# Report of Regional and National Workshops



Department of School Education & Literacy
Ministry of Human Resource Development, Government of India



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#### 1. Introduction

As part of the exercise to prepare the core scope document, three regional workshops were conducted with participation from all of the States / UTs and a few of the central agencies. The first workshop was conducted in Hyderabad, second in Kolkata and the third in Chandigarh. The workshops with participation from all levels of School Education department including Secretaries, Directors, SPDs, DEOs, Headmasters, and Teachers provided an opportunity to obtain raw thoughts and perceptions of administrators & educators on successes and challenges in School Education. The workshops aided in identifying the objectives, core focus areas and potential services to be targeted under the MMP.

The objectives, core focus areas, and potential services were presented at the National Workshop in Delhi for validation prior to finalization of the Core Scope Document.

## 2. Regional Workshop - Hyderabad

The first regional workshop on 'Mission Mode Project in School Education' was held on April 19, 2012 in Hyderabad. The workshop saw the participation of 55 government officials from the states of Andhra Pradesh, Puducherry, Goa, Tamil Nadu, Karnataka, Lakshadweep (UT), Chhattisgarh and Madhya Pradesh.

The workshop began with a formal welcome by NISG and thereafter an address by Ms. Radha Chauhan IAS, Joint Secretary, Department of School Education & Literacy, Ministry of HRD, New Delhi and Mission leader for the MMP. Ms. Chauhan, in her address highlighted the importance of the National E-Governance Plan, Mission Mode Projects (MMP) under the plan and how School Education sector could benefit from e-governance as well. She emphasized the importance of having a MMP in School Education, which would focus on a few core areas for ICT interventions to ensure that the mission didn't spread too thin or too large, and that the goals could be achieved in a fixed time frame in order to, improve the service delivery in School Education sector. The J.S. has informed that the department has sought the assistance of National Institute of Smart Government, an agency under the Dept. of Information Technology, Government of India to formulate core scope document for the MMP through consultative exercise with all the States/ UTs. Through her address, the JS has set the context for the workshop.

After the opening address by the Mission leader, the National Institute of Smart Governance made a presentation to cover the NeGP, context for School Education MMP to highlight the key stakeholders, issues and the services that could be included in the School Education MMP (S.E. MMP), methodology for preparation of core scope document, purpose and expectations from the consultative regional workshops.

Thereafter a participatory exercise was conducted to capture their raw thoughts on issues in the school education system by dividing the participants of the workshop into 6-7 random groups, wherein they were asked to answer two questions relating to the key challenges that they faced as administrators managing school education, and what are the key changes they envisaged would help better learning. The participants in the group were asked to communicate with each other by writing down their raw thoughts on the charts. The participants took up the exercise enthusiastically and the inputs received will now be collated to and taken as inputs for the focus areas of the School Education MMP. The raw inputs (have been divided into themes by NISG team) received from this exercise are provided in Appendix I.

During the day, presentations were made by the participating States in two sessions i.e. a few states in the pre-lunch session and others in the post lunch session. Host state of Andhra Pradesh in their presentation brought out the issues - non-ICT & ICT initiatives already taken by them. It was highlighted that senior officials are required to spend significant time in addressing court cases filed by teachers/ employees and administrative matters leaving little time to spare on the core issues of School Education. The State was optimistic that the core scope for MMP would also include e-Governance for enhancing the internal processes of the department such as administration, approvals etc. Chhattisgarh presentation highlighted the benefits of integration of the IT system of the School Education Department with IT systems of other departments. It was informed that their Civil Supplies department's IT system auto generates the supply order for supply of rations for the mid-day meals to the schools based on the attendance of the previous month of the respective school. The state shared their initiative of creating a unique code for teachers and children. The Tamil Nadu presentation showcased issuing of Smart cards to each student with a unique ID on pilot basis in a few schools, which was aimed at tracking of each student in school till they finished their education. Along with that, Tamil Nadu shared that the communications to all schools is through emails and Teacher's attendance is being tracked centrally through SMS from the mobile phone of the head master of concerned school. Puducherry's presentation focused on the need for development of comprehensive school management software duly adopting the modular design concept to collect data on students, teachers, schools, infrastructure rather than information, which could be useful for analysis. Puducherry also expressed the need for a backend ICT support for CCE, and shared with the audience their initiative in the same. Goa shared with the participants their keen interest to adopt the S.E. MMP due to the future e-readiness of the state brought about by current initiatives such as online connectivity to all schools, distribution of laptops to teachers and students etc. It was also informed that Goa is using Learning Management Systems for their teacher's training and they are embarking upon a pilot for Smart classrooms.

Immediately after the lunch, a second participatory session was held wherein the officials present were asked to role-play stakeholders in school education – students, teachers, parents, administrators & regulators, research and development, and school managements to highlight key expectations and information needs. The 'role-play' exercise led to a lot of interaction amongst the participants who got under the skin of the stakeholders and brought out excellent insights about expectations of various stakeholders.

In the post-lunch State presentation session, Madhya Pradesh team displayed their comprehensive 'Madhya Pradesh – Education Portal' on the schooling system which

facilitated e-content, scholarship information, facilitating access to private schools under the RTE 25% reservation. The presentation made by Lakshadweep focused on the system of 100% subsidy to all school going children, the transportation difficulties posed due to their geography and the absence of private schools. Karnataka presentation highlighted the ICT work undertaken by them in making the examination process for the board exams completely online, hosting the government circulars on their website for free online access, teachers/ employees ' transfers through an online mechanism. Karnataka is embarking on Private school management system, accreditation of schools, setting up subject forums and grievance redressal system etc.

After this, Akshara Foundation, working with government schools in Bangalore showed their unique software that had connected libraries from across the city's government schools online and children studying in schools without a library could actually access them through this software. Akshara spoke about the assessments conducted by them, and the platform for crowd sourcing of feedback on different government schools and their representation on a GIS map that their project Karnataka Learning Partnership had developed. Thereafter, demonstration of two exhaustive online applications was made to the participants. Center for Good Governance, Andhra Pradesh have demonstrated e-Hostel, for management of Hostels and the A.P. Social Welfare Residential Schools Education society demonstrated the School Academic Monitoring System to monitor the performance of residential schools under Social Welfare department of Andhra Pradesh. The presentations made by NISG, participant states are provided as Annexure –IV.

During the feedback session of the workshop, all the participating states expressed their satisfaction with the way the regional workshop was conducted, especially with the consultative exercise undertaken and to know about ICT initiatives happening in school education sector in other states. This, they said, inspired them to replicate such schemes in their own states. They also suggested that the workshop be scheduled for 2 days so that more details of various initiatives can be shared. Other suggestions included, creating a common IT infrastructure for School Education ICT, and need to consider internal administrative workflows of the departments as a service requirement in the core scope for MMP in School Education. Some states/UTs such as, Goa, Lakshadweep and Chhattisgarh volunteered to be 'pilot states' for the School Education MMP. The workshop concluded with expression of 'Vote of thanks' by the NISG.

The list of participants is provided as Appendix II.

## 3. Regional Workshop - Kolkotta

The second regional workshop on 'Mission Mode Project in School Education' was held on May 24, 2012 in Kolkata. The workshop saw the participation of 50 government officials from the states of West Bengal, Odisha, Jharkhand, Sikkim, Assam, Nagaland, Mizoram, Manipur, Tripura, Meghalaya and Andaman and Nicobar Islands. Representatives from National e-Governance Division (NeGD) of Dept. of Electronics & Information Technology (DE&IT) and NCERT attended the workshop as well.

The workshop began with a formal welcome by NISG and followed by an address by the chief guest, Mr. Shri Vikram Sen IAS, Principal Secretary of School Education department of Govt of West Bengal. Mr. Sen spoke about the importance of including School Education as a MMP under NeGP and appreciated the endeavor of DoSE&L, MHRD for arriving at core scope for the MMP through a consultative process. The PS also spoke about the need for transparency and efficiency that the MMP can bring in. The Chief Guest has mentioned about the IT initiatives by the School Education department of Govt of West Bengal and highlighted the application of GIS technology as a decision support system by the administration in sanction of additional class rooms or new schools by the government. Thereafter Ms. Carolyn Deshmukh IAS, Director, Department of School Education & Literacy, Ministry of HRD, New Delhi in her address highlighted the importance of the National E-Governance Plan, Mission Mode Projects (MMP) under the plan and how School Education sector could benefit from e-governance as well. The Director informed that the department is taking assistance of National Institute for Smart Government, an agency under the Dept. of Electronics & Information Technology, Government of India to formulate core scope document for the MMP through consultative exercise with all the States/ UTs.

After the opening addresses, Mr. Bikshapathi, Vice-President of National Institute for Smart Governance made a presentation to cover the NeGP, context for School Education MMP to highlight the key stakeholders, issues and the services that could be included in the School Education MMP (S.E. MMP), methodology for preparation of core scope document, purpose and expectations from the consultative regional workshops. He also presented the emerging Core Focus Areas based on the study until now, and encouraged the attendees to participate freely and frankly so as to provide relevant and useful insights for the MMP.

During the day, presentations were made by the participating States in two sessions i.e. a few states in the pre-lunch session and others in the post lunch session (available presentations are listed in Annexure III). The session was opened by Assam. The state has started massive training program for their teachers in subjects

such as Social, Science, and English with the aid of ICT tools and has a pool of 2700 master trainers. Assam has no major ICT initiatives in education. The department is planning a large-scale survey of the ICT needs of their students and teachers in education. They stressed on Monitoring and Evaluation as a key focus area for themselves and shared that a Teacher Monitoring System using IVRS was going to be developed soon.

Manipur, knowing well the importance of ICT at schools have a plan to set up computer labs at 325 schools. They had implemented the centrally designed IVRS for monitoring Mid-day meals implementation and intended to implement a biometric system this year to capture the attendance of Teachers and Students. The state also shared how inclement and hilly terrain makes it difficult for them to install any ICT infrastructure across the state.

Meghalaya shared their initiative of creating a web portal by the state board, wherein processes such as submission of applications, results, or mark-sheets for students are now made available online and also showed their keen interest in working more on ICT infrastructure issues. It was mentioned that ICT at schools has improved learning skills, and memory of students. The key challenges encountered by the state are lack of funds, lack of IT-skills in its manpower, basic infrastructural issues like electricity in many areas and lack of awareness amongst users about some ICT initiatives already undertaken by the state.

Along with the common issues related to infrastructure, internet connectivity and implementation difficulties that it shares with its neighbors, Nagaland stressed duplication of efforts in data collection by DISE, SEMIS and data quality issues. The state mentioned that multiple datasets for the same data related to teachers, students and schools were available and it was difficult to make any decisions based on such poor quality of data. While the School board makes available the exam results and marks online, Information Technology is not used much in the administration of department.

The state of Tripura shared that the department is implementing many of the IT applications such as DISE, and SEMIS, CAL started by different agencies such as SSA, RMSA etc. Along with that, Tripura had worked towards creating a central education website for the state. The state expressed many challenges including, lack of child enrolment data, lack of data for monitoring quality of learning, monitoring of schemes, administration of the state department etc. The State is embarking upon implementing a comprehensive MDM application to monitor the scheme, attendance, requirement of food grains based on attendance and approval of indents. Further, EDUSAT facilities are being used for imparting teaching to students.

The IT department of the State has initiated e-Forms application for enabling students to apply online for scholarships, stipends.

Andaman and Nicobar islands shared their initiative for improving ICT's role in education by setting up Community Information Centers – Vidya Vahini (CIC-VV), which are citizen service centers through which the UT conducts training for students and teachers. VSAT connectivity is currently used due to their terrain uniqueness and they are expecting the connectivity to improve significantly once the undersea Internet cable link is made operational. The UT also shared that transparency, efficiency in administration are expected outcomes from the School Education MMP.

In the post-lunch State presentation session, Jharkhand explained about the various initiatives that they have taken across teacher database, Para-teacher attendance, additional classroom approvals, monitoring of schemes (including civil works), webbased MIS, School mapping, and the child tracking system to monitor absenteeism. The state expressed the need to integrate the current IT initiatives such as CPSMS with MDMS and also suggested that the center could develop IT modules for some common services such as grievance redressal, biometric attendance system etc. for the use by states. The team has also shared that a view is emerging in the rural areas that quality in education to be given preference over access.

Odisha presented its e-Governance plan to use ICT initiatives extensively in School education in the coming future, which are centered around the child and teaching. The state shared its intentions for digitizing exams, making certificate requests online, putting in place a strong grievance redressal system and improving IT infrastructure in schools. The team has shared that Tahsildar goes to Schools on a prescheduled date to deliver integrated certificates (caste, nativity, income) to students.

The host state, West Bengal was the last state to present its IT initiatives. West Bengal has initiated an ambitious, but pertinent, project titled 'Project Dibankar' which aims to shift the focus of the School Education department from 'School' to 'Child' and focus on the overall development of the children including focus on CCE. Amongst existing IT applications, the team showcased Paschimbanga School GIS', which maps all existing schools on a GIS map along with GIS layers of habitation etc. This enables a Decision Support System, which is supported by state policy, wherein only locations that are proved acceptable by the GIS system are considered for funding for new school allocations or for construction of additional classrooms.

An open question and answer session went on for some time during which NCERT shared some of its experiences as well. Most questions were centered on how

content can be structured and converted to digital form so as to make it more impactful and easy-to-use for children. Answering another question, NCERT shared with the participants about its upcoming initiative of putting a large question bank online so that children can access a random quiz generator and discover which are the topics they need to concentrate on more. NCERT has expressed the need for including office automation (HRMS, FMS), database of resources, delivery of content through e-Books, audio, video, Multimedia mode, Training of teachers, conducting surveys, automation & interlinking of libraries, monitoring of all centrally sponsored schemes in the proposed School Education MMP.

After the presentations by all the states, NISG initiated a participatory exercise wherein all members of the audience were divided into smaller groups and asked to discuss and pen down their thoughts on two questions. The first question was, 'What challenges and issues do you see in your day-to-day experience?' and the second was, 'What would you measure to see if your solutions are working on the ground level?' Both these questions were to be answered across the five dimensions of: Student learning, Teacher support, School governance, Regulations and Community engagement. The participants were encouraged to provide their raw thoughts on the questions based on their day-to-day work experiences. The participants engaged in a varied and lively discussion amongst their groups and came up with a many relevant and insightful points for both questions. Initially, many participants were unable to grasp the import of the second question regarding measures, but upon further discussion amongst themselves and with NISG, most participants thought of practical measures for measuring the success of the School education department and its initiatives. During the discussion that followed the participatory session, a key point regarding need-based training for teachers as opposed to periodic and compulsory training emerged. Participants were of the unanimous opinion that a system of measuring the training needs of teachers so that targeted training can be provided by experts, is an important reform. The raw thoughts of the participants are documented in Annexure I.

After the participatory session, the NISG team took all the participants through some existing implementations across the country. The Education portal of Madhya Pradesh and the various e-Governance initiatives of Kerala were shown to the states as examples of existing implementations.

During the feedback session of the workshop, all the participating states expressed their satisfaction with the way the regional workshop was conducted. Some participants expressed that they hadn't had the right expectations from the workshop leading into it. Some participants also expressed that their states are far behind in ICT maturity, and have more basic infrastructural issues that are beyond just the education department. Other participants felt the workshop was very useful

for them to understand the variety of possibilities of using ICT in education, even though they might not be ready at the ground level yet. All the participants expressed their thanks to DoSE&L of MHRD and NISG for conducting the workshop, which brings these topics up for discussion. The workshop concluded with expression of 'Vote of thanks' by NISG to all the participant states and particularly to the host, West Bengal Team for facilitating the event logistics and support provided for the Workshop.

The list of participants is provided as Annexure II.

## 4. Regional Workshop - Chandigarh

The third regional workshop on 'Mission Mode Project in School Education' was held on June 11, 2012 in Chandigarh. The workshop saw the participation of 94 education department officials from the states of Punjab, Haryana, Delhi, Himachal Pradesh, Rajasthan, Chandigarh, Uttar Pradesh, Bihar, Uttarakhand, Daman & Diu and Dadra & Nagar Haveli. Representatives from, Department of School Education and Literacy (DoSE&L) of MHRD, National e-Governance Division (NeGD) of Dept. of Electronics & Information Technology (DeitY), National Institute for Open Schooling (NIOS), Kendriya Vidyalaya Sangathan and NCERT attended the workshop as well. The list of participants is provided as Annexure I.

The workshop began with a formal welcome by NISG and followed by an address by Ms. Radha Chauhan, Joint Secretary, DoSE&L. The Jt. Secy stressed upon the departments intent of using the inputs obtained from all the participants in creating the Core scope document for School Education MMP and asked all participants to think in terms of service gaps, rather than infrastructure gaps. The JS informed the audience that the department is taking assistance of National Institute for Smart Government, an agency under the Dept. of Electronics & Information Technology, Government of India to formulate the core scope document for the MMP through consultative exercise with all the States/ UTs.

The Chief Guest, Shri S. S. Channy, IAS, Principal Secretary of School Education department of Govt of Punjab spoke about the importance of arriving at core scope for the MMP through a consultative process. He also stressed upon the need to enable better delivery of services through good ICT solutions such as School Management Systems, monitoring & tracking systems etc. The Chief Guest also sounded out the need to ensure that the solutions emerging from the MMP addresses the area-specific or state-specific issues.

After the opening addresses, Mr. Bikshapathi, Vice-President of National Institute for Smart Governance made a presentation to cover the NeGP, context for School Education MMP to highlight the key stakeholders, issues and the services that could be included in the School Education MMP (S.E. MMP), methodology for preparation of core scope document, purpose and expectations from the consultative regional workshops. He also presented the emerging Core Focus Areas based on the study until now, and encouraged the attendees to participate freely and frankly so as to provide relevant and useful insights for the MMP.

Thereafter, an introduction session was initiated in which all the participants introduced themselves briefly and also expressed any immediate thoughts on the MMP or the ongoing workshop. Besides introducing themselves, many participants

also gave a quick brief of the most common thoughts about ICT interventions and concerns:

- The difficulty of rolling out ICT interventions at the last mile, especially in the rural areas
- The need for a structure in deploying integrated technology solutions instead of stand alone systems
- Giving more attention to the academics and pedagogical aspects of implementation rather than the administration
- Limit the scope to identified focus areas and implement in a phased approach
- Include focus on open learning, out of school children through ICT tools
- Bring in Stakeholder perspective by ensuring that the role of various educational administrators to be given appropriate consideration in designing the systems
- Replication, with required modifications, of existing successful ICT initiatives of States instead of reinventing wheel
- Include services for RTE compliance
- Quality of learning is to be the key objective of initiatives
- Plan for training of people in IT and retention of such trained resources on the IT projects for a fixed term

Upon the completion of the introductory session, the NISG team initiated the participative exercise. Participants were informed about the importance attached to this exercise and how the outputs of this exercise will be used as inputs for creating the Core scope document for the School Education MMP. All members of the audience were divided into smaller groups and asked to discuss and pen down their thoughts on two questions. The first question was, 'What challenges and issues do you see in your day-to-day experience?' and the second was, 'What would you measure to see if your solutions are working on the ground level?' The participants were asked to answer these two questions across the four dimensions of: Student learning, Teacher support, School management, and Governance/Regulations. The participants were encouraged to provide their raw thoughts on the questions based on their day-to-day work experiences. The participants engaged in a varied and lively discussion amongst their groups and came up with a many relevant and insightful points for both questions. Initially, many participants were unable to grasp the import of the second question regarding measures, but upon further discussion amongst them and with NISG facilitators, most participants thought of some indicators for measuring the success of the School education department and its initiatives.

The participants gave a very enthusiastic response and engaged in lively and deep discussion amongst them and with the NISG team as well. All the groups were given opportunity to share a few of such thoughts in the open forum through a representative of the group. The raw thoughts of the participants are documented in Annexure II.

Thereafter, there were demos of e-Comprehensive Teaching Learning Tool by Kendriya Vidyalaya Sangathan, Madhya Pradesh Education portal by the State's representative, and a presentation of ICT initiatives in school education by state of Delhi. The KVS demo showcased their two digital initiatives. The first was the platform for creating digital content by teachers to explain certain subject topics and the second was a system, which enabled students and teachers to test themselves on a concept to increase their preparedness. The Madhya Pradesh Education portal demonstration highlighted the portal functionalities and features, such as teacher services, student entitlement system etc. In Madhya Pradesh data collection, entry is done by Block MIS coordinator and the services of CSCs are used too. The Delhi presentation introduced their i-Schooling initiative. The focus of the initiative is to make the administration of the schools more accountable and transparent and reduce the burden of routine, repetitive and monotonous works to a fraction of the original and spare more time of the officials in productive and academic related works. Delhi state has enabled the following features:

- Online Admissions, mark sheets and School leaving Certificates for students
- Teachers have access to online circulars, can fill up online ACRs, Apply for online transfer and can take computer generated pay slips
- School Principals send attendance online, get online permission for various jobs, have all the schools records in electronic mode that are accessible in no time.
- Officers can get any type of data, a report about any teacher or students online

The participants appreciated the demos and presentation as it enabled exchange of knowledge about IT applications in school education domain across states.

After the presentations, an open discussion session was initiated in which each state was given some time to confer and come up with the key ICT-enabled services that they foresee as being the most impactful, if rolled out through the MMP. Although, mixed with some infrastructure based solutions and general challenges, the states provided the following pertinent responses:

SI No.	State	Inputs	
1.	Punjab	<ul> <li>Provide internet connectivity at the village level, and mobile applications for people to use with ease</li> </ul>	

	· ·	
		<ul> <li>Provide student centric services</li> <li>Provide services for Children with Special Needs</li> <li>Given that the quality of Teachers needs to improve as teachers are uninterested, or non-motivated, the selection system of teachers needs to be reviewed</li> <li>Stress on quality of education for students</li> <li>Biometric attendance of teachers,</li> <li>Teachers transfer system</li> <li>An integrated I.T system to contain Student information module, teacher information module, School infrastructure information module, administration of schools including library and laboratory</li> </ul>
2.	Uttarakhand	<ul> <li>As 50 % of the state govt. employees are from the education department, managing the teachers' time is an issue</li> <li>Quality of teachers is a key issue which needs to be addressed</li> <li>State is willing to volunteer as a Pilot state</li> </ul>
3.	Dadra & Nagar Haveli an Daman & Diu	<ul> <li>Teacher-related support systems, such as Teacher recruitment, Teacher training etc.</li> <li>Monitoring system for student activities and performance</li> <li>Teacher and Student attendance tracking system</li> <li>Seamless integration of child tracking with UID</li> <li>Replication of education portals such as Madhya Pradesh, Delhi etc.</li> </ul>
4.	Himachal Pradesh	<ul> <li>Unified portal for all student services such as enrolment and admissions</li> <li>Child tracking system</li> <li>Scholarship Management system</li> <li>Centralized e-content with usage methods</li> <li>Teacher services:</li> <li>Personnel management system along with database containing all details of teachers</li> <li>Training details of all teachers,</li> <li>Monitoring of the training,</li> <li>Evaluation and tracking of training in the classroom scenario</li> <li>Vacancy position</li> <li>Disciplinary cases data</li> <li>Inspections of schools and reports</li> <li>Project management system</li> </ul>
5.	Rajasthan	<ul> <li>Support system for teacher recruitment in form of estimating teacher requirement (as per Teacher student ratio - TSR)</li> <li>Teachers database to provide info on teachers at school level, subject level and vacancy position etc.</li> <li>Child Tracking system</li> <li>Student entitlement tracking system</li> </ul>

6.	Bihar	<ul> <li>System which provides certificates and scholarship online</li> <li>E-payment System to disburse all payments to teachers or vendors by Panchayati Raj Institutions and School Management Committees.</li> <li>Online school database containing school profile, teacher database and student database</li> <li>Tracking of teacher attendance</li> </ul>
7.	Uttar Pradesh	<ul> <li>Teacher Salaries and pensions to be computerized</li> <li>Teachers postings, rationalization as per requirements of TSR</li> <li>Aided schools database of teachers and students</li> <li>Repository of curt cases related to teachers in aided schools</li> <li>Teacher attendance</li> <li>Children entitlements to be managed online</li> <li>Child tracking system</li> </ul>
8.	Chandigarh	<ul> <li>Online Student profile &amp; Teacher profile</li> <li>Paperless office work flow system</li> </ul>
9.	<ul> <li>Student Management system with child data being linked UID</li> <li>Teacher Management System with teacher data being entral as per UID to track life cycle of a teacher</li> <li>Haryana</li> <li>School Management system to provide all services related school, Tracking of Teachers' and Students' attendance activities</li> <li>Paperless office work flow system</li> </ul>	
10.	NIOS	<ul> <li>Open schooling and informal education has to be addressed in this project</li> <li>Online submission of forms for admissions, support services for students such as name corrections etc.</li> <li>Online submission of examination forms, download of Admit cards</li> <li>Switching of courses from NIOS to SIOS or to a state school should be available</li> <li>Sharing of resources to be available on the net</li> </ul>
11.	NCERT	<ul> <li>Teachers training to be imparted online</li> <li>Collaborative portals for e-content</li> </ul>

During the feedback session of the workshop, all the participating states expressed their satisfaction with the way the regional workshop was conducted. The participants were particularly appreciative of the fact that such consultative exercises are being carried out by the DoSE&L, MHRD to arrive at the core scope for the School Education MMP. Some participants also mentioned that the workshop

helped different states learn from each other and expressed that the workshop might have been designed for 2 days so that many of the topics could've been dealt in detail. The DoSE&L in the concluding remarks expressed that the workshop has proved to be very useful, as a lot of inputs on the service perspective have been received from the participating states and finally appreciated the hospitality shown by the host state, Punjab in organizing the event successfully.

The list of participants is provided as Annexure II.

## 5. National Workshop – New Delhi

DoSE&L has conducted a National Workshop on School Education MMP at New Delhi on 27<sup>th</sup> July 2012 with all the States, Central agencies under the department to deliberate on the Service prioritisation and implementation models for the proposed

MMP and arrive at the phasing of the MMP. This report contains the proceedings of this workshop.

#### 1. Inaugural Address

The National workshop on 'Mission Mode Project in School Education' registered the participation of 44 education department officials from the states and UTs of Punjab, Haryana, Delhi, Chandigarh, Chhattisgarh, Gujarat, Uttar Pradesh, Bihar,

Uttarakhand, Daman & Diu, Andaman and Nicobar Islands, Tamil Nadu, Kerala, Arunachal Pradesh, Manipur, Mizoram, Madhya Pradesh, Jharkhand, Jammu and Kashmir, Karnataka, Meghalaya, Nagaland, Odisha, Tripura, Andhra Pradesh and Dadra & Nagar Haveli. Besides, representatives from, National Institute for Open Schooling (NIOS), Kendriya Vidyalaya Sangathan, Central Board for Secondary Education (CBSE), Ministry of Women and Child Development





(MWCD),, Ministry of DoNER, Tribal Affairs Ministry, NUEPA, and NCERT attended the workshop as well. The list of participants is provided in Annexure II.

The workshop was graced by the Secretaries of Department of School Education and Literacy (DoSE&L), Department of Higher

Education (DoHE) of MHRD, Department of Electronics and Information Technology (DeitY) and the President &CEO of National e-Governance Division (NeGD) under DeitY, The workshop began with a formal welcome address by Ms. Radha Chauhan, Joint Secretary, DoSE&L. The JS informed the participants that the department is formulating the core scope document for the MMP through consultative exercise with all the States/ UTs with assistance from National Institute for Smart Government (NISG), an agency under the Dept. of Electronics & Information Technology, Government of India. The department had already conducted three



regional workshops at Hyderabad, Kolkata and Chandigarh with participation from the States and the Consultants have visited the States of Kerala, Gujarat and Bihar for stake holder consultations. The core focus areas, prioritisation of services for the core scope document being presented in the National

Workshop are a result of this consultative process. The JS also encouraged the participants for free and frank interactions so as to provide relevant and useful insights for the prioritisation of services under the MMP. The Jt. Sec emphasised that the department would use the inputs obtained from the participants of the National workshop in formulating the Core scope document for School Education MMP.

Mr Ajay Sawhney, President &CEO of NeGD under DeitY in his address has informed that major sectors like Education, Health and PDS were left out in the first version of

NeGP as the government thought that these projects would be too huge to be handled during the initial stages of the NeGP. Subsequently, with the experience gained, the Apex committee in August 2011 have decided to add these three sectors in the NeGP. School Education with its huge size has different challenges and the MMP is expected to address and impact the quality of services in the School Education eco system in totality rather than



in an isolated manner. Specially designed capacity building programs across the hierarchy of the departments in the States will be a critical and key success factor for the MMP and advised to add Capacity Building as a core focus area under MMP.

Mr Ashok Thakur, Secretary, Higher Education Department in his address has revealed that India has edged out USA in enrolment of students for Higher Education. Appropriately, the department is implementing NMEICT to impact the quality of teaching and learning. As regards to the School Education, he has stated that challenges are different; The primary challenge being recruitment of right kind of teachers, transparency in postings & transfers, ensuring their attendance and teaching the students. It was suggested that e-Governance initiatives shall address the above challenges in order to improve the performance of the school education department and has suggested that sanctions and release of funds under the centrally sponsored schemes of the School Education department shall be linked to implementation of e-Governance through proposed MMP.

Ms. Anshu Vaish, Secretary, School Education & Literacy, Ministry of HRD, in her address has emphasised that the department realises that the States have major role to play in the School Education sector and hence the focus is on consultative process in formulating the core scope document for the MMP. It is important to cover the



requirements of entire ecosystem of the School Education in the core scope document for MMP. While stating that there is no substitution for class room mode of learning in School education, it may be desirable to leverage ICT policy in MMP implementation. Based on the inputs from the regional workshops, state visits for stake

holder consultation over the past 4 months, the department has identified three (3) focus areas for delivering services under the MMP: : Learning Support services, Governance services (School level) and Governance services (School education department level). The Secretary reiterated the importance of the consultative process through the National Workshop to arrive at prioritisation, phasing of services to be considered from the above three identified core focus areas for formulating the core scope document for the MMP.

Mr. J. Satyanarayana, Secretary, Department of Electronics and Information Technology (DeitY), has predicted that implementation of School Education MMP could be very challenging because of three main reasons such as large scope, responsibility matrix from the perspective of center- state relations and large number of last mile sites to be reached for the implementation. He has cautioned that size of the MMP should neither be too big nor too small and hence the sizing and phasing of implementation of MMP should be well thought out during the

formulation of the Core scope document. He suggested that e-Governance in School Education sector is not a green field and advised to leverage the work done by some States which have already taken lead in implementing initiatives in public sector schools and the initiatives by private school chains are also needed to be considered in formulating this MMP. He added, the potential roadblocks for the MMP implementation should be well thought during the core scope



formulation stage and proper mechanisms should be put in place to overcome these roadblocks. These concerns can be addressed by ensuring the pillars of e-Governance: People, Process, Technology & Resources are given appropriate focus in the formulation of core scope. Keeping in view the customization and language requirements by the states, it was mentioned that the 3 layer solution architecture

approach: Core, Configurable and Customizable suits well for this MMP too. and recommended that use of cloud computing to facilitate easy replication by all states. Considering the large number of last mile sites for implementation, Small and Medium Enterprises could be ideal candidates for providing support, operation and maintenance services of IT infrastructure at school level under the MMP.

#### 2. Presentation on Core Scope Document

After the opening address, Mr. Sanjeev Mittal, CEO of NISG initiated the presentation covering the importance of the MMP and the expected outcomes from this national workshop. Thereafter, Mr. Bikshapathi, Vice-President of National Institute for Smart Governance continued with the power point presentation on the Core Scope Document for the School Education MMP.

The presentation covered the methodology of the on-going study, objectives, stakeholder consultations, a preview of the regional workshops, key requirements that emerged from the stake holders during the course of the study, identification of core focus areas, the service categories and its respective indicative services under each core focus area based on the stakeholders' inputs, expected outcomes and Service prioritization framework, alternative implementation models and capacity building perspective for the MMP. A copy of the presentation made during the National workshop is placed as Annexure- III of this report. It has been envisaged that each Student, Teacher and School shall be given a unique ID as a part of the MMP and the same can be unified with the Adhaar number subsequently.



#### 3. Discussions

Ms. Radha Chauhan, Joint Secretary, SE&L has driven the discussion session with the participating states on two main issues i.e., (i)

Services prioritisation and (ii)

Implementation model for the School Education MMP. The participants were requested to express their views in a free and frank manner as it is very critical for formulating the core scope document for the School Education MMP.



(i) Services prioritisation: The consultative exercise with the States has resulted in identifying the indicative services that are required for the School Education sector. The objective of the discussions during the

national workshop is to prioritise the services from the indicative list to be delivered through the MMP. The Service Prioritization framework prioritises the indicative services across the dimensions of potential impact on achievement of objectives of the MMP (Focus Area, Utility and Implementation Timelines) versus ease of implementation (Number of Stakeholders, Dependency on other initiatives, Infrastructure Requirements and Change Management) of the service in its complete form.

(ii) Implementation Model: -The second issue proposed for discussion is suitability of implementation models for implementation of School Education MMP. The objective of the discussions during the national workshop is to arrive at the best fit implementation model that gives flexibility to the States and as well facilitate quick roll out/ replication of MMP by all States. The following three options were discussed with the participants

Option 1: States / UTs responsible for procurement / development of the Application(s) based on the guidelines

Option 2: Center takes the responsibility of procurement / development of the Application(s) around Common Core Services. States take up implementation

Option 3: Center creates hosted applications on a Cloud model around Common Core Services with the following stages of implementation:

- Evaluate the existing successful ICT initiatives in the various States / UTs
- Empanelment of products from market
- Provide a platform to deliver the software as a service

The States actively participated in the discussions and their inputs are captured in this section. The detailed inputs provided by the participants are listed in the table below:

SI N o.	State / Participa ting agency	Inputs	
12.	Andhra Pradesh	Dr. N. Upender Reddy ,Professor SCERT, Andhra Pradesh, while agreeing that the proposed School Management System for the Schools is a welcome step, he has emphasised that priority be given to the student learning and teaching under the MMP He suggested that an interactive portal for content and development	Chhat Andhra Pradesh

SI N o.	State / Participa ting agency	Inputs	
		of ICT enabled learning material falls under this. Further, basic infrastructure such as power, Internet connectivity etc. needs to be provided to the Schools to make use of available ICT enabled teaching and learning methods by the students and teachers. The replicability and cost of ICT solutions needs to be assessed carefully.	
13.	Madhya Pradesh	Shri Sanjay Singh Principal Secretary School Education M.P, underlined that the critical elements (or pain points) for the department are:  — Attendance of teachers — Assessment of learning — Teachers Service matters  According to Shri Singh, the School governance is a top priority service. However, it should be kept in view that most of the Schools lack electricity supply and resources for hardware maintenance. Hence it was suggested that the Centre prescribe hardware and overall architecture that is not over dependent on Personal Computers. According to him the availability of a digital content platform is another priority area and has suggested to take cue from 'SAKSHAAT', the ICT initiative of the Higher education department	CC2 Noting Production
14.	NUEPA	According to Smt. Mona Khare of NUEPA, the biggest challenge for Schools would be availability of Internet access and basic IT infrastructure such as P.Cs. Emphasis be given to training of the support personnel to maintain the ICT infrastructure at Schools. It was suggested to identify backward districts in the States for first phase rollout.	INTERA .

SI N o.	State / Participa ting agency	Inputs
15.	Karnatak a	Shri. G. Kumar Naik, Secretary, Govt of Karnataka, emphasized that the most important service to be addressed on top priority is 'Teacher Life Cycle' that covers teacher recruitment, transfers& postings, training, service matters and salary payments of the teacher. He went on to add that a satisfied teacher does wonders for the school education sector. School Management System that covers the services for students at the school too is to be given top priority.
16.	Gujarat	Smt. Sangeta Singh, Principal Secretary from Gujarat explained that their State has already implemented ICT initiatives in Education for governance and as well in providing content. It was suggested that instead of re-inventing the wheel, the MMP may focus on identifying states which have worked intensively in the identified focus areas and create teams/ groups of these states so as to bring together the expertise for application development and implementation of each focus area  Further, it was suggested that prioritization should be based on the expected outcomes of the MMP with emphasis on what the respective state wants to achieve. In the case of Gujarat, the current priority is now on the quality of school education. Govt of Gujarat has taken the initiative of grading of schools. Teacher evaluation, on a campaign mode and also taken steps on assessment modules, remedial measures etc.

SI N o.	State / Participa ting agency	Inputs	
17.	Punjab	Shri. Brigadier JS Jagga , suggested that prioritization of the evaluation of teacher performance, managing attendance and to make a fool-proof implementation model, which eventually motivate teachers too	AND
18.	Manipur	Shri.Ranjan Yunnam, Additional Director, Education underlined the importance of ensuring attendance of Teachers. He suggested having a biometric attendance system to mark the attendance of teachers. In the light of power crisis faced by states/ schools, it was suggested to have alternative application models accessible on mobile (which can run for 10-12 hours on battery), SMS mode, a call centre facility to upload and collect data etc. He has informed that Manipur teachers have a unique ID based on which they receive their salary; this is proven to be a helpful service for teachers.	Manipur Go:
19.	Andama n and Nicobar islands	Shri.B.S.Bhalla, Commissioner &Secy, Teacher Training and Teacher Evaluation A&N Islands highlighted that that the availability of support personnel is a critical service. School Management system - Back-Office services may be easier to implement, if core application is developed at the centre.	Puntat Madhya Pradesh
20.	Odisha	Shri Rajesh Verma, Principal Secretary, School and Mass Education, Orissa, accentuated the point that ICT support for the enrollment process of children to monitor high dropout rates is a critical service to be provided under MMP. He also said that the basic infrastructure to facilitate ICT implementation (such as power and connectivity) is lacking at the last mile. He corroborated the point raised by other State Secretaries that Teacher attendance is a problem	Orissa Orissa

SI N o.	State / Participa ting agency	Inputs	
		especially in rural areas. Shri. Verma also highlighted that HRMS for enabling the entire teacher lifecycle management issues is a critical service and be given due priority under MMP to avoid teacher spending his time on non-productive activities and service matters. Since some rural schools have only one teacher taking all classes, he suggested a service inclusion to allow 'Multigrade Teaching' using ICT. He suggested for having more community involvement in school management. He has also suggested including management of court cases as a key service for ICT intervention under MMP.	
21.	NCERT	Shri Alok verma, Secretary NCERT has observed that the indicative list of services proposed under the MMP covers all aspects of School education and are necessary. He observed that School Management Systems are readily available as ICT products in the market and could be implemented in a short span of six months. On the Learning Support Services, Shri Verma has commented that though very effective learning tools are available in the market, selection and optimization of the choice vis-à-vis cost, timeframe & capacity are the key concerns. Further availability of power and Internet connectivity for the schools should be flagged as high risk factors for successful implementation of MMP.	
22.	Uttar Pradesh	Shri. Sunil Kumar Principal Secretary, UP has informed that their State already has large database of students, teachers and scholarships. A concern was raised about creation of new database for the new applications and hence sought for seamless migration of the existing databases to new systems being developed	Day Charlest - Manager - M

SI N o.	State / Participa ting agency	Inputs	
		under the MMP. He sought guidance from the centre to have standardized hardware which is cost effective and durable. It would be desirable to standardise hardware specifications rather than vendors driving the specifications.	
23.	KVS	Smt. C.Guru Murthy, Joint Commissioner, KVS suggested to conduct a common teacher recruitment test for Govt and as well private teachers to ensure common standards and service conditions. In her view the service conditions of teachers in some of the private schools is pathetic. She highlighted that the students who were enrolled in government schools are not attending the school and instead going to private schools. It was recommended for forging relationship with agencies which deal with out-of-school children to mitigate the problems faced. Smt. Murthy advised that syllabus function in school governance service needs to be renamed as Curriculum activities and Co-curricular activities functionality may also be covered in the MMP. Further she advocated that the guidelines for procurement procedures to be given under MMP	RVS

#### 4. Concluding Remarks

Taking a positive view of the feedback received from the States on service prioritization and implementation models, Mr. J Satyanarayana, Secretary, DeitY, advocated multi-dimensional approach to make the School Education MMP a success:

#### a. Infrastructural issues need to be accounted for

Power and Internet connectivity have emerged as common constraints at the last mile and hence addressing these issues would be critical for the success

of such large-scale MMP. There might be several possible solutions or solution combinations for this, some of which are:

- Geographies with mature infrastructure to be included in the first phase and should be rolled out to other locations with a definite infrastructure improvement plan in alignment with core IT infrastructure MMPs.
- ii. Selected services such as attendance, governance functions to be delivered over mobile platforms under MMP
- Capitalize on the upcoming handheld device such as Aakash for delivery of services and content
- iv. Leverage National Optical Fibre Link project, which is planning to ensure access to every Gram Panchayat
- v. Use CSC's infrastructure and resources for data entry and feedback with a nominal cost assigned
- vi. Associate with Ministry of Non-Conventional Energy for powering School computers etc.

#### b. Leverage existing applications and content

Many states and central agencies have developed IT applications in one or many functional areas of school education, learning content for their use over the past few years. It is important to review these and adopt them for replication across the country. In doing so, however, the following things must be kept in view

- i. The platform designed at the central level for integrating these applications is the key to the success of scaling up. This platform should not only be able to standardize the application but also provide services to all other states through the cloud. This philosophy is being pursued by DeitY under the slogan '1+1=35'; viz. one existing working application and 1 robust cloud platform together can serve all the 35 states and union territories of India.
- ii. Ensure a time bound-critical review of current successful IT applications by a State with a stringent pass/fail criteria for adopting the same as a national solution for scaling up , if a solution of a state with inherent weaknesses could pose problem to all states

#### c. Give flexibility to states

The centre should provide frame work and guidelines to the states for implementing and monitoring the services rolled out under the MMP, but the states be given the flexibility to adopt the services that best suits their requirements.

#### d. Plan the phasing well

The phasing of the implementation is critical to the success of the MMP. Therefore the phasing plan may be module based, geographical based and should be in sync with the infrastructure created under the Sarva Siksha Abhiyan

#### e. Standardization

The basic principles of NeGP on data standards needs to be ensured in the

design of MMP to insure interoperability across the States and as well between the e-Governance applications implemented across the sectors/departments. The data standards would enable the multiple applications of different agencies to exchange the information with the precise meaning of elements of information being understood on both the sides in the same manner.



In her concluding remarks Mrs Anshu Vaish, the Secretary, DoSE&L, has presented the future road map for the MMP; The core scope document would be finalised by end of August 2012 and the Detailed Project Report is expected to be ready by end of December 2012. It was observed that the physical infrastructure of schools is picking up at the last mile with funding made available to States from the Center and as well under the States own initiatives. She has concluded her address with a positive note that the feedback from States in today's National Workshop is encouraging and it is now emerging that the MMP would eventually facilitate improvement in the quality of school education. The Secretary DOSE&L has thanked the States and assured that the consultative process would be continuous till the MMP goes live in States.

#### 5. Vote of Thanks

To end the session, Ms. Carolyn Deshmukh, Director, DoSE&L thanked the Secretary S.E&L, Secretary H.E, Secretary Diety, CEO & President NeGD, , Joint Secretary SE&L,CEO NISG, senior officers from MHRD, all the participants from the States, Central agencies for their attendance and valuable inputs and expressed that the workshop has proved to be very useful as the participating States have provided several inputs and a broad concurrence has emerged on services prioritisation and implementation models , which would facilitate in finalising the core scope document for School Education MMP.

#### 6. Summary of discussions

<u>Prioritization of Services</u>: The representatives across all States and central agencies have broadly agreed with the indicative list of services proposed under the MMP and have suggested assigning top priority to the following Services under the MMP, in first phase:

- ➤ Learning support services to improve **quality of education** Interactive portals, availability of quality content, lesson plan preparation, teacher evaluation, Student assessment tools
- ➤ Teacher lifecycle management End-to-end coverage of all non-teaching activities of the teacher such as pre- recruitment tests, recruitment tests, transfer and postings, trainings, pay roll, all service matters.
- ➤ School Management All academic and back end operations of a School to deliver services to Students to capture the details about the enrolment/admissions/ transfers, performance and Attendance of the Students, tracking the progress of Lesson Plans, scheme management, and profile and performance of each School. .
- Attendance, especially of teachers, through multiple delivery mechanisms such as Mobile, PC based, call center based etc.

All balance services are given next priority and are proposed to be implemented under second phase. The States have also concurred that capacity building program be given high priority to facilitate change management and to ensure successful implementation of the MMP.

<u>Implementation Model</u>: The participants States by and large were in favour of Center developing a Core, Configurable and Customizable application modules around common services under MMP. The center to either assit the States to set up their own IT infrastructure or sets up a common central IT infrastructure for the states to implement the MMP. The States shall be given flexibility to customise the core module to meet their specific requirements. It was also agreed that instead of re-inventing the wheel, the existing successful State-level initiatives of ICT in School Education to be studied and redeveloped based on approved data standards with robust architecture.

- ➤ The applications developed under MMP shall allow seamless transfer of data from their legacy applications.
- ➤ Interoperability among the MMPs to exchange data for delivery of appropriate services.
- Phased implementation approach is desired in view of large last mile sites. The first Phase of the MMP to target the sites with mature infrastructure, followed by other locations with a definite IT infrastructure improvement plan in alignment with physical infrastructure plan.

- ➤ The MMP services to be provided over Mobile phone/ Hand-held devices and use the existing CSC Infrastructure for increasing the reach of MMP. The option of utilising the up-coming National Optical Fibre Network (NOFN), non-conventional energy modes to be explored to address the connectivity and electricity concerns.
- > Small and medium enterprises to be encouraged to be part of the ecosystem to provide operation and maintenance services to the client end IT infrastructures at schools, which are dispersed across the nuke and corner of the geography.

# 6. Appendix I: Raw Inputs from the Participatory Sessions

# **6.1.** Inputs received in the Hyderabad Workshop

Q: What are your key frustrations and What are the top things you would change overnight?			
	Teacher motivation		
	Teacher learning process		
	Teacher accountability		
	Capacity Development of Teachers		
	Stress on teachers' education		
	Teachers absenteeism		
	Teacher unions		
	No way of making the service particulars of teachers which make the administration frustrating		
	Teachers are becoming more political than education related		
	Lack of accountability among teachers		
Teacher support	Updating teacher on the recent developments in their fields		
	Impose ban on teachers organizations		
	Primary education should have a proper monitoring system teachers at primary level should be competent		
	Accountability/ownership among teachers		
	Teachers' Attitude		
	Teachers to be recruited on pure merit basis by competitive exams		
	Non-attendance of teachers/ non-availability		
	Non commitment/careless attitude/lack of support staff		
	Lack of qualified trained teachers		
	Low level of teacher competency		
	Performance accountability system of teachers		

	Improving teacher quality and commitment, accountability
	Attitude behavior of teachers
	Punctuality of teachers/their habits and behavior
	Teachers willing to come to schools and support the child in day to day matters
	Problem of subject teachers in schools
	Student-teacher participation is not interactive
	Teacher promotion on the basis of testing
	Making the teachers/Administrators to be responsible for their job chart-accountability
	Lack of dedicated/sacrificing trainers
	Making the teachers attend the school on time
	Inadequate subject teachers in high & Hr. Sec school
	Evaluation system
	Monitoring system
	Data management (attendance, results etc.)
	Timely evaluation of learners
	Evaluation without pressure
	Not able to monitor as to what is happening in schools on a timely basis
	Children performance levels are not to the expected level
	Monitoring is not proper
	Children performance levels are not to the expected level
Governance and Regulation	Equal competition between students
	Putting effective monitoring mechanism
	Conducting public exams and learning outcomes of children in schools
	Evaluation pattern
	Conduct baseline tests to assess the competencies of students.
	Decentralized Administration
	Free from political interference
	Time management
	Balance ratio of students and teachers in class
	Teacher promotion on the basis of testing
India - torret	Lack of facilities (Furniture, sanitation etc.)
Infrastructure	Infrastructure facility - lot of disparity in different types of schools

	Providing infrastructure to all schools including toilets, drinking water and running
	water
	Uniforms, transport
	Lack of proper planning in infrastructure
	Providing classroom infrastructure that makes the children comfortable physically and makes the teachers create interaction between the subject and children
	Complete infrastructure with ICT facilities
	No ICT facilities in schools
	No electricity, No computers, no internet
	Provision of facilities TLM, Lab facilities
Examinations	Conducting of public exams
	Examination system - Something different than year-end/term end examination and focusing on continuous evaluation
	Unsatisfactory results from public examinations
Education Administration	Expenditure and budgets provided in stipulated time
	Ensuring delivery of various incentives like free uniform, bicycles, textbooks etc.
	Timely collection of data on various schemes from the field
	Communication and transport facility at the most remote schools
	Dissemination of Information
	Transparency and accountability
	Regular updation of data
	Lack of TA DA
	Lack of institutional memory
	Field level staff do not feel responsible
	Political interference in administration results in failure of policies
	Political will is required for proper implementation of policies for the benefit of the students, public
	Large big dept. with sufficient manpower
	Making the system more down the line - supervising mechanism
	100% enrolment without discrimination
	Education statistics, data are always unreliable - numbers of students, teachers etc.
	Lack of information, data and stats that are reliable
	Lack of financial resources
	Service matters, transfers of teachers
	Court litigations resulting in a number of vacancies
	Parallel administration - 2 secretaries, 2 ministers
	•

	Reduce unionism in schools
	Manpower challenges
	Total supervision by e-programming
	Lack of procedures/Work flows
	Lack of planning
	Preparation of annual work plan and budget in SSA
	Data collection on physical and financial progress
	Providing unique number to each child and tracking the child's progress
	Sharing success stories through technology (website, media etc.)
	No proper targets and getting services with pressure mode
	Online teacher transfer
	Students get service like study certificates and birth certificates
	Dedication of head teachers and administrators
	File system paper work should be reduced
	Ready data should be available or should be able to get it online instantly
Outreach	Reaching the unreached
	Provide electricity for schools
	Good nutritious food
	Lack of awareness on importance of educated child
	Equality and equity
	Reach and access
	Compulsory schooling upto 14 years is not being followed because of poverty, lack of motivation
	Pass a government order to enroll all govt servants' and politician's children in govt schools
Children	Mainstreaming of OOSC in regular schools
	Inclusive education of CWSN
	Unable to take back dropouts into the fold of education
	ASPD RSTC are not working as per expected to educate out of school children
	Most disadvantaged groups to be trained with education
	Persuasion to continue studies, through media and leaders
	Non-attendance of students
Computer learning	Bridge digital divide
	Computers to all schools and two teachers to train them
	Introduce classroom practices which will hold the interest of tech savvy students

	Students have become computer savvy, IT enabled where as teachers still use age- old methods. Many teacher don't know to use computer, don't know to take
	advantage of internet, broadband
	Teachers should have remote or mouse in hand than chalk and duster
	Students should have laptop/Tablet on bench instead of text book, note book, pen
	Headmaster should have laptop and web camera in front of him than file and registers
	Education officer should have laptop on table than files
	Schools/whole education system focused on examination and less on learning
	Teaching Learning Processes emphasizes on memorization and not on Higher Order Learning
	Remove all written homework
	Homework should be exploratory and focusing on discovery
	Active learning of the children by interaction, activities in classroom
Education philosophy	Creating strategies/situations in learning
	Individualized/ Self learning material
	Difficulty in implementing child centered methodology
	Child friendly classroom process
	All elements associated with school functions as a cohesive unit
	Education that enhances skills - wood carving, music, IT, cooking and other application based activities should be promoted
	Classrooms are conducted very mechanically, there is no space for innovation or application
	Education is not for passing exams, our efforts should be directed towards education
	Flexibility in transecting classroom interaction i.e.teachers should be innovative
	Learning to learn
	Problem school skills
	Common curriculum & need based education
	Black board chalk should be scrap out
	Involvement of community
	Community participation in school development
Community	There should be some way of presenting the achievements/ work of the dept. to parents
	Lack of societal involvement
	In view of decreasing enrolment in govt schools, how to regain confidence of parents/society towards govt schools?

	Involve local bodies
	Community ownership of schools
	Parents are not showing responsibility towards their child
	Students should enjoy their studies as learning is fun
	Free from anxiety towards heavy homework, worries to finish assignments
	Creativity and innovations must come into picture
	Students should feel free to express themselves
	Smart classroom processes
	Drawing, painting, music, games should be focused on more than classroom teaching
	Sensitizing the parents & community for ensuring 100% enrolment linking up government subsidy schemes with children enrolment
	Evening time students are free. Either they attend any coaching classes or they acquire life skill. This is not possible for the poor students. Either school should work for full time i.e. 7-1/2 hrs. Work or the others life skill should be taught in the school
	Education Technology with latest computer knowledge with dedicated staff and good atmosphere
	Computers for quality education
	Infrastructure facility with digital computer education
	Providing SMART class room for Govt. schools in which digital content may be used
Digital learning	Changing the classrooms & bring methodological reforms by introducing e- Technology into the class rooms
	Class room teaching learning process need to be improved by introducing digital technology
	Teachers as a bottleneck to learning particularly to CAL
	Language medium of instruction

#### **Positive things about Education sector**

We have developed an e-governance portal for maintaining of various schemes

Cater to the minimum educational needs of large chunk of population unlike many other developing countries

Large number of products of the system is contributing to the creation of knowledge globally

Awareness campaign of RTE act, activating the SMCs

Free supply of textbooks, uniforms,

**Encouraging students for Computer Aided Learning** 

Seeing schools being run well

Latest education technology with computer education

Our examination system

Access in primary schools is almost ensured in TN

That even despite bad conditions, people are still working, children going to schools, meeting deadlines, achieving small success despite lack of infra/resources/support

We are proud because we are able to impart a large number of children's lives positively through education

That even despite bad conditions, people are still working, children going to schools, meeting deadlines, achieving small success despite lack of infra/resources/support

Children come back to schools everyday despite conditions at home/school

Good image in society, draws the best from me

To work in a developmental sector, when atleast some scope is there to contribute for the future generation

Making the students to understand about

**Nuclear explosion** 

Abstract things/Concepts

Experiments in physics & chemistry

Conducting seminars, science exhibitions

The school provided with a rural school science center

Students from very low income group with high motivations

During learning process smile on the face of students

**STEM Priorities** 

Science, Technology, English, Maths

Overwhelming of training, Training institutions should be revamped

Individual effort by teachers/school administrators

Tech savviness of the youngsters

Teachers taking initiatives and proactively working for the welfare of the children

The participants were divided into groups and requested to role-play different stakeholders. They were requested to write down their expectations from the education sector and also, if possible, their expectations from other stakeholders in the education sector.

SI. No	Parents
1.	Moral Values
2.	Proper Teaching
3.	Completion of Curriculum
4.	Proper Evaluation
5.	Remedial Teaching
6.	Intra-relation between parents and teachers
7.	Talent Search
8.	Good Marks
9.	Child Protection
10.	Discipline
11.	English language proficiency
12.	Individual Attention
13.	Personality Development
14.	Cyber Laws Awareness
15.	IT Skills
16.	Infrastructural Facility
17.	Sports Counseling
18.	Study Certificates, DOB to be made avaialble
19.	Attendance and Achievements
20.	School Grading
21.	Fund Utilization
	Teachers
22.	Students attendance responsibility should be shared equally by the parent and community
23.	Engagement in non academic work hinders in the teacher learning process (skills, knowledge, policies, schemes, projects)
24.	Community awareness- How can we complete the syllabus with students of different IQ levels?
25.	Digital classroom
26.	Adequate infrastructure (building, library, lab)
27.	Healthy environment
28.	Appreciation & encouragement and recognition for good works
29.	Union should not encourage bad activities of teachers
30.	Provide sufficient funds for projects
31.	Encourage innovations

32.	Lack of residential facilities in rural areas
33.	Parents should compulsory attend PTA meeting
34.	Government schools should represent all categories of community mandatory (common schools)
35.	After school hours illiterate parent is not able to take care so provide volunteers to take care
36.	Single teacher or double teacher schools are not working well
37.	Instead of class wise teachers- Provide subject wise teachers in every school
	Students
38.	School must be a fun place
39.	School should be near
40.	Play ground
41.	Library, Computer labs
42.	No text book focus instead activity based learning
43.	Assistance for weak students
44.	Good teachers
45.	Parent teacher meetings
46.	No discrimination between girls and boys
47.	No exams
48.	Separate toilet for girls
49.	Don't insult me
50.	Career guidance
51.	More Vocations courses
52.	Transparency of paper evaluation
53.	Transparency in admission process
54.	Promoting talent
	Headmasters and school management
	Expectations from Govt:
55.	Availability of Budget in time
56.	Availability of Teachers subject-wise
57.	Availability of Infrastructure
58.	Exposure visits to excellent/other schools
59.	Non deployment of teachers on other than teaching activity
60.	Work Freedom
61.	Capacity Building on regular basis - IT, Subject,
	Expectations from Parents
62.	To send children regularly and take report from school
63.	Monitoring children's learning at home
	-

64.	Participate in SMC or PTA meeting	
_	Expectations from Public Representatives, Administrators	
65.	Do not interfere in day to day working	
66.	Contribute their fund to education not to ask for transfer of teachers	
67.	Do not police, act as facilitator monitoring should not be coercive but problem solving	
68.	Timely promotion/payment of claims/leave	
69.	Transparent administration and financial matters	
	Expectations from Teachers	
70.	Always prepare for class/lesson transaction	
71.	Timely attendance	
72.	Use teaching aids/innovative teaching methods	
73.	Allow students to reflect/interact	
74.	Ensure equity/inclusion/gender equity	
75.	Keep update in the subject	
76.	Share teaching experience with fellow teachers	
	Education administrators	
77.	Role clarity/Job charts of functionaries	
78.	Clear data points/Database/Decision support systems	
79.	Codification of rules & acts pertaining to school education	
80.	Various schemes details to be transparently made available to all stake holders	
81.	Interactive forums across the states	
82.	Decentralization of teachers service matters in true spirit of 73rd & 74th Amendments to constitution	
83.	For better execution GoI schemes to be implemented by live department instead of creating separate wings/society	
84.	Autonomy/Flexibility to states in devising & implementing schemes	
85.	Required resources have to be provided on time including infrastructure	
86.	Neighborhood/Common school system should be adopted has equipped in Kothari commission report	
87.	Method of CCE continuous comprehensive evaluation to be implemented	
88.	Recruitment of quality teachers/quality officers	
89.	Expose administrators to the best practices in school education world wide	
90.	Give IT gadgets like Laptops/ IPods to all education administrators for better monitoring	
91.	To be insulated form political interference	
	Research and Training	
92.	Online of DISE data - Scope for areas of research & Use the DISE data for research	
93.	To identify resource persons for In-service training	
94.	Assessment of various interventions	
95.	Identification of Training needs	

96.	Training on Action Researches on classroom Practices
97.	Infrastructure (HW+SW) to research institutes for easy data analysis / digitization
98.	Training on various teaching methods / techniques
99.	Research on training vis-à-vis achievement levels of children
100.	Need based Researches
101.	Dissemination and Follow-up action can be taken up
102.	Capacity building of researchers of DIETs/CTEs/IASEs/SCERT - Fund allocation
103.	Expertise and Experience of other institutes

# 6.2. Inputs received in the Kolkotta Workshop

Q: What are the key challenges and issues you face in your day-to-day work in School Education?	
Community participations in school management	
Parents	
VEC	
SMC	
Administration supervision	
Grievance redressal	
Parents sending all their children to school	Community management
Parents themselves to come to schools to make themselves aware	
Active role of parents/PRIs and community in school management	
Community support for school development	
Empowered community through education greater role in development	
Adequate use of resources for civil construction based on the development from civil work web portal	
Regular Inspections of schools and offices	
Regular updating of data & information	
Coverage of schools with ICT	Governance
Display and access of data to the public and students	
Accountability proper monitoring	

Transparency-awakening the community and implementation of e-governance	
Timely collection of various data	
Proper monitoring	
Involvement of community	
There should be no undue political interference	
Quality Governance	
Speedy implementation of all flagship programs	
Maintenance of proper database of teachers, officers and employees	
Transparency	
Efficiency	
Law & order	
eTendering	
political interference	
storing data base	
Motivation of parents & students	
Social economic status	
Sensitization	Quality of education and access
To change attitude of teacher to shift from traditional teaching	460033
Learning should not be for the sake of exam- joyful learning	
Qualified teachers can produce quality of education	

single point contact for all services one orbit	
The social conversation of the student to be taken in consideration at the time of admission	
Attitudinal change in teacher	
Monitoring of teachers performance	
Reward & punishment	Regulation
No implementation in the right perspective	
political interest	
Management school should be by the local people for effective running of schools	
Active participation by the local authority will improve	
Attendance of teachers/students	School Management
Delivery of desired goal	
Appointment of teachers in the recommendation of the locality/local people	
GER to be + 100%	
Foremost challenge is to maintain discipline among students	
It is the management who is mainly responsible for maintaining discipline	
If a teacher is well versed in his teaching subject and able to transact in effective and meaningful manner, a class will be automatically controlled	Students
At the present scenario it is very essential to focus on moral education.	
One should be mentally, emotionally, spiritually and physically teacher not more than the sake a employment	
In fact at present day the students have lost faith on his teacher	

New ideas needs to be regulated to all section so as to ensure that the people can get access and get to know Adequate space room per school To frame uniform syllabus as per class level of the students Good text books as per syllabus to ensure quality of education Support useful TLMs to the students to level their creativity, competency, reasoning ability Arrangement of sports, games, arts, and other extra curricular activities to develop mental physical needs Teachers should be trained using well developed teaching methodologies in the present day context Teachers have to implement in the classroom situation what they have acquainted with the appropriate methodology LCDs computer as teaching tool Teachers are always busy with the average and slow learners but not giving time to gifted children. They are deprived Some orthodox teachers are not ready to accept modern methodology enhancing quality education Challenged students are facing problems with the normal students in the classroom situation following same curriculum in the same time period Students, still now are taught through lecture method where they are not allowed to question Children are overburden by so many books and subjects Wrong examination system are making students to follow the key points of the subject, not helping the students to go through the books thoroughly Some times school authorities are not ready to accept the community participation/parental intervention in the day to day activities in the school

Adequate infrastructure  Availability of text books  Availability of efficient and dedicated teachers  Regular evaluation	
Availability of efficient and dedicated teachers	
Pogular evaluation	
Regular evaluation	
Academic profiles of students	
Orientation of teachers	
proper monitoring	
Want of adequate infrastructure	
Transport facility	
Social taboos relating to girls education	
lack of sensitization	
Demotivating factors parents, teachers,	
Fear of teachers, rudeness	
Humiliation- Caste, status, competition, complexes	
Different students receptive level and their level of understanding	
Training /Special training for CWSN	
TLM	
Class room management Teacher Sup	port
Exposure training to introduction with others	
Capacity building of untrained persons	

Proper and good communication skill	
Evaluation	
Take prompt action	
Self evaluation by teachers	
Evaluation of teachers performance by students	
Delay of work done for teacher	
Lack of proper coordination b/w differential education department	
Availability of portable drinking water, residence for teachers, teaching aided materials	
Export review of syllabus for relevancy	
Physical adventures to be part of assessment	
Development of central repository of e-Content	
School to maintain fees and seat info in transparent manner	
GIS mapping of all schools (real time)	
Child tracking, teacher attendance & performance tracking	
Self assessment based on ICT tools	
Ability to apply for applications and write exams on line get certificates on line including on line availability of answer sheet to all students	
Clear cut policies	
Online availability of edu-services	
Out sourcing of works relating to delivery of services in education field	
Mandatory e-Procurement	

schools for real time online monitoring by citizen	
Citizen centric service	
Capacity building	
Recognition	
Transfer & promotion	
managing parent pressure and RTE	
Indiscipline of students	
Lack of sharing forum	
Training material	
Lack of dedicated and motivating teachers	
School infrastructure (ICT)	
Over burden syllabus	
Less play time	
Lack of simulation exercise	
Lack of focused content	
Migration of family	
Inadequate basic essential infrastructure	
Is essential for good training and also for availability improvement	
Lack of ICT facility at rural villages	
Subject wise and regular training	
Best infrastructure in training institute	

Service condition of teachers	

Q: What would you measure to see if your solutions are working on the ground level?
Future bright prospects for students
Absenteeism
Proxy teachers
Students access & quality of education
Visit schools and see how ICT is transacted in the class room
Testing students understanding with questionnaire
Ask the community, NGOs, parents and third party evaluation to oversee the successful implementation of ICT in schools
Ensure that all equipment is in working condition with infrastructure
Grade the best teacher and best school with incentive to create a healthy competition
Ensure proper training is imparted to teachers on ICT with project work etc.
In case of teacher- fully attentive students in the class, showing better result in their ongoing test
A teacher who is trained in ICT- usage of ICT in his day today functioning
Dissemination of information related to educational provisions
Imparting quality of education
Good print and non print materials, good/trained teachers
Adherence to time frame in the delivery

Every untrained teacher should be trained within a time scheduled
Teachers are required to be given training in every 2/3 years (should be need based)
Unequal/Shortage of teachers
Proper scientific and transparent system in recruitment
Political interventions
Increase retention rate
Disciplined and punctual teachers
Sincerity in teaching with personal attention to the weakness of the students
The average learning achievement level of children should be high and difference between lowest and highest minimal
Literacy rate should be 100%, no dropout. Every child to complete elementary quality education
Improving infrastructure, access, retention through media messages, websites, channels, door to door campaign etc.,
reduced drop out
increased external efficiency
increase NER/GER
increase national income
Increased awareness of the community
Disciplinary action for non compliance of direction incurred by the govt
Students access & quality of education

### 6.3. Inputs received in the Chandigarh Workshop

# Q1: What are the key challenges and issues you see in your day-to-day work in School Education?

Student related	Admission process		
	Student attendance, Indiscipline of students		
	Result sheet/migration certificate/scholarship		
	The classroom transactions are nothing but to give information. It should be interactive, participatory and child friendly.		
	Not enough computers to give an opportunity to work on computer		
	Student help desk should be instituted at district HQ. Student can get any certificate from it		
	Not able to submit their change of fee/form in time		
	Wrong exam result		
	Forgot to make a request in time e.g. TOC, change of subject additional subjects		
	correction of additional data-name/date of birth/address etc.		
	Certificates not received, setting up of exam center, copying in exam, panel of resource persons, academic facilitations, evaluators, observation at exam center		
Teacher related	Promotion, transfers, pay, pension		
	RTE is making children careless about studies		
	Capacity Building		
	What and where are the best training modules		

	how to enhance in service trainers training kits		
	Student attendance, Indiscipline of students		
	Payments Delayed, deductions, not received, lost bills,		
	Training terms is over, over time, leaves, salary, not adequate, work load, sudden work		
	Engagement of teachers in non academic works, Plethora of submission of reports to be prepared by teachers is not be taken into consideration for calculation of pupil teacher ratio has been calculation		
	Teachers are not sufficiently motivated and committed. They do not teach effectively		
	Teachers usually do not use appropriate/effective pedagogies		
School Management	Teachers/students attendance		
	Lack of infrastructure such as Buildings, power, broad band		
	To monitor the RTE compliance by schools and rethinking of certain initiatives such as CCE		
	Admission an entry level		
	Collection of data for CCE		
	Discipline How to tackle this problem		
	Teachers are busy in non-teaching activities (how to reduce these)		
	Gap between teacher student rates is a basic issue for quality education		
	Teacher records, school infrastructure should be computerized in first phase		
	no set guidelines for schools and teachers to maintain discipline in the class. After implementation of RTE students are least interested in learning and least bothered about training infrastructure		

	Digital port folio- Sample and real
	E-Rubrics- Sample and real
	Concept maps/mind maps on various themes
	Constructivist unit plans-
	Digital diary
	Schools should have posts of assistants/or support staff
	Wherever leader is good- school works well/ideally. But there is no concept/post of head master in primary school
	Primary school should have post of HM. Head Master should be trained/pruned and developed into a leader to make school ideal.
	Smart governance to track the status - so that delivery of services can be ensured
	Child tracking to enroll all children to schools is must
	Records of teachers Attendance service record ACR
	All registers like VER, Attendance etc. need to be computerized
	Computerization of enrolment attendance, scholarships teaching of children enrolled will definitely increase the efficiency of schools
School Administration	Teachers not interested to travel from their work place to the institute for training
	Assessment of training need-data availability profile of teachers not available for selection
	Financial sanctions/approval- development and printing of materials and their dissemination
	List of experts/resources needed for research training
	Library is not networked and sharing of data with other organizations

not possible
Supervision for quality education
ICT trained teachers are not available
Infrastructure
Autonomy
Economic problem
Resources
System problems & transfers
Commitment towards ICT implementation
HRMS - human resource management system
On line scholarship programmes
on line application for recruitment
GPS system
Lack of IT professionals
SWAN not connected to schools
Data Collected from school in different mode and different time, type
Gap in ICT infrastructure
Capacity Building of technology and non teaching staff
Student attendance
Teacher attendance
Need base training

No head master Support of politicians Subject specific teacher is primary and secondary schools also Caste system should be treated carefully Outcome should be more important than the process in the education system No monitoring after training of teachers Different teacher ratio is not up to the mark Vacation of lady teachers No record of drop out children Examination pattern should be more efficient, transparent, not of the % achieving type No incentives for improvement of teacher performance No vocational & practical base education No full day school and no importance given to students interest in study Data on how many students visited library, read books, how many hours Exam fee, funds and due funds charged from students Retirement of teachers, leave balance and medical leaves GPF withdraws, balance issuance of GPF Unwillingness of teachers to teach presence of teachers in class rooms

Who are attending the program and who are not attending? To know & ensure that maximum locations are attending the programmes as per schedule

Challenge of regular supply of power to reception of telecast

Challenge of getting true information about as how many locations are utilizing the context of EDUSAT library

Challenge of getting already approved funds for the expansion of the project

IT infrastructure and placing IT professionals

Data center

Streamlining of teachers, appointments, postings, transfers, promotions, registration of court cases, and monitoring of cases

Distribution of scholarships and text books, uniforms using ICT & students

Teachers attendance- Teaching though ICT

school mapping

Teacher like motivation and committed to upgrade and update their content knowledge pedagogies

Deployment of teaches in schools not according to enrolment in schools over several as well under several schemes

Payment to teachers especially GPF and pension get delayed

Vacancies of teachers are not filled timely

The process set prolonged sometimes unduly

Management of private schools especially secondary schools (aided) results In many problem. Selection of service board, management docs not allow teachers to joint-litigation

Management itself appoint teachers without port without approval

of the DIOs//department heads to litigation which results in problem of payment of arrears of teachers-court cases etc. RTE act bans public exam. ICT should be used to know learning levels of students without holding exam it needs to be devised Quality of teachers training remains unknown. ICT to be used in monitoring utility of teachers training Programme (in service) Lack of transportation public remains ignorant about funds received in school for Programme to display of funds utilized and work done Provision of scholarships to students MDM Provision of uniform, text books, furniture, computers, computer lab science lab **Parent** Community Admission engagement Student performance reports Problem of tuitions Teachers attendance Monitoring of trainings attended by community Teacher attendance parents are also not motivated and do not take interest to look after, whether their child goes to school daily in time or not as like in private schools. Teachers should be role model for students Involvement of parents in education is needed

Q2: What would you measure to see if your solutions are working on the ground level?

100% enrolment of children below 14 years

Whether teacher student ratio is maintained
Non manipulation
quality education given to students
Implementation of difficult schemes
Teacher retention in the department as the measurement of job satisfaction
school results are the best indicators of job satisfaction at the teachers
Academic Monitoring system must be improved
Effectiveness of training must be measured after the training at the school level
De duplication of students
RTE & RTI related queries reduced
Reduce false attendance & accurate benefits like MDM & scholarships distributions
Complaints from parents, VECs reduced
Running around for various works reduced by the parents & school teachers & staff
Information readily available
Improve results
Academic data available on line, regular attendance of teachers, reduce running to HQ, available learning material online
How many doing the work online
In Bihar- Right to services act in vogue under which we can ask for services such as scholarship and certificates of exam within limited time frame there are internet kiosks at every block level called "Vasudha Kendra"
Enrollment- Attendance-Irregular to be tracked
Attendance to be monitored

Enrollment register of children
Able to bring more children to school
Deployment policy to be reviewed
How many teachers are posted in their house village
Assessment of distance wise
Assess other reasons gender wise
assess facilities in schools
Assess job conditions
We need devise mechanism to ensure that all children attend school regularly
Quality learning
Student evaluation through various level
Teaching learning material
Enhancement of enrollment
School environment
Children enjoying learning
teaching +learning quality improved
Enhancement in daily attendance
Follow up of teacher training by conducting test at the last day of the training schedule teacher dairy
% of out of school children
All registers need to be computerized

Result register
enrolment register
attendance register
Daily teacher diary
monitor daily
Lack of research work by teachers and training colleges
No of vacancies of teachers should not be more than 10% at any point of time
Periodic tests to be organized to see proposes of learning levels of students
No case pending the teachers pension & GPF beyond 6 months
Decline in the no of visits paid by teachers to block education office, district level office
No of writ petitions received during the month
Time taken between receipt of funds and utilization of funds

# 7. Appendix II: List of Participants

### 7.1. Participants in the Hyderabad Workshop

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