61ST MEETING
OF THE
CENTRAL ADVISORY BOARD
OF EDUCATION

AGENDA ITEMS
&
BACKGROUND NOTES

2nd April, 2013
At 11.00 A.M.
The Convention Hall,
Hotel Ashok,
New Delhi

MINISTRY OF HUMAN RESOURCE DEVELOPMENT
GOVERNMENT OF INDIA

Agenda & Background Notes for the 61st meeting of Central Advisory Board of Education (CABE)

2nd April 2013 at 11.00 AM

Venue: Ashok Hotel, New Delhi

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AGENDA ITEMS

Summary Record of Discussion of the 60th Meeting of Central Advisory Board of Education held on 8th November, 2012

The Sixtieth Meeting of the Central Advisory Board of Education (CABE) was held on 8th November, 2012 at New Delhi under the Chairmanship of Dr. M. M. Pallam Raju, Minister of Human Resource Development. Shri Rahman Khan, Minister of Minority Affairs, Dr. Shashi Tharoor, Minister of State of HRD along with 18 Ministers-incharge
of Education from various States/UTs, Ms Shantha Sinha, Chairperson of NCPCR, Secretary, Department of Higher Education, Secretary, Department of School Education & Literacy, Secretary, Ministry of Women & Child Development and other members of CABE attended the meeting.

2**.** The CABE is the highest advisory body to advise the Central and State Governments in the field of education. The minutes of the previous meeting held on 6th June, 2012 were confirmed today along with the Action Taken Note on them.

3. In his opening remarks, Hon'ble HRM Dr M. M. Pallam Raju mentioned that the purpose of education should be to build an inclusive, fair and just society. In a country as diverse and as large as India, the task of developing national policies while at the same time respecting and incorporating regional aspirations and an inclusive agenda of growth is indeed a real challenge. In this context, Hon'ble HRM emphasized on a participatory approach in which Central Government and State Governments, academics, autonomous institutions, private sector and all other stakeholders, should work together, Hon'ble HRM also expressed the view that education should lead to character building of our youth and also inspire them to work towards the task of nation
building in addition to their work for employment or self-employment.

4. Hon'ble HRM emphasised the importance of Teachers' education as also the need to prohibit unfair practices in schools. He also emphasised the need for close cooperation in implementation of the RtE Act.

5. As regards higher education, Hon'ble HRM said that the consolidation of the initiatives undertaken during XI Plan period, strengthening of the State Institutions, Faculty Development, strengthening Research and Innovation in Basic Sciences and Social Sciences, Skill Building and Vocational Education should be the critical
focus areas.

6. Hon'ble Minister of Minority Affairs, Shri Rahman Khan in his address, urged the State Education Ministers and the CABE members to ensure that the provisions of the Constitution relating to establishment of educational institutions by Minorities should be respected in letter and spirit so as to ensure the educational development of minorities. He also suggested constitution of a Sub Committee of CABE for monitoring the protection of child's rights and minority educational institutions.

7. Presentations were made by the officials and academics on the following issues relating to school education.

- Recommendations of Justice Verma Committee on Teacher Education
- CABE Committee on prevention of unfair practices adopted by schools
- Review of implementation of RtE Act
- CABE Committee on expanding RtE upto Class X and to include preschool

Education

The above presentations were followed by discussions in which state education ministers and CABE members actively participated.

8. Thereafter, the presentations were made on the following issues relating to higher and technical education.

- CABE Committee on University Reforms
- National Framework in Higher Education
- Role of States in Mandatory Accreditation
- All India Higher Education Survey
- Reforms in polytechnic sector

9. After detailed discussions, the following resolutions were adopted:

(i) CABE discussed the recommendations of the Justice Verma Commission and endorsed the recommendations of the Commission. CABE also approved the suggested Action Plan for implementation of the recommendations of the Commission.

(ii) CABE noted the progress under the roll out of the RTE Act, 2009 which shows substantive efforts by the States and UTs to implement its various provisions. CABE took note of the support extended by the Sarva Shiksha Abhiyan in augmentation of school infrastructure in order to meet the gaps in the opening of neighbourhood schools, recruitment of teachers and in improving quality of schooling. Education Minister of Bihar pointed out to the need for extending the RTE deadline for completion of school infrastructure by March end 2013, while some other members of CABE did not support such an extension. CABE took the view that redoubled efforts should be made by State/UTs to achieve RTE standards for school infrastructure in 2012-13 as over 12,000 new schools remain to be opened, over 2,50,000 additional class rooms
and large number of toilets, drinking water facilities, and ramps are under construction under SSA as also by other national programmes for sanitation and drinking water supply.

The CABE would review the progress again in its next meeting.

(iii) CABE reiterated the need for the initiative to curb prevalent unfair practices in the school education sector including charging of capitation fees, misleading and non-transparent processes adopted by schools for admission of students in higher classes, appointment of ineligible and unqualified teachers and unanimously endorsed
the proposed legislation.

(iv) The report of the Committee on extension of RtE to preschool and secondary school was discussed and the issues identified by the subcommittees and the recommendation of the Subcommittees for further and wider deliberation with stakeholders, was endorsed by the CABE.

(v) The report of the CABE Committee on University Reforms was discussed. CABE accepted the recommendation to incentivise the state universities & institutions and endorsed in–principle

the proposed Rashtriya Uchchatar Shiksha Abhiyan. CABE decided that the other issues such as National Higher Education Framework, role of States in mandatory accreditation, and reform in polytechnic sector be discussed in the next meeting.

10. CABE also noted the proposals put forward by Ministry of Youth Affairs and Sports on the need for awarding credits under National Service Scheme and the note of Ministry of Women & Child Development relating to gender issues and protection of children.

11. Meeting ended with vote of thanks to Chair.

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AGENDA ITEM 1: PROPOSAL TO INITIATE ACTION FOR EVOLVING A NATIONAL HIGHER EDUCATION QUALIFICATION FRAMEWORK (NHEQF)

1. Background:

1.1. National System of Qualifications in the Indian context comprises of School Education, Vocational Education and Higher Education. The School education comprises of twelve years of schooling subdivided into Primary, Elementary, Secondary and Senior Secondary level. The School Education is largely governed by the National Curriculum Framework (NCF) and is by and large uniform across the country. The system of Vocational Education, aimed at skill development and employability, which has so far been overlapping across the school and higher education and largely seen as terminal, is now being sought to be streamlined through a National Vocational Education Qualification Framework (NVEQF) recently notified by the MHRD.

1.2. Higher Education is placed at the highest rung of the national educational system and is broadly categorized under the General, Professional and Technical Higher Education. Irrespective of the category, the higher education usually comprises of three levels i.e. undergraduate, postgraduate, research degree. Often certificate, diploma, advanced diploma and postgraduate diploma are also offered by the higher educational institutions.

1.3. Conventionally, the higher educational programmes, their curricula and syllabi have been designed and developed by the Universities and the convention required that the degrees/diplomas offered by a recognized university shall be recognized as equivalent to their own degrees/diplomas by all other recognized universities of the country, thus permitting recognition and acceptability of qualifications across the country.

1.4. In order to facilitate recognition and acceptability of higher educational qualifications offered by different universities and colleges affiliated thereto, through the country and internationally, the University Grants Commission (UGC) has put in place Regulations for the Undergraduate, Postgraduate and Research Degree programmes. These

regulations essentially seek to specify the entry qualification and minimum duration and minimum standards of teaching-learning of different courses and programmes of higher studies. Similarly, various professional councils and other regulatory bodies have also laid down certain minimum standards for qualifications falling under their domain in order to be nationally, if not universally, recognized and accepted.

1.5. While universities are autonomous in academic matters and are free to determine and prescribe curricula for their academic programmes, all universities in the country follow the prescribed norms for the minimum entry qualification and duration for the recognition of their qualification/degrees. Mandated by the University Grants Commission Act 1955, the UGC has been charged with the responsibility of specifying the degrees and accordingly it has setup a mechanism of Standing Committee on specification of degrees which has so far been considering and according approval for award of degrees on the basis of proposals received from different universities on case to case to case basis. Recently, however, the Standing Committee, in consultation with all the professional and technical higher education regulatory bodies and councils, has come up with a standardised format for specified degrees, specifying the nomenclature, minimum entry qualification and duration which universities can offer without seeking prior approval of the UGC.

1.6. As regards equivalence of foreign degrees , the mechanism involves the Association of Indian Universities (AIU), which is essentially an association of vice chancellors of universities in the country. Usually, in all such cases where an Indian university is not sure as to whether a foreign qualification is to be recognised as equivalent to an Indian degree, the matter is referred to the AIU. In principle, a foreign degree offered by a foreign university and which is recognised in the home country is usually considered as equivalent to the Indian degree.

2. Contemporary Challenges and Issues:

2.1. The existing practices of recognition and equivalence of higher education qualifications may have worked well when the country had small number of limited types of higher educational institutions. However, as the number, size and types of higher educational institutions and enrolment are increasing by leaps and bound, the nation needs a more structured and holistic approach to recognition and equivalence of qualifications to permit hassle-free, seamless global mobility of students for further higher education and employability.

2.2. With more than 600 University level institutions of various types – public, private, deemed and many more types of degree-awarding institutions and colleges in excess of 36000, the country does not only have one of the largest system of higher education found anywhere in the world but is also the most complex one. While universities, deemed universities and institutions of national importance are autonomous institutions entitled by law to design, develop and offer programmes of studies which they consider relevant and appropriate for the national needs, the colleges and institutes are expected to be regulated by the universities with which they are affiliated or associated with. At the same time, it is imperative that the Higher educational qualifications offered by these institutions are globally compatible and are recognised for their equivalence to permit vertical and horizontal mobility.

2.3. Twenty years of reforms initiatives in the academic arena of higher education have, rather than simplifying, further complicated the higher education system in the country. As things stands today, the higher educational system has become quite variable in terms of extent of academic reforms adopted by them. Consequently the issue of compatibility of higher educational qualifications with those of not only other countries of the world but also within the country has become important. While there has been a general consensus that the Semester System, Comprehensive Continuous Assessment and Evaluation System and Choice-Based Credit System (CBCS) are desirable, different universities and higher educational institutions have adopted these practices to varying extents. Some have adopted these in all programmes of studies whereas there are other higher educational institutions that have adopted these practices only partially, in some

programmes of studies but not in all. Quite a significant number of higher educational institutions have not implemented the semester system or the credit system at all. Such institutions include a good number of state and some central universities.

2.4. Besides, there are also differences in the definition of Credit across different institutions. Some define Credit in term of number of lectures/practicals/tutorial per week assigned to a particular courses whereas others define it in terms of total number of hours of teaching of a particular course/paper during the semester. Globally, however, the credits are defined in terms of Total Students Effort or Learning Outcomes. Further, universities/degree awarding institutions also differ in terms of evaluation of performance of their students. Some still follow absolute marks rather than the Grading System. Even within those which have adopted Grading System, there are variations - ranging from six-point scale to ten-point scale.

2.5. Under the above circumstances, many universities/degree awarding institutions find it difficult to determine equivalence and recognition of qualification earned by students from other universities. Interestingly, however, universities/degree awarding institutions of the country do recognise the degrees/diploma awarded by others as equivalent to their own with the only condition that the degree/diploma has been awarded by the recognised universities/degree awarding institutions. Most Universities/degree awarding institutions recognise degrees/diplomas awarded by other recognised universities/degree awarding institutions. To address any confusion or controversy in this regard, most universities resolve the issue by referring the case to a standing committee called Committee on Equivalence of Degrees/Diploma or Qualification.

2.6. The above practice and mechanism for recognition and equivalence of qualifications in the country have been largely in sync with the global practices. However, starting from 1990s, most countries of the world have adopted a more structured approach to recognition of qualifications and today most countries of the world have either developed or are in the process of developing a National Qualification Framework to make their

higher education qualification globally compatible. As global mobility of student is increasingly gaining importance, the issues of equivalence of degrees and qualifications offered by universities across the world is going to become more complex and requires a comprehensive and holistic solutions. Under the WTO framework all universities of the member countries need to recognise the degree and qualification offered by the universities of other member countries. Accordingly, most countries of the world have been emphasising upon the need of a national qualification framework for higher education to address the issue of compatibility and seamless recognition of qualification across all institutions of higher education.

3. **National Higher Education Qualification Framework (NHEQF)**

3.1. In view of the above, it is imperative that necessary initiatives are taken to evolve a National Higher Education Qualification Framework (NHEQF) on priority. It is important to mention here that the NHEQF is not to be confused with the National Curriculum Framework (NQF). The NHEQF essentially seek to provide a standardised framework in terms of minimum entry qualification, programme durations, teaching-learning processes and learning outcome aimed at national, and ultimately the universal, acceptability, recognition and equivalence of not only the degrees but also the qualifications. The essential purpose of the NHEQF is to provide the broad framework within which individual universities and other degree-awarding higher educational institution could design and develop the curricula, syllabi and modules that they consider relevant and appropriate without any interference of external agencies and thus enjoy their academic autonomy to the fullest extent in a responsible manner and without adversely affecting the horizontal and vertical mobility of students.

3.2. The NHEQF shall be an structured instrument for the development, classification and recognition of knowledge, skills, competencies and learning outcome associated with a qualification. Consequently, it will indicate the comparability of different qualifications and path of progression from one level to another and also from one institution to another. The NHEQF may provide a comprehensive indicator of all learning achievement and pathways within and across different disciplines and shall represent a

consensus of views of all stakeholders and accordingly, it shall provide a basis for specifying, monitoring and regulating the quality and compatibility of higher education across discipline and institutions and thereby facilitating the recognition of qualifications within the country and internationally. Yet another salient and distinctive expectations from the NHEQF shall be to ensure that the qualifications could be viewed as independent of institutions offering those qualifications for it seeks to prescribe the minimum standards in terms of input, processes and outcome. Other distinctive features of the NHEQF could include such features as making the programmes of studies modular, thereby permitting accreditation or certification of a component part of the larger qualification.

3.3. Broadly, one may expect the NHEQF to provide a comprehensive definition of a single system of levels for all qualifications offered by a variety of higher educational institutions across all discipline and thereby making higher education qualification compatible and comparable nationally and internationally. Besides, it may provide a standardised framework of qualifications based on standards or outcomes and may facilitate higher educational institutions to offer programmes in a flexible and modular manner and thus facilitate students to seek certification and recognition of a module and thus be able to seamlessly move and progress in higher education and across occupation. All these may help evolve a national system of credit accumulation and transfer because the focus of the NHEQF is to evolve a common approach to specifying qualifications and follow a common classification system across disciplines and institutions.

3.4. Thus, the NHEQF would serve as a unequivocal description of higher education qualification at the national level with the aim that the higher education system of the country is internationally understood. It would seek to describes a standardised framework of all qualifications and learning achievements in higher education such that all levels of higher education relate to each other in a systematic and coherent way.

4. The Proposal:

4.1. Considering the exigency and need for a national framework for higher education, it is proposed to constitute a CABE Committee to consider the proposal and make recommendations for evolving the National Higher Education Qualification Framework (NHEQF). The CABE Committee may constitute Sub-Committees comprising the experts drawn from academics and representatives of the national level regulatory bodies and state government, which may study and examine the global initiatives taken during the last two decades for evolving national higher education qualification framework in other countries of the world and the specific issues faced by the country in this regard. The report of the Sub-Committee may provide valuable input to the CABE Committee in formulating its views and recommendations for prescribing the NHEQF.

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AGENDA ITEM 2: ALL INDIA SURVEY ON HIGHER EDUCATION

1. Ministry of Human Resource Development (MHRD) has conducted a web based All India Survey on Higher Education (AISHE) for 2010- 11 to prepare a sound data base on the large and diverse system of higher education in the country. The uploading of data for AISHE 2010-11 has been closed and uploading of data by the institutions for AISHE 2011-12 has commenced from 21st March, 2013.

2**. Reports based on AISHE 2010-11:**– There are two types of reports; one is Static in pre-defined format and other is customized report. 72 Static reports have been prepared with different combination of parameters (List of Static reports is attached at Annexure 'A'). These reports have been made available to all the registered users for their use. Apart from this, customized reports have been prepared in which parameters can be selected and reports can be generated as per requirement by the user itself. These reports can be used for making informed policy decisions. Presently this facility is being provided upto State level. Static reports are automatically updated as soon as data is uploaded whereas Customised reports are updated every day.

3. **AISHE- 2011-12:-**

Main provisions made for smooth functioning and sustainability of the survey are as follows:

(i) *Involvement of State Government*: MHRD has, for several years been collecting data through State Higher Education Departments for its regular publication. For the All India Survey on Higher Education 2010-11, almost all the States have appointed a State Level Nodal Officer to co-ordinate the Survey work. This has helped in covering large number of institutions in the first year (2010-11) of survey itself. There are, 29 State Level officers (In-charge of the whole survey in the State) to coordinate with University Nodal Officers and other Nodal officers in the State, 22 State Level officers from Technical Education Department to co-ordinate with Stand Alone Technical Institutions, 27 State Level officers from SCERT to co-ordinate with Stand Alone Teacher Training Institutions and 17 State Level officers from State Nursing

Council to co-ordinate with Stand Alone Nursing Institutions. A chart to explain the Institutional Mechanism is enclosed at Annexure 'B'.

The State Nodal Officers have agreed to continue to co-ordinate the survey for 2011-12 too in the review meeting held in New Delhi.

(ii) *Regulatory Body*: Stand-Alone Institutions identified in the survey are regulated by All India Council for Technical Education (AICTE), National Council for Teacher Education (NCTE) and Indian Nursing Council (INC) and there is a provision in the software to co-ordinate the survey at national/state level by these Bodies. UGC has also been requested to use this portal for collection and compilation of data and extend full support in coordinating the survey. We shall seek the support of other regulatory bodies such as Medical Council of India (MCI), Indian Council of Agricultural Research (ICAR) etc. for AISHE 2011-12 too.

(iii)*Survey Management*: Through this Calendar of the survey will be set. Date of start and closure of survey can be managed. A provision of partial closure, such as closing the survey for a particular type of institution or in a particular state, has also been made.

(iv)*College Management:* During AISHE 2010-11, the list of colleges was generated, through University DCF and therefore Colleges could start filling data only after University uploaded the DCF. As, almost the complete list of Colleges has been generated, therefore, it has been detached from the University Form. The complete list of Colleges will be populated in the database in the beginning of the AISHE 2011-12 survey. The colleges can be de-affiliated by one University, affiliated by another University; Name of the college can be edited, added and deleted. A provision has also been made for such colleges, which are converted to University so that past years data can always be linked.

(v) *Pre-filling of Data*: Provision has been made in the DCF so that, when it is downloaded for the year AISHE -2011-12, Basic information, Names of Faculties/ Departments, Programmes etc. are pre-filled in the DCF, so that it is easier for the institutions to fill

it for 2011-12. However, an option to download the DCF, without pre-filled data has also been made.

IMPORTANT ISSUES

4. There was very good response from most of the States during AISHE 2010-11. States are requested to continue their support for AISHE 2011-12 also commencing on 21.03.2013.

5. Most of the States have nominated Higher/ Technical Education department as Nodal department/ agency for coordinating the Survey. Chandigarh and Puducherry have State Nodal Officers but not from Higher Education Departments. Andaman & Nicobar Islands, Dadra & Nagar Haveli, Lakshadweep, Sikkim, Manipur and Jammu & Kashmir do not have State Nodal Officers yet. Since Ministry has decided to continue this survey on Annual Basis so as to collect entire higher education data, the involvement of State Governments is very much required for its sustainability.

6. Various reports generated from the data collected under the survey (2010-11) have been made available to all the States. Customised reports may be used for generating reports as per requirement and may be used for informed policy decisions. States are requested to use this tool to generate State Level reports and publish it so that peoples at large may be benefitted from it.

Basic Reports

1	University Report (DCF - I)
2	College Report (DCF - II)
3	Standalone Institution Report (DCF - III)

List Of Institutions

1	State-wise List of Universities & Attached Institutions
2	State-wise List of Stand-Alone Institutions

Number Of Institutions

1	State-Wise Number Of Institutions
2	State-Wise Number Of Institutions - Urban
3	State-Wise Number Of Institutions - Rural
4	State & Specialisation - Wise Number Of Institutions
5	State-Wise Number Of Colleges By Recognistion
6	State-Wise Number Of Stand Alone By Recognistion
7	Type-Wise Number Of Institutions Attached With University
8	Management-Wise Number Of Institutions Attached With University
9	State-Wise Number Of University Offering Education Through Distance Mode

Teaching Staff

1	State & Post-Wise Number Of Male & Female Teacher
2	State & Category-Wise Number Of Male & Female Teacher
3	Post-Wise Number Of Male & Female Teacher In Universty & Its Colleges
4	Category-Wise Number Of Male & Female Teacher In Universty & Its Colleges
5	Post-Wise Number Of Male & Female Teacher In Institution
6	Category-Wise Number Of Male & Female Teacher In Institution
7	Post-Wise number Of Male & Female Teacher In Various Types Of Universities & Its Colleges
8	Category-Wise Number Of Male & Female Teacher In Various Types Of Universities & Its Colleges
9	Faculty & Department-Wise Number Of Male & Female Teacher In Each Institution

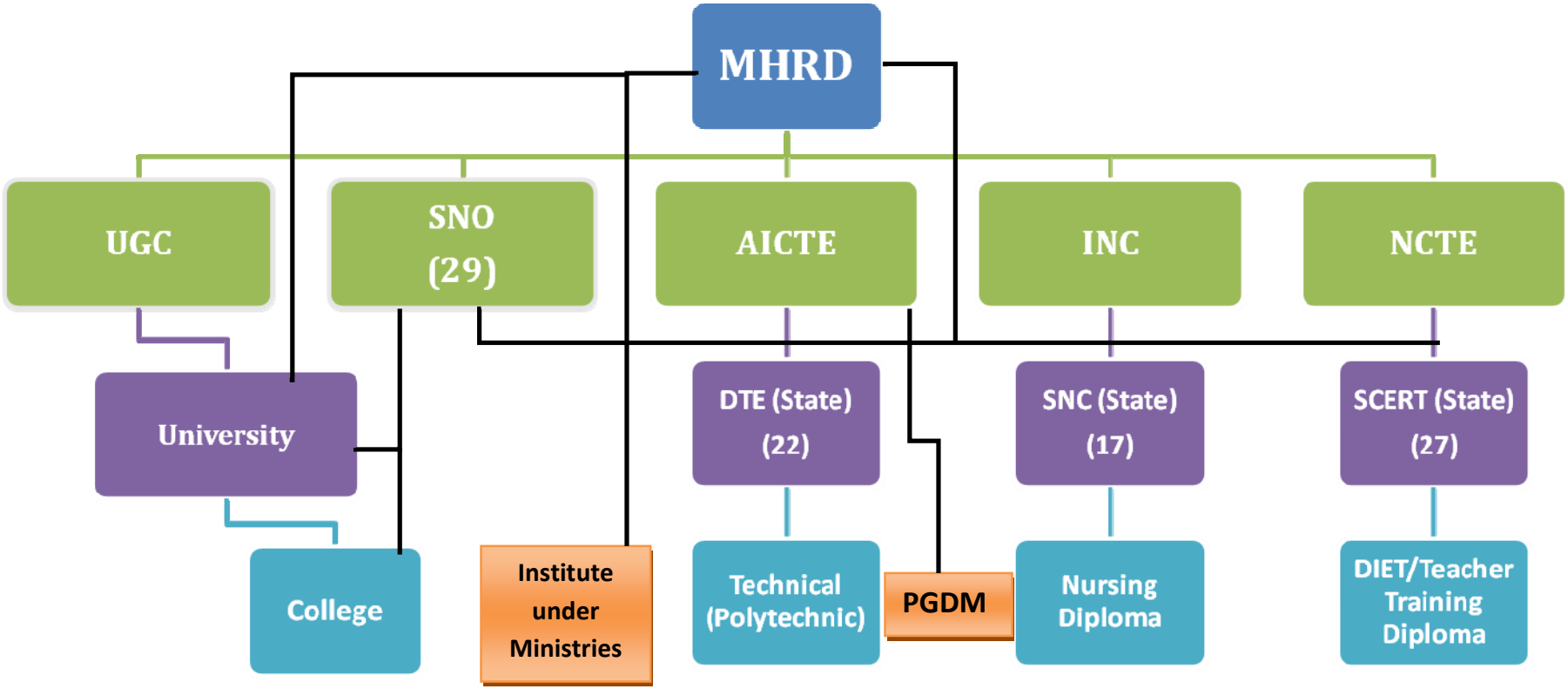
Non Teaching Staff

1	State & Post-Wise Number Of Male & Female Non-Teaching Staff
2	State & Category-Wise Number Of Male & Female Non-Teaching Staff
3	Post-Wise Number Of Male & Female Non-Teaching Staff In Universty & Its Colleges
4	Category-Wise Number Of Male & Female Non-Teaching Staff In Universty & Its Colleges

5	**Institution & Post-Wise Number Of Male & Female Non-Teaching Staff**
6	**Institution & Category-Wise Number Of Male & Female Non-Teaching Staff**
7	**Post-Wise number Of Male & Female Non-Teaching Staff In Various Types Of Universities & Its Colleges**
8	**Category-Wise Number Of Male & Female Non-Teaching Staff In Various Types Of Universities & Its Colleges**
Student Enrolment	
1	**State & Level-Wise Male & Female Student Enrolment**
2	**State & Level-Wise Male & Female Student Enrolment Through Distance Mode Of Education**
3	**State-Wise Male & Female Student Enrolment In Regional Centers Of University Offering Education Through Distance Mode**
4	**State & Level-Wise Male & Female Student On Roll In Distance Mode Of Education**
5	**State & Level-Wise Male & Female Student Enrolment In Self-Financing Mode**
6	**State & Management-Wise Male & Female Student Enrolment In Universities**
7	**State & Management-Wise Male & Female Student Enrolment In Colleges**
8	**State & Management-Wise Male & Female Student Enrolment In Standalone Institutions**
9	**Level-Wise Male & Female Student Enrolment In University & Its Colleges**
10	**Level-Wise Male & Female Student Enrolment In Various Types Of University & Its Colleges**
11	**Institution & Level-Wise Male & Female Student Enrolment**
12	**State & Category-Wise Male & Female Student Enrolment**
13	**Category-Wise Male & Female Student Enrolment In University & Its Colleges**
14	**Category-Wise Male & Female Student Enrolment In Various Types Of Universities**
15	**Institution & Category-Wise Male & Female Student Enrolment**
16	**State & Level-Wise Intake And Student Enrolment In 1st Year**
Gender Ratio	
1	**State & Category-Wise Gender Ratio For Student**
2	**State & Level-Wise Gender Ratio For Student**
3	**State & Level-Wise Gender Ratio In Self-Financing Mode**
4A.	**State & Management-Wise Gender Ratio For Student In Universities**
4B.	**State & Management-Wise Gender Ratio For Student In Colleges**

Out Turn	
1	**State & Level-Wise Out-Turn**
2	**Level-Wise Out-Turn In University & Its Colleges**
3	**Level-Wise Out-Turn In Various Types Of Universities & Its Colleges**
4	**Level-Wise Out-Turn In Institutions**
5	**Discipline Group & Level-Wise Out-Turn**
6	**Programmes Wise Out-Turn In Institutions**
Infrastructure	
1	**University-Wise Avalibility Of Infrastructure**
2	**College-Wise Avalibility Of Infrastructure**
3	**Institution-Wise Avalibility Of Infrastructure**
Progress Monitoring	
1	**Progress Monitoring for Universities**
2	**Progress Monitoring for Colleges**
3	**Progress Monitoring for Standalone Institutions**
Finance	
1	**Institution-Wise Receipts & Expenditure**
2	**Institution-Wise Expenditure Per Student**
Pupil Teacher Ratio	
1	**State-Wise Pupil Teacher Ratio In Different Types Of Institutions**
Programmes & Discipline	
1	**Institution-Wise List Of Programmes & Discipline**

Annexure 'B'


MHRD
UGC
SNO (29)
AICTE
INC
NCTE
University
College
Institute under Ministries
DTE (State) (22)
Technical (Polytechnic)
PGDM
SNC (State) (17)
Nursing Diploma
SCERT (State) (27)
DIET/Teacher Training Diploma

AGENDA ITEM 3: ICT IN HIGHER EDUCATION

1. National Mission on Education through Information and Communication Technology (ICT)

Introduction

The National Mission on Education through Information and Communication Technology (NMEICT) was envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time any where mode. This Mission was launched on 3rd February 2009. This was expected to be a major intervention in enhancing the Gross Enrolment Ratio (GER) in Higher Education.

Components

The three cardinal principles of Education Policy viz., access, equity and quality could be served well by providing connectivity to all colleges and universities, providing low cost and affordable access-cum-computing devices to students and teachers and providing high quality e-content free of cost to all learners in the country. NMEICT encompasses all the three elements. The Mission has two major components:

(a) providing connectivity, along with provision for access devices, to institutions and learners;

(b) Content generation.

It seeks to bridge the digital divide, i.e. the gap in the skills to use computing devices for the purpose of teaching and learning among urban and rural teachers/learners in Higher Education domain and empower those, who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. It plans to focus on appropriate pedagogy for e-learning, providing facility of performing experiments through virtual laboratories, on-line testing and certification, on-line availability of teachers to guide and mentor learners, utilization of available Education Satellite (EduSAT) and Direct to

Home (DTH) platforms, training and empowerment of teachers to effectively use the new method of teaching learning etc.

SAKSHAT is one stop education portal (www.sakshat.ac.in) to facilitate lifelong learning of the students, teachers and those in employments or in pursuit of knowledge free of cost to them. The portal would be main delivery portal for the contents developed under the National Mission on Education through ICT. The portal would also provide Mission related information and facilitate public scrutiny, feedback and transparency for the projects undertaken by the Mission.

Achievements

Achievements in respect of some of the projects sanctioned under NMEICT scheme are as follows:

(i) Connectivity

The Mission aims to extend computer infrastructure and connectivity to over 25000+ colleges and 2000 polytechnics in the country including each of the department of 419 universities/deemed universities and institutions of national importance as a part of its motto to provide connectivity up to last mile. Up to 400 nodes LAN on average is also being provided under the Mission. Connectivity to universities and colleges is in progress and as on 28.02.2013, 400 universities and nearly 19875 colleges in the country have been connected.

(ii) E-Content

The Mission would create high quality e-content for the target groups and to achieve this number of projects has been sanctioned under the NMEICT scheme to various institutions of the country. NPTEL provides e-learning through online Web and Video courses in engineering, science and humanities streams. The Mission of NPTEL is to enhance the quality of engineering education in the country by providing free online courseware. NPTEL is a joint initiative of IITs

and IISc funded by this Mission. More than 990 courses in various disciplines in engineering and science are getting generated in phase-II of NPTEL.

For UG courses, Consortium of Educational Communication (CEC) has been tasked for e-content generation. In phase-I, e-content for 19 UG subjects and in phase-II e-content for 68 subjects will be generated by the CEC in collaboration with its media centers. As on 28.02.2013, 4550 e-content programme have been developed and nearly 1000 e-contents on various subjects have been uploaded on CEC web portal for which the link is provided on Sakshat Portal.

For 77 PG subjects, e-content generation activity has been assigned to University Grants Commission (UGC). The process of content creation has been initiated for 36 subjects during the first phase of the activity; remaining 41 subjects are being indentified for content creation in the second phase of activity.

(iii) Low Cost Access-cum-Computing Devices (LCAD)

Even the best e-content cannot have a significant impact unless it reaches the vast majority of learners with ease, as and when they demand it. The Mission has funded the development of Ultra Low Cost Computing Devices to enable students, wherever they may be, access to education content. Indian Institute of Technology (IIT), Bombay is doing a project pertaining to (a) Acquisition and Testing of Low Cost Access-cum-Computing Device and (b) Hardware and software optimization LCAD under the scheme of NMEICT. In the first phase 1, 00,000 tablets being procured are for the purpose of testing by users all over India in different climatic and usage conditions. The advanced version of low cost tablet called Aakash-2 was launched by the Hon'ble President of India on the occasion of National Education Day i.e. 11th November, 2012.

As compared with Aakash-1 launched in October 2011, this advanced version has a processor which is about 3 times faster, memory which is twice as large, and capacitive touch screen as compared to resistive touch screen. It is being procured by IIT Bombay under a project from MHRD, at a price of Rs 2263/-.

So far 17000 Low Cost Access Devices have been received by IIT, Bombay and nearly 7000 have been distributed to technical institutions (like IITs and NITs). Since these tablets are for the purpose of testing and teacher empowerment, they would not be distributed to the students in the 1st phase. The devices are getting tested and once the production capacities are built up, norms for distribution of the tablets and its beneficiaries would get developed.

(iv)Talk to a Teacher

Under Talk to a Teacher project sanctioned to IIT, Bombay A-VIEW developed by Amrita Vishwa Vidyapeetham has been used as the collaboration tool for the National Teacher Empowerment Program**.** Prof. Deepak Phatak, IIT Bombay, leads the National Teacher Empowerment Program using A-VIEW to train thousands of college teachers across the nation. Under this program, in June-July 2012, IIT-B conducted a training workshop for 10,000 teachers which were inaugurated by then Honorable Union Minister for HRD Shri Kapil Sibal. In November 2012, A-VIEW was used to train 14,000 teachers on a workshop on Aakash 2 Tablets. A total of about 40,000 engineering college teachers have been trained until the end of 2012 through one workshop or other. A total of a minimum of 1,50,000 teachers will be trained in the next three years.

(v) Education Satellite (EduSAT) and Direct to Home (DTH) Platforms

The aim of the Mission is to freely make available knowledge in the form of e-content to learners across the country. To do so, the Mission will harness the power and reach of all possible channels such as internet, intranet, EduSAT or narrow casting TV signals and Direct to Home (DTH) platforms. In Mission Document, provision of 1000 DTH channels for Eklavya & other video based programme including iPTV for e-learning has been envisaged. Department of Space (DOS) has provided two Ku band transponders of 36 MHz each on GSAT-8. With this 50-60 education channels are being planned to be started.

2. Evaluation Committee Report

The Ministry of Human Resource Development, Department of Higher Education vide letter no. 16-124/ 2010/TEL dated 11th May 2011 and 27th June 2011 had constituted an Evaluation Committee of following experts to rigorously conduct the evaluation of the NMEICT Scheme:

(i) Prof. Goverdhan Mehta, ----- Chairman

(ii) Mr. Rajendra S. Pawar, Chairman NIIT

(iii) Prof. H.P. Khincha, IISc., Bangalore

(iv) Prof. Vinaysheel Gautam, IIT, Delhi

(v) Prof. D.K. Bandyopadhyay ----- Member Secretary

The Evaluation Committee had submitted its report on 17th December 2012. The recommendations, of the Committee have been grouped into the 4 categories namely "Content", "Connectivity", "Access Device" and "General and Other Services". Additionally some of the recommendations have been made under the "A New Structure for NMEICT Mission Operation", "Financial requirements projection" and "Road Ahead sub-categories. The recommendations of the committee are available at **Annexure-I**.

Policy Frame Work for Technology Based Education

With due approval of Hon'ble HRM, Ministry of HRD vide letter no. F 8-13/2012-TEL dated 28.05.2012 has constituted a committee of experts comprising of the following to prepare "Policy Framework for Technology Based Education":

(i) Sh. Rajendra Pawar, ----- Chairman

(ii) Prof. D.B. Phatak, IIT- Bombay

(iii) Dr. Anand Sudarshan, VC, Manipal University

(iv) Prof. Ashok Jhunjhunwala, IIT Madra

(v) Sh. Manish Sabharwal

(vi) Prof. S.S.Mantha, Chairman, AICTE

So far four conference call and 6 formal meetings/ workshops of the committee have been held.

Annexure A

College Connectivity

S.N.	State	Total Number of Colleges	No .of Colleges connected
1	Andaman and Nicobar	6	6
2	Andhra Pradesh	3817	2323
3	Arunachal Pradesh	19	8
4	Assam	439	342
5	Bihar	613	540
6	Chhattisgarh	409	225
7	Goa	42	37
8	Gujarat	1038	1085
9	Haryana	1292	678
10	Himachal Pradesh	238	100
11	Jammu & Kashmir	388	178
12	Jharkhand	240	221
13	Karnataka	4292	2957
14	Kerala	1099	905
15	Madhya Pradesh	1609	814
16	Maharashtra	4308	1960
17	Manipur	76	57

University Connectivity

	State	Total No. of Universities.	No .of Colleges connected
1	Andhra Pradesh	31	31
2	Arunachal Pradesh	2	2
3	Assam	7	7
4	Bihar	15	14
5	Chhattisgarh	10	6
6	Gujarat	23	23
7	Haryana	11	11
8	Himachal Pradesh	4	4
9	Jammu & Kashmir	8	6
10	Jharkhand	9	9
11	Karnataka	29	29
12	Kerala	15	15
13	Madhya Pradesh	18	18
14	Maharashtra	31	28
15	Manipur	3	3
16	Meghalaya	3	3
17	Mizoram	1	1

18	Meghalaya	77	56
19	Mizoram	31	23
20	Nagaland	41	35
21	Orissa	1285	878
22	Punjab	785	490
23	Rajasthan	1171	1199
24	Sikkim	13	4
25	Tamil Nadu	2610	1247
26	Pondicherry	96	58
27	Tripura	39	34
28	Uttar Pradesh	3753	2548
29	Uttaranchal	362	223
30	West Bengal	993	569
31	Delhi	118	75
	Grand Total		

18	Nagaland	1	1
19	Orissa	14	13
20	Punjab	8	8
21	Rajasthan	38	37
22	Tamil Nadu	48	47
23	Tripura	3	2
24	UP	40	39
25	Uttaranchal	12	11
26	West Bengal	19	19
27	Sikkim	3	2
28	Delhi	13	10
	Total		

Table 2: List of NPTEL subjects

NPTEL Phase I			
Branch	**Web**	**Video**	**Total**
Basic Courses (Sem I and II)	16	20	36
Civil Engineering	24	19	43
Computer Science and Engineering	22	19	41
Electrical Engineering	16	25	41
Electronics and Communication Engineering	20	23	43
Mechanical Engineering	27	23	50
Ocean Engineering		3	3
Biotechnology		2	2
Mining Engineering		1	1
Metallurgy and Material Science		1	1

NPTEL Phase II			
Branch	**Count**	**Branch**	**Count**
Aerospace	59	General	2
Atmospheric Science	6	Humanities and Social Sciences	64
Automobile Engineering	2	Management	49
Biotechnology	32	Mathematics	86
Chemical Engineering	100	Mechanical Engineering	98
Chemistry and Biochemistry	63	Metallurgy and Material Science	58
Civil Engineering	80	Mining Engineering	1
Computer Science and Engineering	56	Nanotechnology	15
Electrical Engineering	36	Ocean Engineering	27
Electronics and Communication Engineering	51	Physics	75

Total	**125**	**136**	**261**

Engineering Design	11	Textile Engineering	31
Environmental Science	5	**Total**	**990**

Table 3: List of subjects for UG level e-content

Phase I		**Phase II**	
Subjects allotted	**E-content Developed till 28.02.2013**	**Subject Allotted**	**E-content Developed till 28.02.2013**
Physics	29	B.A. (Hons) Urdu (1st Year)	
Business Management	09	B.Sc. (Hons) Food Technology (1st Year)	1
		B.A. LLB (1st & 2nd Year)	
		B. Pharmacy	
		Political Science	10
		Environmental Science	8
Communication & Journalism	193	B.A. (Hons) Music (Ravindra Sangeet)	
		B.A. (Hons) Political	
		B.Sc. (Hons) Microbiology	
		B. A. in Film Studies	
		B. A. Vocational Studies (Book Publishing)	
		B. A. Vocational Studies (Videography)	
		Mass Communication	24
1) Environmental Science 2) Hindi Language & Literature	77 239	B.A. Psychology	122
		B.A. (Hons) Urdu (2nd Year)	
		B. A. (Foreign Language) French & Spanish	
		B.Ed. (English)	
		B.Sc. (Hons) Home Science	
		B.Sc. Analytical Methods in Chem & Bio-Chem	
Botany	272	B.A. Management & Marketing of	101

			Insurance B.A. Marketing Management & Retail Business B.Sc. (Hons) Electronics B.Sc. Agriculture (1st Year)	 121 38 13
Economic Business Management	127 08		B.A. (Hons) Hindi Journalism B.A. (Hons) Urdu (3rd Year) B.B.S. B.Sc. Life Sciences (2nd Year) Bachelor of Fine Arts Business Management	 04 04
Zoology	65		B.A. (Hons) Philosophy B.Ed. B.Lib.Sc. BFA Painting Applied Art Epigraphy BFA Painting Applied Art Sculpture BFA Painting Applied Art Multimedia BTA (Bachelor for Theatre Arts) B. Sc (Bio-Informatics)	48 86 28 31 04
History	**356**		B. A. Vocational Studies (Accounts) B. A. Vocational Studies (Advertisement) B. A. Vocational Studies (Computer) B. A. Vocational Studies (Office Audit) B. A. Vocational Studies (Photography)	 06 23
English Language & Literature (Hon's)	**276**		B. Arch. B.Sc. (Gen) Mathematical Science B.Sc. (Hons) Polymer Science B.Sc. Applied Physical Sciences (Electronics)	 31 06 18

			B.Sc. Applied Physical Sciences (Environmental Science) Physics	11 09
Mathematics	316		B.A. Human Rights B.P.Ed. (3rd Year) B.Sc. Life Sciences B.Sc. Agriculture	
Commerce	486		B.P.Ed. (1st & 2nd Year) B.Sc. Applied Physical Sciences (Computer Science) Electronics	 83 3
Sociology	87		B.A. Tourism B.Sc. (Hons) Food Technology (2nd & 3rd Year) B.Sc. (Hons) Statistics B.Sc. Agro-Chemical and Pest Control B.Sc. Applied Life Science (Sericulture) B. A. Vocational Studies in 22 Courses	08 06 141 84
Anthropology (G + H)	**194**		B.A. (Hons) Music (Hindustani Classical) B.A. Human Resource Management B.A. Office Administration & Secretarial Practice	27 50 08
Computer Science	156		B.Sc. Applied Physical Sciences (Industrial Chemistry) Bachelor of Applied Sciences (Hons) Instrumentation	
Geography	182		B.A. (Hons) Social Work B.A. Management & Marketing of Insurance B.Sc. (Hons) Bio-Chemistry B.Sc. Physical Sciences Bachelor of Arts (BA) - Public	04

			Administration	
Performing Arts	217		Criminology & Forensic Science B.A. Yogic Science	
Chemistry	58		B.A. (Hons) Music (Karnataki Sangeet) B.Ed. (Special Education for Visually Impaired B.El.Ed. B.Sc. (Hons) Bio-Chemistry B.Sc. Agriculture (2nd Year)	
Geology	42		B.A. (Hons) Business Economics B.A. (Hons) Sanskrit B.Sc. Life Sciences (1st Year) Text Editing & Manuscriptology	
Total	3389		LLB (3rd, 4th and 5th year)	
			Total	1161

Table 4: Subjects Identified for UG level e-Content Development in First Phase

1. Anthropology	13. English	25. Mathematics
2. Biochemistry	14. Environmental Sciences	26. Microbiology
3. Biotechnology	15. Food Technology	27. Philosophy
4. Botany	16. Forensic Science	28. Physics
5. Chemistry	17. Geography	29. Political Science
6. Commerce	18. Hindi	30. Psychology
7. Computational Sciences	19. History	31. Public Administration
8. Computational Social Science	20. Law	32. Sanskrit
9. Computer Science	21. Library and Information Science	33. Social Work Education
10. Earth Sciences	22. Linguistics	34. Sociology
11. Economics	23. Management	35. Statistics
12. Education	24. Mass Communication & Journalism	36. Zoology

Table 5: Difference between Aakash and Aakash 2

S.No.	Technical Specifications	Aakash	Aakash 2
1	Processor	366 MHz	1 GHz
2	Memory (RAM)	256 MB	512 MB
3	Storage (Internal)	2 GB	4GB
4	SD Card slot for external memory	Up to 32 GB	up to 32 GB

5	Peripheral	2 x Standard Type A USB 2.02 Ports	Mini USB 2.0 port with 4 Port USB Hub
6	Audio-out	1x3.5 mm jack	Integrated speakers
7	Audio-in	1x3.5 mm jack	3.5mm jack for external headphones/speakers
8	Display and Resolution	7" resistive touch screen with 800x480 pixel resolution	7" multi-touch capacitive projective display with at least 800x480 resolution / screen
9	Connectivity	WiFi	WiFi
10	Battery	2100 mAh	3000 mAh
11	Playback Support	HD Video	HD Video
12	Operating System	Android 2.2 (Froyo)	Android 4.0 (Ice-Cream Sandwich)

On these upgraded devices, R&D teams at IIT Bombay have built a multitude of useful educational applications and content. Some important applications are:

(i) Interactive lesson building tool 'ProxyMITY'.

(ii) 'Clicker' application which permits quizzes to be conducted on-line in class rooms in real time.

(iii) Standard educational contents in pdf and HTML can now be easily stored and read on Aakash-2. As a demonstration, some school books available in digital format from NCERT, and a state board for school students have been ported.

(iv) A 'Robot-Controller' as a demonstration of engineering control applications.

(v) Spoken tutorials can be used on Aakash-2.

(vi) Some educational animations have been built, and open source software tools are being developed and adopted for creating interactive animations to run on Aakash-2.

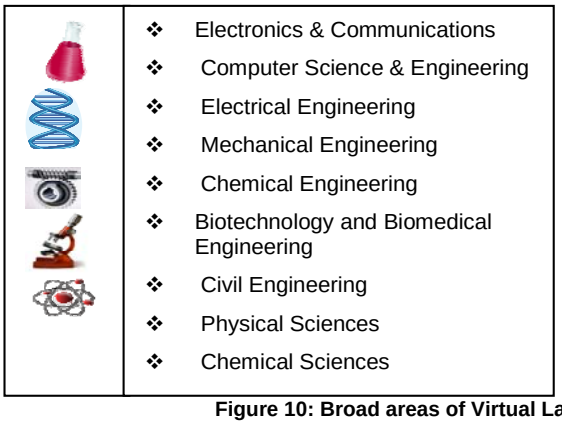
(vii) Programming environment which permits students to use these tablets as a regular computer to write programs in C, C++, and Python.

(viii) The Scilab package has been fully ported on Aakash-2.

(ix) Aadhar biometric authentication has been integrated with Aakash-2.

(x) Linux Operating System has been ported on Aakash, which is being further optimized.

Broad areas of the Virtual Lab and the participating institutes in the endeavour of developing virtual labs are as follows



- Electronics & Communications
- Computer Science & Engineering
- Electrical Engineering
- Mechanical Engineering
- Chemical Engineering
- Biotechnology and Biomedical Engineering
- Civil Engineering
- Physical Sciences
- Chemical Sciences

Figure 10: Broad areas of Virtual Lab

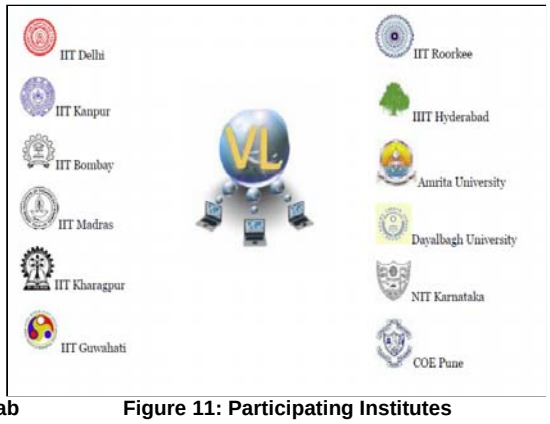


Figure 11: Participating Institutes

Current Status of Virtual Lab, percentage syllabus coverage is indicated below:

Phase	Mandate	Current Status
Pilot Phase	Development of 10 Virtual Labs (Vlabs) (as Proof of Concept)	23 Labs Developed
Main Phase	Development of 80 Simulation Vlabs	85 Labs Developed and Launched by HR'M on 23rd Feb, 2012
New RT Labs	Development of 35 Remote Triggered Vlabs	Under Development

Figure 12: Current status of Virtual Lab

S. N.	DISCIPLINE	Syllabus Coverage (in Percentage)	No. of Labs	Total No. of Experiments
1.	ELECTRONICS AND COMMUNICATION ENGINEERING	90	19	168
2.	CIVIL ENGINEERING	70	10	82
3.	ELECTRICAL ENGINEERING	70	9	79
4.	BIOTECH & BIOMEDICAL ENGINEERING	90	17	146
5.	PHYSICAL SCIENCE	60	18	193
6.	CHEMICAL ENGINEERING	75	3	18
7.	CHEMICAL SCIENCE	75	4	34
8.	COMPUTER SCIENCE & ENGINEERING	50	4	39
9.	MECHANICAL ENGINEERING	70	1	10

Figure 13: Percentage coverage of syllabus

ANNEXURE- I

Recommendations of Evaluation Committee

In order to contextualize and collectively provide a coherent set of recommendations. The Committee has categorized NMEICT Mission activities under the four broad categories mentioned earlier, namely, a) Content. b) Connectivity. c) Access Device and d) General and Other Services.

The above categorization is further amplified under each of the heads to include most of the items indicated in ToR.

Content – All projects that involve e-content development for all disciplines at various levels (UG and PG), provisioning of e-books/e-journals, development and realization of virtual labs, development of vocational educational modules and hepatic devices. etc.

Connectivity – All project(s) that involve setting up a pan-India network in which all academic institutions would be connected with multiples of 10 Mbps bandwidth and universities with multiples of 100 Mbps bandwidth, subsidized by the Ministry. The Virtual Private Network (VPN) in the present context refers to providing seamless access to content without barrier to every citizen of the country, anytime, anywhere.

Access Device – All project(s) that involve provisioning of a low cost device, robust, longer battery backup running on open source software with a wireless access for distribution to learners all over the country.

General and Other Services – All projects that include providing supplementary activities like development of suitable pedagogical methods, research in e-learning, development of language

convertor toolkits, digitization of books and journals, open source software creation and enhancement, spreading digital literacy, development of ERP system, etc. The administrative, managerial, financial aspects and future directions are also covered under this head.

In order to relate the recommendations to the Terms of Reference of the Evaluation Committee, a mapping table is shown below:

Terms of Reference	Evaluation Committee Recommendations
(a) To evaluate the extent to which the following objectives of the ongoing NMEICT scheme have been met so far: (i) Content Generation under NPTEL, for Under Graduate and Post Graduate courses;	5.1 Content
(ii) Provision of e-books and e-journals free to learners;	5.1 Content
(iii) Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning;	5.4 General and Other services
(iv) Development of language converter and translation tool kit;	5.4 General and Other services
(v) Development and realization of Virtual Reality Laboratories and supporting facilities for e-learning;	5.1 Content
(vi) Spread digital literacy for Teacher Empowerment;	5.4 General and Other services
(vii) Experimentation and development of ultra low cost access devices for wider coverage of learners and their field trials;	5.3 Access device
(viii) 'Talk to Teacher' as a substitute for coaching for the economically deprived students;	5.4 General and Other services

(ix) Adaptation and deployment of open source simulation packages equivalent to MATLAB, ORCAD, etc;	5.4 General and Other services
(x) Development of unified ERP system for Educational Institutions;	5.4 General and Other services
(xi) Development of Vocational Educational modules and use of hepatic devices for education & training;	5.1 Content
(xii) Connectivity to Universities and Colleges.	5.2 Connectivity
(b) To ascertain whether there has been or could be commensurate social impact due to implementation of NMEICT Scheme;	5.4 General and Other services
(c) To assess the adequacy of e-contents for science and technology sector and social sciences sector. While doing so, clearly distinguish between recommendation for these sectors;	5.1 Content
(d) To assess financial and other requirements for the second phase of the Scheme keeping in mind the objectives;	5.4.3 Financial requirements projection
(e) To assess whether the norms provided under the NMEICT scheme need revision;	5.4.2 A New Structure for NMEICT Mission Operation
(f) To suggest improvements, if any, in the NMEICT scheme;	5.4.2 A New Structure for NMEICT Mission Operation
(g) To suggest measurable criteria for the NMEICT's success and future course of action;	5.5 Road Ahead
(h) To ascertain whether the projects undertaken so far as (i) in the right direction (ii) are progressing at the right pace and (iii) whether the funds allocated for them are commensurate with the tasks to be accomplished;	5.4.2 A New Structure for NMEICT Mission Operation
(i) To evaluate the processes and transparency followed in sanctioning of projects;	5.4.2 A New Structure for NMEICT Mission Operation

(j) To identify constraints in utilization of resources made available for the teaching learning community under NMEICT; and	5.4 General and Other services
(k) To see whether the scope of NMEICT should be extended to include school education also, and if so, how?	5.4 General and Other services

Table showing ToR with the recommendations of Evaluation Committee

What follows are category wise recommendations of the Evaluation Committee.

Content

Contents in various forms, namely, audio/video lectures, lecture notes, tutorials, e-books/e-journals, etc. are being created and/or provisioned under various content generation projects. Besides this, opportunities for virtual experimentations have been initiated and newer avenues in this arena are being explored. Following are the recommendations in this regard:

- **Comprehensive 4-Quadrant Based Content Creation:** The Committee observes that most of the e-content generated in the present form is not fully compliant with the *four-quadrant* approach. It is therefore suggested that all content generation activities should be measured and benchmarked in full consonance with *four quadrant* approach.

  It may be recalled that the *four quadrant* approach has been proposed by one of the major NMEICT project, namely, NPTEL as part of its Phase-II activity. This approach envisages that content be prepared in the following four dimensions:-

  Quadrant 1: Content web based lecture notes / video lectures in an organized form.

  Quadrant 2: Animations / visuals / illustrations, Video demonstrations / documentaries and interactive simulations wherever required.

  Quadrant 3: Supplementary reading/Wiki Development on the course, other resources /open content in the internet, Case studies, anecdotal information, historical development of the subject.

Quadrant 4: Problems, Quizzes, Assignments and Solutions, Online feedback through discussion forums and Setting up of FAQs.

This is an appropriate model to be adopted for all content generation projects.

- **Connecting video Content with Real Life Situations:** An attempt should be made to take the video-graphic content of presentation beyond the studios in diverse locational settings and sources and also capture the real life situations. Simultaneously, attempt should also be made to embed small strips of [illegible] situations in video-graphic content presentation.

- **Integration of Content:** The Committee emphasizes the importance and urgent need for the integration of generated content at a common portal. At present, content creation projects in different forms are being independently pursued at different institutions. For example, NPTEL coordinated at IIT, Madras is focusing upon creating of video lectures, etc., OSCAR++ at IIT, Mumbai is focusing on creation of animations and Virtual Labs programme at IIT, Delhi is focusing on creating virtual lab experiments. However, if one views from a learner's perspective, he/she would require all these forms of content in one common place (SAKSHAT portal) as an 'integrated whole'. Therefore, it is recommended that there should be a built-in mechanism to ensure coordination and synergy in all forms of content creation so that they can be integrated and bundled together for effective use by the learners.

- **Remotely Triggered Virtual Labs:** While considerable progress has been achieved in virtually simulated experiments, more projects directed towards establishment and operation of remotely triggered labs should be supported to enable access to high end experimentation by learners in less endowed environment.

- **Quality Assurance of Content:** Being a Mission of national importance, any content uploaded as part of NMEICT should be reflective of high academic quality, measuring in standards to the best available anywhere. Therefore, it is recommended that content be uploaded on SAKSHAT portal after due scrutiny and diligence and should be of highest standards. In order to accomplish this, the Mission needs to have a rigorous and stringent

quality assurance policy on the content generation. Some recommendations to strengthen the existing mechanisms are given below:

- It should be ensured that QA testing procedures, guidelines and mechanisms are clearly defined and are made available to content developers so as to ensure quality content. To facilitate and strengthen QA capabilities, more relevant projects in this area need to be initiated.
- Evaluation Committee recommends strengthening of the present review mechanism for the content generated under the Mission both at *pre-launch* and *post-launch stage*. It should be ensured that no content is uploaded on the portal without going through a well defined review process for which a checklist should be put in place. The NMEICT needs to devise a mechanism to identify a pool of domain specific expert faculty within India and/or abroad with no conflict of interests whatsoever, who could be entrusted upon the task of reviewing the content at different stages. On the one-stop portal SAKSHAT, contents which are still under review process needs to be categorized separately and marked as "*Under Review*", whereas those which have been reviewed, the names of reviewers should appear as "*Reviewed By ...*" along with the content. This would instill further confidence in the learner community that the content uploaded is indeed of high quality and validated by independent reviewers.
- In view of the fast changing landscape of learning paradigms and to maintain topical relevance, the Committee proposes that there should be a well defined strategy in place for periodic maintenance (like corrections, addition / deletion of exercises, tutorial contents, case studies, animations, etc.) and for upgrading the content (like adding latest developments in the domain knowledge, emergent topics related to a course, etc.) so that the contents on SAKSHAT portal are always up to date. In addition to the above, suitable mechanisms need to be crafted for a periodic review of the content in the post-launch stage so that obsolesce and redundancy are minimized and the material on the portal always remains relevant and topical.
- A set of guidelines for standardization of audio, video and other types of content to be loaded on SAKSHAT should be generated and followed.

- All contents posted on the SAKSHAT portal should be vetted by anti-piracy software to eliminate possibilities of plagiarism and a suitable disclaimer in this regard should be displayed.

- **Engage with the very best from anywhere and everywhere:** The Committee feels that it is essential to widen the net of content creators by engaging many more competent contributors from a wide range of institutions. It is recognized that there are vast body of scholars who are outside the formal system of education but constitute a rich resource for enriching the contents on SAKSHAT portal. It is strongly felt that scholar outside the formal system should also be involved in content development particularly in areas of creative endeavors like art, music, etc. Therefore, a massive pan-India (and even abroad) outreach exercise for identifying the available talent pool of content creators should be undertaken.

  A call for participation by experts towards content creation may be displayed on SAKSHAT. Minimal eligibility criterion and a screening mechanism for identifying content creators and reviewers may be prescribed.

  It is also recommended that orientation programme in both online and offline formats for content creators should be devised and implemented.

- **Ownership of Content and Usage Rights:** The Committee recognizes the importance for a clear policy with regard to ownership and user rights of contents generated and uploaded as part of the Mission. Committee recommends that ownership of the content be rested with the original contributor/s. All content uploaded on the SAKSHAT portal should have a suitable disclaimer clarifying that individual author/s is/are responsible for the content uploaded and that portal or MHRD is not responsible for the content posted. Since the usage rights and ownership rests with original contributor/s, a policy with regard to their use rights by individuals and organizations should be formulated.

- **Stated Deliverables for Content Generation:** The Committee is of the view that the Mission develops and mandates a strict deliverable policy on all the projects under the category of content generation. The deliverable policy must categorically outline the

compliance guidelines with respect to the 4-quadrant approach with integration processes, QA procedures, content format standardization and ownership rights.

- **R&D in Content Generation/Authoring Tools:** The Committee has observed that activity in this area is at a modest level and needs considerable strengthening. Hence, R&D efforts using open source tools for creating high quality video content, animations, e-based self learning and evaluation resources, simulators and interactive communications, etc., should be initiated / augmented.

- **Virtual Programmes in Andragogy:** Programmes in teacher certification in andragogy issues and better teaching practices needs to be created with the help of communication and instructional designs experts.

- **Special Initiatives in Humanities, Social Sciences, Arts and Other such Disciplines:** As content creation activity in some of the areas related to Humanities, Social Sciences and Arts, etc., has been deficient, there is need for launching a special drive to create quality content in these areas to enrich the SAKSHAT portal. In this regard, considerable scholarly resources which are available in the non-formal systems should also be tapped in an imaginative manner.

- **Concurrent Focus on Self Learning:** To harness the full potential of SAKSHAT as a national learning platform for all, the content creation should also concurrently serve as an enabler of self learning along with self evaluation to reach out diverse constituencies irrespective of age, time, place and pace of learning.

- **INFLIBNT-INDEST Activities:** The present practice of providing support for subscription to e-journals/e-resources through the INFLIBNET-INDEST activities should not only be continued but their budgetary should be enhanced to keep up with the present and expected future requirements. In addition, the coverage of institutions needs to be augmented and may include private institutions also. Automated framework for collecting user feedback and the use patterns needs to be put in place and should form part of overall decision making process.

Connectivity

Based upon the statistics provided in Chapter 4, the Committee is of the view that considerable progress has been made in this major endeavor. A very significant portion of the resources have been utilized for this purpose to build basic infrastructure which would find many possible uses in the future.

The Committee would like to make the following recommendations with regard to connectivity:

- **Coordination amongst NKN and NMEICT:** There are two major national networking initiatives through NKN and NMEICT and there is a need for better synergy and coordination between them on connectivity issues in order to improve efficiency and to avoid duplication.

- **Limited connectivity usage:** Even though connectivity has been provided by the national networking initiatives, the Committee's feedback indicates that the use of this connectivity by students and faculty of institutions in general is limited. Therefore, the Committee recommends that wherever the limited usage can be traced to maintenance and running cost issues, adequate support be provided to such institutions.

- **Focus on bandwidth:** While 1Gbps and 10 Mbps bandwidth connectivity has been provided to the universities and colleges, respectively, in practice, the available bandwidth is much lower. Keeping in view the future requirement of educational institutions in the light of high bandwidth demands of various e-learning contents, the Committee recommends provisioning for need based augmentation of bandwidth.

- **Diversification of Connectivity Provisioning:** Committee recommends the contention of providing e-content access to all users through all possible connectivity mechanisms including EduSAT or narrowcasting TV signals or Direct to Home platforms in the all

regions of the country. Since TV and mobile phones have high penetration, cost of access through them should be weighed against accessibility through Internet.

- **Cloud based Computing and Connectivity Environment:** Considering the objective of the Mission, the bandwidth requirements, last mile connectivity solutions and BPO type of requirement for management of the e-content delivery, a Cloud based Computing Environment appears to be an appropriate type of platform.

  To implement cloud computing platform, the Committee suggests a following possible architecture (Figure 5.1) and a few details of the same.

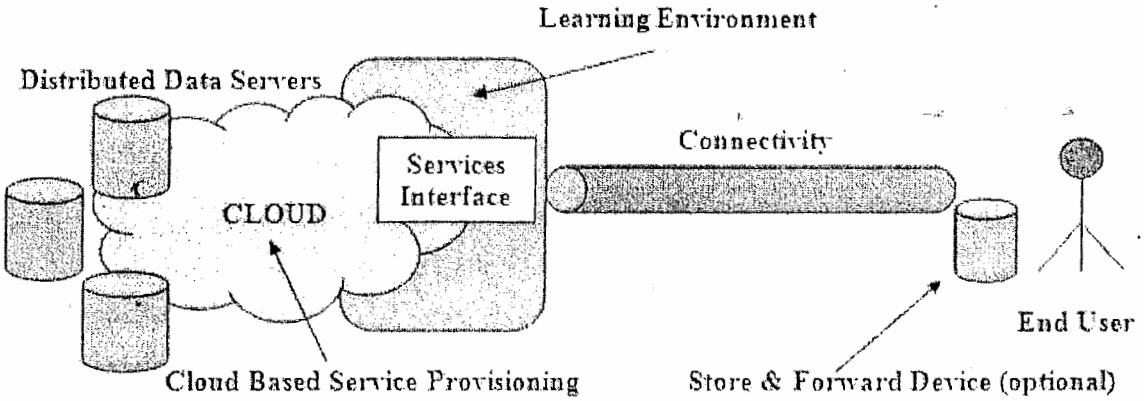


Figure 5.1: Cloud based Learning Architecture

➢ A Cloud Services Based Architecture is proposed (Figure 5.1) for providing all the services required under NMEICT projects. The proposed architecture connects all the broad themes of NMEICT together. The generated content in active form (virtual labs) and passive form (videos) reside on distributed data servers spread across the cloud. SAKSHAT portal is to be upgraded to provide a *learning environment* that brings students and teachers together. Connectivity ensures that end users are always connected to the cloud services through various end devices. Optionally, to provide a seamless service, a store and forward device can be deployed at the end user premises which buffers information about the most recently used services from the cloud, so that in an event of connectivity failure, these services can be provided to the end user.

- Above architecture ensures that learning can happen in anytime – anywhere paradigm. It would also minimize the need for a technical expertise at the end user premise since all the infrastructure resides in cloud. Operation and maintenance of the above architecture can be either done by the NMEICT Mission itself or transferred to any other public/private organization. The above architecture only requires maintenance of the cloud. As end user premises require a store and forward device, a provision for minimal training can be provided by the Mission to the local administrators. Efforts can be undertaken at local and cloud level to prevent misuse of connectivity bandwidth for purposes other than learning.

- **Last Mile Connectivity Provisioning:** In regard to provisioning of connectivity to the end users, two main options are available namely DTH and Wireless/Wired based IP network. Although both types of connectivity have their pros and cons, the Committee recommends provisioning of both the options to address the diverse usage patterns of the end users in the country.

Access Device

The success of NMIECT Mission strongly hinges around a low cost device through which the content created can reach the learner. The concept of creating a $35.00 Low Cost Access Device (LCAD) is a game changer. The widespread talk of LCAD has actually generated a lot of interest and competition in the industry towards low cost solutions (in the form of low cost tablets) for addressing computing/accessing needs of a wide range of users.

- **Professional Approach:** The Committee recommends that a project of LCAD magnitude and importance should follow a professional approach in respect of design, components selection, layouts, prototyping, manufacturing and testing, etc. from the very inception. Appropriate documentation in this regard should be available at an appropriate repository or as an Intellectual Property portfolio.

- **Futuristic LCAD design:** It is recommended that LCAD be designed keeping in view the requirements and availability of bandwidth, quality of content to be displayed, availability of 24X7 connectivity and electrical power conditions. In addition, the design must be scalable and futuristic enough so that users can upgrade their requirements. The LCAD has to be

robust and of high quality to take care of heat, dust, moisture, rough handling, etc. LCAD has to be also designed progressively with increased indigenization of both hardware and software, with solar energy as a possible power source.

- **LCAD Availability in Multiple Models:** Keeping in view the increasing user requirements and buying capacities, the Committee feels that it would be a good option to bring out 2 or 3 models (good, better, best) of LCAD.

- **Provisioning of Back Office:** Along with the availability of LCAD, efficient after sales services both for hardware and software as well as contact facilities for helpline are essential components in the chain for utilization. Possibilities of creating Public-Private Partnership (PPP) based models could be considered for providing these services. A Back Office or Call Centre type structure could also be considered for providing support services to users of LCAD, connectivity and content.

General and Other Services

In regard to the General and Other Services, the Evaluation Committee makes following recommendations.

- **Massive Teacher Empowerment Programme:** Increasing penetration of ICT is changing the learning landscape rapidly. Conventional methods of teaching are giving way to newer avenues for dissemination of knowledge. In this changing paradigm, there is growing need to bridge the gap between the learners (students) who are always enthusiastic about ICT usage and the teachers who either lack familiarity or are less enthusiastic towards adopting ICT in teaching learning process. Hence, a massive programme ought to be initiated under the aegis of NMEICT for teacher's empowerment in order to fully benefit from the changing ICT based education scenario. Besides providing digital awareness and literacy, these programmes should also be structured to include training in ICT based pedagogy.

- **Breaking Language Barriers:** India being a country with a rich multi-lingual diversity, it is commonly observed that a large percentage of Indian population is more comfortable with

their regional language rather than English as far as learning processes are concerned. Therefore, it is important that the content in English language is also made available in regional languages through translation/transliteration so as to have wider impact of the content generated through the Mission. This would require a lot of imaginative effort to strengthen the existing mechanisms (automated or otherwise) and advances in natural language processing and machine translation tools. It is therefore suggested that research and development activity in this area be augmented.

- **Virtual University:** With the advent of ICT, a lot of non-conventional approaches to teaching and outreach have emerged like virtual classrooms, online exams, etc. One of the objectives of expanding higher education in India is to enhance access and improve quality. However, lack of availability of high quality faculty, supporting resources and infrastructure is a major impediment. One possible way to address this problem using ICT is to explore the possibility of establishing a full-fledged university in a virtual mode. Evaluation Committee recommends that the concept and feasibility of virtual universities needs experimentation through a prototype (pilot level) initiative.

- **Digitization of Books and Journals:** It has already become clear that LCAD (tablet) shall not only be used as an access device for content but also as an e-book/e-journal reader as it has the capability of storing hundreds of e-books/e-journals which the learner can read anytime, anywhere. Therefore, widespread penetration of LCAD should be synchronized with a massive digitization programme involving books, manuscripts, journals and archival materials available in various libraries and institutions across the country. Any copyright issues arising out of this initiative need to be addressed appropriately.

- **Outreach Programme:** Evaluation Committee observes that the National Mission has not attained a desirable level of visibility and has not penetrated throughout the country. It is therefore suggested that mechanisms must be devised to enhance outreach through publicity in all forms of media, develop presentation modules (DVD, ppt, posters, etc.) to be distributed to all educational institutions of higher learning. In addition, a group of experts should be commissioned to visit and conduct orientation programmes to inform learners and

teachers about the Mission and its activities. This activity should also be an enabler for drawing talented and interested teachers to participate in the Mission activities particularly in content development.

- **Facilitation of Entrepreneurship and Socio-Economic Development:** Although the key goal of the Mission is to create a knowledge enabled society in the country, Evaluation Committee recommends that the ambit of Mission be amplified to include socio-economic development related activities through content creation in areas like entrepreneurship (including social entrepreneurship), e-commerce, e-marketing, networking and mentoring, etc. This should be an enabler for self employment generation, new startups and women empowerment.

- **Private-Public Partnership:** In the present enrollment scenario in higher education, nearly 85% of students are in the private institutions which also command substantial faculty resources. In addition, there are many private players who are engaged in the field of e-learning. It is well known that many industries, in particular IT sector have developed learning resources (which are used for in-house training, as well as in 'finishing schools') which might be useful for more widespread use. It is imperative, therefore, that a way should be found to involve and engage them in the Mission's vision and activities. Avenues for engagement with leading industry bodies like CII, FICCI, ASSOCHAM, etc. in furthering the cause of the Mission also need to be explored.

- **Establishment of Certification Mechanisms:** With the increasing availability of content and corresponding enhancement of user profile, there will be aspirations on the part of the users to get a certification for the acquired knowledge. The Committee recommends that the Mission may examine the possibilities of creating a suitable mechanism (like an Academy) to facilitate such certifications.

5.(d) Revamp of SAKSHAT Portal

The one stop portal named SAKSHAT is the face of the Mission to the outside world. Hence, it is imperative that state of the art technology and experts need to be employed to design, develop,

operate and maintain the portal, commensurate with its importance. In respect to the delivery of e-content throughout the country, a well defined protocol must be put in place so that all the e-content hosted in the portal is leveraged in the best possible way by the learners. In this regard, the Committee makes the following recommendations in addition to the content related recommendations indicated earlier.

- **Distributed Services and Mirroring of Content:** Several regional mirror sites distributed across regions in India be created and be networked using the cloud based learning environment as given in Figure 5.1. Distributed storage and mirroring of e-content would reduce the load over the cloud.

- **Frequent Updates:** SAKSHAT portal shall have daily updates appropriately highlighting the new activities of NMEICT. Such updating will encourage more frequent views by visitors.

- **Online Management:** It will be helpful for overall management of the Mission as well as for those participating in its activities if a DASHBOARD based activity management services be installed on the SAKSHAT portal with appropriate access control for an online communications and for viewing the status of the project such as sanction, project reports, budgetary positions, etc.

- **Dedicated Qualified Staff:** SAKSHAT portal should have a dedicated Webmaster who will be responsible for the operation and maintenance of the portal. If required, services of a dedicated group of experts and professionals (private players may be involved) may also be utilized.

- **Navigation Facilities:** SAKSHAT portal is likely to be visited by learners with various degrees of proficiency for its optimal use. Hence, the navigation tools and the facilitation provided on the portal have to be user friendly and elegant and address the needs and requirements of users from different age groups, proficiency levels and motivation. Advanced search options based on keywords, authors, subject area, etc. should also be a part of the navigation facilities on the portal.

- **Detailed Analytics and Monitoring:** SAKSHAT portal must display a detailed account of usage statistics in terms of number of page hits, number of download, user browsing patterns, etc. SAKSHAT portal needs to provide a tool to facilitate regular monitoring and peer surveillance (vigilance) of the portal so that it gets improved and upgraded from time to time.

- **Feedback and Engagement Forum:** SAKSHAT portal should provide windows for feedback, discussion forums, chat boxes, etc. so that it remains a vibrant and networked forum for users and peers. The portal should also provide a window for eliciting "Expression of Interest" from prospective experts who are willing to be engaged to contribute to the Mission.

- **SAKSHAT – A National Repository:** In the long run, SAKSHAT portal should be positioned as a National Repository for all scholarly and creative output from the country, thereby considerably amplifying its scope, utility and visibility.

5.4.2 A New Structure for the NMEICT Mission Management

The Evaluation Committee deliberated at length on the present structure of the NMEICT Mission and has come to a firm conclusion that a new structure (Figure 5.2) for its management and operations is necessary in order to fully deliver on its objectives and ambitions.

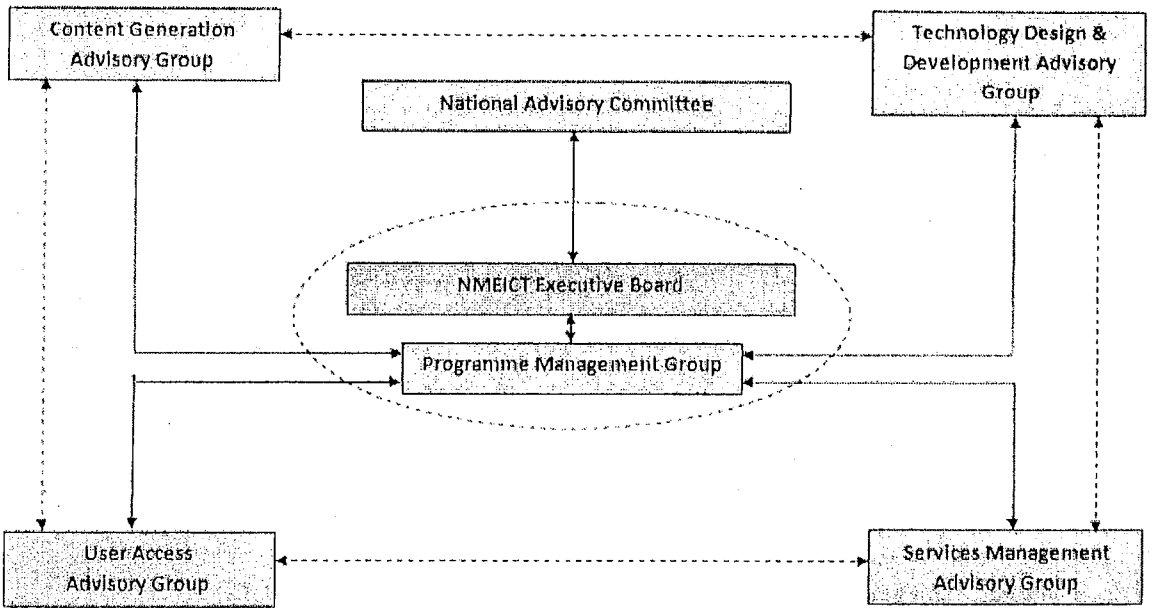


Figure 5.2: A New Structure for NMEICT Mission Operation

Salient features of the new structure for NMEICT Mission operation are:

- Appropriate connect between Expert Groups, Management of the Mission and the Government is the cornerstone of the proposed structure.

- While the new structure envisages an independent Mission Directorate outside the Ministry, it also provides for a robust linkage with the Government at the Apex Level.

- The new three tier structure attempts to blend the weightage given to independent peer opinion with accountability and renders the overall process more participative and transparent.

Given below are the composition and functions for each of the three tiers of the new structure for NMEICT Mission management and operation.

Composition:

National Advisory Committee (NAC)	
Chair	
	Minister, MHRD
Members	
	All Members of NMEICT Executive Board Chairman
	Additional Secretary (TEL)
	IFD Additional Secretary, MHRD
	Secretaries of DOT, IT, DST, Health, Agriculture and Law
	Chairman AICTE
	Chairman UGC
	Two leading industrialists
	Four members from amongst the Directors of IITs, NITs, IIITs and VCs of Central Universities
	Four VCs from Universities
	VC IGNOU
Member Secretary	
	Secretary, Higher Education, MHRD

Figure 5.3: Constitution of National Advisory Committee (NAC)

NMEICT Executive Board (EB)	
Co-Chairs	
	A Distinguished Academician
	Secretary, Higher Education, MHRD
Members	
	Three ex-Officio members (one each from Planning Commission, Finance Dept. of MHRD and MCIT, not below the rank of Joint Secretary)
	Five independent domain experts to be nominated by NAC.
Member Secretary	
	Executive Director (full time)

Figure 5.4: Constitution of NMEICT Executive Board (EB)

Programme Management Group (PMG)	
Chair	
	One out of the five independent domain experts
Members	
	Chairs of all four Advisory Groups (*ex-Officio*)
	Four independent domain experts to be nominated by the Executive Board (EB) from the areas of engineering, science, technology, management, law, medicine, agriculture, vocational training, etc.,
Invitees	
	Director MHRD
	Director Higher Education (NMEICT)
	Director IFD
Member Secretary	
	Executive Director, EB (*ex-Officio*)

Figure 5.5: Constitution of Programme Management Group (PMG)

Functions:

1. National Advisory Committee (NAC)

National Advisory Committee (NAC) will be chaired by Minister, HRD and its membership is indicated in Figure 5.3.

i) Broad policy framework of NMEICT.

ii) Ratifying proposals that are screened and approved by the Executive Board (EB). However, project proposals beyond a budget of Rs. 10 Crores will be sanctioned by the National Advisory Committee (NAC) on the recommendation of EB.

iii) Monitoring of activities and progress of the Mission.

iv) Budget approval and allocations as recommended by EB.

The NAC will meet at least two times in a year.

2. Executive Board (EB)

The Executive Board (EB) will be co-chaired by a Distinguished Academician (nominated by the Minister, MHRD) and Secretary, Higher Education from MHRD. The membership of EB is indicated in Figure 5.4.

There shall be a full time Executive Director (ED) who shall be the Member Secretary and will not be below the rank of Additional Secretary in the Government. The ED, having professional and administrative experience, shall be appointed through an open advertisement process and Search-cum-Selection Committee constituted by Minister, MHRD.

Executive Board shall have a dedicated office hosted in one of the centrally funded Government Institution. A suitable Memorandum of Agreement (MoA) shall be signed between the Institution and MHRD.

i) The EB will be responsible for all the activities under the NMEICT Mission.

ii) The EB is empowered to create suitable governance and operational mechanisms in all activities of the Mission for efficient and smooth functioning.

iii) The EB will prepare a blueprint for invitation, processing and reviewing of project proposals by Programme Management Group (PMG).

iv) The EB will have financial powers to approve all projects and expenditure up to Rs. 10 Crores. However, all approved projects and activities will have to be reported to the NAC for ratification. In case of projects and activities exceeding Rs. 10 Crores, its recommendations will be placed before NAC for approval.

v) The EB will prepare the annual budget of the Mission to be placed for approval before the NAC.

vi) The EB will be responsible for all matters related to SAKSHAT portal.

The EB will meet at least four times a year.

3. Programme Management Group (PMG)

The Programme Management Group (PMG) will be chaired by one of the five independent domain experts of EB and its membership is indicated in Figure 5.5.

i) PMG shall formulate guidelines for inviting proposals and scrutinizing them through a robust peer review system. To facilitate this process, PMG shall take advice from various advisory groups (in areas like content, technology design and development, user access, services management etc.) which may be constituted with the approval of EB.

ii) All recommendations of PMG should be submitted to EB for approval.

iii) PMG shall be responsible for monitoring and review including on-site assessment, etc. as per the directions set by the EB.

The PMG will meet at least four times in a year.

4. Financial requirements projection

Looking at the financial allocations and expenses incurred during the 11th Five Year Plan and assessing the future activities and requirements, the Evaluation Committee suggests the following budget estimates.

Category	Estimated Budget Amount Required (in Crores)
Content generation, Virtual labs	1500
Pedagogy, content related R&D and operations & maintenance of SAKSHAT portal	1000
All types of Connectivity including DTH.	3000
Low cost access device	5000
Other Services including administrative expenditures and Host Institution expenditure	1500
Total	12,000

Table 5.2: Financial Estimates for NMEICT in future

Road Ahead

NMEICT Mission has been an ambitious enterprise with the potential of a game changer in the higher education arena. It has met with modest success and has some achievements to its credit particularly in establishing widespread connectivity and supporting availability of e-resources. It has also been able to inculcate the culture of ICT in education and create a network of experts in a limited way.

In order to ensure that optimal value and outcomes are derived from the investments already made, it is important to undertake an in-depth and rigorous independent peer review of top few high-investment projects and decide if incremental funds can result in completion (within a clearly define time frame), full documentation and appropriate distribution/dissemination of these projects. All large projects will need to be monitored closely till completion. Without this, the large amount of intellectual and financial investment made in these projects will go waste, without any major benefit to the education system in the country.

(Note: A total approved funding of 442 Cr (90% of total approved funding of 488 Cr) has gone into 11 projects (13% of total of 86 projects). Yet only 4 of these projects indicate "Completed" status.)"

However, the future agenda should be to provide a completely seamless ICT infrastructure for anytime-anywhere-anything educational resource in an equitable fashion across the vast geographical areas and the enormous learners spread over it. This ICT based knowledge revolution would reflect in terms of socio-economic dividends and enable India to emerge as a super power. The Committee has endeavored to provide a slew of recommendations which will provide a roadmap for re-engineering the NMEICT Mission and fulfillment of a great national ambition. In addition, integration of efforts of different Ministries such as MHRD, MCIT, DOS, etc. related to ICT in education leading to greater convergence is essential.

Concluding Remarks

- NMEICT Mission has in a limited way addressed the issues related to access, equity and quality which are at the vanguard during the current expansion phase of higher education. However, the full potential of ICT as a powerful tool to effectively address the key

challenges involving access, equity and quality in Indian higher education remains to be fully harnessed. Availability of LCAD, amplification and diversity of offerings and ease of navigation on SAKSHAT portal, availability of content in multiple languages, increasing Internet penetration in educational institutions and access to digital resources, etc. offer great hope and opportunity for making a digital transition to a seamless world of knowledge in an inclusive manner. A reinvented NMEICT Mission can play a pivotal role in this endeavor.

- The increasing high demand for higher education has stimulated significant growth in both private and public provision. Open universities which depend on technology integrated learning are also expanding and multiplying. Many conventional higher educational institutions are adopting dual mode or blended programme delivery systems, thereby creating a new dynamic, flexible lifelong learning environment. In this context, the experimentation in the form of establishment of Virtual Universities has not yet proved its viability. Therefore, introduction of ICT in a systematic manner with a clearly defined outreach strategy in both public and private higher educational institutions in our country is an important objective. It is suggested that NMEICT Mission should contemplate generating new idea based models and initiatives for ICT enabled learning on a sustainable basis.

- It is important to devise strategies that will strongly relate digital learning processes to socio-economic development issues. In particular, digital outreach should be an enabler for self employment, skill development, women empowerment, etc. A roadmap specifically targeted to this objective needs to be crafted.

- Avenues of partnership with private and foreign entities involved in digital learning space needs to be explored.

- NMEICT Mission needs to factor-in the emerging international challenges and competitions from other similar initiatives elsewhere such as MIT's Open Courseware.

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AGENDA ITEM 4: INCLUSION OF NCC AS AN ELECTIVE SUBJECT IN SCHOOLS AND COLLEGES

Education has a very extensive role to play in changing people and society. It has to be entirely reformed and related to the life, needs and aspirations of the people so that it may serve as a powerful tool of social, economic and cultural transformation. While framing the educational policies of our country, it has been envisaged that general education is an important tool in shaping future citizens and enabling active engagement with society. The Radhakrishnan Commission, the Kothari Commission have emphasized the need for students to be aware of social issues. The national system of education should have emphasis on the cultivation of social, moral and spiritual values among students.

2. The instituting of the National Service Scheme (NSS) in 1969 was a concrete manifestation of this emphasis. The National Policy on Education (NPE), 1986 modified in 1992 states that students will be required to participate in one or the other of existing schemes namely the National Service Scheme, National Cadet Corps, etc.

3. The XII Five Year Plan too, has documented that a National Initiative to foster Social Responsibility in Higher Education would be launched. Several ongoing activities, such as, the National Social Service, National Cadet Corps, Voluntary Service, promotion of culture, arts, music, youth development initiatives will be captured in the proposed new National Initiative aimed at deepening and enhancing community engagement in our colleges and universities.

4. The National Cadet Corps (NCC) was born out of the vision of creating a pool of highly motivated and disciplined youth imbued with the spirit of patriotism and national fervour who will answer the call of the Nation in its hour of need. From its humble beginnings, along with our nascent nation, it has matched the spectacular growth of our country and stands proud as the largest uniformed youth organisation in the world today.

5. Today, our country needs a national movement of young people engaged actively in social development, sports and the development of personal character. In this regard, a Workshop on “Introduction of NCC as an Elective Subject in Schools and Colleges” was held on

12th March, 2013 at Vigyan Bhavan, New Delhi which was inaugurated by Hon'ble Union Minister for Human Resource Development. This Workshop was the joint initiative taken by the Ministry of Human Resource Development along with the National Cadet Corps and the University Grants Commission. The workshop was attended by Principals of autonomous colleges and Vice-Chancellors of their affiliating universities. Autonomous bodies such as AICTE and CBSE were also present.

6. The Workshop set the tone for carrying forward this important agenda of inculcating in our young students a sense of national pride and making them well rounded individuals and better citizens having the right values. It was decided to implement NCC as an elective subject with credit points in 30 autonomous colleges in the first phase from academic year 2013-14 and extend it to all other 400 autonomous colleges and interested Universities from the academic year 2014-15.

7. This is submitted information of CABE.

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AGENDA ITEM 5: PROPOSED EDUCATION COMMISSION

In pursuance of the announcement made by the Prime Minister on 15th August, 2011, the Government has decided to set up an Education Commission to make recommendations for improvements at all levels of education. The Composition and Terms of Reference of the proposed Commission are being finalized in consultation with the stakeholders.

2. The new Education Commission will be tasked with providing the framework of a national policy that would address the needs and challenges of the education system in the 21st century. It is expected to re-orient the education system, as well as set out goals and parameters for an education system that addresses the changed socio-economic and technological realities. The last major policy formulation for the entire education system was undertaken in 1985, which resulted in the 1986 National Education Policy. This was before India embarked on its policy of liberalization, and the ensuing high economic growth path. The proposed Education Commission will therefore have to provide the government with directions on restructuring educational priorities and institutions in a manner that takes into account the changes over the past three decades. It will also be expected to suggest ways to make the education system responsive to fast changing economic-social and technological realities.

3. One major change that the Indian education sector has undergone is making free and compulsory elementary education a fundamental right. This has thrown up a whole host of challenges both at the elementary level but also created further demand at the secondary and tertiary levels, and forced the government to consider the question of vocational education in a serious and systematic manner. The Commission is expected to assess future challenges in the school education on account of the enabling Right to Education Act, focusing on a rights based approach to school education.

4. The question of engaging local bodies, in primary and secondary education and technical training will also be taken up. The Commission will look into ways of empowering teachers as well as creating and fostering a system of accountabilities. This would address issues not just of

chronic teacher shortages at every level of the education sector but also about non-performance, absenteeism and training.

1. Efficient use of public resources is a one key area where the Commission is expected to make an intervention.

6. Education is a Concurrent subject and in a federating structure, the critical and crucial role of State governments both in policy formulation and effective implementation is well recognised. Hence, it has been the endeavour of the Ministry to have consultations and continuous dialogue with the States for the development of this sector. Over the past three years, regular meetings of CABE and State Education Ministers Conference have been held and this has helped in developing consensus on various issues and schemes within the sub-sectors of education ranging from elementary, adult, secondary, higher, technical, vocational and open and distance education.

7. One round table meeting to discuss the issues relating to Education Sector, including Constitution and Terms of Reference of the proposed Education Commission has been held under the Chairmanship of Hon'ble HRM. Second round table meeting is expected to be held shortly. Composition and terms of reference of the Commission will be decided after detailed discussions with eminent educationists and persons of repute with interest in industry and other related fields. The draft terms of reference are annexed to this note.

This is submitted for information of CABE.

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Draft Terms of Reference for the Education Commission

1. To undertake a comprehensive review of the education system in the context of the goals enunciated in the Education Commission (1966), National Policy on Education 1986 and Plan of Action 1992, to identify the lessons learnt and constraints encountered, evaluate strengths and weaknesses and assess challenges and opportunities.

2. To envision the new paradigms in education and to restate the vision, objectives and goals of the education system in the emerging social, political, economic and technological context.

3. To recommend strategies, policies, structural changes and new measures to draw upon the demographic advantage through education and skill development.

4. To recommend strategies, policies and measures to transform the education sector to attain and maintain global standards of excellence.

5. To propose measures to foster equity and inclusion at all levels of education and provide equal opportunities to all to access quality education with specific reference to the disadvantaged and weaker sections including the Scheduled Castes, Scheduled Tribes, minorities, backward communities, backward regions, the differently abled, economically weaker sections and girls.

6. To assess future challenges in school education flowing from the Right of Children to Free and Compulsory Education Act with special emphasis on improving learning outcomes.

7. To suggest reforms including policy and legislative measures to promote autonomy with accountability in higher education for the free pursuit of knowledge and innovation.

8. To propose measures for advancement of an education system that promotes infusion of ethical and constitutional values.

9. To assess the affiliation system in higher education and suggest reforms and restructuring of the affiliation system to promote choice for the student, freedom for the teacher in delivery of education and autonomy of the institution.

10. To recommend appropriate governance structures for educational institutions including public and private funded institutions to emerge as democratic and accountable centres of empowered self-governance.

11. To examine the role of Urban Local Bodies and Panchayati Raj institutions in governance of primary, secondary, vocational education and literacy centres in light of constitutional provisions for democratic decentralization.

12. To examine the nature and purpose of regulation at all levels of education and to recommend appropriate principles of regulation and regulatory structures for achieving national objectives.

13. To propose policies and measures for development of teaching faculty at all levels and attract talent to the teaching profession with special emphasis on ensuring availability of qualified teachers, to develop assessment indicators for measurement of teachers' performance for teacher accountability.

14. To examine the role of technology, technology enabled learning and collaborative information and communication technologies (ICT) in education and research.

15. To propose strategies to foster an ecosystem of research, innovation and growth of knowledge involving industry, community and society and to suggest metrics for measurement of research performance of institutions.

16. To recommend measures to promote flexible learning systems in education and expansion of choice for students.

17. (a) To recommend measures to establish linkages between school education and higher education, between professional education, vocational education, skill development and university education with specific emphasis on employability to meet workforce requirements at national and international levels; and

    (b) to recommend structures to meet evolving demands for employment in the global context.

18. To assess the impact of literacy programmes and suggest measures for universal functional literacy.

19. To promote new and innovative sources of financing education including promotion of philanthropic investments and to ensure that students from disadvantaged and weaker sections are not deprived of educational opportunities for lack of finance.

20. To examine the role of the private sector in achieving national goals in education and explore possibilities of public private partnership in education.

21. To suggest measures to integrate co-curricular activities including physical education, games and sports, arts, music and culture as an integral part of curriculum in schools and colleges for holistic development of children.

22. To suggest measures and initiatives for the development of scheduled and non-scheduled languages with special emphasis on promotion and preservation of classical and endangered languages of Indian origin.

AGENDA ITEM NO. 6: REVIEW OF IMPLEMENTATION OF RTE

Since the coming into effect of Right to Children to Free and Compulsory Education (RTE) Act, 2009, the following are the developments in respect of status of implementation of RTE Act.

(i) All States/UTs have notified RTE Rules

(ii) 26 States/UTs have constituted SCPCR/REPA as per details given below :-

Sl. No.	**States/UTs having SCPCR**	**States/UTs having REPA**
1	Assam	Andaman & N Island
2	Bihar	Mizoram
3	Chhattisgarh	Andhra Pradesh
4	Delhi	Arunachal Pradesh
5	Goa	D&N Haveli
6	Haryana	Daman & Diu
7	Jharkhand	Meghalaya
8	Karnataka	Mizoram
9	Madhya Pradesh	Himachal Pradesh
10	Maharashtra	
11	Odisha	
12	Gujarat	
13	Manipur	
12	Punjab (notified)	
13	Rajasthan	
14	Sikkim	
15	Tamil Nadu	
16	Uttarakhand	
17	West Bengal (notified)	

(iii) Andhra Pradesh, Chandigarh, Dadra and Nagar Haveli (only at district level), Delhi, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh (only at district level), Odisha and Rajasthan have notified the mechanism for local grievance redressal.

(iv) All States/UTs have notified Academic Authority

(v) In pursuance of Section 29(2) of RTE Act, the following is the status of curriculum renewal:-

Curriculum Renewal done in	**In Process**	**NCERT Textbooks**	**Neighboring States**
Andhra Pradesh, Bihar, Chhattisgarh, Haryana (Pr), Karnataka, Kerala, Manipur, Mizoram, Meghalaya, Nagaland, Orissa, Uttar Pradesh, Uttarakhand, Gujarat, Madhya Pradesh, Tamil Nadu, Tripura, West Bengal .	Assam, Himachal Pradesh, Maharashtra, Punjab	Chandigarh, Delhi, Goa, Haryana (Up. Pr.), Himachal Pradesh (Up. Pr) , Jammu & Kashmir, Jharkhand. Lakshadweep, Rajasthan, Sikkim	Daman & Diu and Dadar & Nagar Haveli (following Gujarat) Puducherry **(**follow curriculum of Tamil Nadu, Kerala and Andhra Pradesh)

(vi) The following advisories / guidelines have been issued during the last one year

(a) Advisory on Implementation of the provisions of section 29 of the Right to Children to Free and Compulsory Education (RTE) Act, 2009 issued under section 35(1) of the RTE Act.

(b) Advisory on implementation of Sections 31 and 32 of the Right to Children to Free and Compulsory Education (RTE) Act, 2009

(c) Guidelines under section 35(1) of the Right to Children to Free and Compulsory Education (RTE) Act, 2009 regarding free and compulsory education in a neighbourhood school.

(d) Section-wise Rationale/Clarification of the provisions of the Right to Children to Free and Compulsory Education (RTE) Act, 2009.

(e) Guidelines under section 35(1) of the Right to Children to Free and Compulsory Education (RTE) Act, 2009 in respect of residential Schools.

(f) Guidelines under section 35(1) of the Right to Children to Free and Compulsory Education (RTE) Act, 2009 in respect of Playgrounds specified under the schedule to the RTE Act.

(g) Guidelines under section 35(1) of the Right to Children to Free and Compulsory Education (RTE) Act, 2009 in respect of Section 8 and 9 of the RTE Act

preventing discrimination in schools in respect of children belonging to weaker section and disadvantaged groups.

(vii) Status of compliance with regard to norms and standards given in schedule to the RTE Act :-

(a) **Untrained Teachers (DISE 2011-12)**: As per DISE 2011-12 there are about 20 percent (8.6 lakh) untrained teachers as per NCTE norms. States with large number of untrained teaches are West Bengal (1.97 Lakh), Bihar (1.86 Lakh), Jharkhand (77 thousand), Jammu and Kashmir (31 thousand), Meghalaya (14 thousand), Arunachal Pradesh (9 thousand) and Mizoram (6 thousand), Uttar Pradesh (1.43 Lakh), Chhattisgarh (48 thousand), Odisha (40 thousand), Assam (16 thousand), Tripura (10 thousand).

NCTE has given approvals for training of untrained teachers in distance mode to the States of Arunachal Pradesh (8,948), Madhya Pradesh (34,902), Jharkhand (15,967), Bihar (39,210),Chhattisgarh (45,225), Meghalaya (7,822), Manipur (6,583), Nagaland (10,863), Odisha (30,067), West Bengal (1,15,050), Uttarakhand (2374), Uttar Pradesh (1,24,000) and Assam (68,727) for training of the untrained teachers.

West Bengal still has untrained teachers for whom arrangements need to be put in place for training.

(b) **Status of teachers' recruitment and vacancies**

S.No.	State/UT	Sanctioned Post			Vacancies			Status of TET
		By State	Under SSA	Total	By State	Under SSA	Total	
1	Andman & Nicobar Island	3311	210	3521	232	12	244	Conducted
2	Andhra Pradesh	225387	39189	264576	15892	11787	27679	Conducted
3	Arunachal Pradesh	6774	7262	14036	0	1109	1109	Conducted
4	Assam	124592	48808	173400	12613	8052	20665	Conducted
5	Bihar	190337	403413	593750	55464	205378	260842	Conducted
6	Chandigarh	2928	1390	4318	550	330	880	Conducted
7	Chhattisgarh	186768	67507	254275	53041	10314	63355	Conducted

S.No.	State/UT	Sanctioned Post			Vacancies			Status of TET
		By State	Under SSA	Total	By State	Under SSA	Total	
8	Dadra & Nagar Haveli	1008	937	1945	294	485	779	Conducted
9	Daman & Diu	449	119	568	145	77	222	Conducted
10	Delhi	39607	7104	46711	3006	3968	6974	Conducted
11	Goa	6705	169	6874	0	0	0	No
12	Gujarat	175196	58688	233884	0	27258	27258	Conducted
13	Haryana	55414	13435	68849	13906	2149	16055	Conducted
14	Himachal Pradesh	42037	5856	47893	1193	2203	3396	Conducted
15	Jammu & Kashmir	53103	43471	96574	5438	2970	8408	No
16	Jharkhand	69066	120396	189462	29624	38422	68046	Conducted
17	Karnataka	170845	29055	199900	15336	4777	20113	No
18	Kerala	131613	2925	134538	0	2925	2925	Conducted
19	Lakshadweep	0	38	38	0	21	21	Conducted
20	Madhya Pradesh	186210	173855	360065	16244	79110	95354	Conducted
21	Maharashtra	297254	42091	339345	6729	26704	33433	Conducted
22	Manipur	15591	2871	18462	0	152	152	Conducted
23	Meghalaya	6877	13262	20139	0	4212	4212	No
24	Mizoram	13085	2485	15570	0	310	310	No
25	Nagaland	12922	3147	16069	7	211	218	No
26	Orissa	126459	89901	216360	23679	10084	33763	Conducted
27	Puducherry	3442	48	3490	552	11	563	Conducted
28	Punjab	81639	14090	95729	19161	2602	21763	Conducted
29	Rajasthan	160868	114132	275000	12968	13243	26211	Conducted
30	Sikkim	7161	724	7885	0	319	319	No

S.No.	State/UT	Sanctioned Post			Vacancies			Status of TET
		By State	Under SSA	Total	By State	Under SSA	Total	
31	Tamil Nadu	120707	33214	153921	6800	6840	13640	Conducted
32	Tripura	24613	6980	31593	0	545	545	No
33	Uttar Pradesh	394960	423553	818513	147593	159087	306680	Conducted
34	Uttrakhand	43485	14316	57801	7746	9270	17016	Conducted
35	West Bengal	264155	198253	462408	42988	61623	104611	Conducted
TOTAL		**3244568**	**1982894**	**5227462**	**491201**	**696560**	**1187761**	

(c) **Favourable PTR**

State/UT	Overall PTR of State	Number of schools with RTE Compliant PTR	
		Number	%age
A & N ISLANDS	9	318	96.36
ANDHRA PRADESH	18	67224	85.69
ARUNACHAL PRADESH	17	1823	43.69
ASSAM	29	20848	50.24
BIHAR	59	10235	14.85
CHANDIGARH	37	67	60.36
CHHATTISGARH	23	34093	73.22
D & N HAVELI	43	85	30.91
DAMAN & DIU	35	59	67.05
DELHI	39	1499	53.88
GOA	15	676	65.00

GUJARAT	29	26079	77.89
HARYANA	26	9956	66.94
HIMACHAL PRADESH	15	13627	90.41
JAMMU & KASHMIR	13	19500	85.73
JHARKHAND	42	14134	35.04
KARNATAKA	21	41514	82.60
KERALA	19	4727	91.80
LAKSHADWEEP	11	46	100.00
MADHYA PRADESH	38	44880	42.03
MAHARASHTRA	25	56932	81.66
MANIPUR	13	1971	79.86
MEGHALAYA	16	6782	86.92
MIZORAM	13	2170	87.82
NAGALAND	15	1801	85.48
ORISSA	27	36704	63.29
PUDUCHERRY	12	420	96.55
PUNJAB	20	13953	68.57
RAJASTHAN	27	44885	57.71
SIKKIM	11	857	95.12
TAMIL NADU	28	27477	75.13
TRIPURA	18	3778	88.37
UTTAR PRADESH	38	59379	38.57
UTTARAKHAND	20	11087	64.00
WEST BENGAL	30	51322	63.10

Total	**30**	**630908**	**59.05**

DISE 2011-12

(d) **Infrastructural norms for Drinking Water and Ramps**

State/UT	Total Schools	Number of schools with Drinking Water		Number of schools with Ramp	
		Number	%age	Number	%age
A & N ISLANDS	330	317	96.06	77	23.33
ANDHRA PRADESH	78450	66989	85.39	16318	20.80
ARUNACHAL PRADESH	4173	3197	76.61	181	4.34
ASSAM	41500	36582	88.15	27619	66.55
BIHAR	68925	64333	93.34	40236	58.38
CHANDIGARH	111	111	100.00	47	42.34
CHHATTISGARH	46562	43493	93.41	20215	43.42
D & N HAVELI	275	271	98.55	63	22.91
DAMAN & DIU	88	88	100.00	55	62.50
DELHI	2782	2782	100.00	2215	79.62
GOA	1040	1034	99.42	549	52.79
GUJARAT	33481	33476	99.99	31038	92.70
HARYANA	14874	14785	99.40	10352	69.60
HIMACHAL PRADESH	15073	14866	98.63	8755	58.08
JAMMU & KASHMIR	22746	18123	79.68	3011	13.24
JHARKHAND	40336	36306	90.01	15973	39.60
KARNATAKA	50257	49979	99.45	37045	73.71

KERALA	5149	5053	98.14	3782	73.45
LAKSHADWEEP	46	46	100.00	28	60.87
MADHYA PRADESH	106771	104379	97.76	65054	60.93
MAHARASHTRA	69722	64296	92.22	60058	86.14
MANIPUR	2468	2332	94.49	174	7.05
MEGHALAYA	7803	4619	59.20	1960	25.12
MIZORAM	2471	2231	90.29	1333	53.95
NAGALAND	2107	1538	72.99	227	10.77
ORISSA	57994	54900	94.66	29907	51.57
PUDUCHERRY	435	435	100.00	304	69.89
PUNJAB	20349	20347	99.99	17382	85.42
RAJASTHAN	77774	72913	93.75	52559	67.58
SIKKIM	901	864	95.89	33	3.66
TAMIL NADU	36575	36575	100.00	28703	78.48
TRIPURA	4275	3202	74.90	2486	58.15
UTTAR PRADESH	153934	150764	97.94	128370	83.39
UTTARAKHAND	17323	16520	95.36	9434	54.46
WEST BENGAL	81335	79358	97.57	42932	52.78
Total	**1068435**	**1007104**	**94.26**	**658475**	**61.63**

DISE 2011-12

(e) **<u>Infrastructural norms for Toilets</u>**

State/UT	Total Schools	Schools with Common toilet		Schools with girls and boys toilet	
		Number	%age	Number	%age

A & N ISLANDS	330	14	4.24	271	82.12
ANDHRA PRADESH	78450	22026	28.08	37997	48.43
ARUNACHAL PRADESH	4173	775	19.63	1237	31.33
ASSAM	41500	13592	32.75	21632	52.13
BIHAR	68925	15657	22.72	35039	50.84
CHANDIGARH	111	0	0.00	111	100.00
CHHATTISGARH	46562	12107	26.00	18623	40.00
D & N HAVELI	275	32	11.64	174	63.27
DAMAN & DIU	88	3	3.41	84	95.45
DELHI	2782	37	1.33	2745	98.67
GOA	1040	243	23.37	715	68.75
GUJARAT	33481	9490	28.34	23937	71.49
HARYANA	14874	1386	9.32	13005	87.43
HIMACHAL PRADESH	15073	2281	15.21	12313	82.08
JAMMU & KASHMIR	22746	4789	21.39	5175	23.12
JHARKHAND	40336	4471	11.08	27398	67.93
KARNATAKA	50257	815	1.62	49185	97.87
KERALA	5149	409	7.97	4462	87.00
LAKSHADWEEP	46	5	10.87	36	78.26
MADHYA PRADESH	106771	29041	27.20	73701	69.03
MAHARASHTRA	69722	16542	23.73	49772	71.39
MANIPUR	2468	1	0.04	2467	99.96
MEGHALAYA	7803	1923	24.64	2891	37.05
MIZORAM	2471	768	33.57	1394	60.93

NAGALAND	2107	561	26.64	1344	63.82
ODISHA	57994	24989	43.09	22348	38.54
PUDUCHERRY	435	15	3.45	419	96.32
PUNJAB	20349	2647	13.02	17638	86.74
RAJASTHAN	77774	16416	21.11	58626	75.38
SIKKIM	901	174	19.40	707	78.82
TAMIL NADU	36575	10500	28.71	23411	64.01
TRIPURA	4275	1482	34.67	2018	47.20
UTTAR PRADESH	153934	16840	10.94	124788	81.07
UTTARAKHAND	17323	3039	17.60	13661	79.13
WEST BENGAL	81335	31179	38.33	42452	52.20
Total	**1068435**	**244249**	**22.88**	**691776**	**64.80**

DISE 2011-12

(f) **Norms for working days and instruction hours**

Most of the states/UTs have followed the RTE stipulation of 200 working days and 800 instructional hours at primary and 220 days and 1000 hours at upper primary in their notifications and have specified the number of working days and working hours either more than or equal to the minimum specified. However, there are some exceptions like Goa has 210 working days and 925 instruction hours at upper primary level, Meghalaya and Mizoram both have 600 instruction hours for primary and upper primary and Rajasthan has not yet specified instruction hours.

(ix) School Management Committees (SMCs):

Delhi, Goa and West Bengal (for primary) are yet to set up SMCs.

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AGENDA ITEM 7: SUMMARY OF BEST PRACTICES ADOPTED IN MID DAY MEAL SCHEME

1. **Uttarakhand**

Appointment of BhojanMatas:

In Uttarakhand, the State has appointed BhojanMatas and Sahayika who are not only cooks, but also change agents as the play a role in social integration. These BhojanMatas are mostly mothers of the children enrolled in the schools where she is appointed and particularly from the underprivileged sections.

2. **Jharkhand**

Involvement of Community through SarasvatiVahini:

Involvement of SarasvatiVahini in the implementation of MDM is good example of the community participation. In Jharkhand, community participates through school children's mothers association called **SarasvatiVahini.** Out of the total mothers of children enrolled in the school, two mothers are nominated as **Sanyojika,** who are active and can do the cooking and other activities effectively. Remaining members of SarasvatiVahini supervise the cooking and distribution of meal on roster basis. Community's involvement also helps in improving the condition of school.

Another intervention which the State is implementing is children's involvement in the form of **Bal Sansad** in each school. The Health Minister of the **Bal Sansad has been** given responsibility of monitoring the health and hygiene aspects, such as whether children are washing their hands and plates before and after meal, sitting in proper posture, standing in queue, cooks are properly wearing apron etc. of the mid day meal programme.

3. **Tripura**

Construction of Dining halls in schools

To improve the effectiveness of the feeding programme in the state, the state has constructed dining halls for school children to take MDM comfortably. The requirement of funds is met from State budget. This has been done with the objective to provide children an opportunity to sit together and eat their meals regardless of caste and community with hygiene and dignity.

4. Gujarat-

The State Government has initiated the concept of public participation in the scheme through the concept of "TithiBhojan". The villagers sponsor the food with sweets for children on various occasions and provide utensil for MDM centres.

5. Andhra Pradesh

Green channel fund release scheme

The Government of Andhra Pradesh has introduced the scheme called green channel scheme for making available funds without any interruption throughout the year for the programmes that extend direct benefit to the poorer sections of the population like School Education, Agriculture, Rural Development, Medical & Health, Hostel run by Welfare department are the main scheme of the priority in Andhra Pradesh green channel fund released system.

The Government of Andhra Pradesh has taken bold initiative to introduce Social Audit of Mid Day Meal programme in two districts viz. Chittoor and Khammam on pilot basis.

6. Karnataka

Gas based cooking in all schools. LPG is used in all the schools in the State for the preparation of food. In the state of Karnataka out of 56,083 total primary and upper primary schools, gas based cooking is available in 54336 (97%) schools. This has helped to keep kitchen and school area clean. This is also ecological and environmental friendly.

7. Bihar

MahilaSamakhya's Role in implementation of Mid Day Meal

The State Government is implementing the MDM Scheme through SHGs / MahilaSamakhya / Mata Samitis in 9 districts. The practice of cooking the food, serving food and quality of food is taken care by these women. Food is cooked at the panchayat level and cooked food is safely transported to school within an hour of preparation. Role of MahilaSamakhya has been observed in terms of women getting employment and adequate income from these activities. MahilaSamakhya is a successful intervention and an example of best practice in maintaining efficiency and quality of the Scheme.

8. Kerala

(i) Effective and efficient Public Distribution System "Maveli Stores"

"To provide essential requirements to the reach of everyone" is the mission statement adopted by the Kerala State Civil Supplies Corporation, better known as SUPPLCO which is a fully owned Government Company. The Public Distribution System in the State is therefore an instrument to meet the needs of the children through a strong food chain starting from the FCI and Kerala State Civil Supplies Corporation, which finally goes down to the school through the **Maveli Stores,** which avoids the interruptions in implementation of the programme.

(ii) Involvement of parents

It was evident that the parents particularly thepoor had a very positive view on the Scheme. In the schools where theprogramme is operational, parents wanted the Scheme to continue but certainimprovements like introduction of variety of menu. Mid Day Meal is effective foreconomic and social reasons. One of the parent mentioned that Mid Day MealScheme has provided a platform to the children to learn so many good habitswhile taking the food. The involvement of Parent-Teacher Association is verygood in 90 percent of the schools. The PTA president and members visit theschool often. Parents are found to be helping the cooks in many schools. Insome schools, the parents (not many, but one or two only) are found to besupporting the distribution of food to the students.

9. Mizoram

Kitchen Gardens in the Schools

One of the best practices found in most of the north eastern States is kitchen garden in the schools. In Mizoram, certain schools, especially in the rural areas and small towns, have started their own kitchen gardens. The schools serve fresh vegetables grown in the garden in the MDM sometimes as one of main items, sometimes as supplement to MDM and as salad depending upon the types of vegetables available in various seasons. In States like Mizoram, where adequate supply of green vegetables through the year Is not available, it is a good practice to have kitchen garden in a school.

10. Rajasthan

Public-Private Partnership

A policy for attracting public-private partnership in the MDM Scheme was launched by the Government of Rajasthan in January, 2006. Commendable achievements have been made in attracting such partnerships in the programme. AkshyaPatra Foundation, Naandi Foundation, AdamyaChetna Trust are examples which have partnered with the Government in success implementation of the MDM in the State.

11. Tamil Nadu

The State Government not only makes sufficient budget provision for constant supply of food items and infrastructure facilities, but increased budget provisions are made every year for continuous improvement in the management systems and quality of Mid Day Meal Supplied in schools. The Social Welfare and Nutritional Meal Programme Department at State level and the network with the Tamil Nadu Civil Supplies Corporation ensure constant supply of food items. At the institutional level, preparation and distribution of MDM is a good team effort which includes not only the regular workers, noon meal organizers, cooks and the assistants, but also get the cooperation from teachers, head teachers, mothers and the members of the Village Education Committee.

12. Nagaland

Common Kitchen:

A novel model experimented and being successfully implemented in Kohima town which feeds 10 Govt. Primary and 4 Govt. Middle Schools. Common kitchen was established in the heart of Kohima town to cook and serve the mid day meals to all 14 Govt. Primary schools and Govt. Middle schools in this town. A non-profit voluntary Women Self Help Group, registered under State Govt., volunteered to take up the responsibilities not only in cooking the meals but also in collecting periodically, as and when required, the allocated food grains and fund from the establishment of Deputy Inspector of Schools.

13. West Bengal

In Nadia district of the West Bengal, the schools were having their own kitchen garden where vegetables are grown in the school premises. An Assistant Teacher of the school has voluntarily taken up responsibility of the entire farming process. Students are engaged every day in the watering the vegetable plots. The school has also dug out a pond where fish farming is undertaken. Students are thus provided with varied fresh vegetables and fish in MDM, Support of VEC members is obtained in nurturing and maintenance of the vegetables plots and the pond. The school even provides its produced vegetables to other nearby schools. To enhance the spirit, students are asked by the teachers to recite poems (based on subjects like Mid Day Meal, Education for All etc.) before taking the meal. These poems are composed by the Assistant Teachers of the school. Discussions are also held with the guardians / parents about the usefulness of the MDM. This innovation helped the School Management Committee to become self-reliant in the supply of vegetables.

14. Rain water conservation project in School

(Contai, East Midnapore, West Bengal)

To meet the demand of drinking water and cooking water of Mid-Day Meal in school, a project on rain water conservation has been started at BattalaAnandamoyee High School, Ramnagar II Block, EastMidnapore of West Bengal. Recently this project has been inaugurated by local MLA Mr AkhilGiri during Annual Programme of the school. Mr PulakBarapanda, Vice President of School Managing Committee told that, “during summer the water level of this area goes very low and it becomes problematic for the school to arrange drinking water and cooking water of MDM for the students. With conservation of rain water, it will help to mitigate this problem”. The Head Master of the school, Mr Hrishikesh Das told that an ex student of this school took the initiative for starting this project. The Science and Technology Department gave financial assistance of Rs. 197000.00 for implementation of this project.

15. Kitchen Garden in the school premises

Andhra Pradesh, Karnataka (23,475 schools), Punjab, West Bengal and NER States are promoting kitchen garden in school premises.

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AGENDA ITEM 8: "REGULATORY MECHANISM FOR THE TEXTBOOKS AND PARALLEL TEXTBOOKS TAUGHT IN SCHOOL OUTSIDE THE GOVERNMENT SYSTEM" – DRAFT NATIONAL TEXTBOOK COUNCIL BILL.

Central Advisory Board of Education (CABE) in its first meeting held on 10th and 11th August, 2004 decided to constitute a committee of CABE under the Chairmanships of Prof. Zoya Hassan and Prof. Gopal Guru to examine "Regulatory mechanism for the text books and parallel text books taught in schools outside the Government system." The Committee was constituted by the MHRD vide orders No. 2-18/2004-PN-1 dated 10th September, 2004. Terms of Reference of the Committee were as indicated below:

a. To study and report on text books in govt. schools not using the Central Board of Secondary Education Syllabus;
b. To study the text books and curriculum of schools outside the Government system including those run by the religious and social organizations;
c. To suggest an appropriate regulatory mechanism for institutionalizing the issue of preparation of text books and curricular material.

2. The Committee submitted its report in 2005 and the same was accepted by CABE in its meeting held on 15.07.2005. The Committee inter-alia recommended:

(i) to constitute a fully autonomous "National Textbook Council" representing civil society and academia to monitor textbooks. It would provide ordinary citizens a forum to register complaints regarding textbooks to be followed up by an investigation by the Council.

(ii) procedure for approving curricular materials should include a serious appraisal by academic experts of their adherence to the core principle of egalitarianism democracy and secularism.

3. FOLLOW UP ACTION BY MHRD

Draft NTC Bill was prepared in consultation with NCERT and the proposal was approved by Hon'ble HRM on 02.04.2007. The matter was referred to the Department of Legal Affairs for their advice and that Department opined that comments of the concerned Ministries and States/UTs Governments may be obtained on the draft Bill. Accordingly, Draft Bill along with Draft Cabinet Note was sent to the concerned Ministries/Departments and State/UT Govts for their comments.

4. OBJECTIVE OF THE DRAFT BILL

(i) Need to ensure that the textbooks used in schools are based on the values enshrined in the Constitution of India.
(ii) NTC to keep an eye on school textbooks to maintain a standard of education & to save children from ill effect of inferior quality textbooks.
(iii) To conduct independent specific enquiries on complaints received from the public about the quality and value perspective of textbooks.

5. SALIENT FEATURES OF DRAFT NTC BILL

(i) The NCT shall review textbooks to assess the fulfillment of conditions for textbooks.
(ii) The Council may enquire in cases of violation of the conditions laid down for textbooks.
(iii) To proceed to enquire the Council shall invite at least two reputed experts connected with the subject to give their opinion on the matter under enquiry and shall take their opinion into consideration before arriving at a decision.
(iv) For the purpose of holding an inquiry the Council shall have the same powers as are vested in a Civil Court while trying a suit under the Code of Civil procedure, 1908.

6. PROPOSED COMPOSITION

Council to consist of Chairman and six other members. The Chairman shall be retired Judge of the Supreme Court, to be nominated by the Chief Justice of India.

Other members from CIIL, IITs, research institute in Social Sciences, etc.

At least two of the total Members will be women.

7. RESPONSE OF OTHER MINISTRIES/DEPARTMENTS

7.1 From among the Ministries, the Department of Expenditure has not supported the Bill on the following main grounds:

(i) The mandate proposed for NTC overlaps that of NCERT, NIE, RIEs, SCERTs etc. The Government needs to place faith in the integrity and ability of these institutions to keep a vigil over textbooks.
(ii) Establishment of NTC is a kneejerk approach. A self-corrective mechanism in NCERT and SCERTs would serve the purpose better.
(iii) Education is in the Concurrent List, States therefore also have the responsibility to screen and monitor the content of textbooks.

(iv) It should be possible for Government of India to use its executive powers to lay down guidelines for scrutiny of textbook content.

(v) A central organization would be ill-equipped to deal with the mandate and would actually add to the already burgeoning Govt. expenditure.

7.2 The Planning Commission too has not supported the Bill and has advised in-depth review of the decision to set up such a Council. In their view, the issue has not been studied enough to establish the inadequacies of the existing legislations to deal with violations included in the NTC Bill. Further, the Planning Commission feels that the Department has not consulted the States and other stakeholders enough. They have also pointed out deficiencies in the contents of the proposed legislation.

7.3 MHA, MoMA and the Department of Higher Education have raised only a couple of technical points while supporting the Bill.

8. RESPONSE OF THE STATE/UT GOVERNMENTS

i) Arunachal Pradesh, Chhattisgarh, Goa, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Uttarakhand A&N Island, Dadra & Nagar Haveli, Daman & Diu, NCT of Delhi and Pudducherry have agreed and given their consent to the proposed Bill. Some of the States have made the following suggestions:

a)Inclusion of subject experts and educationalist suggested by States/UTs;

b)Inclusion of State representatives as member of the Council to maintain cultural diversity of country.

ii) Gujarat and West Bengal have not agreed with the proposal. West Bengal also recommended for State representation.

iii) Tamil Nadu and Lakshadweep have not offered comments on NTC.

iv) Comments from Andhra Pradesh, Assam, Bihar, Himachal Pradesh, Jammu & Kashmir, Kerala, Maharashtra, Manipur, Meghalaya, Uttar Pradesh, Chandigarh have not been received.

9. PROVISION UNDER RTE ACT

The CABE's decision to consider an institutional regulatory mechanism for preparing guidelines and parameters for review of textbooks was taken in July, 2005 i.e. 6 ½ years ago. RTE Act has now come into force which covers the elementary education sector and CABE has set up a Committee to explore its extension to the secondary sector. Section 29 of the RTE Act lays down that the appropriate Government shall notify an academic authority. This academic

authority would inter alia have the role of ensuring conformity with the values enshrined in the Constitution while laying down the curriculum (including syllabus, textbooks, teacher training etc.) and the evaluation procedure. Therefore, setting up a separate NTC may no longer be necessary.

10. GUIDANCE & DECISION

In view of the provision under the RTE Act, Ministry of Human Resource Development recommends that the proposal may be dropped. CABE may please deliberate and decide.

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AGENDA ITEM 9: BEST PRACTICES IN IMPLEMENTATION OF SCHOOL SANITATION AND HYGIENE EDUCATION

SCHOOL WATER SUPPLY

1. **Use of non-conventional energy sources for lifting water from the well / tank to the overhead tanks - merry-go round pump, Sea saw pump:** States like Gujarat, Bihar, Uttar Pradesh, Punjab, Rajasthan, Tamilnadu, Madhya Pradesh, West Bengal, Jharkhand and Chattisgarh are using force lift pumps, Merry-go-around and see-saw pumps for lifting water. The water is pumped to the overhead tank provided over the toilets to enable running water to the toilets. This provides the running water to the toilets without making any special efforts. In this way while playing on the above facilities water gets automatically lifted to the overhead tanks. It has been found in these schools that the maintenance and functionality problem is minimum as sufficient water is collected in the overhead tank. This also lead to optimal utilisation of water as the water that would have gone waste is put to proper use.

2. **Rain Water Harvesting:** Attempts have been made to provide drinking water by collecting and storing rain water in the storage tank constructed inside the school campus in the water staved areas like Western Rajasthan, Gujarat, etc. In Mizoram the water collected from the roof top is stored in a tank constructed above ground. In States like Tamilnadu, Haryana etc. the water thus collected from roof top is recharged in underground. In Rajasthan the harvesting tanks is constructed in the courtyard of the school and the rainwater which is falling on the made ground is allowed to run to the tank which in the middle. This is called “Tanka”.

3. **Initiative by the School Children for safe handling of water:** Formation of health clubs, Pani Panchayat, Bal Panchayat, Child Cabinet etc. have been formed in schools. The children who are members (Minister for water, Minister for Health) of the club make arrangements for safe handling of water through better storing arrangements, distribution

methods. These children also see that the children when collecting water from the tap etc. are not over crowded at the distribution points and make the children to form queue to collect water. States like Gujarat, Bihar, Uttar Pradesh, Punjab, Rajasthan, Tamilnadu, Madhya Pradesh, West Bengal, Jharkhand and Chattisgarh are adopting this practice.

4. **Testing of water quality by the Children:** Students have been trained to test the water quality of the available water in the schools through portable water testing kits. If the quality is found to be unfit for drinking they inform the nearby Public Health Engineering Department Laboratory.

SCHOOL SANITATION

5. **SWASTHH PLUS (School Water and Sanitation towards Health and Hygiene):** The participation of children in school sanitation and hygiene programmes is widely recognized right from the selection of sites for installation/construction of water, sanitation and hygiene (WASH) facilities, their use and maintenance, change within self and help to change other children/peer groups, and largely in dissemination of knowledge/information about hygiene and sanitation from school to the family and in the community. In addition to dissemination of health and hygiene messages they also insist on a change in attitude and practices at the personal, family and community level in health, hygiene and sanitation behavior. Formation of child cabinet, Bal Panchayat, Meena Manch, sanitation scouts and formation of health club, student club etc. are practiced in the following states to promote good sanitation and hygiene practices. This is practiced in the States of Assam, Uttar Pradesh, Bihar, Sikkim and Madhya Pradesh.

6. **Eco Toilets (Ecological Sanitation):** This is a toilet in which the solids and the liquids are separated these toilets. The urine is collected in a plastic container kept at the back side of the toilet and is removed when the container is full. The urine thus collected is diluted and used as manure. The user after defecating has to put saw dust or ash over the feces. When the pit is full the user has to use the second hole for defecation. The first pit is left for some time and the solids are dried and this can be removed using hand. This is used as manure. The liquid and solid separated are used as manure. This also called

creating wealth from waste. These kinds of toilets are constructed in Tamil Nadu and Pondicherry.

7. **Provision of incinerators in girl's toilets schools:** Incinerators are provided in girls toilets to burn the sanitary napkins used by the girls. The girls can throw the used napkins through hole provided in the girl's toilet. The napkin reaches the burning chamber through the chute. Periodically the waste burnt along-with other solid wastes collected from the school campus. This kind of facility has been provided girls' toilet in schools from the States of Kerala, Jharkhand, Rajasthan, Himachal Pradesh, West Bengal and Delhi.

8. **Liquid Waste Management:** The waste water generated from the toilets, drinking water area and kitchen-shed is diverted to the kitchen garden developed in the school campus. Most of the States are adopting this for the liquid waste management.

9. **Waste (Solid) to Wealth:** The waste from the school kitchen and food remains thrown away by the children used to make the surroundings dirty and a perfect breeding ground for disease. Kerala (Malinya Muktha Keralam- plan for setting up a bio-gas plant for transforming this waste into a resource, that is, fuel for the mid day meal and slurry/manure for the school garden). The above work has been done in Tirur block in Malapuram District in Kerala. They have also formulated a plan for setting-up bio gas plant for transforming this waste into a resource, that is, fuel for the mid day meal and slurry / manure for the school garden. Under the supervision of PTA / Health club / green club members formed maintenance committees which maintains and operates the plant without complaint.

10. **E-toilets:** A government girls' school in Ernakulam, Kerala, is the first school in the country to get an electronic public toilet. A number of schools will be fitted with e-toilets, which have automatic doors and will self-clean after each use. Where water is scarce, recycling units using bio-membrane reactors will be installed.

11. **Hand Washing:** October 15 of every year is celebrated in schools as Global hand washing day. Global Hand washing Day focuses on children because not only do they suffer disproportionately from diarrheal and respiratory diseases and deaths, but research shows that children – the segment of society so often the most energetic, enthusiastic, and

open to new ideas – can also be powerful agents for changing behaviors like hand washing with soap in their communities. Children take up marches etc to spread the message of hand washing to the community. MHRD has given instructions to all States to go for hand washing before the mid day meal is served to the children. Many States are celebrating 15th October as hand washing day from 2008 onwards. They also practice hand washing in schools and in most of the schools the soap is kept for hand wash.

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AGENDA ITEM 10: ELIMINATION OF GENDER AND SOCIAL GAPS IN SCHOOL ENROLMENT AND RETENTION.

Reducing gender and social gaps is one of the four goals of SSA and since launch of the scheme SSA has targeted the social groups showing gaps in access to elementary education. For providing access, flexible and evolving strategies like AIE centres, EGS centres, new schools, residential schools, transportation etc have been adopted. Additional teachers, free text books, renewal of curriculum and text books, in service teacher training, TLM grants, computer aided learning and specific learning programmes for early grades and upper primary are provided to enhance quality and improve retention. All three components of access, retention and quality have been addressed and emphasized simultaneously. SSA now has to address the residual quality issues.

Over all enrolment of SC children has gone up from 3.56 crore in 2007-08 to 3.95 crore in 2011-12, of ST children from 1.92 crore in 2007-08 to 2.17 crore in 2011-12 and of Muslim children from 1.84 crore to 2.5 crore in the same period. Enrolment of girls has increased from 8.86 crore in 2011-12 to 9.64 crore in 2011-12.
In an independent survey for out of school children in 2005 it was estimated that there were 1.34 crore children out of school in the country. This reduced to 81 lakh when the study was repeated in 2009 and State's own estimate was of about 30 lakh out of school children in March 2012.

District Information on School Education (DISE) was initiated in 2005-06 as a data base for elementary education, which captures all the social parameters of the enrolled children including girls, SC and ST. As an educationally backward minority, Muslim children have also been captured since 2007-08 and disaggregated data is available at district, block and school level at the website www.ssa.nic.in .

Analysis of DISE shows that at the primary level, share of Muslim children is as per the share of population, while it is slightly less at the upper primary level. While sanctions and progress under key SSA components in Muslim concentration districts is monitored (as special focus districts) at the national level on a quarterly basis, similar monitoring should take place at the State and district levels too in order to promote the inclusion of minorities in elementary education.

State-wise percentage of Muslim population and percentage is as follows:

State/UT	% of Muslim Population (Census 2001)	Percentage of Muslim enrolment to total enrolment	
		Primary	Upper Primary
A & N Islands	8.22	8.09	6.89
Andhra Pradesh	9.17	10.07	8.71
Arunachal Pradesh	1.88	0.37	0.36
Assam	30.92	40.21	33.72
Bihar	16.53	15.2	13.23

State/UT	% of Muslim Population (Census 2001)	Percentage of Muslim enrolment to total enrolment	
		Primary	Upper Primary
Chandigarh	3.95	5.08	4.55
Chhattisgarh	1.97	1.37	1.46
D & N Haveli	2.96	3.23	3.22
Daman & Diu	7.76	9.52	8.81
Delhi	11.72	13.24	11.28
Goa	6.84	9.48	7.86
Gujarat	9.06	8.57	8.03
Haryana	5.78	9.82	5.07
Himachal Pradesh	1.97	1.82	1.48
Jammu & Kashmi	66.97	68.47	66.15
Jharkhand	13.85	14.49	13.74
Karnataka	12.23	15.95	14.43
Kerala	24.7	31.29	29.18
Lakshadweep	95.47	99.38	89.02
Madhya Pradesh	6.37	4.96	4.25
Maharashtra	10.6	13.59	11.89
Manipur	8.81	8.97	7.55
Meghalaya	4.28	3.51	3.18
Mizoram	1.14	0.42	0.08
Nagaland	1.76	0.93	0.74
Odisha	2.07	1.47	1.56
Puducherry	6.09	7.63	6.41
Punjab	1.57	1.59	1.22
Rajasthan	8.47	8.43	5.89
Sikkim	1.42	1.26	0.92
Tamil Nadu	5.56	5.84	5.48
Tripura	7.95	11.85	11.13
Uttar Pradesh	18.5	10.18	8.1
Uttarakhand	11.92	17.59	10.99
West Bengal	25.25	32.22	28.78
INDIA	**13.43**	**13.31**	**11.65**

Muslim Gender Gap 2011-12 (Source:- DISE)

State/UT	Gender Gap Muslim

	Primary	Upper Primary
A & N Islands	0.04	1.12
Andhra Pradesh	-0.46	-4.06
Arunachal Pradesh	12.74	0.6
Assam	-0.34	-9.18
Bihar	0.32	-3.72
Chandigarh	4.5	4.98
Chhattisgarh	3.36	1.1
D & N Haveli	6.84	1.96
Daman & Diu	5.64	12.76
Delhi	0.26	-2.9
Goa	13.72	20.12
Gujarat	3.76	4.74
Haryana	10.06	27.26
Himachal Pradesh	6.64	15.02
Jammu & Kashmir	3.78	5
Jharkhand	0.8	-3.56
Karnataka	1.98	-0.54
Kerala	1.46	2.92
Lakshadweep	2.34	-5.88
Madhya Pradesh	0.02	-2.56
Maharashtra	2.4	1.76
Manipur	-0.46	4.12
Meghalaya	2.02	-5.3
Mizoram	16.2	16.12
Nagaland	12.66	12.52
Odisha	2.68	-5.12
Puducherry	5.44	8.02
Punjab	9.46	7.9
Rajasthan	6	12.8
Sikkim	11.12	13.38
Tamil Nadu	1.24	0.58
Tripura	1.74	-7.6
Uttar Pradesh	3.94	0.1
Uttarakhand	5.76	3.48
West Bengal	-0.48	-13.36
INDIA	**1.66**	**-2.62**

Disaggregated data for other minorities is not available/ maintained.

In order to address the **issues of education of Muslim children, SSA provides for** inter alia, opening of new schools, additional teachers as per enrolment, free text books including urdu text books, free uniforms for girls, SC, ST and BPL children, in service teacher training, scholl grants and teacher grants etc. For education of vulnerable, drop out and never enrolled girls at upper primary level, 3609 Kasturba Gandhi Balika Vidyalayas (KGBVs) have been sanctioned out of which 544 are in Muslim concentration districts where in 10,821 Muslim girls are enrolled. Overall there are 32,490 Muslim girls enrolled in KGBVs.

For focused targeting under ***SSA 88 Muslim concentrated districts have been identified*** wherein for 2012-13 **18%** of the total allocations under SSA were approved for these 88 special focus districts.

The main provisions in these districts in the last 5 years is as follows:

Item	**Sanctions 2008-09**		**Sanctions 2009-10**		**Sanctions 2010-11**		**Sanctions 2011-12**		**Sanctions 2012-13**	
	Number	**% of total**	**Number**	**% of total**	**Number**	**% of total**	**Number**	**% of total**	**Number**	**% of total**
Opening of New PS (including EGS to PS)	2507	25%	1623	17%	10800	43%	1358	34%	103	42%
Opening of New UPS	4515	23%	1872	15%	2425	27%	366	22%	167	10%
ACR	17026	15%	25017	20%	33658	21%	49425	23%	50829	26%
Construction of New PS	4369	19%	1744	22%	5089	38%	1527	46%	272	21%
Construction of New UPS	4368	22%	806	12%	975	15%	0	0%	166	7%
Total Teachers	23125	22%	7341	14%	43585	32%	29578	20%	30574	25%
Toilets	6512	32%								
Drinking Wate	1203	29%								
KGBV	Rs 26830 lakh	22%	Rs. 20,762.32	22%	Rs. 16,430	19%	Rs. 12891.05	6%	Rs. 19901 lakh	11%
NPEGEL	Rs 6945 lakh	12%	Rs. 5,540.66	13%	Rs. 5,568	14%	Rs. 2206.65	6%	Rs. 3096 lakh	13%
Total Financial	**Rs. 414501.81 lakh (17%)**		**Rs. 485392.14 (18%)**		**Rs. 6,59,926.60** **18%**		**1068749.17 (18%)**		**Rs. 1284696 lakh (18%)**	

Other than SSA, the following two schemes are also available for Minority Education:

a. **The Scheme for Providing Quality Education in Madarsas (SPQEM)** has came into existence with effect from October, 2008. The objective of SPQEM is to provide financial assistance and encourage traditional institutions like Madarsas and Maktabs to introduce Science, Mathematics, Social Studies, Hindi and English in their curriculum so that children studying in these institutions gain academic proficiency for Classes I-XII. However, the process of modernization of traditional Maktabs is voluntary. SPQEM provides financial assistance for appointment of teachers to teach modern subjects, establishment of computers and science laboratories in Madarsas of Secondary and Higher Secondary level, as also strengthening of libraries and book banks at all levels.

State-wise physical and financial progress under SPQEM scheme is follows:

(Rs. in Lakhs)

Sl. No.	States	2009-10		2010-11		2011-12		2012-13	
		No. of Institutes	Amount	No. of Institutes	Amount	No. of Institutes	Amount	No. of Institutes	Amount
	Budget provision	**Rs. 5.00 lakh**		**Rs. 25.75 lakh**		**Rs. 50.00 lakh**		**Rs. 28.39 lakh**	
1	Gujarat	0	0.00	15	191.20	6	124.30	0	0.0
2	Haryana	0	0.00	12	201.12	10	145.36	0	0.0
3	Jammu & Kashmir	0	0.00	1	25.00	0	0.00	0	0.0
4	Karnataka	0	0.00	15	281.98	31	357.26	20	357.1
5	Kerala	0	0.00	15	337.73	126	2588.56	21	229.1
6	Madhya Pradesh	0	0.00	12	252.94	0	0.00	11	227.9
7	Maharashtra	0	0.00	19	387.61	39	754.59	21	401.5
8	Rajasthan	0	0.00	7	102.83	0	0.00	0	0.0
9	Uttarakhand	0	0.00	12	190.29	17	208.32	45	687.3
10	Sikkim	0	0.00	0	0.00	15	345.60	6	16.1
11	Mizoram	0	0.00	0	0.00	1	25.00	17	444.2
12	Assam	0	0.00	0	0.00	4	94.22	0	0.0
13	Uttar Pradesh	22	448.00	14	277.05	10	200.39	18	431.3
	Total	**22**	**448.00**	**122**	**2247.80**	**259**	**4843.60**	**159**	**2794.6**

b. The scheme for **Infrastructure Development of Private Aided/Unaided Minority Institutes (IDMI)** would facilitate education of minorities by augmenting and strengthening school infrastructure in Minority Institutions (elementary/ secondary/senior secondary schools) in order to expand facilities for formal education to children of minority communities. The scheme will inter alia encourage educational facilities for girls, children with special needs and those who are most deprived educationally amongst minorities. The scheme covers the entire country. However, preference is given to eligible minority

institutions (private aided/unaided elementary/secondary/senior secondary schools) located in districts, blocks and towns having a minority population above 20%, based on available census data.

The scheme funds infrastructure development of private aided/unaided minority elementary/secondary/senior secondary schools to the extent of 75% and subject to a maximum of Rs. 50 lakhs per school for:

(i) Strengthening of educational infrastructure and physical facilities in the existing elementary/secondary/senior secondary school including additional classrooms, science/ computer lab rooms, library rooms, toilets, drinking water facilities etc.
(ii) Hostel buildings for children in such category of schools, especially for girls.
(iii) Any other educational infrastructure not covered in (i) or (ii) above, but which in view of the State/Central Grant in Aid Committee is justified for educational advancement of the minority institution.

State-wise physical and financial progress under IDMI scheme is as follows:

S. No.	Name of State / UT	2010-11			2011-12			2012-13		
		Amount	No. of Teachers	No. of Madarsas	Amount	No. of Teachers	No. of Madarsas	Amount	No. of Teachers	No. of Madarsas
	Budget Provision	**Rs. 104.00 lakh**			**Rs. 150.00 lakh**			**Rs. 195.00 lakh**		
1	Andhra Pradesh	260.00	228	40	0.00	0	0	0.00	0	0
2	Assam	1039.00	1458	486	459.53	0	0	349.85	417	139
3	Bihar	0.00	0	0		0	0	55.54	80	80
4	Chandigarh	0.00	0	0		0	0	0.00	0	0
5	Chhattisgarh	811.67	1306	439	229.70	609	255	721.79	634	253
6	Haryana	37.50	18	6		0	0	0.00	0	0
7	J&K	347.87	722	372	538.60	0	0	0.00	0	0
8	Jharkhand	0.00	0	0		0	0	0.00	0	0
9	Karnataka	490.17	446	160	210.58	133	48	0.00	0	0
10	Kerala	1490.09	1444	724		0	0	776.88	1444	724
11	Madhya Pradesh	1343.24	1172	764	1085.53	1728	1028	2104.42	3410	1920
12	Maharashtra	36.59	33	11	147.52	99	34	100.31	137	46
13	Orissa	0.00	0	0		0	0	0.00	0	0
14	Rajasthan	547.46	460	220	71.95	62	21	392.66	460	220
15	Tamilnadu	0.00	0	0	0.00	0	0	0.00	0	0
16	Tripura	0.00	0	0	0.00	0	0	199.41	315	129
17	Uttar Pradesh	3554.55	3903	1758	11173.35	11754	4539	12151.81	21138	8357

S. No.	Name of State / UT	2010-11			2011-12			2012-13		
		Amount	No. of Teachers	No. of Madarsas	Amount	No. of Teachers	No. of Madarsas	Amount	No. of Teachers	No. of Madarsas
18	Uttarakhand	188.86	192	65	34.62	27	9	493.44	529	165
19	Uttar Prades (NIOS)	0	0	0	2.02	0	0	0.00	0	0
	Total	**10147.00**	**11382**	**5045**	**13953.40**	**14412**	**5934**	**17346.11**	**28564**	**12033**

States may therefore monitor the gender and social gaps regularly, so that the same can be speedily bridged. States where these issues remain to be addressed may be asked to respond on the same.