinary, educational focus
Assessment judgmental, mainly through competitive tests for ranking, through narrow measures of achievement, leading to trauma and anxiety	Assessment for Learning, self assessment to enhance motivation, through continuous non-threatening processes, to record progress over time

4.7.5 An effective system of split-design trainings and school follow-up may be put in place. Specific areas for attention include early literacy, numeracy and inclusive education, and science, mathematics and social sciences education for classes VI-VIII and secondary school. This work will be carried out in close coordination with BRCs and CRCs, and the use of a training management system. Information Technologies (IT) would be effectively used for various outreach and extension programmes. In respect of in-service training of secondary school teachers, DIETs would undertake this function only if (a) there is no CTE to cater for the district; or (b) the jurisdictional CTE of the area is unable to fulfill this requirement, either because of its inadequate institutional capacity or because of the large number of teachers to be trained necessitating the DIET to supplement the function of the CTE.

4.7.6 The organization of ISTE needs to be overhauled. Design and conduct of trainings should respond to the following concerns :

- (i) Trainings must be designed and delivered locally to the extent possible, rather than routinised implementation of trainings received from above in the cascade system. The Master Resource Persons’ involvement in training objectives, leading to training design would lead to better quality trainings for teachers, ‘live’ and non-routine.
- (ii) Cascade’ training models need to be used for specific skill and information related areas where there is less likelihood of dilution across vertical levels. Cascade designs could also have spaces which are filled locally, and may also include elements which are amenable to local alternation, based on assessing the situation. Use of ICTs to support cascade training with the state resource persons

continuously mentoring the teacher trainers, should be encouraged. Efforts should be made to reduce vertical levels to increase the effectiveness of the training programmes.

- (iii) Trainings must be closely carried out based on the Cluster Resource Person's (CRP) assessment of needs of teachers in their clusters and linked to a process of school follow-up and mentoring in which the CRPs participate, or better still through self nomination or nomination in consultation with the school head and teacher concerned. CRPs need to have information regarding who needs what training, based on which teachers are called. After training of the teachers, the training needs to include debriefing of CRPs in terms of how to carry out the school based support.
- (iv) For training to be more effective, trainers need to meet with the same group of teachers again, after they have had some opportunity to practice, so that they can discuss what worked, what did not and also address the issues that teacher's experience. For this 'split model' is better than one off trainings. In such a model, sessions would be of say two days followed by a month or two of practice followed by again meeting (of the same group with the same trainers) for two or three days to reflect and to learn, etc. Split models may be taken up on a pilot basis in a few districts.
- (v) Small groups for training and resource and ideas enrichment trainings would lead to more impact and make trainings more interesting and relevant for teachers. It would also enable greater opportunities for participation for individual teachers

4.7.7 Training Management System (TMS) and Professional Development Record for teachers is required at every district to be able to consolidate and track various professional development activities across the cluster, block and district and even State and national levels, provided by different agencies, all directed at teachers. Currently the information on training are kept in hard copy form and capture data relating more to financial accounting rather than training management.

4.7.8 The training management system could be built on the information available in the EMIS to address planning issues pertaining to in- service teacher training. This system manages and tracks the trainings for which teachers are deputed, i.e. the management of a training delivery system to ensure that there is a rational, efficient way to allocate/call the right teachers for the right training and to track the trainings received.

4.7.9 Trainings are provided by various agencies and aim at different aspects of their practice, ranging from personality development to specific

grade and subject related inputs. Currently, the information on training are kept in hard copy and capture data relating more to financial accounting rather than training management. The TMS can operate at the block level and assist in aspects relating to planning, reviews and reporting of trainings.

4.7.10 Using information from the EMIS pertaining to teachers and their school locations, the TMS captures additional information using two masters. The training master captures training description, including main features of training design, content and agency. Training delivery master captures details of the delivery of a particular training, teacher names, training dates, attendance etc. The system permits various querying. (NIAS, 2007; a document providing guidelines on a TMS can be accessed from the website [www.teindia.nic.in](http://www.teindia.nic.in)).

### (3) Direct Field Interventions and School Improvement

4.7.11 DIET could design and implement direct work in schools serving special groups or schools which are facing difficulties. This would be a field action project and would involve continuous curriculum and pedagogic innovation, work with teachers and school heads, work with community as well as assessing and overseeing children's learning and all round development. These would be intensive and time bound interventions which should be carried out in an action research mode with field presence and mentoring. DIETs could plan to design and undertake such direct interventions in collaboration with university departments or established NGOs on the field.

4.7.12 Monitoring of the quality of schools particularly in the light of the RTE Act would be an important function of DIETs. School visits of faculty should be carried out within some academic framework and the data maintained so that over the year, various visits to schools contribute to the formation of a ground level understanding of schools to complement the statistics. Such information should also be analysed and shared with concerned block and district functionaries.

4.7.13 DIETs in coordination with SSA should participate in the development of the school improvement plans and proposals of the BRCs and CRCs, and provide inputs especially on matters relating to teacher professional development. A detailed discussion of various possible ways in which BRCs and CRCs can function, and the role that DIETs can play in this process is outlined in the operational guidelines for revitalizing and strengthening the Block and Cluster level Institutions (Revised Implementation Framework of SSA, Ministry of HRD, 2011).

#### (4) Studies on Education

4.7.14 DIET as an institution and DIET faculty as individuals should be encouraged to take up studies of the education of the district. For this, the DIET faculty would need to have capacity for research and documentation, as well as research funds and infrastructure to support this work. Research should be able to contribute to the process of understanding the issues that face the District teachers and children and focus on district specific issues.

4.7.15 A basket of research projects with research design and methodology built in could be developed by the SCERT/University Department, and made available to the DIETs who could choose from this basket. DIETs may also take part in Research that is designed at the State level and contribute the data and analysis of the district. Both quantitative and qualitative research studies need to be encouraged. These would provide some level of quality of the research as well as significance in a larger sense.

#### (5) Annual Academic Planning and Reviews

- (i) The DIET could carry out consolidation and analysis of information on status of schools and status of learning to provide feedback to BRCs and CRCs for school visits and institutional support. These could also be the basis for deciding on various training to be offered and specific schools to be supported.
- (ii) There needs to be a focus on regular documentation of special academic programmes for special groups, special forms of interventions etc, developed for the district, e.g. for tribal children, for girl children, etc.
- (iii) The DIET should become the seat for academic planning of the District. The overall thrust on teacher education (except for large scale training) needs to be made more central in the SSA/RMSA approach and for this DIETs need to be more systematically integrated into and also made an object and instrument of quality improvement.
- (iv) Through the TMS, DIETs could maintain records of teacher education programmes received by teachers. This coordinating role would not only make the current arrangements of teacher education programmes more efficient, but would significantly contribute to a more rational and transparent system of training.
- (v) The review and status of teachers in the District and an understanding of requirements and needs from the point of view of their professional development could also be maintained by the

## DIET.

### (6) Resource Centre/ Teacher Learning Center and Material Development

4.7.16 Each DIET must develop and run an Educational Resource Center for the District. A Resource Centre is an enhanced library created specifically to make available to teachers, teacher educators and district education planners, the range of materials and resources they require for their professional practice. A resource centre would include:

- (a) A functioning library of reference books, children's books teaching learning materials, textbooks, maps and other resource materials, including access to Internet and computer enabled resources.
- (b) Local materials of relevance to education (teaching and planning) such as studies of education in the district and education statistics, a collection of local experiments and innovative efforts related to education, etc.
- (c) Tools and materials for replication of teaching aids, etc.
- (d) Sets of materials that teachers can borrow and take into classroom for direct use (multiple kits for demonstrations and organizing activities for whole class).
- (e) Updated database on resource persons/groups, resource organizations/agencies and research institutes working in education and make it available at district level for academic purposes.
- (f) In addition to various equipment and kits that teachers can use in their classrooms, the Resource Centre could also include the digital library/lab for access to various digital resources and the internet.

4.7.17 DIET can emerge as a hub of educational value through a vibrant resource centre and a centre for teacher learning at the district level. It could bring to use the local knowledge, build on its competencies and integrate the use of educational technologies to facilitate processes of maintaining and disseminating knowledge and skills. The resource center would work to nurture a professional community of users by:

- (a) Promoting an interest in and a culture of using the library as a support for teaching and training, for ideas and for materials.
- (b) Developing a culture of sharing ideas and experiences by contributing materials developed by teachers, etc. to the resource center.
- (c) Networking the district, block, cluster and school resource centers for effective exchange of ideas, information and resources.
- (d) Providing academic help and support to resource groups working at different levels (district, block and cluster levels) in the district.

- (e) Facilitating teachers in developing and using low cost, locally available educational resources.
- (f) Providing a forum for interactions with educationists, intellectuals, artists, creative teachers, resource persons and resource group to the district functionaries, including CRPs, BRPs, DIET faculty, D.Ed and B.Ed students.
- (g) Forging links between pre and in-service teacher education as envisaged in the NCFTE 2009.

4.7.18 Use of resource centre and educational technologies needs to be integrated within the curriculum. Instead of providing a separate course on teaching applications for editing texts or spreadsheets, students could be exposed to pedagogical applications like Geo-Gebra (Mathematics) and Marble (Geography). Such applications are not proprietary, maintained by a community of like-minded professionals (open source) and require no additional funding. Also, student teachers could be encouraged to prepare documents digitally which could be used for formative and summative assessments. Appropriate training needs to be provided to the faculty in use of such applications before they can be integrated into the curriculum. Such resources are equally important for ISTE. DIETs can contribute to building a cadre of teachers with computer competence through organizing regular workshops on Educational Technology. Information and Communications Technology including TV, radio, telephony and internet are useful resources that provide access to ideas and enable wider dissemination of information. Distance media can effectively be used to keep teachers connected with professionals in academic and applied disciplines. Rather than being the work of an education technology wing, technology needs to become an integral part of the knowledge and practice of all teacher educators.

4.7.19 Even if not initially, overtime more district specific materials and resources could be developed for use in schools. The use of Children's own drawings and artwork are a rich resource that can be creatively used in such local materials. In addition, with the advancement of technology, digital photographs and desk top publishing can lead to the production of attractive locally produced materials. There are possibilities that in due course, faculty, local resource persons and experts, teachers and even children themselves can produce and publish materials not only for their own use but also for exchanging the resources with other schools. Local materials can be produced on a variety of themes, which may include, materials on local historical monuments; Flora and fauna; Mapping 'Problems' (Ecological, Economic, Health, Social, etc.) of the district; Festivals and cultural events; Songs, poems, and riddles; Folk tales; Tracing historical events of significance in the area; Stories of people in the district; The material life of people; The

crafts traditions of the area; etc. The PSTE and ISTE initiatives of the DIET can work in coordination with schools to develop this kind of material. Development of resource material for school teachers would enhance their capability and supplement existing available material.

4.7.20 Forums are key spaces for the strengthening of reflective practice throughout the education system. Forums should have both physical and virtual components, to ensure continuous interactions, seeking and sharing. Forums also serve as a motivational environment of interaction with people and ideas and provide opportunities for exposure, learning and discussion of different perspectives, experiences, and experiments of teaching-learning processes, material development and of training :

- DIET could support the organization of school quality review meetings.
- Subject forum meetings of teachers and/or teacher educators (from TEIs and MRPs as a group)
- Seminars for teacher educators with opportunities for presentation of internal work and invited speakers.

4.7.21 The core forum at the DIET level could take the form of a weekly academic seminar in which faculty present their academic work along with invited speakers from other groups. Quarterly and yearly reviews of schools, programme evaluations and proposals for new interventions, etc. could also be presented in such forums. These academic seminars could be a fixed feature of the institution and be open to all teacher educators and education NGOs in the district. A culture of faculty and institution head attending these academic meetings is important to create and sustain an academic peer group.

#### Co-curricular activities

4.7.22 While DIETs will organize a large number of formally structured, curriculum related training and other programmes, they would also be expected to organize a wide range of co-curricular activities in which faculty members and trainees (especially pre-service trainees) would participate on a voluntary basis, depending on their individual interest. Though these activities would be outside regular curricular programmes, they would play an important role in enriching life on the campus.

4.7.23 Pre-service trainees would be the main beneficiaries of these activities, since they are the ones who would be at the Institute for long durations, but participants of in-service programmes would also find many

of these activities interesting and useful

4.7.24 Co-curricular activities will be expected to be organized chiefly through clubs and societies formed for the purpose. Each such club/society would have one or two staff associates/ advisors and trainees would enroll members of such clubs/societies depending on their interest. Office bearers of each club/society would be chosen from amongst such trainee members in accordance with rules which the Institute may frame for the purpose. Some of the areas for which clubs/societies could be constituted include : Debates and elocution, Library activities, Hiking and mountaineering, History and archaeology, Current affairs, Fine arts, Music, dance and drama, Environment, Science, Hobbies, Athletics/Gymnastics/ Aquatics, Various games and other sports, Yoga/Judo/Karate, Social service and Scouting and guiding

#### Staffing pattern and Organisational Structure

4.8 The staff strength of a DIET would be the same as recommended in the DIET Guidelines of 1989, consisting of the following positions

Post	Number
Principal	1
Vice Principal	1
Senior Lecturers	6
Lecturers	17
Work Experience/Work Education Teacher	1
Librarian	1
ICT Support Staff	1
Statistician	1
Office Superintendent	1
Lab. assistant	1
P.A./Steno (to Principal)	1
Clerk (including one for hostel)	8
Steno Typist/Data Entry Operator	2
Accountant	1
Maintenance Support Staff/Group D	6

4.9 Under the DIET Guidelines of 1989, each DIET was recommended to have seven branches, and for each branch a staffing pattern was recommended. However, as the study by NCERT (August 2009) has indicated, several of the branches have either been non-functional or partly functional, while some have outlived their utility. The inflexibility in the organizational structure of the DIET has led to sub-optimal utilization of its human resources and its inability to allow innovation and prioritization of its activities.



4.10 In order to allow DIETs to have flexibility in utilizing its human resources in an optimal and efficient manner, it would be desirable to allow each DIET to reorganize its staff around the core functions enumerated above, depending on the importance of one or more programme/activities for each of them. A Committee chaired by the Director, SCERT, Principal and Senior lecturers of the DIET and the District Education Officer (Elementary and Secondary Education) should recommend a re-organized structure of the DIET, to the State Education Secretary. The Teacher Education Approval Board (TEAB) in the Ministry of Human Resource Development will be the final authority to approve changes in the organizational structure and all proposals should be brought before it for approval.

#### Programme Advisory Committee (PAC)

4.11 As provided in the 1989 Guidelines, there shall be a Programme Advisory Committee (PAC) would serve to advise and guide and review the Institute's plans, programmes and activities. The PAC would meet at least twice a year, to approve the Perspective and Annual plans of the DIET and monitor its functioning. Its objectives would be to ensure:

- a) District focus in programmes and activities
- b) Coordination among institutions
- c) Promoting innovation
- d) Ensuring that the States Education Plans are adequately reflected within the district plans
- e) Efficient use of resources and personnel to address education quality and teacher education requirements of the District.

4.12 The PAC would have representation of key institutions of the State and the District with whom the DIET is expected to work and coordinate. The suggested composition of the PAC is as under:

- i) District Magistrate/District Collector/CEO, Zilla Parishad - Chairman
- ii) District Education Officer
- iii) District Project Coordinator of SSA and RMSA
- iv) Two senior faculty of DIET
- v) Two School Head masters
- vi) One Representative, each from Tribal welfare department, social welfare department, minorities department, women and child welfare department
- vii) One BRC Coordinator
- viii) One CRC Coordinator
- ix) One principal from private aided/unaided teacher education college (D. Ed and B.Ed)
- x) Principal, IASE

- xi) Principal, CTE
- xii) Representative of Director SCERT
- xiii) One NGO working in the field of teacher education
- xiv) Two student from PSTE (seniors and junior)
- xv) Principal, DIET: Convener

4.13 The PAC may set up sub-Committees to monitor the progress of specific programmes and activities of the DIET.

#### Personnel and Cadre Management

4.14 Effectiveness of the DIETs hinges on the quality of its personnel and the personnel policies being followed. It is imperative for States to evolve ways through which women and men of aptitude, merit, enthusiasm and dedication are inducted into the DIETs, and are provided opportunities of professional growth, creative work and career advancement in the academic stream. This is one area in which there has been inadequate progress in most States, and in urgent need of action and reform. Some of the current problems that need to be addressed include the following:

- (a) DIET faculty tend to have B. Ed degrees and do not have expertise in or experience of elementary education.
- (b) DIET faculty may not have higher degrees in education and do not have appropriate qualification to work as teacher educators (MA/MED Education or in related disciplines such as psychology, philosophy).
- (c) Without adequate expertise and experience, DIET faculty often do not feel competent to contribute core academic work and tend to assume administrative roles.
- (d) DIET faculty is not stable and frequent transfers out of academic positions to administrative positions create a high level of instability in many institutions.

4.15 Annexure 12 of the DIET Guidelines (1989) lays down the general Guidelines regarding recruitment procedures, flexibility criteria and cadre management. Appendix to that Annexure lays down the suggested essential qualifications and experience of persons who can be considered eligible for appointment in the DIETs. States have made the appointments in the DIETs based on these Guidelines. However, in view of the fact that large number of posts in DIETs still remains vacant, the in-built flexibility in the organizational structure (instead of the inflexible 7 branches) which would revolve around the various activities and programmes specified in this Guideline, it is considered necessary to suggest certain principles and procedures, which may be considered by the State Governments for filling up vacant and new posts. This is also considered

necessary in view of the fact that under the Revised Scheme, creation of a cadre of teacher educators and filling up all vacant and new posts in a time bound manner are essential requirements.

4.16 A strategy to ensure that DIETS have relevant academic expertise and are able to retain them, is required on four fronts:

- (i) Appointment of faculty with appropriate qualifications and experience; this must include fresh appointments along with opportunities for promotion within the education cadre.
- (ii) Capacity building of faculty must be provided so that over time faculty acquires appropriate expertise in subject areas of relevance to teacher professional development/teacher education and to do research in education.
- (iii) Opening up a few visiting positions to enable teachers and others to spend short period of time in the DIET and work with student teachers or teachers and teacher educators.
- (iv) Creating a cadre of teacher educators in the State to serve the academic resource institutions or direct recruitment could be considered.

4.17 States must commit to reviewing and opening up recruitment to bring talent and capacity to DIETs including direct recruitment and visiting positions. Persons coming on a lien from Universities or other higher education institutions could also be encouraged. Developing career progressions for academic streams and encadrement could also be considered to retain talent.

4.18 There is pressing need to ensure that all posts in DIETs are filled. Creating a cadre of teacher educators could help to retain and nurture academically qualified people who also understand and develop expertise for various activities in education. This could also enhance a sense of professional identity. The State Government would need to work out and provide career and remuneration progression for the teacher educators. Modelling the cadre on the college system could be considered. The cadre of teacher educators could serve DIETs, CTEs, IASEs, and SCERTs. With equivalence established, there could also be some movement of faculty to Universities for short periods. The principles governing recruitment policy, including deputation, and cadre management are suggested at Annexure II.

4.19 States could consider the qualifications suggested in Annexure III for appointments in the DIETs. However, care should be taken that such appointments are consistent with the NCTE Regulations and the State's extant policy/regulations on personnel and cadre management with regard to the DIETs. Persons who are in the DIET system but not possessing the laid down qualifications may be given

three years' time window to acquire the qualification, failing which they should be moved out of the system.

4.20 Various specialization areas, as specified in Annexure III, are required in the faculty in order to enable them to work as teacher educators both in the pre-service and in-service spaces and also to carry on various other academic tasks to support teachers, schools and children's learning. The complement of faculty should reflect the range of specializations required.

#### DIET Infrastructure and facilities

4.21 The specifications for infrastructure and related facilities of a DIET were specified in the DIET Guidelines (1989). These have been re-produced in Annexure IV. The same specifications would continue to apply for renovation of existing DIETs and establishment of new DIETs, taking into account the following additional factors :

- (i) The infrastructural requirements of a D. Ed institution specified in the extant Regulations of the NCTE must be adhered to;
- (ii) Library needs to be enhanced in order to function as a Resource Center for the district.
- (iii) Full-fledged computer center with internet for faculty and students
- (iv) Individual work spaces with computers for faculty
- (v) Multimedia presentation capabilities- TV, DVD player and projectors.
- (vi) State Governments may consider modifications in the specifications based on actual needs and contemporaneous requirements, including of ICT infrastructure.
- (vii) In respect of the hilly areas of NER, Uttarkhand, J&K and Himachal Pradesh, State Governments may consider modifications having regard to topographical and related features.

#### DIET Website and Faculty Forum

4.22 Each DIET must have its own website. The SCERT could provide and maintain a platform for this purpose. The Website should include information about education in the District, with special focus on teachers and teacher education in the district, and the quality of schools and children's learning. The website would provide institutional and organizational information, ongoing work and activities and faculty of the DIET. Each faculty's profile would be posted in the Webpage. It could also include information regarding master resource persons available, and special achievements of the institution. Publications of the DIET, resources, etc. could also be provided. The annual training calendar and other information regarding programmes would be placed on the site. The website

could include registration and membership login for all teacher education institutions, schools, teachers and teacher educators of the district and enable them to participate in discussion groups and discussion for a, and to receive relevant information. Such a forum could also link and support student teachers in the PSTE programme.

4.23 An academic faculty forum may be instituted on a periodical basis in which DIET faculty or other invited experts could make presentation of ongoing research, discuss academic matters. A functioning faculty forum would establish an academic culture and peer group interaction within the DIET. This forum may also be opened to other teacher educator faculty and NGOs of the District.

4.24 ICT support within DIET : ICT infrastructure is complex and fragile and requires regular maintenance support. However, given the potential for benefit to the process of teaching-learning, the processes for creating and maintaining the infrastructure needs to be developed as part of the program. Hence the program needs to ensure infrastructure availability - computer lab, Internet (preferably broadband wireless), with other ICT devices including radio, TV, camera, audio recorder, mikes, speakers handy-cams etc. A Lab attendant is required to secure and manage the infrastructure and maintain uptime. Digital library / repository should be maintained in the lab, variety of resources, classified with annotations/comments. Digital resources in DVDs should also be maintained for lending to faculty members and student-teachers.

#### Systemic linkages

4.25 DIETs have tended to remain insular and insulated from key sites of education decision-making and activity at the district level. They must break their isolation and enter into active engagement and collaboration with institutions at the District, sub-district, State, national and international levels.

4.26 DIETs must form active relationships with other district level institutions and fora that are contributing to and shaping elementary education and children's all round development. The DIET must interact with the Zilla Parishad (ZP) on matters of education and quality. Many issues of elementary education require an inter-departmental approach. The Departments of Social Welfare, Tribal Welfare, Minority Education, Women and Child, Health, Sports and Youth are relevant Government Departments with whom DIET interaction is necessary. DIETs could have members (by rotation) on different advisory committees.

4.27 Formal linkages with district teacher associations and other centers for teacher development such as B.Ed and D.Ed colleges and University Department of Education are necessary. In addition linkages with higher Education Institutions in the District should also be nurtured.

4.28 In most States, the DIETs are directly administered by the SCERTs. To promote institutional autonomy at the level of the DIET itself, the SCERTs will need to move away from a hierarchical relationship to nurture DIETs. When State priorities are being defined, the formal involvement of DIETs in this exercise is essential. SCERT should nurture a professional forum for interaction with DIET Principals. DIET personnel could be members of various committees under the SCERT. State programmes can be made functional across DIETs by (a) coordination between State and District planning processes (b) having a few, limited programmes for State wide implementation and organizing regular interaction meetings between SCERT and all the DIETs.

4.29 National, International and Non Government Organisations working on issues such as 'Child Labour', 'Children's rights', CWSN, etc. increasingly have a District presence. Formal interaction of these institutions and agencies at the District level would benefit organizations and work. The work of such organizations and institutions should be routed to the District through the DIET as the lead coordinator of academic work with schools and teachers.

4.30 DIET's linkages with the Block Resource Centres and the Cluster Resource Centres are important. As In-service Teacher Education and Professional Support to teachers is the core mandate of the BRCs and CRCs, their work must be coordinated with the DIETs through formal mechanisms, both for the purpose of quality maintenance and also to bring about coordination at the district level to provide overall direction for this work. Core reforms are also required in the in-service teacher education sector, including quality of training and professionalization of the organization of trainings. The DIET, could support BRCs through:

- (a) Overview and Coordination of School Improvement Plan – The DIET would guide the block and cluster personnel with regard to preparation and conduct of in-service programmes. They would support the BRC to overcome challenges that come in implementing programs for school improvement.
- (b) Design and Delivery of Training – DIETs would work to ensure quality and relevance of training. In addition to inputs and review of training design, small research studies could be carried out to review training standards and efficacy.
- (c) Training Management —overall all training being received by teachers in the district would be centrally pooled in a training management system, bringing more coordination in this work. DIETs could also coordinate between BRCs-CRCs and NGOs in the District all of whom may be contributing to teacher training Any agency offering training to teachers in the District could route this activity via the DIET.

- (d) Head Teacher Training – DIET could provide trainings designed for Head Teachers. These trainings would be different from those given to teachers and focus on themes like school leadership and teacher motivation.
- (e) Development of MRP Pool – MRP pools need to be nurtured through developing subject expertise, pedagogic ideas and training of trainer related skills. DIETs could lead this effort at the District level and the bulk of its training work could be directed at nurturing this resource person pool in the district.
- (f) Database of Experts – The DIET may become the nodal centre that maintains a data base of experts available at the District, Block or Cluster level who can be called on from time to time.

4.31 The DIET also needs to interact closely with IASE and CTEs within the district to ensure that they complement each other in meeting the training needs of teachers in the District. DIETs must also nurture interaction with Universities in order to draw on contemporary knowledge and research. University collaborations for research and training should be encouraged and build synergies between institutions with possibilities of co-developed and implemented programmes, faculty and student exchange, collaborative research and training.

#### Faculty Development and Capacity building

4.32 A strong programme of capacity building will need to be instituted in the State and made available to DIET faculty. A range of professional growth and capacity building opportunities need to be conceptualized and made available to faculty.

#### Continuing Education

- a) Short courses, diplomas, certificates : A range of such courses need to be developed by various institutions of higher education in the State, including Universities, IASEs, CTEs and some capable NGOs with relevant expertise. These courses need to be conceived of so that absence from the institute is not excessive. Use of blended learning and modular type courses could also be considered. Courses could include a component of independent work as well as evaluation of the participant. Courses lists which are recommended for DIET faculty could be compiled by the SCERT and information provided to DIET faculty so that they can avail of such opportunities. The State Government must evolve a policy of granting leave to faculty to undertake such courses and also to fully support or subsidise the fee for these courses.

- b) Courses need to be held in areas such as pedagogy and curriculum of all subject areas, child development, cognition and learning, aims of education, sociological understanding of 'backwardness', 'failure', 'underachievement', literacy for first generation school goers, evaluation and assessment, use of ICT in relation to subjects, ICT for blended learning and collaboration, resource creation, use of wikis, its uses and limitations, etc.
- c) Higher education (MPhil/PhD/Diplomas/Post Doctoral research) in areas of relevance including education, curriculum and pedagogy, teacher education, assessment, special education, ICT in education, and in allied disciplines such as sociology, psychology, philosophy, etc, with focus on education. Faculty who are registered for such courses may be provided with leave for upto two years, with the requirement that the next five years of service will be in a DIET.

#### Seminars, Workshops and Study Tours

- (a) Attendance at Seminars to present papers should be encouraged and appreciated.
- (b) Participating in seminars or in workshops could also be counted towards professional development.
- (c) Study Tours may be undertaken by faculty so that at least once in two years, each faculty member goes on an exposure trip of upto 5 days. These trips could be to model and innovative schools or to innovative teacher education institutions or centres with outreach for school students and teachers.

#### Research and Publication

- (a) Every member of faculty must be involved in carrying out a small or medium research study. Preference in terms of quantum of funding could be given to research studies that are carried out independently or collaboratively between DIETs and Universities/NGOs. Action Research Projects in which DIET faculty collaborate with school teachers may also be given preference in funding.
- (b) Faculty should be required to present their ongoing research at seminars and other forums. They must make a presentation at least once a year in the DIET faculty forum.
- (c) Faculty should be encouraged to publish their work and write in journals, magazines and newspapers.
- (d) DIET should also support publication by teachers in the Districts. Small grants and support for publication could be made available.



- (e) The DIET could publish once a year, or create on-line a DIET magazine carrying articles by student teachers, teacher educators and teachers of the District. E-newsletters or bulletins could be produced at more frequent intervals, since they are easier to publish.

### Study and Research Leave and Fellowships

Faculty of DIETs may be able to avail of study leave and sabbatical for the purposes of higher studies, to take up fellowship opportunities and to undertake research or publication. Faculty could also be permitted to go on leave or be deputed to work with Universities to gain exposure and experience of different work cultures and issues.

### Perspective Plan and Annual Work Plan (AWP) and Annual Report

4.33 Each DIET could engage with the development of a Perspective Plan for five years which would guide its activities through the 12<sup>th</sup> plan period. Further it would prepare an Annual Work Plan (AWP) to guide all its activities in each forthcoming year. The AWP would be reviewed mid-term and at the end of each year while formulating programmes for the next year.

4.34 The perspective plan preparation assumes importance in the context of the 12<sup>th</sup> plan period. It would involve developing a vision and deciding on a direction for the next 5 years. The plan would be developed by a group of faculty within the DIET lead by the Principal, through a process of consultations and discussions involving all faculty, the District education functionaries, institutions and stakeholders, including the SCERT. The Perspective plan would be presented to the PAC and suggestions received from it would be incorporated and finally adopted by the PAC for the DIET.

4.35 The Plan would provide a sense of direction to the DIET. It would reflect an understanding of teacher professional development status in the district, the District schools' educational requirements, and the state's overall plans and directions for both teacher professional development and school improvement. It would indicate the role to be played by the DIET in general vis-a-vis teacher professional development and school learning quality and in particular the district specific requirements and innovations that the DIET wishes to engage with. The DIET may in addition indicate in the perspective plan how it proposes to be internally organized, and what collaborations it envisages or requires, so as to achieve its plans most effectively.

4.36 The Annual Work Plan would be developed within the overall five year perspective plan. The Annual Work Plan (AWP) of the DIET is important as this

activity will establish the autonomous character of the Institution and provide it with focus for the year. The AWP could serve to integrate and focus the DIET on District requirements and reflect its own special role and how it visualizes making a difference to schools, teachers and children.

4.37 The AWP must reflect how the DIET integrates various activities and programmes required of it by other agencies, or designed by it, and utilize all its available sources of funds to achieve its institutional objectives within the overall context of the Perspective Plan. For this the AWP process needs to:

- Involve all District and sub district institutions concerned with education, in particular the BRCs and CRCs, and within the framework of an educational plan for the district.
- Be participatory in its approach, involving all DIET faculty.
- Be based on review of the previous year AWP and reflection on achievements in relation to that.
- Plan in advance for various State programmes impacting on DIET faculty time and resources.
- Consider the parallel efforts of other agencies at the District level, including Non Government Organisations and other departments.
- Focus on and reflect district needs and district specific concerns, setting realistic goals
- Visualize relationship of DIET activities with schools, BRCs, CRCs and other District institutions.
- Have a mix of both training and capacity building related workshops and activities as well as research, studies and material development.
- Include the faculties' own capacity building and reflective review, planning and meeting requirements.

4.38 A good AWP and Perspective planning exercise would enable DIETs to revisit activities and requirements, based on the overall sense of significance of various activities in relation to each other and the desired outcomes. It would provide focus and directly lead to the definition of roles as well as inter institutional relationships. It would serve as the basis for the institution's own reflective audit..

4.39 The AWP and Perspective Plan process must take an integrated whole institution approach to planning, where funds can be seen as different sources of support towards activities that are decided upon and prioritized at the institutional level. Financial autonomy must lie within the institution, rather than the entire accountability being directed to the organizations from which the grants are received.

4.40 The year must end with the production and presentation of the Annual Report of the DIET by the Principal, which should constitute a report of achievements of the year, analysis of what has not been achieved and reflections on what is being contemplated for the forthcoming year. This should be presented each year to a general body comprising the faculty of the DIET, students, members of the PAC and a wider group of stakeholders in the District. The Annual Report should be uploaded on the website of the DIET. The report would include an overview of all the academic work being carried out in the district and a review of the academic progress of the district. This report should be able to reflect the work of the DIET, the work of the BRCs and CRCs and additional work carried out by various other groups working in the District for school quality improvement and for teacher education.

4.41 An effectively functioning PAC and rigorously developed, adopted and reviewed perspective plan and AWP and the compilation and presentation of an Annual Report, are central to realizing autonomy and maintaining responsible accountability within the system. Information regarding the membership of the PAC, perspective plan and AWP as well as Annual report for both the current and past years must be available in the Website of the DIET. All efforts are required by State and district institutions and functionaries to establish the DIETs as relevant focal institutions in the District.

4.42 Being a lead academic resource institution at the District level, the DIETs could be called upon to undertake training and orientation workshops or activities such as material development and training for other departments of government and by private institutions. Time and effort to these activities may be compensated, and funds so generated can be used by the DIETs to cater to the administrative and functional needs. The extent of such funds and its utilization should also be a part of the Annual Work Plan (AWP) and be reviewed and approved by the PAC.

#### Recurring and non-recurring Central assistance for DIETs under the Revised Scheme

- (i) Condition for Central assistance – Study conducted by the NCERT and reports received from the State Governments indicate that large vacancies of academic and non-academic posts exist in several DIETs. State Governments have been rather slow in filling up the vacancies in the DIETs/DRCs. Further, most State Governments have not created a separate cadre of teacher educators, even though they were required to do so. Both these factors have undermined the capacity of the DIETs to perform their functions efficiently. It is accordingly mandated that release of Central assistance to the State Governments in respect of the

existing DIETs/DRCs would be linked to the conditionalities that (a) the State creates a cadre of teacher educators; (b) fills up all the vacancies by 31<sup>st</sup> March, 2013; and (c) thereafter, the vacancy should not be more than 5% of the sanctioned strength. In respect of new DIET (established in XII Plan), all the sanctioned posts should be filled up within one year of its establishment.

- (ii) At present, the criterion for eligibility of a district for setting up of a fresh DIET/DRC is that the said district should have been in existence as on 1.4.2002. In the revised Scheme, DIETs will be established in all districts created up to March, 2011.
- (iii) Non-recurring Central assistance to be provided for establishment of a DIET (by upgrading an existing elementary teacher education institution or, where no such institution exists, by establishing a new institution) in the newly created districts on the basis of a Plan prepared by the State Government in respect of the proposed DIET in accordance with the infrastructural norms for establishment of a DIET, applying the specifications and State SOR. In respect of a district where a new DIET has to be established, the proposal would be considered only after the State Government has allotted land, along with necessary permissions, for its establishment. In respect of a DIET which is established by upgrading an existing teacher education institution, it will be entitled to non-recurring assistance upto Rs 30 lakh as equipment grant. In respect of a newly established DIET, the equipment grant would be upto Rs 40 lakh per DIET. After the DIET is established, it will be entitled to recurring Central assistance in the same manner as would be available to existing DIETs.
- (iv) With regard to assistance for strengthening of infrastructure of existing DIETs, State Governments have been emphasizing that several of the existing buildings of DIETs/DRCs are in dire need of renovation which would enable them to prolong the life of the buildings. Further, several of the DIETs do not have the full component of the infrastructural facility as provided in the MHRD guidelines. Therefore, the said provision of the guidelines has been modified to include “renovation of buildings, expansion and modernisation”. Additional non-recurring assistance to existing DIETs for up-gradating their facilities at par with the infrastructural facilities specified above, based on the specifications and State SORs, and an amount of Rs. 20 lakh for equipments.
- (v) The existing District Resource Centres (DRCs) can be upgraded into full fledged DIETs, on need basis. Recurring assistance for civil work based on the infrastructural specifications and the State SORs will be made available for such up-gradation, and non-recurring assistance upto Rs 10 lakh per DRC for equipments would be available. Till such time the DRC

functions as such, it would be eligible to avail annual assistance upto Rs 10 lakh for specific programmes, projects and activities, Rs 25,000 for computer consumables, Rs 60,000 for faculty development and Rs 3 lakh as contingency grant;

- (vi) Salaries for all posts created and filled up after up-gradation (for an upgraded DIET) subject to full State contribution in respect of all posts sanctioned prior to up-gradation, and for all posts in respect of new DIETs.
- (vii) Recurring assistance in respect of programmes and activities, on the basis of the actual needs and capacity of the institution, subject to a maximum of Rs 30 lakh per DIET per year. Proposal for central assistance should be based on an Annual Plan of activities which would be prepared by each DIET on the basis of the actual needs and capacity of the institution, giving the physical and financial implications of each activity, subject to a maximum of Rs 30 lakh. For training programmes, financial estimates should be prepared on the basis of rates specified under the SSA/RMSA for residential and non-residential training programmes. Financial norms for honorarium to resource persons, and other related expenditure for programmes and activities would be projected in accordance with the extant norms of the State Governments, including under SSA/RMSA. These Plans would be collated for the State as a whole in the State Annual Work Plan. In respect of in-service training programmes conducted by DIETs from resources provided under the SSA/RMSA, the Annual Plan should clearly indicate the specific programmes and coverage so funded.
- (viii) Contingency grant of Rs 15 lakh per DIET per year to meet day-to-day expenses, including recurring expenditure upto Rs 3 lakh for vehicle facility if not already provided to the DIET. These would cover all day-to-day expenses, purchase of library books/periodicals, small office/library equipments, computer consumables, etc;
- (ix) Recurring assistance of Rs 5 lakh per DIET for undertaking programmes for Faculty Development.

## Chapter V : Colleges of Teacher Education (CTEs)

### Background

5.1 The Colleges of Teacher Education (CTEs) were established during the VII plan period under the Centrally Sponsored Scheme (CSS) of Restructuring and Reorganization of Teacher Education (1987) in which it was proposed that about 250 existing Secondary Teacher Education Institutes (STELs) of an adequate standard and good reputation be financially assisted, on a project basis, towards becoming leading and innovative institutes in the field of teacher education. The CTEs were meant to work in the field of secondary teacher education – both pre-service and in-service. In addition, they also had the responsibility of carrying out research, innovations, material development and provide extension support to schools and other professional bodies.

5.2 The NCERT Report on evaluation of the Scheme has given some significant findings regarding the functioning of CTEs which are summarized as under:

- (a) Large variations in infrastructure facility; inadequate infrastructure for staff room, library, laboratories, lecture and seminar halls, hostel facilities in several of the CTEs
- (b) Most CTEs have less than 50% of requisite strength of academic and technical staff
- (c) No provision for direct recruitment of academic posts; Little attention to staff strengthening after upgradation
- (d) Several CTEs have not availed of Central assistance; Delays in utilization of grants
- (e) large inter-state and intra-state variations in conduct of in-service programmes
- (f) Very few CTEs have undertaken research projects
- (g) Only 40% of sampled CTEs have undertaken curriculum material development
- (h) Faculty development limited to some CTEs and restricted to participation of some in-service training programmes

### CTEs: Key Activities

5.3 Discussions regarding improvement in teacher quality and teacher education are now widening to include not just elementary but secondary education as well. The recently initiated RMSA stresses the need to improve the access and quality of secondary education across the country. The efforts towards improving the elementary teachers' capacity building processes have highlighted the fact that similar efforts have not taken place for secondary and senior secondary teacher education and are urgently required. The RMSA proposes an organized attempt towards building capacity of teachers in secondary schools. In this, context the role of

Colleges of Teacher Education (CTEs) becomes crucial, especially over the next 5 years. It is envisioned that CTEs play the major role in the field of secondary teacher education and development, also guiding the various secondary teacher education institutions in the districts under them. They have to see themselves as centres for developing excellence in secondary teacher education and in secondary classrooms at school.

5.4 The CTEs, in order to improve the quality of secondary education, shall conduct training need analysis and base line surveys for organizing training programmes. They shall prepare context specific teacher handbooks and training modules for quality training. They shall also undertake the impact studies to study the effect of training programmes on classroom processes and learning outcomes. They shall prepare implementation guidelines for conducting plan activities including training and projects for ensuring optimum utilization of funds with financial accountability.

5.5 Acknowledging the principle of continuous teacher education and professional development, the following key areas of work are identified for the CTEs:

Action Steps with regard to the CTEs:

- a. Alignment of the structure and functioning of the CTEs with that described under CSS: Several STEIs were upgraded to CTEs in principle although they did not meet the necessary specification, on the understanding that they would work towards achieving them. Actual up-gradation in terms of formulation of departments, recruitment of staff, infrastructure development, programs offered and activities carried out, needs to take place now.
- b. Each State Government needs to evaluate the present institutions to establish where they stand with respect to the norms and resources available to them. Thereafter, their annual plans should reflect the steps they would take and the timeline required to reach their goals.
- c. Setting up new CTEs: Under the existing norms, each CTE should serve three districts; however, the district size is not uniform.. It is clear that the present strength of 104 CTEs cannot serve all districts and in some cases it may be more feasible for a CTE to serve lesser number of districts. Therefore, new CTEs will have to be established, on need basis, by upgrading existing Government/aided secondary teacher education institutions.
- d. Strong work relationship between SCERT and CTE: The work done by CTEs towards preparation and development of secondary school teachers cannot be in isolation. They need to collaborate with other agencies in the State, and this process could be facilitated by the SCERT.
- e. Given the diverse backgrounds and needs of different CTEs, rather than having a 'one size fits all" plan, the SCERT can also support the Program Advisory Committee (PAC) of each CTE in developing their vision and plan
- f. ICTs can be used to support new models of teacher education that are need-

based, self-directed, continuous/life-long, mentored, decentralized / peer-learning based. Existing investments in ICTs can be utilized in meaningful manner, basing program design on educational perspectives and priorities, rather than being technology-driven, to support the NCFTE, 2009 vision of teacher education. CTEs need to use ICTs effectively to ensure retention of institutional memory for supporting institutional learning and institutional development. CTEs need to develop virtual networking with other institutions for sharing and building communities of practice.

- g. The CTEs as pioneering institutes must work towards development of pre-service programs in their region.
- h. Tracking/ monitoring of CTEs against indicators: both internally and externally, the performance of CTEs should be constantly measured against indicators developed by the Centre, State and the CTE itself.

### Professional Development of Teacher Educators in CTEs

5.6 For undertaking the various in-service and pre-service activities, it is necessary that the CTE academic staff undergoes capacity building. This requires:

- (a) Regular sharing meetings between principals and senior faculty members for planning and sharing of experience, of practices, problems materials, should be organized.
- (b) The CTE should develop its annual work plan, planning together for its key work areas and distributing work.
- (c) Participation of faculty in subject based workshops
- (d) Participation of faculty in workshops on research methods
- (e) A series of workshops on research methodology for CTE faculty by national or State level government or private bodies which have experience and expertise in educational research.
- (f) Collaboration with IASE: an important work area for the IASE is the capacity building of the CTEs and enhancing capacity in CTEs to handle academic disciplines and building capacity for research will be important.
- (g) Capacity building in the use of ICT: A widespread program of capacity building for teacher-educators is required on ICT. A separate provision has been made in the revised CSS for setting up of computer labs and purchase of equipment.
- (h) CTEs capacities to use ICTs to create demand based pre-service and in-service teacher professional development models, need to be developed. This includes creating the required ICT infrastructure, including for support and maintenance, building faculty capabilities to use variety of digital tools and methods for designing and offering programs to teachers. Such programs would include developing teachers communities of practice as a method of teacher networking and development, as well as the collaborative



co-construction and reviewing of digital learning resources and publishing it to create a resource rich learning environment.

- (i) It is essential to learn to use ICT tools like radio, video tools, computers etc. as well as methods such as information access, review, classification, communication and networking. This needs to cover both hardware (parts of computers, radio and A-V educational devices and assembling them) and software (to integrate ICT tools for effective teaching-learning and in education administration) skills. There should be an emphasis on using a wide variety of free and open source educational applications to co-construct digital learning resources. This is in line with the emphasis on constructivist approaches in NCF and also supports creation of a local and decentralized resource rich learning environment.

#### Pre-service programs for secondary school teachers

5.7 It is essential that all CTEs conduct B.Ed programs and this should remain a vital component of their annual work-plan. Pre-service teacher education programs of CTEs are part of the university system that governs all matters relating to curriculum, admissions and assessment. CTEs should be enabled to pilot innovations in the B.Ed program– at the level of content, classroom transactions as well as assessment. All CTEs should become the focal institution for transacting revised curriculum of the B.Ed programme, based on the principles laid down in the NCFTE, 2009.

#### In-service programs for secondary school teachers

5.8 The 1989 CTE Guidelines had stipulated the number and duration of subject oriented in-service programs as well the number of teachers to be trained in these, by the CTEs. The programs can be 3-4 week long subject oriented courses and shorter (3-10 day) theme specific courses. Many CTEs have not been able to meet the goals set in the guidelines (NCERT, Aug 2009). In order to revitalize in-service training of secondary school teachers, the strategies/ factors need to be considered.

- (a) CTEs should undertake a needs assessment of the academic support required by the secondary school teachers in various disciplines from time to time and organize their subject based workshops in these areas.
- (b) Pre-service training and in-service training should not be looked at as two separate activities, with separate faculty and little interaction. In fact the idea behind reducing the pre-service load of faculty is that they take on a more active role in in-service efforts. There is an urgent need to take a comprehensive look at the training needs of teachers rather than in a piecemeal manner. Thus, in-service training should not be looked at as the

responsibility of one or two faculty members and faculty should jointly develop a vision and strategy for the same.

- (c) CTEs should set up a management information system for their in-service programs. The CTEs should take requisite steps to build a data base of the secondary teachers in their work area, which would importantly provide them information of the numbers of teachers of different subjects, their educational and professional qualifications and their voiced training needs.
- (d) With the introduction of RMSA, the annual in-service training of all secondary teachers is also going to become essential. The Principal, CTE should collaborate with the SPD, RMSA in both planning and implementation phases (design of training modules, training of trainers, observation, feedback and modification of trainings etc.) For the training programmes, the per trainee rates approved under the RMSA shall be used by the CTE.

#### Extension and resource support to secondary schools – Lab schools

5.9 Some secondary schools in the work area of CTE may be treated as Experimental Schools for pilot studies and research. To ensure implementation of the ideas discussed/generated during in-service programs, the CTEs should carry out field visits. Visits to secondary schools should be well-planned and faculty should have a clear idea how they want to extend support to the teachers and children when they go to school. If possible two or more subject experts should go to school together, such that it is possible for them to create linkages among subjects.

#### Resource support to the DIETs

5.10 DIETs are responsible for the status of elementary education in their district. However, if they are to take up in-service secondary teacher education they will need capacity building. CTEs should provide necessary support to DIET faculty through a series of subject based workshops and continue this support in a comprehensive manner. Besides these, CTEs are also expected to take on workshops on research methodology to enable DIET faculty fulfill their mandate for research - themselves taking on research studies and in helping teachers take on classroom based action research. CTEs have to be flexible in their interactions with DIETs and should respond to their voiced needs of capacity building.

## Networking and Linkages

- (a) Putting together ideas generated by teachers and disseminating them over a wider sphere.
- (b) Setting up of forums and networks of teachers and encouraging building up a discourse including of ideas for teachers and teacher educators.
- (c) Linking CTEs to the University departments of Education and other disciplines, leading NGOs.
- (d) Virtual forums in the form of mailing lists and portal based interactions can supplement and complement physical forums and extend learning beyond physical forums and interactions to create teachers' virtual communities of practice. The concept of teachers' communities of practice, needs to cover not only networking of teachers, but also of teachers with teacher-educators and of teacher-educators in different institutions at different levels in the education system. Such networking is essential to support the building an environment of continuous peer review/feedback and learning in these institutions.

## Research

5.11 Research is supposed to be a major part of CTE work meant to distinguish it from other STEIs. Following areas of research should be focused upon (a) how children understand various concepts and how these processes of understanding develop over time; (b) review of textbooks and other reading material for children; and (c) need assessment for capacity development of teachers. In order to enable the CTEs faculty to develop expertise in research methods following steps may be taken :

- (a) A series of workshops on research methodology may be organized for CTE faculty by national or state level government or private bodies which have experience and expertise in educational research
- (b) Constitute Research Committee (RC) to guide CTE faculty in research and give suggestions for research topics. Members of the IASEs, University Department of education, leading NGOs can be part of the RC.
- (c) Faculty of CTE specializing in a discipline should interact with secondary school teachers in their work areas and help teachers design and implement action researches for their classrooms

## Material Development

5.12 The CTEs need to design reading material and courses for the in-service needs of teachers and teacher educators. CTEs are expected to take on the following activities:

- Prepare supplementary reading material for teachers : This would not only include subject specific material but also that related to issues of pedagogy,

aims of education, relationship between society and school, assessment etc. This could involve collating as well as translating and simplifying existing material and making it accessible to teachers.

- Contextualization: Prepare teachers' handbooks; teachers in the secondary classes need support in understanding various concepts they have to transact in the textbooks.
- Prepare supplementary material for children based on experiences of their extension work and feedback from teachers. This can include work sheets, workbooks etc.
- Prepare Teaching aids and kits. Again this will involve not only developing aids and kits keeping in mind local needs and conditions but also sourcing such aids and kits. Some commendable work has been done in this area by Eklavya, Madhya Pradesh, Centre for Learning Resources, Jodo Gyan, Homi Bhabha Centre for Science Education (HBCSE).

### Organizational Structure and Personnel

5.13 The recruitment and personnel policies governing the CTEs have been examined and a revised framework is suggested at Annexure V. It may be added that creation of a cadre of teacher educators is essential and all State Governments must endeavour to amend the recruitment Rules paving way for creation of such a cadre.

5.14 The suggested organizational structure of the CTEs was specified in the CTE Guidelines (1989), which are re-produced in Annexure VI. This structure may be adopted by the States for sanctioning posts in the existing CTEs and for establishment of new CTEs. However, if the State Government is of the opinion that the structure requires certain modifications in respect of one or more CTEs, having regard to its activities, it may suggest the same to the TEAB for approval.

5.15 New CTEs would be set up as per the existing norm of one CTE for three contiguous districts, by upgrading an existing government/aided secondary teacher education institution. This norm would be relaxed only in exceptional cases. The States should carry out a need assessment study keeping in mind the geographical location and area of the CTE, number of STEIs, senior secondary schools, and teachers it is expected to provide extension activities to etc and build a case for establishment of more CTEs if required.

### Infrastructure

5.16 The infrastructure norms of a CTE were suggested in the CTE Guidelines (1989), which are re-produced in Annexure VII. The existing CTEs should evaluate where they stand in terms of infrastructure and prepare proposals for strengthening of the infrastructural facilities. States may propose certain changes in the suggested norms

having regard to the contemporaneous requirements, including of ICT, and physical constraints. These can be considered by the TEAB.

### Annual Work Plans and Perspective Plans

5.17 The CTEs need to develop the following plans and reports with the help of PAC and other agencies such as NUEPA and the University.

- Annual work plans – detailing activities, as well as plans to improve infrastructure and financial planning, budgeting and estimated expenditures and sources of income
- Annual reports – should be written indicating performance against indicators.
- Perspective plans – for 5 years should be prepared along with the annual plans and approved through PAC
- Linkages with apex bodies and universities for approval and development of perspective plans should be forged

### Norms for financial assistance under the Scheme

5.18 Following assistance would be available in respect of CTEs under the revised Scheme:

- (i) New CTEs would be set up as per the existing norm of one CTE for three contiguous districts. This norm would be relaxed only in exceptional cases. Central assistance for salary of staff of CTE would be limited only to the posts sanctioned and filled up after up-gradation of the secondary teacher education institution into a CTE.
- (ii) Only Government/aided secondary teacher education institutions would be up-graded as CTEs. For selecting institutions for up-gradation, the State Government should devise clear norms from the viewpoint of ensuring that only institutions with proven quality are upgraded as CTEs.
- (iii) Non-recurring Central assistance to existing CTEs for strengthening and upgrading their infrastructure in accordance with the infrastructure norms of CTEs outlined in Annexure VII, based on the specifications and State SORs. Equipment grant upto Rs 20 lakh per CTE will also be made available.
- (iv) Recurring Central assistance for expenditure on salary (for posts sanctioned and filled up after up-gradation), Rs 25 lakh for programmes and activities, and contingency grant of Rs 15 lakh per year for meeting day-to-day expenses, including recurring expenses on vehicle up to Rs 3 lakh per annum, if not already provided for to the institution. These would cover all day-to-day expenses, purchase of library books/periodicals, small office/library

equipments, computer consumables, etc; Assistance for programmes and activities would include expenditure towards faculty development/training of the academic staff of the CTE. For training programmes, financial estimates should be prepared on the basis of rates specified under the RMSA for residential and non-residential training programmes. Financial norms for honorarium to resource persons, and other related expenditure for programmes and activities would be projected in accordance with the extant norms of the State Governments, including under RMSA.

- (v) In respect of new CTEs, non-recurring Central assistance for upgrading the infrastructure of the existing secondary teacher education institution in accordance with the infrastructure norms of CTEs outlined in Annexure VII based on the specifications and State SORs. An amount of Rs. 30 lakh will also be available for equipments in a new CTE. Recurring assistance specified in (iv) above would be available to the new CTEs after they are established.
- (vi) To avail Central assistance, State Governments must ensure that all the posts of academic and non-academic staff in the CTE are filled on or before 31<sup>st</sup> March, 2013 and thereafter, the vacancy should not be more than 5% of the sanctioned strength. Steps should also be taken to sanction posts in accordance with the staffing pattern suggested for the CTEs and fill them up expeditiously.

## Chapter VI : Institute of Advanced Studies in Education (IASEs)

### Background

6.1 The establishment of Institutes of Advanced Studies in Education (IASEs) was first articulated in a Centrally Sponsored Scheme (CSS) of Strengthening and Reorganization of Teacher Education, 1987. CSS suggested that about 250 existing Secondary Teacher Education Institutes (STEIs) of an adequate standard and good reputation be financially assisted, on a project basis, to competently discharge their envisaged role, of which 50 would be designated as Institutes of Advanced Studies in Education (IASEs) and they would have an additional mandate of developing into centres of excellence and research, while the other upgraded STEIs would be called Colleges of Teacher education (CTEs). The recommendation by CSS was a result of the concerns regarding quality of teacher education raised by the National Policy on Education (NPE) 1986. NPE states that teacher Education is a continuous process and its pre-service and in-service components are in-separable. As a first step, the system of Teacher Education needs to be overhauled.

6.2 In respect of the IASEs, the findings of the NCERT Report (August, 2009) are summarized as under:

- (a) IASEs not established in all States; some are not functional
- (b) Buildings require renovation; some IASEs have inadequate space for laboratories, in-service programmes and research activities;
- (c) 50% of IASEs have less than 50% of sanctioned academic posts filled; Several IASEs have not appointed additional staff after up-gradation
- (d) Large inter-state variations in recruitment methods
- (e) Very few IASEs are conducting M.Ed and M.Phil programmes
- (f) Limited no. of IASEs are conducting in-service programmes
- (g) Areas such as research, curriculum material development and faculty development are neglected
- (h) IASEs not optimally availing of Central assistance

6.3 The Report has recommended that, in view of the important role that these institutions are expected to perform, especially in the context of professional development of teacher educators, the existing IASEs should be strengthened in terms of organisational structure, academic programmes, human resources, financial support, etc. At present 31 IASEs have been sanctioned. The criterion for setting up an IASE in a State is : (a) State with 20 districts or less – 1 IASE; (b) States with 21-40 districts – 2 IASEs; and (c) States with more than more than 40 districts – 3 IASEs. However, in view of the important role of IASEs in teacher education, and the enhanced role envisaged for

them, it is proposed to upgrade 50 Departments of Education in Central and State Universities into IASEs during the XII Plan period.

6.4 IASEs will be additionally required to set up units/centres that would undertake in-depth work in specific areas including research and material development in areas of Curriculum Studies, Pedagogic Studies, Assessment and Evaluation, apart from the responsibility of educating teachers and teacher educators. This will ensure the development of a professional cadre of teacher educators with specialized skills. These Institutions would also act as Regional Resource Centres, each catering to state-owned teacher education institutions in the vicinity as a resource Centre for these institutions for various activities, including development of curriculum and learning material, educational planning and administration, development of modules for training of educational administrators.

#### Proposed Action Steps with regard to the IASEs

6.5 The challenge for the IASEs is to rise to the new demands, fulfill the objectives outlined for them as well as forge an identity for themselves and emerge as Academic Lead Institutions and Centres of Excellence as was originally envisioned.

- i. The already established IASEs need to be individually evaluated against the stated objectives for which IASEs were conceived, guidelines proposed to determine the next steps needed in terms of faculty development, infrastructure development and vision building. As an example, the first task should be to determine the vacancies both in academic and non-academic staff. The number of programs offered and their quality should also be assessed. Thereafter, their annual plans should reflect the steps they would take to meet the new guidelines and the timeline required to reach their goals.
- ii. Setting up new IASEs: Under the 1989 Guidelines, IASEs were established by upgrading Secondary Teacher Education Institutions and some Departments of Education. During the XII Plan, around 50 Departments of Education in universities would be upgraded to IASEs. The States need to identify all such Universities and set up a committee to evaluate them against the criteria for being an IASE, steps required for up-gradation and a plan for their smooth transition.
- iii. Strong work relationship between SCERT, CTEs and IASE: A stronger linkage between the SCERT, CTEs and IASEs has to be established. Both CTEs and IASEs are working towards preparation and development of secondary school teachers. They need to collaborate with each other in this process and the SCERT should serve as a forum for these interactions.
- iv. Developing into Regional Resource Centres: The IASE should work on a plan to develop into resource centres for their region. The plan should outline the work they will carry out in this capacity, manpower required, institutions that



they will cater to, activity plan, finances required, alternate sources of generating funds for the resource centre etc. IASEs must work towards development of pre-service programs for teacher educators in their region and act as resource centres for other institutions of secondary teacher education in their area.

- v. Raising resources: Apart from raising funds through their resource centre, IASEs also need to generate them by conducting workshops, through consultancy work, developing and offering certificate courses, writing proposals for research grants etc. In cases where the IASEs have the facilities, this can also be done by offering their premises and hostels for teacher development workshops.
- vi. Focus on Research: Research has been neglected in the IASEs so far, and the institutes need to start by setting up research committees consisting of internal and external experts that can prepare a plan to build the capacity of the IASE faculty to carry out research and hand hold them in this process in the initial years.
- vii. Use of ICTs to support new models of teacher education: Need-based, self-directed, continuous/life-long, mentored, decentralized / peer-learning based teacher education programs can be designed and piloted by IASEs. Creation of a learning resources rich environment needs to be supported using digital tools and methods. Existing investments in ICTs can be utilized in meaningful manner, basing program design on educational perspectives and priorities, rather than being technology-driven, to support the NCFTE, 2009 vision of teacher-education. IASEs need to use ICTs effectively to ensure retention of institutional memory for supporting institutional learning and institutional development. IASEs need to develop virtual networking with other institutions for sharing and building communities of practice
- viii. Tracking/ monitoring of IASEs against indicators: both internally and externally, the performance of IASEs should be constantly measured against indicators developed by the Centre, State and the IASE itself.

### IASEs: Key Activities

6.6 IASEs are mandated to prepare elementary and secondary teacher educators through pre-service and in-service programs. They should also conduct research and provide academic guidance to DIETs and resource support to CTEs. It is important to recognize that teachers are the main source of maintaining and enhancing quality and therefore any work undertaken by the IASEs should aim to improve the quality of teacher preparation. This could take the form of conducting pre-service programs for teachers, teacher educators as well as conducting studies and research that would help build greater capacity of the institutions of teacher development as well as of schools. The primary objectives of the work done by IASEs, thus, can be stated as follows:

- (a) Preparation of quality teacher educators for all levels of school education.
- (b) Capacity building of elementary and secondary teacher educators.
- (c) Ensuring that the spirit of the ideas mentioned in NCFTE and NCF is reflected in pre-service and in-service programs offered by the IASEs.
- (d) Promoting research to improve quality of education.
- (e) Working on providing quality teaching and reading material for teachers at the secondary level
- (f) Providing a forum for DIETs to share, learn and grow.
- (g) Establishing linkages between higher education institutes and SCERTs/DIETs

#### Capacity Building of faculty of IASEs

6.7 The IASEs were exceptionally functioning STEIs that had been selected and upgraded. Their mandate expanded to include not just pre-service teacher preparation but several other activities such as research, extension support, and now they are expected to serve as regional resource centres as well. If the earlier established and new IASEs are expected to fulfill their functions, they need to work on a capacity building plan for its leadership as well as faculty. Some activities that can be undertaken as part of this are:

- (a) Participation of faculty in workshops/seminars on subject areas, research methods, child development, psychology of education and other related disciplines
- (b) Capacity building through collaborations in work with other institutes of higher education
- (c) Capacity building in the use of ICT: A widespread program of capacity building for teacher-educators is required on ICT.
- (d) Regular sharing meetings between principals and senior faculty members for planning and sharing of experience, of practices, problems materials, should be organized.
- (e) Attending workshops (especially for the heads of IASEs) on topics such as planning and administration as they are expected to provide support in this area to other institutions

#### Pre-service programs

- (a) All IASEs should design and conduct pre-service programs for preparation of secondary teachers. These could be the regular B.Ed program or integrated four year B.Sc/ B.Ed programs etc. The IASEs should revise the teacher education curriculum in accordance with the principles laid down in the NCFTE, 2009
- (b) Pre-service programs for teacher educators at all levels: The IASEs need to focus on preparation of quality teacher educators at all levels. The programs

conducted by the IASEs that qualify a person for becoming teacher educators are M.Ed, M.Phil. and Ph.D.

#### Research Activities:

6.8 IASEs need to evolve policies to prepare teacher educators with adequate representation of research that encompasses TE-not only sectorally, such as ECCE, primary, middle, secondary; but also in terms of equity, inclusion, teaching-learning, knowledge, etc. There is great need for inter-disciplinary, and IASEs are uniquely placed to generate this kind of inter-disciplinary research by inviting higher education teachers in other departments of universities to co-teach and co-supervise the teacher education research. More specifically, the IASEs can:

- (a) Conduct pedagogic, sociological research related to teaching-learning
- (b) Generate research based understanding of children, how they learn; multiple facets of child development
- (c) Generate research on issues of equity and inclusion with respect to school and teacher education
- (d) Provide an inter-disciplinary platform for academic exchange and production of research
- (e) Carry out rigorous research exercise along with the concerned CTE/DIET to assess the needs of in-service programs.

6.9 The Main areas of activities are elaborated below :

6.9.1 Undertake policy research in school and teacher education: The IASEs in collaboration with universities need to undertake policy analyses, evaluation studies that can serve as bases for improved policy formulation. They can also collaborate with NCERT and NUEPA as most of the studies of this nature, in India, have been carried out by them. At the state level the involvement of higher education in policy research is near non-existent. This results in disengagement of IASEs from state policies, and hence a diminished role; re-engagement on policy issues and their academic implications can contribute greatly to quality improvement of TE and SE.

6.9.2 Forging Linkages and providing Academic Support: The IASEs were envisaged to be the face of the crucial link between higher education and SCERT-DIETs. They were also meant to provide academic support to teacher education at all levels of schooling. They can also provide a cross-cutting platform for stakeholders in education: researchers, teacher educators, teachers, community, children, etc.

6.9.3 The IASEs need to engage with curriculum building, orientation to state teacher educators at SCERTs, DIETs, BRCs, CRCs. IASEs must especially take the lead in perspective building on educational theory, practices, disciplines, research

and provide support to concretize these at state level. In most states, IASEs are part of the University system, and hence has a huge hinterland of academic resources from the varied university disciplines, apart from the Education Department in which most IASEs are housed.

6.9.4 At the level of school education, IASEs have a more pervasive potential. Teachers who have obtained their teacher education degrees from IASEs need to form a network through which IASEs can experiment, research and influence research based teaching-learning practices. IASEs can build on these and other teachers to help them become teacher educators for the in-service programs. They can infuse quality and research base into teaching-learning material production, curriculum building, classroom pedagogies. By systematically drawing on the research literature being generated by M.Phil, Ph.D. students and library resources at IASE, and allied departments of the university, IASE can help provide resource support to the state school system.

6.9.5 IASEs and few selected CTEs should take on the responsibility of orientation and training of Principals and Faculty of Teacher Education Institutions (B.Ed./STC/DIETs/SCERT) as there has been a great increase in the number of teacher education institutions without proper planning. A long term strategy needs to be evolved by these institutions for the newly recruited Principals and teachers of such colleges.

6.9.6 Evolve models for teacher education : IASEs need to engage with SCERTs and State Boards to evolve quality models of pre-service teacher education programs

6.9.7 Evolve teaching-learning materials, conduct research on TLMs to serve as exemplars: There is a shortage of reading material accessible to teachers. The IASEs need to take a lead in preparing original material as well as translating material that will be useful for teachers at the secondary level. The use of free and open source educational applications in different subjects should be encouraged to create a learning resource rich environment.

6.9.10 Serving as regional resource centres: The IASEs are expected to serve as resource centres in their region. The resource centres can achieve the following:

- (i) Provide a Forum for sharing Innovations, Practices and Research: The centre can organize a time specific and region specific sharing of professional practice of innovations, studies (region, state and national level) in the form of seminars, workshops, debates and exhibitions with participation of other STEIs, schools, DIETs etc – the participants being determined by the agenda.

- (ii) Establish Resource Groups and Subject Specific Forums: for the teachers and teacher educators in their area. State and District level resource groups and subject forums can be established for involvement in planning, implementing and supporting academic programs. These forums should provide opportunities for engaging with national level resource persons for capacity building of these resource groups. These forums may engage with the IASE in various programs such as material development etc.
- (iii) Engage with MODEL secondary schools for study and research: Every IASE must have a practicing school attached to it for regular professional practice and implementing various pedagogical innovations before upscaling. It must be ensured that the IASE faculty teaches the school students and share the time table.
- (iv) Engage in generating ICT literacy among its members. This should also extend to using a variety of free ICT applications in different areas to create an environment of competence in using ICTs for various educational purposes
- (v) Bring out a newsletter (print or online): detailing various activities and innovations in education carried out in the region.

## Organizational Structure and Personnel

6.10 The suggested organizational structure of the IASEs was specified in the IASEs Guidelines (1989), which are re-produced in Annexure VI. This structure may be adopted by the States/Universities for sanctioning posts in the existing IASEs and for establishment of new IASEs. However, if the State Government/University is of the opinion that the structure requires certain modifications in respect of one or more IASEs, having regard to its activities, it may suggest the same to the TEAB for its approval.

6.11 The recruitment and personnel policies governing the IASEs are indicated at Annexure V. It may be added that creation of a cadre of teacher educators is essential and all State Governments must endeavour to amend the recruitment Rules paving way for creation of such a cadre.

6.12 The norms for establishment of IASEs have been : 3 IASEs for States with over 40 districts, 2 IASEs for a State having 21-40 districts and 1 IASE for states with less than 21 districts. During the XII Plan, 50 Departments of Education in Central and state Universities would be upgraded into IASEs.

## Infrastructure

6.13 The infrastructure norms of an IASE were suggested in the IASE Guidelines (1989), which are re-produced in Annexure VII. The existing IASEs should evaluate where they stand in terms of infrastructure and prepare proposals for strengthening of

the infrastructural facilities. States/Universities may propose certain changes in the suggested norms having regard to the contemporaneous requirements, including of ICT. These can be considered by the TEAB.

#### Annual Work Plans and Perspective Plans

6.14 The IASEs need to develop the following plans and reports with the help of PAC and other agencies such as NUEPA and other Universities : (a) Annual work plans – detailing activities, as well as plans to improve infrastructure and financial planning, budgeting and estimated expenditures and sources of income should be developed; (b) Annual reports should be written indicating performance against indicators; (c) Perspective plans for five years should be prepared along with the annual plans and approved through PAC. Linkages with apex bodies and universities for approval and development of perspective plans should be forged. The perspective plan should outline:

- i. Targets to be Achieved in clearly defined measurable terms and presented in a phased manner i.e., on year to year basis and disaggregated target
- ii. Teacher education programs to be conducted: Pre-service and in-service.
- iii. Identification of Problems and Issues in different areas such as secondary education, Teacher education programs, etc
- iv. Pre-plan of activities to be undertaken, Workshops and discussions to be organised, major Studies conducted
- v. Strategies for the problems and activities
- vi. Costing and Budget Requirements

#### Norms for Assistance to IASEs under the Scheme

6.15 Following assistance to IASEs would be available in the revised Scheme:

- (i) Non-recurring Central assistance to existing IASEs for strengthening and upgrading their infrastructure in accordance with the infrastructure norms of IASEs outlined in Annexure VII, based on the specifications and State SORs. Equipment grant upto Rs 20 lakh per IASE will also be made available.
- (ii) Recurring Central assistance for expenditure on salary (in respect of posts sanctioned and filled-up after up-gradation), Rs 25 lakh for programmes and activities, and contingency grant of Rs 15 lakh per year for meeting day-to-day expenses (including expenses on vehicles up to Rs.3 lakh, if not already provided for to the Institution). Assistance for programmes and activities would include expenditure towards faculty development/training of the academic staff of the IASE.
- (iii) In respect of new IASEs, non-recurring Central assistance for upgrading infrastructure of the Department of Education in accordance with the infrastructure norms of IASEs outlined in Annexure VII, based on the specifications and State SORs. An amount of Rs. 30 lakh will also be available for equipments in a new IASE. Recurring assistance specified in (ii) above would also be available to the new IASEs after they are established.

## Chapter VII : State Councils for Educational Research and Training (SCERTs)

### Introduction

State Institute of Education (SIEs) were established in mid-60s for qualitative improvement of elementary education. Their functions comprised organization in-service training for teacher and supervisory personnel, extension activities research and publication of instructional materials. Subsequently, in course of time, State Institutes/agencies were also set up in some States to provide academic support to the school education in areas of growing importance like science education, educational technology, English language teaching, etc. and specific areas of concern like examination reform, evaluation, educational and vocational guidance, etc.

7.2 As the number of institutions meant for providing academic support to the school system increased, need for coordination among them arose. The then Ministry of Education and Social Welfare recommended in 1973 that all such existing institutions be merged into a single organization to be called the State Council of Education Research and Training (SCERT). Like the SIE, the SCERT was also primarily intended to pay special attention to universalization of primary education, though it also concerned itself with other stages of school education.

7.3 During the VII Plan period, following the adoption of the NPE (1986) and the Plan of Action (POA, 1992), major responsibility for implementation of several of the newly created Centrally Sponsored Schemes was assigned to the SCERTs. These included the Operation Blackboard, Non- Formal Education, Educational Technology Programme, Integrated Education of Disabled Children, Environmental Orientation to School Education, Improvement of Science Education in Schools, and Vocationalization of Secondary Education. Accordingly, under the Teacher Education Scheme recurring and non-recurring assistance have been provided to the SCERTs

7.4 At present, there are SCERTs in 25 states and State Institutes of Education (SIEs) in Assam, Arunachal Pradesh, Jammu and Kashmir (2), Sikkim, Andaman & Nicobar Islands, Uttar Pradesh and Chandigarh (NCERT, 2009). A large number of SCERTs were created between 1988 through the early 1990s. Having been in existence for over 2 decades, it is pertinent to reflect on the progress of SCERTs since the 1990s. Most States created SCERTs not as new institutions but amalgamated pre-existing institutions such as the State Institute of Education, Science Centres, non-formal institutions, adult education etc. Understandably, it took around 5-10 years for the SCERTs to become fully functional with the identity as envisaged by policy. Personnel issues arising out of the amalgamation has persisted right through (Delhi SCERT, 2002). Several studies have pointed out that despite guidelines to the effect, very few States envisaged SCERTs as a

distinct institution and cadre. There was also lack of clarity in terms of positioning SCERT faculty vis-a-vis the various levels in the state directorate of education leading to uneasy relationship between the school teachers, principals and SCERT faculty. SCERT faculty saw themselves as post-secondary educators, and hence a level above senior secondary teachers. States, however, viewed SCERT faculty as interchangeable with the school teaching cadre. Study conducted by the NCERT has led to the following findings in respect of the SCERTs/SIEs :

- (a) Infrastructure and physical facilities such as hostels, toilets, laboratories, etc. are either not available or inadequate;
- (b) Staff positions in SCERTs/SIEs vary across States. Many of the SCERTs are inadequately staffed and around 50% of sanctioned positions are vacant in most of the SCERTs.
- (c) SCERTs, except in Delhi and Tamil Nadu, do not have a separate cadre and faculty is drawn from other institutions, including from schools, some of whom are posted on ad hoc basis.
- (d) Administrative support is weak, and posts of administrative staff such as administrative officers, stenographers, clerks, accountants and other Group C and D posts have not been filled up.

7.5 Since SCERTs are envisaged as State level institutions under the State government, the work to be done by SCERT is determined by the priorities of the State Education Department. However, the need for continuous professional development of all teachers through in-service education was not generally a priority of state directorates of education. The District Primary Education Program (DPEP) launched in 1994 established parallel systems for training, policy and planning through SIEMATs, DRCs and CRCs managed by the DPEP/SSA Mission, which further served to sideline the SCERTs (and DIETs). SCERTs and DIETs received fresh attention under the Tenth Plan (2002-2007) guidelines which recommended additional support to SCERTs to become institutions of excellence, raising the central contribution to Rs. 1 crore. The 11<sup>th</sup> Plan period was taken up by review of the entire scheme. The increase in private TEIs in states brought a fresh role to SCERT as a nodal agency for pre-service elementary and early childhood teacher education. Since 2000, SCERTs have also been at the forefront in preparation of textbooks for all levels of school education in an enhanced manner.

7.6 Over a period of time, SCERTs have been mandated to perform a variety of functions, though there are large inter-State variations. The SCERTs are expected to organize in-service education and extension programs for all categories of educational personnel. Their other functions include development of curriculum, instructional material, textbooks, supplementary materials as well as undertaking research program guidance, support and assistance to the state department of education, functioning as state resource institutions to provide academic support at all stages of education, co-ordination of all academic matters relating to school education and to maintain



appropriate linkages with other educational organizations and supervision and support to the district and sub-district level institutions. Apart from these considerable expectations, SCERTs are also expected to perform a variety of roles by NCERT, NUEPA in their state studies and surveys, nodal agency for NCTE, science fairs and other activities for state governments.

#### Modified vision of SCERT

7.7 The vision of SCERT demands that its role be viewed at multiple levels and agencies. The core functions of the SCERT can be classified under the following broad heads :

##### Academic Authority u/s 29 of the RTE Act

7.8 Under section 29(1) of the RTE Act, the State Government has to appoint an academic authority to lay down the curriculum and evaluation procedure which would be followed by all schools in the elementary level. Given their existing mandate, most of the States have notified the SCERTs as the academic authority to perform this function. This involves not only laying down the curriculum and evaluation procedure but also to develop a system for assessment and evaluation of the learning achievements on a continuous basis.

##### Policy matters

7.9 The SCERTs are expected to undertake policy research and to advise state governments on policy formulations relating to school education and elementary teacher education. This inter alia involves preparation of State Curricular Framework for School Education, preparation of curriculum of the elementary teacher education course, preparation of state perspective plan for teacher education, etc. Collating and disseminating available research from universities, research agencies, NGOs is a set of related activity which SCERTs are expected to perform.

##### Curriculum and Material Development

7.10 Preparing textbooks in all curricular areas for all levels of school education is one of the core activities of the SCERTs, and several of the SCERTs have over the last several years undertaken this task. The scope of its functioning must encompass curriculum development, preparation of proto type teaching learning material and text books for all levels of school education and teacher education. The existing curriculum and syllabus of the teacher education courses will have to be revised in light of the National Curriculum Framework (NCF – 2005) and the National Curriculum Framework for Teacher Education (NCFTE). This effort is to be supplemented by preparation of other teaching-learning materials including ICT for school education. Researched materials do tend to be in the dominant language i.e. English, mainly because the resources English language researcher can attract is not always available to local language based

researchers. To begin with, there is need to carefully select the most relevant of the materials and translate them into state languages. At the same time, relevant local language based research available must be collated and translated into English and Hindi. This exercise will make available the best of research in all languages to student teachers and teachers. The SCERT needs to be the focus of curriculum and pedagogical transformation for teachers in all aspects. This includes not just cognitive and procedural but their attitude to children and education as well as their self-confidence, ownership and feeling of responsibility.

#### Training and related activities

7.11 Organizing in-service teacher education annually for all teacher educators, administrators, secondary level teachers and ECCE practitioners are important functions of the SCERTs. Along with its in-service responsibilities, the SCERT should attempt at evolving meaningful, short term and long term teacher education programs on specific themes of specialization for secondary and senior secondary teachers, administrators and teacher educators. Besides these, doctoral and post graduate programs in education/teacher education for early primary to secondary stages should be offered by SCERT. Designing and implementing such programs would also help them in visualizing the relevant inputs for in-service teacher education. Adequate opportunities for continuously updating the capacities of SCERT faculty should be created so that they can discharge their responsibilities effectively.”

#### Community and Children's outreach

7.12 Teacher education institutions face one key challenge - they are once removed from the active teaching-learning experience. Community and Children's outreach program and network keeps the SCERTs rooted to the experience and issues on the ground. The Talimi Mela of Jamia Millia Islamia and the recent initiative of CIET, NCERT, to start a children's corner are some good examples of such initiatives. SCERTs (and DIETs) may have to have a more frequent system in place.

#### Inter-disciplinary Coordination

7.13 The SCERT should be the nodal agency in the state and establish proper coordination and collaboration with various statutory bodies like Board of Textbooks, Board of Secondary Education and Board of Elementary Education. The SCERT as the academic authority has the responsibility of developing learning outcomes, appropriate teaching-learning materials, modules for teacher preparation, developing assessment tasks and suggestions for classroom processes. These components are presently addressed in a piece-meal manner with different groups working. There is a need for a comprehensive understanding in each discipline. These include for, for example, Mathematics, Science, Hindi, Second Language and Third Language, Social Study teaching etc. These groups must build an overall view for the entire period that the

child is in the school and take a comprehensive view of the expected materials, methods and assessment. These groups should be constituted by involving faculty from SCERT, CTEs IASE and DIETs. It is not possible to have separate groups in all these subjects but each SCERT must have at least a few groups working and developing new understanding that can be shared with other States as well as NCERT and other national bodies.

7.14 There are many institutions in the State supporting the work of SCERT. These include for example the State Institute of Education, the English Language Teaching Institution, the State Institute of Science Education, the State Institute of Management and Training and some other institutions. The SCERT also needs to oversee the programmes and institutions for ECCE in the State. It is suggested that SCERT be represented on program development and implementation committees of each of these institutions. The SCERT must collaborate with and oversee functioning of these. It must also seek their support in its programs and help the institutions to improve quality and reach of their programs. Mechanisms for sharing resources and ideas could also be set up.

#### Organizational Structure, Personnel and Administration

7.15 The NCERT Report (August, 2009) points out that there is wide variation in the status of SCERTs in different states. In Karnataka, SIE has been given the status of a Directorate within the State Education Department and its functions are visualized as an administrative wing of the Department. In Assam and Uttar Pradesh, both SIE and SCERT function alongside. Union Territories of Pudducherry, Daman and Diu, Dadra and Nagar Haveli and Lakshadweep have neither SCERT nor SIE; academic functions in these UTs are performed by academic wings of State Institute of Education. In Delhi, the SCERT is an autonomous body. In Kerala, SCERT is an autonomous body under higher education. In most of the States the SCERT is under the administrative control of the Department/Directorate of School Education, whereas it is under the Department of Teacher Education in Karnataka and Tamil Nadu, the Department of HRD in Bihar and the Department of Higher Education in Himachal Pradesh.

7.16 The NCERT Report (2009) also points out that nearly one-third of the sampled SCERTs have no academic positions; where such positions have been created, Professor in 2 SCERTs, Reader in 3 SCERTs and in the remaining Sr. Lecturer/ Lecturer are the highest academic positions. The faculty is posted mostly on deputation from DIETs, CTEs and secondary schools on ad hoc basis in most of the SCERTs. A separate cadre of teachers is created only in Delhi and Tamil Nadu so far. About fifty percent of the sanctioned posts are vacant in most of the SCERTs. In West Bengal, Director is the only faculty member in the SCERT, who is assisted by six research fellows working on temporary basis. In SIE, Jammu, a Joint Director is assisted by 6 Field Advisors and 13 Research Officers. SCERT in Karnataka has 16 Deputy Directors besides the Director

and Jt. Director. The Director is assisted by 8 Deputy Directors in SCERT of Orissa. No appointment has been made so far in SCERT, Jharkhand

7.17 In about forty per cent of the SCERTs, the faculty strength is less than recommended. The qualifications of faculty vary from state to state. Most of the faculty members working in SCERTs are drawn from the secondary/senior secondary schools with no Masters Degree in Education. Qualifications and experience have not been considered while making intra and inter departmental transfers, which have generally affected the performance of SCERTs. The pay structure of Director and faculty members of SCERT differs from state to state. Most of the faculty in SCERTs is drawn from school cadre (Haryana, Punjab, Goa, Uttarakhand, Uttar Pradesh etc.) and DIET and CTE (Gujarat, Andhra Pradesh, Karnataka etc.), and they continue to draw the pay in their respective cadres. The pay scale of Director in most of the states is that of administrative position such as Director/Additional Director of Schools.

#### Proposed Structure for SCERT

7.18 In view of the proposed role of SCERT, details of functions of the divisions should be worked out in such a way that discharging them will be necessarily in the context of the overall school and teacher education programmes. Staff requirement for the departments should be accordingly worked out. It is recommended that adequate faculty positions be created with sufficient technical and support staff. The technical staff should have capacity to provide support in organizing the activities related to science, mathematics and language labs, art and craft, physical education and yoga, ICT, etc. A 'model' structure of the SCERT is proposed taking into account the various functions of the SCERTs. The 'model' structure is given in Annexure VIII. Suggested Infrastructural requirements for the model SCERT is given in Annexure IX. Each State will have to assess its needs in terms of faculty and infrastructure depending upon actual demand for various facilities and their current availability. Once the State Government takes a decision to re-organize/expand the structure of the SCERT, it shall issue a Notification to that effect, specifying the new structure, staffing pattern and strength.

#### Components of Assistance under the Scheme

7.19 The components of Central assistance to be provided to the SCERTs are as under :

- (i) Non-recurring central assistance for strengthening of physical infrastructure (civil works, hostel facilities, repairs and renovations, etc) of the existing SCERT based on the State SORs and Rs 30 lakh for equipments to enable it to upgrade its facilities in accordance with the proposed infrastructural and equipment norms.
- (ii) Non-recurring Central assistance of Rs.50 lakh per SCERT for establishment of Special Cells/Laboratories for Science, Mathematics, Social Studies,

Educational Technology/Computer and Language/English education during XII Plan.

- (iii) Rs.20.00 lakh per SCERT as recurring assistance for undertaking specific projects for academic activities such as curriculum/material development (including for pre-service teacher education courses such as D.Ed), training, research, execution of functions envisaged under section 29(1) of the RTE Act.
- (iv) Rs 10 lakh per SCERT per year for conducting various programmes for capacity building of faculty of the SCERTs;
- (v) Salaries of faculty and staff of SCERTs in respect of additional posts sanctioned and filled up after the introduction of the revised Scheme, in accordance with the suggested organizational structure for SCERT, after the State Government notifies the revised organizational structure, staffing pattern and strength. This would be subject to the condition that the State Governments create a separate cadre of teacher educators;
- (vi) SCERTs/SIEs should also develop appropriate training material and conduct training for Education Administrators, including Head Teachers. With the emergence of Panchayati Raj Institutions and the empowerment of VECs and SMCs for school management (section 21 of the RTE Act), Head teachers and district/ sub-district level education administrators must acquire new perspectives on planning and management. The programme components will include a vision on decentralised planning and management of educational programmes, including school leadership programmes for head teachers. The programme would be conducted in a cascade model in which the SCERT would develop resource persons for imparting the training. Each SCERT/SIE will prepare modules for the training programme of 5-days duration, for training of educational administrators, including Head Teachers, which would be imparted to 40 participants in the DIETs by the SCERT/DIET faculty or resource persons specially hired for the purpose and four such training programmes would be conducted in each DIET every year. Rs. 40,000/- have been provided per cycle of 40 participants each for training programme for educational administrators for 5 days.
- (vii) The newly recruited teacher educators of DIETs/DRCs should have strong grounding in curriculum, pedagogy and research. They shall be given orientation training (induction) for a period of 14 days by the SCERTs/SIEs by utilizing the expertise of academicians from national/regional level institutions such as NCERT, NUEPA, TIFR, TISS, RIEs, etc. An amount of Rs. 200 per participant per day has been provided for 14-days Orientation/Induction Training of Teacher Educators.

7.20 The TEAB would approve the perspective plan for the development of the SCERT. These approvals would be based on specific proposals received under the

aforementioned components from the State Government, including physical and financial estimates of the proposals. States which have a State Institute of Education (SIE) instead of SCERT would also be eligible for the aforementioned Central Assistance. However, they would need to upgrade the SIE in a full-fledged SCERT.

#### Programme Advisory Committee (PAC)

7.21 Each SCERT must have a Program Advisory Committee (PAC) with representatives from the State Universities, the DIETs, the IASEs and CTEs, teachers, from national institutions and from NGOs and institutions with experience of supporting work in education at various levels. The NCERT (2009) found that only one-third of the sampled SCERTs seem to have the PAC and one-sixth have Research and Executive Committees. The committee shall meet at least once a year for drawing up the programme for the next year and review of the progress of work. The pool from which PAC members can be drawn is suggested at Annexure X.

#### Annual and Perspective Plan

7.22 The SCERT is expected to prepare a 5 year perspective plan as well as annual work plans. The suggested list of items to be included in the Plan is indicated at Annexure XI.

## Chapter VIII : Block Institutes of Teacher Education (BITEs)

There are a large number of districts having high concentration of SC/ST and Minorities where there is an urgent requirement of setting up elementary pre-service teacher training institutions to ensure preparation of elementary school teachers from amongst persons from these communities. While the policy for elementary education has a foundation for inclusive education and includes strategies for sensitization of teachers to the specific needs of children belonging to SC/ST and minorities, the establishment of these institutions would ensure access to good quality teacher education facilities for rural and remote areas and facilitate the entry of talented persons, particularly persons from SC/ST and Minority concentration areas, into the teaching profession. This would help ensure the participation of SC/ST and minority groups in the teaching profession and also overcome the shortage of locally based teachers in these areas to be employed in elementary schools.

8.2 The Ministry of Minority Affairs, Government of India had obtained 'in principle' approval of the Cabinet on the proposal to set up Teacher Education Institutes in minority concentration areas. The Ministry of Minority Affairs has prepared a list of 90 Minority Concentration Districts (MCDs) based on the 2001 census data on population, socio-economic indicators and basic amenities indicators. List of the 90 MCDs, along with the list of districts with SC population above 25% and ST population above 50%, based on 2001 Census data, is at Annexure XII.

8.3 It has been decided to establish 196 Block Institute of Teacher Education (BITEs) - one such Institute in a block of each of the 90 MCDs and the SC/ST dominated districts (other than the block in which a DIET is sanctioned), for which Central assistance would be provided. The BITE shall be a pre-service elementary teacher education institution. The BITE would be established in the block having the highest concentration of SC/ST/Minority, depending upon the criterion for which the district has been identified for setting up the BITE. The Scheme envisages the following strategy:

- (a) Possibilities should be explored for approaching well performing elementary teacher education institutions for admitting eligible persons from the SC/ST/Minority communities to the teacher education course; the Government would meet the cost of tuition and other fees in respect of persons so admitted;
- (b) Identify an existing elementary teacher education institution in the district, other than a DIET, which can be up-graded as a BITE. Non-recurring Central assistance would be available for civil works for up-gradation of an existing elementary teacher education institution into a BITE based on the specifications mentioned in the norms and standards of the NCTE for a D.Ed institution and for a 50-seater hostel, in accordance with State SORs. Equipment grant of Rs 10 lakh would also be made available. Recurring grant will be made available for salaries in respect of posts sanctioned and filled up

after up-gradation of the institution in a BITE and of Rs 5 lakh per year as contingency grant.

- (c) Explore the possibility of using unused capacity or for increasing the capacity of the DIET in the district for admitting eligible persons from these communities to the teacher education course;
- (d) Establish a new BITE (in a block other than the one where the DIET is established). Non-recurring Central assistance would be available for civil works for construction of a BITE based on the specifications mentioned in the norms and standards of the NCTE for a D.Ed institution and for a 50-seater hostel, in accordance with State SORs. Non-recurring assistance upto Rs 20 lakh for equipments would also be available. However, sanction of a BIT would be given only after the State Government has earmarked and allocated land for establishment of the BITE. Recurring assistance would be available for salaries in respect of the posts sanctioned and filled up, and Rs 5 lakh as contingency grant.



## Chapter IX : Integrating ICTs with teacher education

ICT is a very broad domain, and affects all aspects of life, the socio-cultural, the political and the economic. Since education is concerned with preparing learners to become responsible citizens, there is a great need for student-teachers to acquire a basic understanding of ICTs, including the Internet. Hitherto, focus has been on basic proprietary softwares; however, we need to expose student-teachers to a larger gamut of ICTs, so that they have basic understanding and can develop skills in areas that interest them. The course curriculum should hence cover the following :

- (a) Basic hardware knowledge - Computers – laptops, net-books, tablets, radio and audio recorders, camera, Printer/peripherals; Cell phones
- (b) Basic software knowledge - Public operating systems (e.g. GNU/Linux) - virus free, free of cost/free to share which support most languages, and basic software applications that are also free to share, modify and use for office automation, web browsing etc.
- (c) Basic knowledge of Internet and web based tools and resources including of cyber security – avoiding dangers and risks as well as basic website and web tools use (for creating and maintaining institutional resource portals etc)
- (d) Larger socio-cultural, political and economic implications of the emerging network society, an effect of ICTs.

9.2 The goal in ICT literacy must be to expose teachers to a wide variety of ICT resources – hardware, software as well as digital learning resources . This requires an emphasis on using available free / public digital resources. Teachers must not treat ICTs as a black box – they should be taught to install even the operating system, open up hardware to study components. Programs that have done this (e.g. Kerala's IT@schools programme) have seen enormous confidence developed in teachers. Learning to install software and freely installing it on multiple computers (without such act being a violation of law) serves as a significant inhibition destroying process and encourages teachers to begin a journey of learning in the digital world. Teachers become learners and teachers instead of being consumers/users who have no idea and no right to study, share or customise resources. Inexpensive computers / devices that support access and participation in the digital space, need to be promoted on large scale.

ICT Aided Learning / integrating ICTs into subject teaching-learning

9.3 The biggest drawback so far in ICTs has been to treat it as a stand-alone subject. However, ICT it is a new and powerful method for mediating teaching-learning and hence needs to be integrated into different subjects. To integrate, the steps of accessing, reviewing, creating and sharing resources are to be structured into formal curricular experiences.

9.4 Existing digital resource repositories from governments and NGOs including audio resources (EDC), video resources, animation movies etc. should be made widely accessible. It is important to make the resources available in district repositories linked to state repository. Student-teachers also need to learn how to access the world wide web for resources, including principles governing quality, authenticity of resources, rules of fair use etc. Student-teachers need to integrate ICTs into their subject teaching-learning, using varied digital methods to create learning resources, using public educational software applications, such as

- (i) Maths – Geogebra, Bruch, K Turtle, carMetal
- (ii) Languages - SCIM (multi-language typing), K Hangman etc. (language), K Anagram, K Letters
- (iii) Science – K Stars, Stellarium etc (astronomy), Kalzium, STEP, PHET etc
- (iv) Social Science - Marble (geography), KGeography, OpenMaps
- (v) other subjects - Freemind (creative thinking) for creating concept maps
- (vi) web tools like wiki, blogs
- (vii) digital tools like video camera and video/photo/audio software applications including recordmydesktop, Kdenlive, Audacity etc. as well as CBTs such as spoken tutorials ([www.Spoken-Tutorial.org](http://www.Spoken-Tutorial.org))

#### Blended learning in Teacher Education

9.5 Complementing physical workshops/meetings with virtual interactions over a mailing-list or an e-learning forum such as moodle provides new models of teacher education through ICTs. For instance, the TISS MA Education program ([www.tiss.edu/maee](http://www.tiss.edu/maee)) which is 5+ years old is able to offer the program to students across the country and also access faculty from across the country, because each of the four semesters consists of a 3 week contact period (on-site) followed by a 12 week course transaction over Moodle. Since Moodle is a public software, the course has freely customized it for its own specific requirements. Similar programs need to be offered by DIETs to teachers which can allow learners to learn at their own pace (relatively) and also reach a larger number of teachers than is possible through purely physical interactions.

9.6 Blended models also allow for greater possibilities for addressing the diverse and heterogeneous learners needs, since the teaching-learning is not restricted to the classroom and virtual learning spaces allow for greater one-to-one interactions, at space and time convenient to the teacher-educators and student teachers. Thus blended models can allow for catering to diverse learning needs, contexts and aspirations.

9.7 It is also important to note that the distant modes have been an integral part all over the globe in Teacher professional Development and distance education is merging

into blended learning, more effectively combining contact period and on-line interactions. In the context of teacher education, distance learning has more than one aim and audience. It has been used as a pre-service teacher preparation method with “teacher candidates,” mostly with extensive face-to-face preparation. In developing and developed-country contexts, it has been deployed as an in-service vehicle to fulfil a mandate to upgrade the knowledge, skills and qualifications of an existing teaching force. Finally, and predominantly within developed-country contexts, distance education, mainly in the form of web-based education, serves as a vehicle for continuing education, offering enrichment, enhancement and additional certifications for teachers who have attained at least a minimum level of certification in their content/grade-level area. The use of blended models needs to be encouraged in both in pre-service, in-service

### Use of Public Software in Teacher Education

9.8 Since the adoption of ICTs in education is essentially an educational issue, rather than a technological one, pre-service teacher education policy and program need to be anchored in sound educational perspectives. Curriculum is the primary process of directing teaching towards fulfilling educational aims and digital learning resources (content) and digital learning tools/ processes (software applications) which constitute curricular resources, need to comply with curricular principles. An important principle of education is that curricular resources need to be publicly owned, so that they are freely available to teacher educators, teachers and students without restrictions. In the case of traditional print media (books), the public education system does not use proprietary curricular resources, since that prevents the schools, teachers and students from freely sharing the resources and from customizing and using them as per their local needs. Proprietary software and content forces the teacher to be a 'mere user'; treating these tools as a 'given'. Teachers, schools and the entire public education system become completely dependent on the vendor for any changes, modifications, enhancements / customizations to these tools and have no right to freely share these resources with one another. Thus allowing for use of privatized digital learning processes (in the form of proprietary software or content) would be detrimental to education and the public education system should use only publicly owned curricular resources.

9.9 There are free software applications for all the areas where proprietary software applications have been used in schools. At a systemic level, public software has been used in a successful “ICT@schools” program in India – the Kerala [IT@SchoolsIT@Schools](#), which is being emulated in Gujarat. The 'Subject Teacher Forum' program of RMSA, Karnataka uses public educational software for mathematics, science and social science teachers.

9.10 In addition, use of publicly owned software has other important advantages. Since publicly owned software can be freely shared, the costs of using freely shareable

software applications would be much lower specially for implementing at a large scale, where support systems are feasible to build. An IIM-Bangalore study estimates that on a conservative basis, Kerala [IT@Schools](#) program has saved Rs 50 crore on software license fees and India would save Rs 20,000 crore each year by adopting the same.

9.11 The GNU/Linux publicly owned operating system is virus-resistant and this can hugely reduce maintenance and support efforts and resources. A large number of computers in educational institutions tend to be unused due to virus issues and using GNU/Linux would increase infrastructure availability. A large number of educational software applications can be bundled with the GNU/Linux operating system which means they can be available to teachers and schools in a simple single installation process. The Kerala, Karnataka and Gujarat programs use the Ubuntu GNU/Linux operating system which is simple and easy to use, bundled with the educational tools.

9.12 Thus education system should encourage the use of digital tools and resources that are freely shareable and modifiable, in line with other curricular resources and discourage the use of software or content which is privately owned and which teachers and education system is legally and technologically prevented from sharing/customizing. Some of the education tools for various subjects and Language are suggested in [Annexure XIII](#).

Suggested Roadmap for ICT integration into processes of DIETs, etc.

Activity	Resources required	Indicative costs (for a DIET with 100 students)
Create / upgrade required ICT infrastructure in each institution	Computers, Internet, camera, audio recorders, storage devices. Broadband wireless connectivity	100 access devices would cost 20,00,000 and this can be acquired over a 3 year period. Other costs would not be more than couple of lakhs. Various programs of central and state government provide budgetary support for acquiring ICT infrastructure
Build basic ICT literacy capacities in teacher-educators	Master resource persons to train the teacher-educators	Training costs, based on a blended model, combining 10 days workshop based, spread over 3-4 phases and a on-line email/portal based interactions
Build capabilities in teacher-educators	Master resource persons to train	Training costs, based on a blended model, combining 10 days workshop

to use ICTs for their subject teaching-learning	the teacher-educators	based, spread over 3-5 phases and a on-line email/portal based interactions
Build capabilities in teacher-educators to use ICTs for their own continuous and life-long professional development	Master resource persons to train the teacher-educator	Annual program of training for teacher-educators, on a blended model, combining 5 days workshop based, spread over 1-2 phases and a on-line email/portal based interactions
Teacher-educators to work with student-teachers and teachers to support their layered learning for ICT mediation in teaching-learning	Teacher-educators	Part of regular PSTE program.
Maintenance of the infrastructure	Lab attendant, consumables	Around 15% of the capital costs should be provided for maintenance and upgrade of infrastructure
Maintaining a web-portal /e-learning system (can be done as a second phase, after basic capacity building of all teacher-educators in first phase)	One web administrator. Resources for the portal would be created by the faculty as a part of their regular teaching and research work.	Apart from the web administrator, the costs of maintaining the portal would be around 10,000 per year.
Offering blended courses	Course creation and administration costs – largely part of people costs and should subsume into regular activities of the institution	Designing courses offered on a blended model with a large virtual component can be coordinated by SCERT with identified DIETs. Courses and faculty can be virtually shared across institutions

## Components of Central assistance under the Scheme

9.13 The central aim of introducing technology in teacher education is to develop and promote openness for new thinking in an atmosphere of innovation through introduction of methods that are interactive, non-threatening and self paced – and move away from mechanical text-based, chalk and talk methods. Integrating ICT into teacher education is also necessary for bridging the digital divide between Government and private teachers, rich-poor, urban-rural, by providing opportunities to effectively use technology to further educational objectives. This will entail hardware support, namely provisioning for satellite transmission facilities in the DIETs. It will also entail provisioning for software support for developing content and orientation of teacher educators and teachers. Following assistance would be made available:

- (i) One-time assistance upto Rs 5 lakh per DIET for hardware support;
- (ii) Development of 50 teacher modules @ Rs 10 lakh per module (to be developed by the Central Government);
- (iii) Upto Rs 70,000 for hub/switch;
- (iv) One-time training/orientation of teacher educators upto Rs 1 lakh per DIET;
- (v) Cost of additional support, including maintenance upto Rs 2 lakh per DIET per year.

9.14 Several SCERTs and DIETs already have the infrastructure support, including EDUSAT facilities and therefore, above provisioning would be limited only to those institutions which do not have such infrastructure and facilities at present.

## Chapter X : Public Private Partnership (PPP) in Teacher Education

10.1 A large number of initiatives have been taken by private not-for-profit organizations in the education sector in providing quality, particularly at the elementary stage. These organizations have been providing excellent support in the implementation of the SSA in a collaborative manner. They have been contributing in development of innovative models of schooling, training of teachers, development of textbooks, child friendly educational kits, curricular material, IT skills training for teachers and students, etc. Even in pre-service training, private not-for-profit organizations are providing systematic support in teacher preparation for elementary schools.

10.2 In the context of the RTE Act and the need to prepare teachers to assume their roles and responsibilities envisaged under the Act, it would be appropriate to develop an institutional mechanism to effectively harness the resource and expertise available in the non-governmental sector, as also encourage private players to collaborate with Government institutions in the field of teacher education. Under the revised Scheme, SCERTs and DIETs would have the mandate to involve private non-for-profit organizations in their activities. In particular, PPP could be explored in the following areas :

- (i) Leadership and management capacity building in teacher education institutions: There is a compelling need to develop the managerial and leadership capacities of middle-level educational functionaries, such as SCERT and DIET Principals and Lecturers,. The experience of the private sector can be harnessed by the State Government both for training of these functionaries and also for developing internal training systems within these organizations, which have a focus on 'public institutional leadership which has its own unique features different from leadership in the private sector.
- (ii) Academic enrichment: Private sector organizations with experience in the field of teacher education can mobilize resources to provide academic support to SCERT and DIETs. This can be in areas like pre-service teacher education, in service teacher training and in classroom support.
- (iii) E-Learning platforms: Many large private sector organizations have developed e-learning platforms as an important method of training their employees. E-learning platforms provide the advantage of allowing each person to learn at their own pace and at the same time it also provides opportunity for large scale access to learning resources. There are a host of private sector organizations developing e-learning modules and e-learning management systems as well. The government can partner with organizations which have these capabilities to develop e-learning platforms

for teachers, teacher educators and other education functionaries responsible for the DIETS and SCERTs. Such e-learning combined with traditional physical processes could be used to create new blended learning models, which would eventually need to become a normal process.

10.3 The State Government may frame internal Guidelines for regulating practices and areas of partnerships of SCERTs and DIETs with the not-for-profit organizations, within the overall budgetary allocation for various programs and activities under the Scheme. The proposals for such partnerships should constitute part of the Annual Work Plan of the State Government for approval of the TEAB.



## Chapter XI : Professional Development of Teacher Educators

Continuous up-gradation of professional and academic capabilities is necessary not only for practicing teachers but also for teacher educators. Therefore, special emphasis would be given in the XII Plan for professional renewal of teacher educators. Refresher Courses for teacher educators in government and government aided teacher education institutions (DIETs, DRCs, CTEs and IASEs) needs to be put in place. 50 lead institutions would be identified and supported to offer specially designed refresher courses to Teacher Educators. These institutions would develop and impart 21-days refresher modules in 2 cycles each year, consisting of 40 participants each. Accordingly, around 4,000 teacher educators would be covered each year. Central assistance upto Rs 2 lakh per course of 21-days duration would be made available to an Institution, for conducting upto two refresher courses every year.

11.2 The Central Government will identify lead institutions in the field of Teacher Education and teacher training, including Universities, not-for profit organizations, etc and enter into a Memorandum of Understanding (MOU) with each of them, for undertaking this responsibility. The identified institutions would be required to develop modules in specified areas of knowledge, especially for orienting teacher educators from the perspective of the RTE Act, and would be offered to the teacher educators of the DIETs, CTEs and IASEs, in consultation with the respective State Governments.

## Chapter XII : Monitoring and Evaluation

### Strategy

One of the problems pointed out in the NCERT Report (August, 2009) was the weak monitoring of the outputs and outcomes of the teacher education institutions and the absence of a systemic and institutional mechanism to measure the effectiveness of these institutions. While the Guidelines of 1989 did prescribe a system of reporting of performance by the DIETs, CTEs and IASEs, somehow, over the years the system went into disuse. As pointed out in the Report of the NCERT (August, 2009), the PACs in respect of DIETs, CTEs, IASEs and SCERTs envisaged under the Guidelines for the Teacher Education Scheme have either been not constituted, or where constituted, have either become dysfunctional or have not realized the mandate for which they were constituted. As a result, except for the periodical meetings held with the State Governments at the regional/national level, discussions with specific State Governments, and the annual meetings of the TEAB, there was no institutional mechanism to monitor the performance of these institutions at the level of the Central Government.

12.2 In view of the specific mandate of the RTE Act relating to teacher preparation and teacher training and the targets under the RMSA for teachers and teacher training at the secondary level, it becomes incumbent upon the Government to develop an institutional mechanism to monitor the effectiveness of the Scheme. It has accordingly been decided to undertake the following strategy for putting in place a strong monitoring mechanism:

- (a) Develop a database of the teacher education institutions;
- (b) Develop a computerized Management Information System (MIS) of these institutions along with performance indicators of physical and financial progress of the various outputs and outcomes of the Scheme;
- (c) Develop a portal, linked to the MHRD portal, containing (a) and (b) above;
- (d) Develop a set of performance indicators of DIETs, CTEs, IASEs, BITEs and SCERTs for assessing their quality and suggesting for their improvements. SCERT, Tamil Nadu has developed a set of performance indicators for DIET effectiveness. It is proposed to utilize the same for developing national level set of performance indicators for DIETs, CTEs and IASEs.
- (e) Identify independent and well reputed institutions (Universities, etc) engaged in teacher education and entrust them with the responsibility to periodically evaluate the performance of these institutions (on sample basis), based on the performance indicators mentioned at (d) above.
- (f) Entrust SCERTs/SIEs with the responsibility of monitoring the performance of all the DIETs/DRCs and CTEs in the State.
- (g) Establish a Technical Support Group at the level of the Ministry, which would provide support to the Ministry for collection, collation and analysis of

information received through the MIS, assist in appraisal of Annual Work Plans of the State Governments, analyze the Reports received from the Monitoring agencies, etc.

12.3 For developing and putting in place a comprehensive monitoring mechanism, an additional expenditure upto 2% of the approved Annual Work Plan and Budget of the State to be earmarked as Monitoring, Management and Evaluation (MME) cost - 1.8% will be disbursed to the State Government for incurring expenditure on monitoring by it at the State level, while the remaining 0.2% will be utilized by the Central Government for institutionalizing monitoring of the Scheme by it.

#### Performance Indicators – Macro Approach

12.4 For effective monitoring the outcomes of efforts undertaken by the State Government, including the institutions of DIETs, CTEs, IASEs, BITEs and SCERTs, a set of indicators have been developed through a process of extensive consultations. The indicators are enumerated at Annexure XIV.

12.5 First part of the set of Indicators relate to state-level parameters of core areas of tasks and measures which each State Government is expected to undertake in the field of teacher education. The starting point of such a task is to develop a comprehensive set of data base of the teacher education system in the State, including the government and private teacher education institutions, the infrastructural and instructional facilities available therein, the qualifications of teacher educators, etc. This part also measures the State's performance in critical areas of reform, including revision of teacher education curricula, creation of a cadre of teacher educators, recruitment of teacher educators in the state-owned institutions, etc. It would also enable each State Government to develop a dashboard of critical parameters – number of unqualified teachers, annual teacher requirement, annual teacher preparation capacity, teacher-trainee ratio in the TEIs, vacancy position in the TEIs, etc. It is expected that the preparation of information on the set of indicators and questions outlined therein would greatly facilitate the State Education Department in making an assessment of where the State stands at a particular point in time in the area of teacher education, as also in identifying the unfinished tasks and planning ahead for such tasks.

12.6 The second part of the set of indicators relate to each category of institutions – DIETs, CTEs, IASEs, BITEs and SCERTs. For each of the level of institution, a series of process indicators have been suggested, against which performance indicators have been specified, consisting of input/activity measures and output/outcome measures. The process indicators, which are more in the form of questions, would guide each of the institutions in preparation of its perspective and Annual Plans, to make an internal assessment of its processes and performance, and enable it to make systemic reforms and changes in its activities.

## Strategy for Monitoring by States

12.7 For the State Governments, the starting point of the monitoring mechanism would be the development of institutional system for collection and collation of information on the performance indicators referred to in Annexure XIV. This would also lead to the development of a comprehensive data base of the teacher education system of the State. The State Education Department may, for the purpose, develop a Monitoring-cum-Planning Unit, consisting of planners, educationists and statistical experts, which will be responsible for this task. The Unit could also be made responsible for collection and collation of institutional level Annual Plans, and preparation of state-level Perspective and Annual Plan.

12.8 A second set of strategy would be to empower the SCERT to develop a mechanism of monitoring the DIETs, CTEs, IASEs and the BITEs, which would be on a more regular basis. In respect of States, where the IASEs and CTEs function directly under the Department of School Education (or the Department of Higher Education, as the case may be) the monitoring would be done by such Departments. Such monitoring would inter alia include holding regular meetings with the institutions, providing them guidance in implementation of the Annual Plan, assessing the extent of linkages across institutions (including with schools and school teachers), and making recommendations to the PAC and other Committees of the Institution.

12.9 An important area of concern often expressed by DIETs is the delay in availability of funds at their level. Since funds, made available both by the Central Government and from the State's own funds, are released from the State treasury, it is extremely important to develop institutional mechanism to expedite the process of funds' disbursement. The importance of this task cannot be overemphasized since Annual Plans on teacher training, research activities, faculty development, field visits, etc. depend to a large extent on the timely availability of funds at the level of the institution. Monitoring the timely flow of fund, and its utilization under various components for which the funds are made available to the institutions, would go a long way in ensuring efficient implementation of the Scheme.

12.10 Further, every State Government would constitute a State Level Coordination-cum-Monitoring Committee (SLCMC) chaired by the State Education Secretary (School Education) with representatives from the Department of Higher Education, Director, SCERT, Principals of 2 DIETs (extendable to 10% of the DIETs in the State), Principals of an IASE, 1 CTE Principal, two Heads of Departments of Education of Universities, SPD-SSA, SPD-RMSA, Principals of three private teacher education institutions, 3 School Heads. The SLCMC shall meet at least twice a year and monitor the performance of the institutions, especially in light of the performance indicators referred to at Annexure XIV.

## Monitoring by the Central Government

12.11 The Ministry of HRD would develop an institutional mechanism for monitoring the implementation of the Scheme. On the basis of the information made available by the States a data base of the teacher education system for the country as a whole would be developed. The data base would be placed on the teacher education portal of the Ministry. The portal would with time also have dynamic features to enable information from States and other stakeholders to be uploaded on-line. For this purpose, a Quarterly Performance Report (QPR) will be designed which would be filled by the States and uploaded on the website. The portal would inter alia have valuable information on research and documentation in teacher education, journals on teacher education, as also list of important events/workshops/seminars on teacher education, which can benefit teacher educators, teachers and other stakeholders.

12.12 The Department would develop comprehensive performance indicators for each level of teacher education institutions. These indicators will be shared with identified around 25 independent monitoring agencies, which would undertake six-monthly assessment of a sample of the institutions on the basis of the performance indicators. The Reports of these institutions would be shared with the State Governments, which would enable them to make mid-course corrections and improve the implementation process.

12.13 A Technical Support Group on Teacher Education (TSG-TE) would be constituted which would work under the Teacher Education Bureau of the Department of School Education and Literacy. The TSG-TE, which would be constituted of teacher educators, researchers, technicians and statistical experts, including IT experts, would provide soft support to the Bureau, in preparation of statistical information and reports, appraisal of Annual Work Plans, analyzing QPRs, analyzing fund flows at various levels within a State, undertaking State level interactions, analyzing reports of monitoring institutions, etc.

12.14 The Department would hold consultations with the State Governments at national-level meetings convened twice a year, and also hold periodical state-level and regional level meetings.

## Chapter XIII : Planning, Appraisal and Fund Flow Mechanisms

### Approach to Planning

Inarguably, all aspects of the teacher education system of the country cannot be subsumed in a Centrally Sponsored Scheme, not merely because of the challenges of financial resources which are not unlimited, but also because majority of teacher education institutions are owned and managed by non-Governmental organizations and institutions, over which the interventions can be at best regulatory and at arms' length. Nevertheless, it remains the statutory responsibility of the Government, both the Central Government and the State Government, to realize the mandate of improving the quantitative and qualitative dimension of teacher preparation and teacher training mandated under the RTE Act.

13.2 Planning for Teacher Education requires an integrated approach, cutting across levels of teacher education institutions, ownership status of such institutions, various Departments and authorities within the State Government. It would also warrant envisioning beyond the programmatic interventions under the Teacher Education Scheme and taking a more holistic approach of the teacher education system, encompassing within its fold the overall educational planning of the State for teachers, students at levels of school education under the SSA, RMSA and other programmatic interventions.

13.3 With this approach, the Perspective Plan and the Annual Plans of the institutions, as also of the State Government needs to capture the larger and holistic picture of the State. This Guideline has emphasized the importance of decentralised planning at the level of the DIETs, CTEs and IASEs. Such planning is not only relevant from the viewpoint of preparing a more realistic State-level Plan, it also underlines the need to provide these Institutions their due autonomy and responsibility in planning for their domain area. Over time, placing such responsibilities on the Principal and faculty of DIETs, CTEs and IASEs and making them accountable for execution of their Plans would lead to development of leadership skills, confidence building and overall professional development of the teacher educators, which are essential ingredients of teacher preparation capabilities.

### Plan Preparation, Appraisal and approval

13.4 As mentioned earlier, the Annual Plans of the Institutions, after their approval by the PAC, will be collated at the level of the State Government and made into a State level Plan, in accordance with the Annual Work Plan format under the Scheme. The Annual Work Plan will be appraised by the Teacher Education (TE) Bureau in the Department of the School Education and Literacy with support of the Technical Support Group –

Teacher Education (TSG-TE). The Annual Plan will be presented by the State Government before the Teacher Education Approval Board (TEAB) chaired by the Secretary, Department of School Education and Literacy, and consisting of Joint Secretary (EE I), Department of School Education and Literacy, Financial Advisor to the Ministry of Human Resource Development, and representatives from Planning Commission and lead organizations such as NUEPA, NCERT, NCTE, etc. The TEAB will be the final authority for approving the Annual Work Plan of the State Government.

#### Fund Flow mechanism and sharing between Centre and State

13.5 The assistance under the Teacher Education Scheme would be made available directly to the State Government and transferred to the State treasury through the Central Government fund transfer mechanism. However, in respect of assistance to lead institutions for undertaking programmes for professional development of teacher educators, and undertaking monitoring of DIETs, etc., funds will be made available directly to the respective institutions.

13.6 In respect of funds to be made available to the State Governments, recurring assistance would be given in two instalments in a year, subject to furnishing of utilization position of the preceding instalment and other related conditions. In respect of non-recurring assistance, the funds would be made available in two instalments, and the State Government should endeavour to utilise the first instalment in the year in which it is released.

13.7 Since the inception of the Scheme and till the XI Plan, 100% Central assistance was being given to the State Governments for various recurring and non-recurring components (other than for SCERTs in which 50% funding was by the States), subject to the financial limits and other conditions specified in the Scheme. This is being revised to ensure that State Governments also have a fair degree of financial stake in implementation of the Scheme and the institutions for which financial assistance is provided (SCERTs, DIETs, CTEs and IASEs) which in any case are State-owned institutions.

13.8 Under the revised Scheme applicable for the XII Plan, the Centre and States shall share the funds in the ratio of 75:25 for all the components for which Central assistance is sanctioned to the States. In respect of the eight States of the North East Region (including Sikkim), the sharing ratio will be 90:10. In respect of the posts in DIETs, CTEs, IASEs and the Block Institutes of Teacher Education (BITEs) created before their up-gradation, the salary outgo will continue to be the liability of the State Government. For posts created and filled up after up-gradation and for all posts in new DIETs and BITEs, the salary expenses would be shared between the Centre and the States in the ratio of 75:25 (90:10 for NER States, including Sikkim). In respect of SCERTs, salaries of faculty and staff in respect of additional posts sanctioned and filled up after the

introduction of the revised Scheme, in accordance with the suggested organizational structure for SCERT will be made available in the same ratio. However, for all posts in SCERT created and filled up before the introduction of the revised Scheme would continue to be the liability of the State Government.

13.9 Similarly, all other components of recurring and non-recurring expenses would be shared between the Centre and the States in the ratio of 75:25 in respect of DIETs/CTEs/ IASEs/SCERTs/BITEs (90:10 for NER States including Sikkim). Central assistance would be released to the State Governments only after the State Government commits to spend its mandatory share under the various components and has spent the State share against the previous releases of Central assistance.



**Annexure I**

**State-wise No. of DIETs, CTEs & IASEs sanctioned and functional**

Sl No.	State/UT	Number of DIETs/CTEs/IASEs Sanctioned			Number of DIETs/CTEs/IASEs Functional		
		DIETs/DRCs	CTEs	IASEs	DIETs/DRCs	CTEs	IASEs
1	Andhra Pradesh	23	8	2	23	8	2
2.	Arunachal Pradesh	11	0	0	11	0	0
3.	Assam	23	8	2	18	8	2
4.	Bihar	24	6	0	24	4	0
5.	Chhattisgarh	16	1	1	16	1	1
6.	Goa	1	0	0	1	0	0
7.	Gujarat	26	8	2	26	8	2
8.	Haryana	19	0	1	19	0	1
9.	Himachal Pradesh	12	1	0	12	1	0
10.	J&K	14	2	0	14	2	0
11.	Jharkhand	22	1	0	19	1	0
12	Karnataka	27	9	2	27	9	2
13	Kerala	14	3	1	14	3	1
14	Madhya Pradesh	45	6	3	45	6	2
15	Maharashtra	34	12	2	34	12	2
16	Manipur	9	1	0	9	1	0
17	Meghalaya	7	2	0	7	2	0
18	Mizoram	8	0	1	8	0	1
19	Nagaland	8	1	0	6	1	0
20	Orissa	30	10	2	30	10	2
21	Punjab	17	2	1	17	2	1
22	Rajasthan	32	9	2	30	9	2
23	Sikkim	3	0	0	1	0	0
24	Tamil Nadu	29	5	2	29	5	2
25	Tripura	4	1	0	4	1	0
26	Uttar Pradesh	70	3	3	70	3	3
27	Uttrakhand	13	3	1	13	3	1
28	West Bengal	18	4	2	16	4	2
29	A & N Islands	1	0	0	1	0	0
30.	Delhi	9	0	2	9	0	2
31	Pondicherry	1	0	0	1	0	0
32.	Lakshadweep	1	0	0	1	0	0
33	Daman & Diu	0	0	0	0	0	0
34	D&NH	0	0	0	0	0	0
35	Chandigarh	0	0	0	0	0	0
	<b>Total</b>	<b>571</b>	<b>106</b>	<b>32</b>	<b>555</b>	<b>104</b>	<b>31</b>

GUIDELINES REGARDING RECRUITMENT PROCEDURES, DEPUTATION AND  
CADRE MANAGEMENT

Both short and long term selection procedures for filling up DIET faculty posts will have to be so devised that only persons of outstanding, or at least very good ability, and record are recruited to these posts, and they do not become mere promotion posts for incumbents of lower level posts in the State/ UT Education Department, nor a dumping ground for the unwanted elements of the Department.

“Suitable financial incentives (especially for outstanding research and innovation work) and promotional avenues should also be provided for the DIET faculty to ensure continuity and retention of competent personnel in these institutions.”

## 2. Avoid Transferability

Free transferability between the DIETs and other positions in the State Education Department must at all cost be avoided. It has to be ensured that personnel in the DIETs are not normally subjected to lateral transfers to posts elsewhere and that positions in the DIETs are not readily accessible by transfer from the State Education Department or elsewhere. The precise manner of achieving this object will vary according to the situation in different States.

## 3. Mode of Recruitment

3.1 Special attention also needs to be paid to the procedure and criteria of selection of personnel. Generally speaking there could be the following modes of filling up various posts in the DIETs :

- a. Direct recruitment through open advertisement, on the basis of the minimum qualifications and experience laid down;
- b. Deputation from the school, college/University system for a period of 3-

5 years of persons with the prescribed minimum qualifications;

- c. By promotion from one level within the DIET system to the next higher level through selection on the basis of merit.

3.2 The State Government may specify appropriate ratios in respect of direct recruitment, deputation and promotion, for creation of the cadre and filling up of the posts at different levels. It may also consider not having promotion posts for certain entry level posts, such as that of Lecturer.

3.3 Generally, only those persons should be selected for appointment to any academic post in the DIETs who are willing to serve in those posts.

## 4. Selection Committee

There should be a high level selection committee for each category of posts. The committee should have at least two experts from the field of teacher education.

## 5. Eligibility Criteria

5.1 Annexure III gives recommended eligibility criteria for various academic posts in the DIET. It should be seen in conjunction with the following paras 5.2-5.6.

5.2 Suggested upper age limits for appointment to various posts are as follows :

Post	Deputation	Direct Recruitment
Principal	50	45
Vice Principal	45	40
Sr. Lecturer	45	40
Lecturer	40	35

5.3 Other things being more or less equal, preference should be given to younger persons and to women.

5.4 Candidates must have excellent academic record from the High School Stage onwards.

5.5 Preference should be given to candidates possessing the following:-

- a. Substantial record of educational experimentation/ innovation.
- b. Rich Participation in Artistic/ Literary/ Cultural / Sports / Adventure / Community Service activities.
- c. Rich participation in other co-curricular activities like NCC/Scouting/Guiding/ NSS etc.
- d. Published work of high standard.

5.6 Prescribed Eligibility Criteria or experience may be suitably relaxed in the case of persons with a proven record of exceptional ability and merit.

## 6. Management of the DIET Faculty / Cadre.

6.1 Implementation of the personnel policies suggested for DIETs, in their true spirit, will normally involve the creation of virtually a separate cadre of personnel chosen through a careful process of selection. Having created a body of personnel it will be necessary to manage them in an imaginative manner, encouraging their personal growth and development, and also providing a career pattern which is sufficiently attractive. The following points may be borne in mind in this context.

6.1.1 DIET staff should not be allowed to become mere trainers and must periodically function, for adequate durations, as practitioners and teachers. This may be ensured by arranging that each

member of the faculty of a DIET also takes a few classes and work in an elementary school located at or near DIET headquarter; and/ or by providing that she/ he teaches in an elementary school on whole time basis for a few months, say, every two years, or some other arrangement of interspersion between work as teacher educators and teachers may be devised, without allowing this to be made a means of thoughtless transfers.

6.1.2 Provision regarding Study Leave or DIET faculty should be much more liberal than they may be for other in Government or even in the Education Department. It should be permissible for a person on the faculty of a DIET to take Study Leave of the appropriate duration every 3 years or so, and work on any worthwhile project which leads to her/his professional enrichment as a teacher educator/ educational researcher/ student of education. This provision may be linked to production of genuine academic work provided the terms are sufficiently imaginative. It is to be hoped that this kind of incentive will prove a major attraction for right kind of persons.

6.1.3 A person posted in a DIET should have a reasonably long tenure so that he/she develops a loyalty to the institution, and nurtures it. Frequent transfers are not desirable unless administratively warranted.

6.1.4 Promotion opportunities within the DIET system should be available to personnel who join DIETs on a career basis. There is no objection if these are supplemented by further promotional opportunities from the post of Principal upwards either into other academic posts under the State Government/SCERTs/University system. In addition to this, State Government should consider the possibility of providing for flexible complementing as already in existence in some scientific institutions

POST-WISE SUGGESTED ELIGIBILITY CRITERIA  
Principal

Essential Qualification (1)	Essential Experience (2)
<p>(i) Master's Degree in Humanities/ Social Science/ Sciences</p> <p>(ii) M.Ed. Preferably with specialization Elementary Education/ Adult Education/ NFE/Educational Planning &amp; Administration or Degree/ Diploma in Education Planning and Administration/ Adult Education/ Child Development/ Com. Development/ Rural Development/ Social Work/ communication/ Women's Studies.</p>	<p>(A) 0 years' experience of the following kinds with at least 3 years of each :</p> <p>(i) teaching in a school, preferably elementary school;</p> <p>(ii) teaching in a TEI, preferably ETEI, or providing other tech. resource support to School Education, preferably Elementary Education;</p> <p>(iii) Educational administration at least at the level of principal of a higher/ senior secondary school or project officer of AE/NFE or district level responsibility in Women's development.</p> <p>Provided that either as teacher, teacher educator or educational administrator / supervisor, the candidate should have at least 3 years experience related to Elementary Education.</p> <p style="text-align: center;">or</p> <p>(i) Seven years, experience of teaching in a school;</p> <p>(ii) Three years, experience in educational administration at least of the level of Principal of the higher/ Senior secondary school or project Officer of AE/NFE or district level responsibility in Women's development.</p> <p>Provided that either as a teacher or as educational administrator the candidate should have at least 3 years experience related to Elementary Education.</p> <p style="text-align: center;">or</p> <p>(i) Seven years' experience in administration of AE/NFE programmers at least of the level of project officer or district level responsibility in women's development or in providing tech. resource support to such programmers at a senior level.</p>

1

(ii) Three years, experience of teaching in school/TEI(preferably elementary level) and /or School Education Administration.

Essential (2)

- (i) Should have an excellent record of service in the above capacities;
- (ii) Should have been a successful team leader; and
- (iii) Should have a substantial record of educational innovation / experimentation.

Desirable

- (1) Three years' experience of providing technical resource support to Elementary Education or AE or NFE.
- (2) Work in the area of Education of SC/ST/Women/Girls/Minorities.



Branch	Sr. Lecturer		Lecturer			
Qualification	Experience		Subject	Qualification	Experience	
(1)	(2)		(3)	(4)	(5)	(6)
2. Pre-service Teacher Education	(A) (i) Master's Degree in Humanities/ Social Science/ Sciences.	5 years' experience of teaching in School/TEI, of which:	1. Foundations of Education	(A) (i) Master's Degree in Humanities/ Social Science/ Sciences (Preferable	At least 3 years experience of teaching in an Elementary School/ TET (Preferably ETEI)	
	(ii) M.Ed with specialization in Child Psychology or	(a) at least 2 years should be in each, and (b) at least 3 years should pertain to Elementary School or ETET		(ii) M.Ed with specialization in Foundations of Education or		
	(B) (i) Master's Degree in Child Psychology/ Child Development		2. Language-1,2	(i) Master's Degree in Language concerned	At least 3 years experience of teaching in an Elementary School / ETEI	
	(ii) Degree/ Diploma / Certificate in Teacher Education (Preferably Elementary Education)			(ii) Degree / Diploma/ Certificate in Teacher Education (Preferably Elementary Teacher Education)		

(1)	(2)	(3)	(4)	(5)	(6)
Pre-service Teacher Education (contd.)			3. Mathematics	(i) Master's Degree in Mathematics (ii) degree/ Diploma/ Certificate in Teacher Education (Preferably Elementary Education)	At least 3 years experience of teaching in an Elementary School/ ETEI
			4. Science	(i) Master's Degree in a Science on Subject (ii) Degree/ Diploma/ Certificate in Teacher Education (preferably Elementary Teacher Education)	Do
			5. Social Studies	(i) Master's Degree in Geography / History/ Political Science / Economics / Sociology. (ii) Degree/ Diploma / Certificate in Teacher Education (preferably Elementary Teacher Education)	Do
			6. Physical Education	Degree/ Diploma in Physical Education preferably with Specialization in around knowledge of yoga.	At least 3 years experience of teaching in an Educational Institution (Preferably TEI)
			7. Art Education	Degree/ Diploma in fine/ Visual/ Performing Area	Do



Branch	Sr. Lecturer		Lecturer	
	Qualification	Experience	Qualification	Experience
(1)	(2)	(3)	(4)	(5)
3. In-service Education, Field Interaction & Innovation Coordination	(i) Master's Degree in Humanities/ Social Sciences / Sciences (ii) M.Ed preferably with specialization in Elementary Education or In-service / Continuing Education or Distance Education or Educational Extension Or Degree/ Diploma/ certificate in Teacher Education (preferably Elementary Teacher Education) (b) Degree/ Diploma/ Certificate in Distance Education/ Containing Education/ Extension	(i) 5 years experience of teaching in School/ TET of which: (a) at least 2 years should be in each, and (b) at least 3 years should pertain to Elementary School or ETEI (ii) Substantial experience at a responsible level, of active involvement in. (a) In-service / continuing/ distance education of teachers, and/ or (b) Educational extension work (iii) Desirable: Record of educational innovation/ experimentation and/ or involvement in Social Work / Community Organization / Rural Development project.	As in Col (2)	(i) A least 3 years experience of teaching in a social (preferably Elementary Service / TET (preferably ETEI) (ii) Experience of active involvement (a) In- service/ continuing / distance education of teacher and or (b) Education extensions work.

(1)	(2)	(3)	(4)	(5)
4. Curriculum/ Material Development & Evolution	<p>(A) (i) Master's degree in Humanities /Social Sciences/ sciences</p> <p>(ii) M.Ed with specialization or</p> <p>(B) (i) Master's degree in Child Psychology, Child Development or Education</p> <p>(ii) Degree/ Diploma / Certificate in Teacher Education (preferably Elementary Teacher Education)</p> <p>or</p> <p>(C) Ph.D. in Child Psychology /Child Development Curriculum/ Educational measurement / Evaluation</p>	<p>(i) At least 3 years experience of teaching in a School/ TEI preferably Elementary School/ ETEI</p> <p>(ii) 3 years experience at a responsible level of work in Curriculum Development / preparation of Text Books / Educational Testing and Evolution, preferably in Elementary Education</p>	As in Col. (2)	<p>(i) At least 3 years experience of teaching in a school/ TEI (preferably Elementary School/ ETEI)</p> <p>(ii) Experience of work in curriculum development/ preparation of textbooks/ Educational Testing and Evaluation, preferably in Elementary Education</p>
5. ET	<p>(A) (i) Degree in Humanities / Social Sciences/ Sciences</p> <p>(ii) M.Ed with specialization in Educational Technology/ AV Education</p> <p>or</p> <p>Degree / Diploma/ Certificate in Teacher Education with ET/AV Education as one of the papers, &amp; successful completion of a training course on ET/AV Education of not less than 6 weeks' duration</p> <p>(B) Degree/ Diploma in Communication / Mass Communication/ Commercial Art/ Films &amp; TV Programmes/ Drama/ Engineering</p>	<p>(A) (i) At least 3 years experience of teaching in a school preferably Elementary School</p> <p>(ii) At least 3 years experience in development of training in use of educational aids in a TEI/ET Cell/ SIEB/ SCERT/SRC etc.</p> <p>(B) (i) 5 years experience development / production/ training in use of AV Programmes / Educational aids for children or for mass Education.</p> <p>(ii) Interest in Elementary / Adult Education &amp; aptitude</p>	<p>(A) As in Col. (2)</p> <p>(B) As in Col. (2)</p>	<p>(A) (i) At least 2 years experience of teaching in a school preferably Elementary School</p> <p>(ii) Experience of kind stated under (ii) to Col. (3)</p> <p>(B) (i) At least 2 years experience of the kind stated under (i) in Col. (3)</p> <p>(ii) As in Col. (3)</p>

(1)	(2)	(3)	(4)	(5)
6. Planning and Management	(A) (i) Master's Degree in Economics/ Statistics / Public Administration (ii) M. Ed with specialization in Educational Planning/ Administration or (B) M.A. (Edn.) specialization in Education Planning & Administration or (C) Master's degree in Economics/ Statistics/ Public Administration / Education	(A) & (B) 6 year's experience Schools/ TEIs / Educational Planning & Administration Preferably at the Elementary level of which at least 3 year's should be in Educational Managements (the last being in a gazetted capacity) or (C) 6 years experience in Panning/ Administration in a gazetted capacity , preferably in (i) State/ District / Block level Planning (ii) Planning in Social Services sectors	(A) & (B) As in Col (2) or (C) As in Col (2)	(A) & (B) 4 years experience in schools/ TEIs / Educational Planning & Administration level of which at least 2 years would be in Educational Planning/ Administration or (C) 3 years experience of Planning/ Administration preferably in (i) State/ District /Block level planning (ii) planning social service sector
7. Work Experience	(A) (i) Master's Degree (ii) Degree/ Diploma in Teacher Education (preferably M. Ed/ specialization basic Education work experience/ PUPW/ Vocational Education/ Craft Education) or (A) 2 years Diploma/ Certificate (recognised by the director General of Employment & Training) in a technical trade or (B) Master's Degree in Social Work / Home Science/ Commerce / Vocational Education or Bachebr's Degree in Agriculture / Forestry / Electronics or Diploma in Engineering	5 years' experience at whole time teacher of Craft/ Hobby/ Work Experience / SUPW / Vocational subject in a Bal Bhavan/ school TEI/ ITI etc (ii) sound practical knowledge of, and skill in, at least one Craft / SUPW area, taught in elementary Schools	As in Col (2)	(i) 3 years experience of the kind stated under (i) in Col (3) (ii) Sound practical knowledge of, and skill in at area taught in Elementary Schools.

## Annexure IV

## SUGGESTED PHYSICAL NORMS FOR THE BUILDINGS OF A DIET

Item	No.	PRIORITY I		No.	PRIORITY II		Remarks
		Carpet Area			Carpet Area		
		Per Unit Sq. ft.	Total Sq. ft.		Per Unit Sq. ft.	Total Sq. ft.	
1	2	3	4	5	6	7	8
I. Institute Building	4	500	5000				Two of the class rooms may preferably have removable partition, and it would be desirable for the other two to be of lecture theatre type (slopping floor). A smaller class room size may do if class size will be restricted to 40.
1. Class rooms...							
2. Seminar Room...	1	400	400				
3. Special Rooms :							Labs. To have built-in Black boards, sinks with water taps, built-in almirahs with glass panes, etc.
(i) Science Methods Labs.							To be fitted with Flexi Glass Board (not black board) and Rubber Linings for windows, for dust proofing. Adequate power sockets to be provided.
(a) For Phy. Science including stores...	1	700	700				
(b) For life Sciences including Store...	1	700	700				
(c) Cabin for one Faculty Member I/C...	1	100	100				
(ii) Computer Lab. and cabin for Faculty member I/C	1	300	300				
(iii) Resource Room for Education of the Handicapped (including space for Faculty Member I/C) ...	1	250	250				
(iv) E.T. - Display-cum-Store	1	250	250				
(v) Rooms for oar Education							
(a) For Visual Arts & Crafts like paper & Clay Work (Including space for Lecturer and store).	1	400	400				Room to have 3 water taps with sinks.

(b) For Performing Arts 1 300 300  
(Including Store)

(vi) Shed-cum-store for WE 1 600 600  
Activities

(vii) Store Room-cum-Cabin 1 250 250  
for Lecturer in Phy. Education

TOTAL-(3) 5350

4. Staff Rooms

(i) Principal's Room 1 300 300  
(With PA's cabin)

(ii) Room for Vice-Principal/Sr. Lecturer I/C 1 150 150  
DRU

(iii) Cabins for Academic staff 9(each for 2 members on an average) 125 1125

(iv) Hall for Administration staff to sent OS, Accountant and Clerks 1 500 500

TOTAL-(4) 2075

5. Library

(Including Reading Area Librarian's Cabin) 1 1000 1000

6. Miscellaneous :

(i) Gen. store Room 1 225 225

(ii) Toilets 1 225 450  
One Unit each for Ladies & Gents

(iii) Girl's Common Room 1 440 400

(iv) Auditorium for about 200 1 2250 2250

(including projection room and green room) 1 500 500

(v) Canteen

This room to be located in one corner of the building so as to cause minimum disturbance in other activities in other activities.

This need not form part of the main building and may be constructed to more economical specifications e.g. with an A.C. sheet roof.

TOTAL-(6)		675		3150	
GRAND TOTAL (1)-(6)		10000		3150	Classified under
Add 30% for Circulation ne: (Veranda, corridor, stair- cross, & other spaces) and wall thickness					"Priority II" will be planned for only if it can be done within the financial coiling, after providing these under
		13000			
		13000		945	"Priority I "
Total Built-up Area				4095	
				or say	41009
II. Hostel :					
(Illustrative Norms for					
master block)					
1. Double seats Room	50	120	6000		
2. Toilets ...	2	400	800		
	(with wash basin)				
3. Dinning Hall, Kitchen & Store	1	1000	1000		
4. Common Room	1	500	500		
5. Hostel Office-cum- Dispensary	1	150	150		
6. Hostel Store ...	1	200	200		
TOTAL ...		8650			

	1	2	3	4	5	6	7	8
--	---	---	---	---	---	---	---	---

Add 30% for circulation areas (verandahs, corridors, staircases and other common spaces) and wall thickness ....

2600

11250

(or say, about 110 sq. feet per inmate)

TOTAL - Built up Area

11. Staff Quarters

1. For Principal 1 1200 1200

2. For Faculty Members one of whom will also function as House ) Warden 2 750 1500

3. For Watchman and one other class IV staff 2 400 800 As many

4. For other Academic & supporting staff 3500

Total Built-up Area

\*\* As many as possible within prescribed financial ceiling for Civil Works.

CTEs and IASEs : Qualifications and Staff Recruitment

1 Staffing

Staffing of a CTE/IASE would have the following three main sub-components:

- (a) Determination of qualification, level and pay scales, recruitment procedure and cadre formation for the posts,
- (b) Recruitment/Selection of personnel, and
- (c) Induction level training and orientation of key personnel

The following guidelines are recommended in respect of the above three matters.

2 Qualifications

CTEs and IASEs are institutions of higher learning, within the University system, and therefore subject to all the discipline of that system. The most important corollary of this is that posts of Lecturers, Readers and Professors in these Institutions will necessarily have to be manned only by persons satisfying, mutatis mutandis, the eligibility criteria laid down by the UGC/NCTE for these posts, for the 'General' – category of colleges (i.e. those imparting instruction in Science, Humanities, Commerce, etc.). The posts of principals of CTEs and IASEs would likewise have to be manned by persons satisfying, the eligibility criteria laid down for such posts.

3 Levels and Pay Scales

Holders of the above posts in CTEs/IASEs must not merely be recruited in accordance with rigorous qualifications as above, but should also be given parity with their counterparts in the 'General' colleges in the matter of pay scales. In certain States, Lecturers, Principals, etc. of STEIs are not placed in the UGC or 'General' college pay scales but on par with State Govt. Officers like Assistant Directors, Dy./Joint Directors etc. Wherever such prevailing scales are poorer than the ones suggested above, the State Government may attempt to increase them and bring them on par with scales applicable in 'General' colleges. Wherever such up-gradation is done, Central assistance will be available to the extent of State's/UT's additional liability created on this account.

4 Recruitment procedure and cadre formation

Both short and long-term selection procedures will have to be so devised that only



persons of outstanding or at least very good ability and record are recruited to posts in these institutions and these posts do not become mere betterment avenues for incumbents of lower level posts in the existing institutions or elsewhere in the State/UT Education Department.

Creation of separate cadre for staff engaged in Teacher Education and Educational research in the State/UT, comprising faculty posts in the DIETs, CTEs/IASEs, and the SCERT/SIE, should be seriously considered. Suitable financial incentives (especially for outstanding research and innovation work) and promotional avenues should also be provided for the CTEs/IASEs faculty to ensure continuity and retention of competent personnel in these institutions.

5 Framing of Service Rules:

A comprehensive set of service rules providing for all the matters mentioned in aforementioned would have to be framed (if not already under taken) so that the whole system of staffing of CTEs/IASEs gets institutionalized.

6 Recruitment/ Selection of Personnel:

Some new faculty posts will be created in almost every STEI whose up-gradation is sanctioned. In addition, some of the present incumbents of the existing posts would have to be shifted elsewhere either because they do not fulfill the eligibility criteria or are otherwise not found suitable for being retained in the upgraded institutions.

State Governments are advised to initiate the process of selection of persons to the posts created. Selection of personnel should be done by a high level committee completely objective and impartial persons in accordance with proper laid down guidelines and criteria.

7 Initial Training and Orientation of Principals and certain other faculty members:

Principals and faculty members in certain areas like in-service Education, Educational Technology Planning and Management etc. will have to be suitably oriented at the outset. Other faculty members would also have to be gradually covered under suitable training and orientation programmes. Initial orientation courses for Principals and faculty members would be organized, as far as possible by NCERT, NUEPA and University Departments of Education.

Annexure VI

SUGGESTED AREA-WISE STAFFING PATTERN FOR CTEs/IASEs

As per Annexure II, CTEs and IASEs are expected to have an academic faculty consisting of 16 and 26 members respectively, excluding the Principal. These faculty members may belong to the areas specified below, so as to cover all the main academic areas of the Institution's responsibility:

Area		CTE			IASE			
		Reader	Lect.	R/L	Prof.		Reader	P/R/L
1		2	3	4	5	6	7	8
<b>A. "Education" Subjects</b>								
1.	Foundation of Education (Philosophy, Sociology & Psychology of Education)	1	1	-	1	-	2	-
2.	Elementary education	-	-	-	-	1	1	-
3.	In-Service Education & Extension Services	1	-	-	-	1	1	-
4.	Educational Technology	-	1	-	-	-	1	-
5.	Educational Planning & Management /Admin.	-	-	-	-	1	-	-
6.	AE/NFE	-	-	-	-	-	1	-
7.	Special Education	-	-	-	-	-	1	-
<b>B. "School" Subjects- Content-cum-Methodology</b>								
<b>(i) Science &amp; Mathematics</b>								
1.	Maths	-	-	1	-	-	-	1
2.	Phy. Science	-	-	1	-	-	-	2
3.	Biological Science	-	-	1	-	-	-	2
4.	Home Science	-	-	1	-	-	-	1
<b>(ii) Others (languages, Humanities, Social Sciences, Commerce &amp; We)</b>								
1.	Languages (regional/Classical/Hindi/English)	-	-	3	-	-	-	3
2.	Social Science and Humanities	-	-	3	-	-	-	3
3.	Commerce (Including Accountancy, Banking and Insurance)	-	-	1	-	-	-	1
4.	Work Experience	-	-	1	-	-	-	1
		2	2	12	1	3	7	15
Add (+) 1 11 (1 Reader) 1 3 11 [(1 Prof., 3 readers & 11 lects.)								
Breakup of R/L or P/R/L		3	13		2	6	18	

Note:

1. As far as school subjects are concerned, the criterion for providing a post of CTE/IASE for any of them would be that
  - A sufficient no. of postgraduates of that subject are consistently getting admission to B.Ed/ M.Ed course in the institution, and
  - There are about 200 or more teachers in that subject in the Govt. and Aided Secondary schools of the districts which the Institution is expected to serve.
2. "R/L" stands for "Reader/Lecturer" and "P/R/L" stands for Professor/Reader/Lecturer.
3. In a CTE, of the 12 posts in 'School' subjects, one may be Reader and The rest Lecturers.
4. In an IASE:
  - (i) Of the 15 posts in 'School' subjects, one, three and eleven may be of Professor, Readers and Lecturers respectively,
  - (ii) The post of Professor may be in any 'School' subject. Of the 3 Posts of 'Readers, one and two respectively may be in 'Science' and 'other 'subjects.
5. Apart from the Lecturer in Educational Technobgy, instruction to pre-service and in-service trainee in computers and their applications would also be imparted by faculty members belonging to school subjects, after they have themselves been suitably trained in computers.

NORMS FOR CTEs AND IASEs

Sl No.	Items	College of Teacher Education	Institution of Advanced Study in education
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1.	Student Intake	B.Ed 100	B.Ed 100
2.	Academic Staff	Principal 01 Readers 03 Lecturers 13  — <u>17.</u>	M.Ed & other Specialized courses upto 50
3.	Other Staff	Librarian 1 Physical Ed Instructor 1 Technicians/ Instructors (Computers/ ET/Arts/Craft) 3-4 Lab. Asstts. 2 Clerical & Class IV Staff in min. necessary numbers	Librarian 1 Physical Ed Instructor 1 Technicians/ Instructors (Computers/ ET/Arts/Craft) 4-6 Lab. Asstts. 3 Clerical & Class IV Staff in min. necessary numbers
4.	Minimum Campus Area	5 Acres	7 Acres
5.	Accommodation (a) Academic wing	Lecture hall 1 Lecture Rooms 3 In-service Ed Room 1 Seminar Room 1 A.V. room 1 Art Room 1 Craft/WE Room 1 Sc. Lab. 1 Psycho Lab. 1 Edu. Tech. Room 1	Lecture hall 1 Lecture Rooms 5 In-service Ed Room 1 Seminar Room 1 A.V. room 1 Art Room 1 Craft/WE Room 1 Sc. Lab. 3 Psycho Lab. 1 Edu. Tech. Room 1
	(b) Administration wing	Principal's Room 1 Office Room 1 Staff Room 1 Store Room 1 Girl Common room 1 Boy Common room 1 Adequate Toilet facilities	Principal's Room 1 Office/ Store Room 1 each Cubicles for Staff members Staff Room 1 Girl Common room 1 Boy Common room 1

		Room Canteen & Drinking water facilities	Adequate Toilet facilities Room Canteen & Drinking water facilities
6.	Library	(i) Library with reading room for about 50 students (ii) Books – 10,000 (iii) Journals (professional)- 10	(i) Library with reading room for about 50 students (ii) Books – 20,000 (iii) Journals - 15 (professional including research).
7.	Hostel	Separate Hostel accommodation for boys and girls so as to accommodate a total of about 150 inmates at a time	Separate Hostel accommodation for boys and girls so as to accommodate a total of about 175 inmates at a time
8.	Play Ground	Play grounds for games, sports, athletics and physical education activities.	Play grounds for games, sports, athletics and physical education activities.
9.	A.V. Equipment	VCP & 22” Colour TV 2 units Audio Two-in-one 2 units Slide Projectors 2 Adequate no. of educational video films, slides and Audio Cassettes Overhead projectors Amplifiers and Microphones	Same as for CTEs, with the difference those IASEs will have a larger collection of films, slides and cassettes.
10.	Computer Equipment	Micro Computers] ] Disc Drives ] 10 Colour monitors ] each Printers 3 Voltage Stabilizers Adequate no. of software packages	Same as for CTEs, with the difference that IASEs will have a larger collection of software packages.

Annexure VIII

‘Model’ Structure of SCERT

S.No.	Designation	Name of the Department	No. of faculty members	Pay Scale (UGC)
1.	Director	SCERT	1	Professor
2.	Joint Director	SCERT (Incharge of DIETs in addition to other normal work of SCERT )	1	Professor
3.	Head	I. Division of Curriculum Studies i) Deptt. of Science & Mathematics ii) Deptt. of Social Sciences  iii) Deptt. of Languages  iv) Deptt. of Art Education  v) Department of Health Education & Physical Education vi) Department of Work Education vii) Deptt. of Educational Measurement and Evaluation	1 4  3  3 3 3	<ul style="list-style-type: none"> <li>• Professor</li> <li>• Associate Professor (2)</li> <li>• Assistant Professor (2)</li> <li>• Associate Professor (1)</li> <li>• Assistant Professor (1)</li> <li>• Associate Professor (1)</li> <li>• Assistant Professor (2)</li> <li>• Associate Professor (1)</li> <li>• Associate Professor (2)</li> <li>• Assistant Professor (2)</li> <li>• Associate Professor (2)</li> <li>• Assistant Professor (2)</li> </ul>
4.	Head	2. Division of Teacher Education & Foundation (Pre-Service Education-Philosophy, Psychology, Sociology; In-Service Education	10	<ul style="list-style-type: none"> <li>• Professor(1)</li> <li>• Associate Professor (5)</li> <li>• Assistant Professor(5)</li> </ul>
5.	Head	III Division of Technological Services (ICT) i) Deptt. of Computer Education ii) Deptt of Technological Aids	3	<ul style="list-style-type: none"> <li>• Professor(1)</li> <li>• Associate Professor (1)</li> <li>• Assistant</li> </ul>

				Professor (1)
6.	Head	IV. Division of Educational Surveys, Research & Policy Perspective	3	<ul style="list-style-type: none"> <li>• Professor(1)</li> <li>• Associate Professor (1)</li> <li>• Assistant Professor (1)</li> </ul>
7.	Head	V. Division of Special Needs & Social Justice i) Inclusive Education ii) Women Empowerment Cell iii) Education for SC/ST and Minority cell iv) ECCE Cell	7	<ul style="list-style-type: none"> <li>• Professor(1)</li> <li>• Associate Professor (3)</li> <li>• Assistant Professor (3)</li> </ul>
8.	Head	Division of Library & Documentation	4	<ul style="list-style-type: none"> <li>• Librarian(1)</li> <li>• Assistant Librarian (1)</li> <li>• Professional Assistant(2)</li> </ul>
9	Technical Staff	Technical Staff for different departments	5	<ul style="list-style-type: none"> <li>• Computer Assistant(1)</li> <li>• Semi-Professional Assistant (2)</li> <li>• Laboratory Assistant(2)</li> </ul>
10.	Project Staff	Project Staff for different departments for 2 years	6	<ul style="list-style-type: none"> <li>• Junior Project Fellow</li> </ul>
11.	Chief Administrative Officer	Administrative Section	11	Office: <ul style="list-style-type: none"> <li>• Chief Administrative officer</li> <li>• Accountant</li> <li>• Office Assistant (2)</li> <li>• Data Entry Operator</li> <li>• Group D (3)</li> <li>• Section Officer (DIET)</li> <li>• Data Entry Operator (2)</li> <li>• Office Assistant</li> </ul> Hostel <ul style="list-style-type: none"> <li>• Bursar for Hostel (1)</li> <li>• Group D (2)</li> </ul>

Infrastructural Requirement of “Model” SCERT

1. 1 Room for Director with all facilities appropriate for Director’s Room viz. furniture side almira and the Director’s Room should be connected with: - 1 Conference Room.
2. 1 Room for Joint Director
3. 4 Seminar Rooms
4. 2 Class – Room’s for B.Ed Class
5. 1 Room for “State Research Support Group”
6. 1 Big Room approximately the size of Hall for Library
7. 1 Hall where 100 Teacher Educators or Teachers could be addressed.
8. 1 Studio for recording video films
9. 1 CAL LAB

S.No	Head’s	Associates
1	Division of Curriculum. Studies	2 Rooms
2	Department of Science & Maths Professor (2) Assistant (2)	2 Rooms 2 Rooms 1 Rooms
3	Department of Social Science Professor (2) Assistant (2)	(2) Room (1) Room
4	Department of Languages Professor (1) Assistant professor (1) Assistant professor (1)	1 Room (1 Room )
5	Department of Art Education Assistant professor (2) Associates professor (1)	1 Room 1 Room
6	Department of Work Education & Phy. Education Assistant professor (2) Associate professor (2)	1 Room 1 Room
7	Department of Work & Education (3)	1 Room
8	Department of Education Meast & Eval (3)	1 Room
9.	Technical Staff *Computer Assistant (1) *Semi Professor Assistant (2) *Lab Assistant (2)	In Cal Lab In ET Lab 1 with department of SC, 1 with department of work experience 8 Phy. Education
10	Project Staff to have one separate room for J.P.F	1 Room
11	Admin Staff in on Hall or Two Room	1 Hall
12	One open Amp – Theatre	1 Room
13	1 Auditorium	1 Room

10. Separate Room for Head’s –



1	Head	Division of Teacher Education & Foundation (pre-service education-philosophy, psychology, sociology, In-service	*Professor (11) *Associate professor (15) *Assistant professor (5)	1 Room 2 Room 2 Room
2.	Head	Division of Technological Service	*Professor (1) *Associate professor (1) *Assistant professor (1)	1 Room 1 Room 1 Room
3.	Head	Division of Education Surveys Research & Policy	*Professor (1) *Associate professor (1) *Assistant professor (2)	1 Room 1 Room 1 Room
4.	Head	Division of Special Needs & Social Justice	*Professor (1) *Associate professor (3) *Assistant professor (3)	1 Room 1 Room 1 Room
5.	Head	Division of Library & Documentation	*Library (1) *Assistant Lib (1) *Professional Assistant (1)	All to be part of Library

Provision of Art Lab, Science Lab & Psychology Lab & : (4 labs)

Language Lab be also made

Cafeteria to accommodate 30 – 35 persons : (1 Cafeteria)

1 Store – Room : (1 Room)

1 Room as facility center where photo- copy machines. : (1 Room)

## Annexure X

A proposed pool for drawing members of the Program Advisory Committee for SCERTs

1	Secretary, Education	Chairperson
2	Director, SCERT	Member Secretary
3	Director, School Education	Member
4	Joint Director, SCERT	Member
5-9.	Principals of DIETs	5 Members drawn by rotation
10-11	Department/Unit Heads	2 Members drawn by rotation
11	Dean, University Department of Education	Member
13.	Head, IASE	Member
14-15	Heads, CTEs	2 Members drawn by rotation
16-20	School Management Committee	5 Members drawn by rotation
21-23	Academics	3 Members nominated by Director
25-28	PRI representatives	5 Members drawn by rotation
29-33	NGO representatives	5 Members nominated by Director
34-35	Experts in Performing Arts	2 Members
36-37	Experts in Crafts	2 Members
38	Faculty, Sociology Department of University/HEI	Member
39	Faculty, Child Development of HEI	Member
40	Faculty, Mathematics Department, HEI	Member
41	Faculty, Sciences	Member
42-49	Faculty, Languages	7 Members state's languages
50	Representatives from print, radio, TV media	3 Members
51	Representative from Department of Agriculture	Member
52.	Representative from Department of Health	Members
53-62	Student Teachers (Teacher trainees from TEIs)	5 male and 5 female
63-68	Teacher representatives	6 Members
69-75	School Principals	6 Members
76.	State Knowledge or Innovation Commission	Member
77.	Representatives from IITs/ITI/environment	3 Members
78-79	Representatives from women's rights groups	2 Members
80-81	Representatives from child rights groups	2 Members
82-83	Representatives from disabilities rights group	2 Members
84-85	Representatives from SC/ST rights group	2 Members
86-87	Representatives from minority rights groups	2 Members
88-89	Representatives from child labour organizations	2 Members

Note: Director means SCERT, Director; Where more than 1 member is designated gender and social group parity to be maintained where possible.

Suggested List of Items in Annual Plan/Perspective Plan of SCERT

A. Introduction/State Profile

- Historical Background
- Geographical features socio-economic and geo-cultural profile
- Administrative Structure [Districts, Blocks, Panchayats, Villages, Habitations; towns, cities, metros]
- Demographic Profile [Disaggregated data by Gender and Social Group]

B. Literacy and schooling Profile

- Literacy Profile (Disaggregated data by Gender and Social Group)
- School-going children profile [Disaggregated data by gender, districts and stages of schooling]
- Out-of-school children [primary/secondary data from ILO and other organizations by age group, gender, SC/ST/Minorities]
- Children from weaker sections of society [primary/secondary data by age group 6-18 years by gender]
- Children with special needs [by district, age, gender, type of disability]

C. Elementary and secondary education profile of the State.

- Schools [ by district, stage-primary, middle, secondary, senior secondary]
- Strength [by district, by school: number of teachers (male/female) and children (boys/girls)]
- Teachers and teacher related indicators [District-wise]
- Enrolment and Enrolment related indicators [district-wise: by gender and social category].
- Retention position [District-wise and Gender and social category]
- Quality and Quality related indicators [by district and schools]
- Existing and projected Teacher Vacancy in 12FYP [by district, stage and subject]
- Performance of students by stage
- State Curriculum Framework, textbooks, other teaching learning materials

D. Teacher Education in the State

- Review of existing teacher Education Institutions: DIETs, CTEs, IASEs, SCERT, university departments of education, private institutions in terms of
  - Structure
  - Role
  - Recruitment/Placement Policy
  - Intake capacity at various levels
  - Linkage with Schools, and BRCs/CRCs
  - Linkage with academic institutions for academic support and nature of support

- Annual output of teachers by stage, subject
  - Curriculum of various teacher education curricula
  - Evaluation of quality of Teacher Education in the state
- E. Performance of TEIs related to TE and SE curriculum and material development, support to schools, DIETs, BRCs, CRGs etc.
- F. Support from states and other Institutions [kind of support by institutions]
- G. Review of Quality of Pre-service Education-Curriculum and programs
- H. Review of In-service Education: coverage, quality, impact and follow-up
- I. Review of Modalities for teacher education and professional development of teacher education
- J. Review of Research in Teacher Education conducted in the state by TEIs/HEIs/NGOs
- K. Planning Process
- L. Highlight the activities/research undertaken for developing the teacher education plan
- Pre-plan activities
  - Appropriate recruitment and placement policy for faculty in teacher education institutes
- M. Clear articulation of expectations from various kind\$ of institutions DIETs, CTEs, IASEs and SCERTs
- Clear articulations of relationship and responsibility towards TE, schools education, research
  - Details of workshops and discussions organised to prepare perspective
  - Details of studies, reviews conducted to assess training needs identify the direction and gap areas in pre service TE and in-service TE in 12 FYP
- N. Targets to be Achieved [Targets are translation of objectives in clearly defined measurable terms
- What is intended to be achieved during the 12FYP plan period is to be set on following (others can be added. Targets to eb presented in a phased manner i.e., on year to year basis and disaggregated target setting [i.e. District-wise and school and TEI wise]

- Teacher education to be conducted: Pre-service and in-service.
- Teachers in Pre-service and in service [coverage]
- TE for BRC, CRC Coordinators
- Teacher Educators to be trained

- O. Identification of Problems and Issues [Sources for identification of problems and issues are State

Profiles of elementary education, secondary education, Teacher education Programmes in the State,

Pre-plan activities undertaken, Workshop and discussions organised, Studies conducted]

- P. Strategies

Strategies in Teacher Education plan for:

- to improve in service TE: its coverage, quality, impact, follow-up
- to decide modalities for education and professional development of teacher educators,
- to improve pre-service TE
- Strategies for Institutional changes and improvement of
  - structure for institutions
  - the number and nature of faculty
  - role and responsibilities to be undertaken

[strategies for all identified problems: a single strategy may not be uniformly operational in different areas for translation of strategies into activities, phasing and sequencing of strategies into activities]

#### Q. Costing and Budget Requirements

- Listing of Activities having cost implications and brief narrative account
- Separating recurring and non-recurring items,

Note:

- Work out unit cost for non-recurring and average cost for recurring items with details of all Unit Costs/Average Costs]
- Financial Parameters given under guidelines to be adhered to
- Ceiling on various cost items as prescribed under guidelines
- Feasibility of plan and the absorption capacity of the state, commitment from state for state contribution

List of SC/ST and Minority Concentration Districts

S.No.	Districts	MCDs and SC/ST Dominated Districts		
		Minority Concentration Districts	SCHEDULED CASTES (25% AND ABOVE)	Scheduled tribes 50% and above
A	B	C	D	F
<b>Andaman &amp; Nicobar Islands</b>				
1.	Nicobar	*		
	Sub Total	1	0	0
<b>1.1 Arunachal Pradesh</b>				
2.	Changiang	*		
3.	East Kameng	*		*
	East Siang			*
4.	Lower Subansiri	*		*
5.	Papum Pare	*		*
6.	Tawang	*		*
7.	Tirap	*		*
	Upper Siang			*
	Upper Subansiri			*
8.	West Kameng	*		
9.	West Siang			*
	1.2 Sub Total	7	0	9
<b>1.3 Assam</b>				
10.	Barpeta	*		
11	Bongaigaon	*		
12	Cachar	*		
13	Darrang	*		
14	Dhubri	*		
15	Goalpara	*		
16	Haikandi	*		
17	Karbi Anglong			*
18	Kairimganj	*		
19	Kokrajhar	*		
20	Morigaon	*		
21	Nagaon	*		
22	Kamrup	*		
23	North Cachar Hills			*
	1.4 Sub Total	12		2
<b>Bihar</b>				

S.No.	Districts	MCDs and SC/ST Dominated Districts		
24	Araria	*		
25	Darbhanga	*		
26	East Champaran		*	
27	Katihar	*		
28	Kishanganj	*		
29	Purnea	*		
30	Sitamarhi	*		
31	West Champaran	*		
	1.5 Sub Total	7	1	0
Chhatisgarh				
32	Bastar			*
33	Dantewara			*
34	Dashpur			*
35	Kanker			*
36	Kowardha			*
37	Sarguja			*
38	Sub Total	0	0	6
Delhi				
39	North East	*		
	Sub Total	1	0	0
Gujarat				
40	Dahod			*
41	Dangs			*
42	Narmada			*
43	Vaisad			*
	Sub Total	0	0	4
Haryana				
44	Ambala		*	
45	Fatehabad		*	
46.	Mewat (Gurgaon)	*		
.47	Sirsa	*	*	
	1.20 Sub Total	2	3	0
Himachal Pradesh				
48	Bilaspur		*	
49	Kinnaur			*
50	Kullu		*	
51	Lahaul & Spiti			*
52	Mandi		*	
53	Shimla		*	
54	Sirmour		*	
55	Solan		*	

S.No.	Districts	MCDs and SC/ST Dominated Districts		
56	Sub Total	0	6	2
Jammu & Kashmir				
57	Kargil			*
58	Leh (Laddakh)	*		
	1.21 Sub Total	1	0	1
Jharkhand				
59	Chatra		*	
60	Gumla	*		*
61	Lohardagga			*
62	Pakaur	*		
63	Palamau		*	
64	Ranchi	*		
65	Sahebganj	*		
66	West Singhbhum			*
	1.22 Sub Total	4	2	3
Karnataka				
67	Bidar	*		
68	Gulbarga	*		
69	Kolar		*	
	Sub Total	2	1	0
70	Kerala			
	Wayanad	*		
	1.26 Sub Total	1		
Madhya Pradesh				
71	Bhopal	*		
72	Barwani			*
73	Dhar			*
74	Dindori			*
75	Jhabua			*
76	Mandla			*
	1.27 Sub Total	1	0	5
Maharashtra				
77	Buldana	*		
78	Hingoli	*		
79	Nandurbar			*
80	Parbhani	*		
81	Washim	*		
	1.28 Sub Total	4	0	0
Manipur				
82	Chandel	*		*
83	Churachandpur	*		*



S.No.	Districts	MCDs and SC/ST Dominated Districts		
84	Senapati	*		*
85	Tamengiong	*		*
86	Thoubai	*		
87	Ukhruai	*		*
	1.29 Sub Total	6	0	5
Meghalaya				
88	East Garo Hills			*
89	East Khasi Hills			*
90	Jaintia Hills			*
91	Ri Bhoi			*
92	South Garo Hills			*
93	West Garo Hills	*		*
94	West Khasi Hills			*
	1.30 Sub Total	1	0	7
Mizoram				
95	Aizawal			*
96	Champhai			*
97	Kolasib			*
98	Lawngtlai	*		*
99	Lunglei			*
100	Mamit	*		*
101	Saiha (Chhumtuipui)			*
102	Serchhip			*
	1.31 Sub Total	2	0	8
Nagaland				
103	Dimapur			*
104	Kohima			*
105	Mokokchung			*
106	Mon			*
107	Phek			*
	Tuensang			*
108	Wokha			*
109	Zunheboto			*
	1.40 Sub Total		0	8
Orissa				
110	Gajapati	*		*
111	Khandmal			*
112	Malkangiri			*
113	Mayurbhanj			*
114	Nawarangpur			*
115	Rayagada			*

S.No.	Districts	MCDs and SC/ST Dominated Districts		
116	Sundergarh			*
	1.43 Sub Total	1	0	7
	1.44 Punjab			
117	Amritsar		*	
118	Bathinda		*	
119	Faridkot		*	
120	Fatehgarh Sahib		*	
121	Hoshiarpur		*	
122	Jalandhar		*	
123	Kapurthala		*	
124	Mansa		*	
125	Moga		*	
126	Muktsar		*	
127	Nawanshahar		*	
128	Sangrur		*	
	1.57 Sub Total	0	12	0
	1.58 Rajasthan			
129	Banswara			*
130	Dungarpur			*
131	Ganganagar		*	
132	Hanumangarh		*	
	1.63 Sub Total	0	2	2
Sikkim				
133	North	*		*
	1.64 Sub Total	1	0	1
Tamil Nadu				
134	Cuddalore		*	
135	Kancheepuram		*	
136	Nagapattinam		*	
137	Perambalur		*	
138	The Nilgiris		*	
139	Thiruvarur		*	
140	Villupuram		*	
	1.66 Sub Total	0	7	0
	1.67 Tripura			
141	Dhaki			*
	1.68 Sub Total	0	0	1
	1.69 Uttaranchal			
142	Bageshwar		*	
143	Haridwar (Roorkee)	*		
144	Udham Singh Nagar	*		

S.No.	Districts	MCDs and SC/ST Dominated Districts		
	1.70 Sub Total	2	1	0
1.71	Uttar Pradesh			
145	Auraiya		*	
146	Azamgarh		*	
147	Badaun	*		
148	Baghpat	*		
149	Bahraich	*		
150	Balrampur	*		
151	Barabanki	*	*	
152	Bareilly	*		
153	Binjaur	*		
154	Bulandahahar	*		
155	Chitrakoot		*	
156	Fatehpur		*	
157	Ghaziabad	*		
158	Hardoi		*	
159	Hathras		*	
160	Jyotiba Phule Nagar	*		
161	Jalaun		*	
162	Jhansi		*	
163	Kaushambi		*	
164	Khiri	*	*	
165	Lucknow	*		
166	Mahoba		*	
167	Meerut	*		
168	Mirzapur		*	
169	Moradabad	*		
170	Muzaffarnagar	*		
171	Maharajganj			
172	Pilibhit	*		
173	Rae Bareilly		*	
174	Rampur	*		
175	Saharanpur	*		
176	Sant Kabir Nagar			
177	Shahjahanpur	*		
178	Shrawasti	*		
179	Sidharth Nagar	*		
180	Sitapur		*	
181	Sonbhadra		*	
182	Unnao		*	
	1.72 Sub Total	21	17	0

S.No.	Districts	MCDs and SC/ST Dominated Districts		
West Bengal				
183	Bankura		*	
184	Bardhaman	*	*	
185	Birbhum	*	*	
186	Dakshin Dinajpur	*	*	
187	Haora	*		
188	Jalpaiguri		*	
189	Kolkatta	*		
190	Kooch Bihar	*	*	
191	Malda	*		
192	Murshidabad	*		
193	Nadia	*	*	
194	North 24 Parganas	*		
195	South 24 Parganas	*	*	
196	Uttar Dinajpur	*	*	
	1.73 Sub Total	12	9	0
	TOTAL			

## Public Software - Education Tools

Application Area	Public Software	Description
SCIENCE	Kalzium	This shows the periodic table and the properties of elements. It acts as an encyclopedia, explaining states of matter, evolution of elements. Basic equations can be balanced using this tool.
	KStars	Desktop planetarium-Astronomy with over 130000 stars, all planets, etc.
	Stellarium	This is a desktop planetarium software that shows exactly what you see when you look up at the stars.
MATHS	PhET	Fun, interactive simulations of physical phenomenon
	KTechLab	This tool can be used to build your own circuits and explain its various components
	Geogebra	An algebra and geometry package providing for both graphical and algebraic input
	Tux Math	A fun game through which children can practice their addition, subtraction, multiplication and division.
	KBruch	This tool can be used to explain fractions as well as for the children to practice arithmetic problems.
LOGIC	KTurtle	The turtle will follow whatever directions you give it. Can be used to draw various symmetrical figures and is a good exercise of logic.
SOCIAL STUDIES	KGeography	Quiz on different states and capitals across the globe
	Marble	This acts as a desktop atlas.
ENGLISH	KHangman	Guess the correct word with a certain number of guesses allowed
	KAnagram	Unscramble the word
	KLettes	Identify the alphabets by recognizing the sound
	Tux Typing	Tux Typing" is an educational typing tutor for children.

Performance Indicators for the 12<sup>th</sup> Plan Teacher Education Scheme

State- Level Indicators

To Be Tracked – Six Months into the Plan Period and One Year After

1. Has the State begun preparing a detailed database of information on teacher education in the State
  - a. Number of government & private teacher education (M.Ed, B.Ed & D.Ed) institutions (district wise)
  - b. Number of unqualified teachers at elementary/secondary levels (district wise)
  - c. Number of teacher educators required & number available (district wise)
  - d. Teacher-Student ratio at teacher education institutions (district-wise)
  - e. Qualification/experience of teacher educators (district-wise)
  - f. Infrastructure requirements of teacher education institutions (district wise)
  - g. Library and instructional resources available at teacher education institutions (district wise)
2. Has the State held discussions with critical stakeholders (education experts, teacher educators, teachers, student teachers) to decide its teacher education policy and strategy for the next five years?
3. Has the State begun preparing a five-year perspective plan for teacher education?
4. Has the State completed the process of creating a cadre for teacher educators?
5. Has the State developed selection criteria and selection process to fill existing faculty vacancies in the SCERT, DIETs, IASEs and CTEs?
6. Has the State planned for the capacity development of those selected?
7. Has the State begun preparing a five-year perspective plan for teacher education?
8. Has the State initiated the process of re-designing teacher education curriculum based on National Curriculum Framework for Teacher Education 2009?
9. Has the State initiated the process of re-designing the school curriculum and textbooks based on the National Curriculum Framework 2005?
10. Average time taken for Central funds (other than salary) to reach the DIETs, CTEs and IASEs from the State treasury.

State Level Dashboard  
(To be Tracked per Year & End of Five Years)

Teachers	Teacher Educators
<ol style="list-style-type: none"> <li>1. Total number of unqualified teachers in               <ul style="list-style-type: none"> <li>• Government Schools</li> <li>• Aided Schools</li> <li>• Unaided Schools</li> </ul> </li> <li>2. % of candidates who have cleared TET</li> <li>3. Has the TET data been used to analyse the performance of Teacher Education Institutions?</li> <li>4. Number of new teachers needed annually               <ul style="list-style-type: none"> <li>• For Elementary Level</li> <li>• For Secondary Level</li> </ul> </li> <li>5. Year-wise total number of teacher trainees passing:               <ul style="list-style-type: none"> <li>• Through DIETs</li> <li>• Through BITEs</li> <li>• Through CTEs</li> <li>• Other B.Ed Colleges</li> <li>• Other D.Ed Colleges</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Approved capacity of preparing Teacher Educators(M.Ed)</li> <li>2. Total number of M.Ed graduates every year</li> <li>3. Teacher -Student ratio in               <ul style="list-style-type: none"> <li>• DIETs</li> <li>• CTEs</li> <li>• IASEs</li> <li>• BITEs</li> <li>• Other B.Ed Colleges</li> <li>• Other D.Ed Colleges</li> </ul> </li> <li>4. % of faculty vacancy in               <ul style="list-style-type: none"> <li>• SCERT</li> <li>• DIETs</li> <li>• CTEs</li> <li>• IASEs</li> </ul> </li> <li>5. Total faculty capacity in               <ul style="list-style-type: none"> <li>• BITEs</li> <li>• DIETs</li> <li>• CTEs</li> <li>• Other B.Ed Colleges</li> <li>• Other D.Ed Colleges</li> </ul> </li> </ol>

Institutional Indicators

(To be Tracked per Year & end of Five Years)

Focus	Suggested Process Indicators	Suggested Performance Indicators
<p>State Councils for educational Research &amp; Training (SCERTs)</p>	<ol style="list-style-type: none"> <li>1. Has the SCERT revised the teacher education curriculum based on National Curriculum Framework for Teacher Education 2009?</li> <li>2. Has the SCERT re-designed the school curriculum, textbooks and assessment processes based on the National Curriculum Framework 2005?</li> <li>3. Does the SCERT have a detailed, updated district-wise database on school education in the State?</li> <li>4. Has the SCERT established special cells/laboratories for Mathematics, Science, Languages, Social Studies and Educational Technology?</li> <li>5. Does the SCERT hold regular meetings with               <ol style="list-style-type: none"> <li>a. SSA</li> <li>b. RMSA</li> <li>c. DIETs</li> <li>d. CTEs</li> <li>e. IASEs</li> </ol> </li> <li>6. Has the SCERT re-organized its structure based on its requirements?</li> <li>7. Has the SCERT developed orientation programmes for educational administrators and head teachers?</li> <li>8. Has the SCERT developed material for teacher educators to use in other teacher education institutions and for teachers in schools?</li> <li>9. Has there been recorded feedback</li> </ol>	<p><u>Input/Activity Measures</u></p> <ol style="list-style-type: none"> <li>1. % faculty vacancy in SCERT (based on Annexure IV structure)</li> <li>2. Number of teacher educators who have undergone orientation programmes conducted by SCERT</li> <li>3. Number of educational administrators and head teachers trained by SCERT</li> <li>4. % of new books (&lt; 3 years old) in the institution library</li> <li>5. Number of learning surveys conducted by SCERT and reports of these surveys</li> <li>6. Development of detailed information database on school education in the state</li> </ol> <p><u>Output/Outcome Measure</u></p> <ol style="list-style-type: none"> <li>1. School curriculum reflecting National Curriculum Framework 2005</li> <li>2. Teacher Education curriculum in alignment with National Curriculum Framework for Teacher Education 2009</li> <li>3. Availability of resource material for teachers and teacher educators</li> </ol>



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	<p>(through independent assessment &amp; user studies) on the range &amp; quality of material developed?</p> <p>10. Has the SCERT created and implemented 'learning surveys' in the state that assess learning outcomes in schools?</p> <p>11. Does the SCERT conduct research studies related to education issues in the State?</p> <p>12. How many studies have been done by SCERT faculty - number of proposals submitted/accepted/completed?</p> <p>13. What are the areas of research covered?</p> <p>14. How many publications have been authored by SCERT faculty - conference/seminar presentations, reports, newspaper/journal articles, books etc.?</p> <p>15. Are there regular faculty development programs for SCERT faculty?</p> <p>16. How many faculty members at SCERT were deputed for conferences; opted for study leave and undertook exposure visits?</p> <p>17. What is the frequency of faculty meetings within the SCERT? Are there records of the same?</p> <p>18. What has been the most 'talked-about' process improvement in the year within the SCERT?</p>	
CTE	<ol style="list-style-type: none"> <li>1. Does the CTE have a detailed database on the secondary schools and secondary school teachers in the districts that it serves?</li> <li>2. Has the CTE done a training need analysis for secondary school teachers?</li> <li>3. Has the CTE developed modules for secondary school teachers?</li> <li>4. Does the CTE use ICT during in-service</li> </ol>	<p><u>Input/Activity Measures</u></p> <ol style="list-style-type: none"> <li>1. % of faculty vacancy in CTEs</li> <li>2. Number of secondary school teachers qualified through CTEs</li> <li>3. Number of in service programme- conducted through CTEs</li> </ol>

Focus	Suggested Process Indicators	Suggested Performance Indicators
	<p>training programmes?</p> <p>5. Does the CTE hold regular meetings with</p> <ol style="list-style-type: none"> <li>a. SSA</li> <li>b. RMSA</li> <li>c. DIETs</li> <li>d. IASEs</li> <li>e. SCERT</li> </ol> <p>6. Has there been positive feedback on the B.Ed programme by student teachers? Are there records of the same?</p> <p>7. Has there been positive feedback on the in-service programmes by secondary school teachers? Are there records of the same?</p> <p>8. Does the CTE use a Training Management System?</p> <p>9. Does the CTE conduct research studies related to secondary education issues in the districts that it covers?</p> <p>10. How many studies have been completed by CTE faculty - number of proposals submitted/accepted/completed?</p> <p>11. What are the areas of research covered?</p> <p>12. How many publications have been authored by CTE faculty – conference/seminar presentations, reports, newspaper/journal articles, books etc.?</p> <p>13. Are there regular faculty development programs for CTE faculty?</p> <p>14. How many faculty members at CTE were deputed for conferences, went on study leave and undertook exposure visits?</p> <p>15. What is the frequency of faculty meetings within the CTE? Are there records of the same?</p> <p>16. What has been the most 'talked-about' process improvement in the year within the CTE?</p>	<p>4. Availability of technology-enabled infrastructure (functioning computers, internet connection, email id and multi-media facilities)</p> <p>5. % of new books (&lt; 3 years old) in the institution library</p> <p><u>Output/Outcome Measure</u></p> <ol style="list-style-type: none"> <li>1. Success ratio in pre-service examination</li> <li>2. % of CTE students who cleared TET</li> <li>3. No. of teachers benefitted from training programmes</li> <li>4. No. of research publications/documents released</li> <li>5. No. of resource materials prepared for teachers</li> </ol>

Focus	Suggested Process Indicators	Suggested Performance Indicators
Institutes of Advanced Studies in Education (IASEs)	<ol style="list-style-type: none"> <li>1. Does the IASE have a detailed database on the teacher education institutions and teacher educators in the area that it serves?</li> <li>2. Has the IASE conducted a training need analysis for teacher educators?</li> <li>3. Has the IASE created special courses for teacher educators in identified areas of need?</li> <li>4. Does the IASE use ICT during in-service training programmes?</li> <li>5. Does the IASE hold regular meetings with               <ol style="list-style-type: none"> <li>a. SSA</li> <li>b. RMSA</li> <li>c. DIETs</li> <li>d. CTEs</li> <li>e. SCERT</li> </ol> </li> <li>6. Has there been positive feedback on the M.Ed programme by student teachers? Are there records of the same?</li> <li>7. Has there been positive feedback on the in-service programmes by secondary school teachers? Are there records of the same?</li> <li>8. Does the IASE use a Training Management System?</li> <li>9. Does the IASE conduct research studies related to teacher educators in the area that it covers?</li> <li>10. How many research studies have been done by IASE faculty - number of proposals submitted/accepted/completed?</li> <li>11. What are the areas of research covered?</li> <li>12. How many publications have been authored by IASE faculty – conference/seminar presentations, reports, newspaper/journal articles, books etc.?</li> <li>13. Are there regular faculty development</li> </ol>	<p><u>Input/Activity Measures</u></p> <ol style="list-style-type: none"> <li>1. Number of institutions setup as or upgraded to IASE</li> <li>2. % faculty vacancy in IASE</li> <li>3. Number of modules created for teacher educators</li> <li>4. IASE as the Regional Resource Center</li> <li>5. % of new books (&lt; 3 years old) in the institution library</li> </ol> <p><u>Output/Outcome Measures</u></p> <ol style="list-style-type: none"> <li>1. Success ratio in pre-service examination</li> <li>2. % of IASE students who cleared TET</li> <li>3. No. of teachers benefitted from training programmes</li> <li>4. No. of research publications/documents released</li> <li>5. No. of resource materials prepared for teacher educators</li> </ol>

Focus	Suggested Process Indicators	Suggested Performance Indicators
	<p>programs for IASE faculty?</p> <p>14. How many faculty members at the IASE were deputed for conferences, went on study leave and undertook exposure visits?</p> <p>15. What is the frequency of faculty meetings within the IASE? Are there records of the same?</p> <p>16. What has been the most 'talked-about' process improvement in the year within the IASE?</p>	
<p>District Institutes of Education &amp; Training (DIETs)</p>	<ol style="list-style-type: none"> <li>1. Does the DIET have a detailed database on the schools, Block Resource Centres &amp; Cluster Resource Centres in the district that it serves?</li> <li>2. Has the DIET conducted a training need analysis for teachers?</li> <li>3. Does the DIET hold regular meetings with               <ol style="list-style-type: none"> <li>a. SSA</li> <li>b. RMSA</li> <li>c. IASE</li> <li>d. CTE</li> <li>e. SCERT</li> </ol> </li> <li>4. Has there been positive feedback on the D.Ed programme by student teachers? Are there records of the same?</li> <li>5. Has there been positive feedback on the in-service programmes by elementary school teachers? Are there records of the same?</li> <li>6. Does the DIET use a Training Management System?</li> <li>7. Does the DIET conduct research studies related to teacher educators in the area that it covers?</li> <li>8. What are the areas of research covered?</li> <li>9. How many publications have been authored by DIET faculty – conference/seminar presentations, reports, newspaper/journal</li> </ol>	<p><u>Input/Activity Measures</u></p> <ol style="list-style-type: none"> <li>1. Number of visitors to the DIET Resource Center every month ( this excludes student visits during the library period)</li> <li>2. Number of DIET faculty visits to schools in a quarter (each visit to be at least 4 hours of interaction)</li> <li>3. Availability of technology enabled infrastructure (functioning computers, internet connection, email id and multi-media facilities)</li> <li>4. Average duration of Principalship in the last 5 years</li> <li>5. % of faculty positions filled</li> <li>6. % of new books (&lt; 3 years old) in the institution library</li> </ol> <p><u>Output/Outcome Measures</u></p> <ol style="list-style-type: none"> <li>1. Number of qualified teachers added to the system through DIETs</li> <li>2. % of DIET students who</li> </ol>

Focus	Suggested Process Indicators	Suggested Performance Indicators
	<p>articles, books etc.?</p> <p>10. Are there regular faculty development programs for DIET faculty?</p> <p>11. How many faculty members at the DIET were deputed for conferences, went on study leave and undertook exposure visits?</p> <p>12. What is the frequency of faculty meetings within the DIET? Are there records of the same?</p> <p>13. What has been the most 'talked-about' process improvement in the year within the DIET?</p>	<p>cleared the TET</p> <p>3. No. of modules for training of teachers, etc prepared by DIET faculty</p> <p>4. No. of action research undertaken by the DIET faculty</p> <p>5. No. of resource material developed by DIET faculty for school teachers</p> <p>6. No. of faculty of DIETs who underwent capacity development and training programs</p> <p>7. Has the DIET prepared the Annual Action Plan 2012-13</p>