

“SAMARTH”

STATEWIDE SYSTEMIC REFORMS TO IMPROVE THE QUALITY OF EDUCATION

HIMACHAL PRADESH



“SAMARTH” - STATEWIDE SYSTEMIC REFORMS TO IMPROVE THE QUALITY OF EDUCATION

The State Government of Himachal Pradesh has embarked on an ambitious state-wide systemic transformation programme to improve the quality of education in the state’s ~14000 elementary government schools. While the HP government has improved both access to and equity in education across the state, the ‘quality’ aspect of education still needs improvement.

The focus of the programme “Samarth” is to improve the learning levels of students through *systemic interventions*. The Directorate of Elementary Education (DEE) and Sarva Shiksha Abhiyan (SSA) have partnered with a social development consulting organization to transform elementary education in the state. The key focus of the programme for the next 2 years is:

- Improve learning levels by 8-10 percentage points.
- Achieve grade-level competencies for atleast 75% students across elementary grades.
- Ensure Himachal is among top 3 states in National Achievement Survey (NAS)

The programme has been divided into three phases: diagnostic, design and implementation.

- During the diagnostic phase a full-scale problem identification exercise was conducted wherein each of the 12 districts in Himachal were visited, large scale surveys were carried out, and expert interviews and discussions were held with various internal and external stakeholders.
- During the design phase, best practices from other states were studied and solutions were designed to specifically address identified problems within Himachal’s unique culture and context.
- The programme is currently in the implementation phase with multiple initiatives on the ground.

To achieve the above said goals following programmes have been initiated in the State:

- I. *PRERNA*"- To improve the learning level of students in reading writing and numeracy skills
- II. *"PRAYAS"* - An initiative to improve science and mathematics at upper primary level
- III. *Training at Cluster level*
- IV. *OMR based Review and Monitoring*
- V. *Text Book Tracking*
- VI. *E-SMS PORTAL*
- VII. *Continuous Learning Tips for Teachers via SMSes*
- VIII. *OMR based Recording of Assessment Data*
- IX. *Online transfers of teachers via an up-to-date PMIS*
- X. *Khaas Shiksha: Recognition for best teaching and teaching related practices*
- XI. *E-Samadhan*

I. PRERNA

TO IMPROVE THE LEARNING LEVEL OF STUDENTS IN READING, WRITING AND NUMERACY SKILLS

The low learning levels among primary school children are an area of priority concern. Different achievement surveys conducted by state and national level institutes/organizations indicated that children in Himachal Pradesh learn their alphabets and develop word reading skills early on but the commensurate ability to read simple texts does not develop by Classes II-III. It is only by Classes IV-V that they begin to read reasonably well. Similarly, it was reported that children learn their numbers early but the progression towards solving mathematical sums—addition-subtraction and multiplication - division is relatively slow. Keeping in view this fact state has planned to focus on early literacy and numeracy. 'PRERNA' Programme was launched by Hon'ble Chief Minister Himachal Pradesh to improve the learning level of children in reading, writing and numeracy skills at primary level.



'PRERNA' stands for Result Enhancement, Resource Nurturing and Assessment. Improvement in learning levels through identification of gaps in learning, addressing these gaps and constant evaluation through training and innovative teaching techniques are the core of this programme.

The approach followed in the classroom:

- i. A base line of children's learning levels in performing basic tasks of language and arithmetic was conducted.
- ii. Target was set to improve the ability of children from their current level to:
 - a. Speak and say: words, sentences, answer questions.
 - b. Read: words, sentences and long texts.
 - c. Comprehend: word meaning, simple instructions, questions and simple texts.
 - d. Write correctly: words, dictated sentences, and self-constructed sentences. (The goals for each set of children will depend upon their current ability. For example – a child who cannot read words will learn to decode words and a child who reads haltingly should read fluently and answer questions based on the text)
- iii. Mathematics :
 - a. Recognizing and understanding the meaning of numbers.
 - b. Do, say and write addition and subtraction problems.
 - c. Understand and use tables to solve multiplication and division problems.

(The goals for each set of children will depend upon their current ability. For example – a child who does not understand numbers and place value will learn to do addition and subtraction with carry forward and borrow)

Base line assessment was displayed and regularly monitored and regulate the learners' achievement. The entire class was divided on level wise on the basis of baseline. The children were given learning standard based interventions. The teacher worked more with children having lower levels of learning while children who can read stories with comprehension, have been shifted to classroom curriculum. The teachers ensured that the students are learning and are being regularly shifted to next higher level. The teachers have used the library books as supplementary reading material for the enhancement of reading and comprehension skills. The progress of the child was shared with the parents regularly. Flash Cards, Charts, Dominoes, puzzles & models etc were used by the teachers. Emphasis was given to activity based teaching learning process.

Analysis of Baseline and End line of Prerna : On basis of this analysis, the enhancement on various competencies has been noticed as follows:

PRERNA Results (Baseline v/s Endline)											
Class	Assessment	Story Readers	Sentence Formation	3 Digit Number Recognition	Subtraction			Division			Simple Fraction
					2 by 2 Digit Subtraction (Numeric)	3 by 3 Digit Subtraction (Numeric)	2 by 2 Digit Subtraction (Word Problems)	2 by 1 Digit Division (Numeric)	3 by 1 Digit Division (Numeric)	Digit Division (Word)	
Std 3	Baseline	30.2%	19.0%	46.8%	54.5%	37.7%	29.6%	22.8%	14.2%	18.2%	36.1%
	Endline	47.7%	33.1%	61.3%	77.8%	62.1%	53.9%	49.1%	36.2%	41.9%	67.8%
Std 4	Baseline	44.0%	25.6%	58.7%	64.7%	48.4%	38.5%	42.3%	31.6%	33.7%	46.4%
	Endline	61.5%	41.9%	72.2%	83.7%	70.1%	62.1%	62.2%	50.6%	53.8%	73.5%
Std 5	Baseline	51.0%	32.9%	66.5%	73.2%	61.5%	45.6%	51.5%	39.9%	42.5%	47.4%
	Endline	69.6%	49.2%	78.7%	87.4%	77.7%	69.0%	70.4%	58.6%	63.8%	76.6%

Language Skills

It was found that whereas 43% students could *read a story* at the time of baseline, the number increased to 58% of assessed students when the endline was conducted. Similarly, whereas only 27% students could *formulate basic sentences* at the time of the baseline, the number increased to 41% of assessed students at the time of the endline.

Mathematical Skills

It was found that whereas 64% students could carry out *2 by 2 digit subtractions* at the time of baseline, the number increased to 82% of assessed students when the endline was conducted. Similarly, whereas only 39% students could execute *2 by 1 digit divisions* correctly at the time of the baseline, the number increased to 60% of assessed students at the time of the endline.

Pilot Programme for learning enhancement in the subject of English

This initiative has been implemented in two districts

Solan

- Block : Kuthar
- Schools: 50
- Standard : 3 to 5
- Summer closing schools: 34
- Winter closing Schools: 16

Shimla

- Block: Mashobra (17 cluster)

The program is being implemented by DIET Solan and Shimla in partnership with Pratham Education Foundation. The program has three phases. The first phase focused on developing students' skills to identify letters particularly through their sounds. The second phase will introduce students to more difficult vocabulary and relatively lengthier texts (about 6 - 15 sentences). The final phase would aim at bringing students at par with their with their grade-level English textbooks. The program aims to enable primary school children achieve basic competencies in Listening, Speaking, Reading and Writing.

Assessment

Program Reach in Shimla District

Baseline Assessment

Baseline Assessment was conducted in third week of October

3rd Class	143 Children
4th Class	134 Children
5th Class	173 Children
Total	450 Children



End-line Assessment

End-line Assessment was conducted in second week of December.

3rd Class	141 Children
4th Class	131 Children
5th Class	169 Children
Total	441 Children















4

- Three assessments (Baseline, Midline and Endline) were conducted with students from grades 3 to 5 to assess their learning levels. The assessment will be one-one-one and oral and will test children on the following:
- Reading letters (uppercase & lowercase)

- Reading words (3 - 4 letters) + Comprehending them
- Reading sentences + comprehending them
- Reading a simple story (6 - 8 lines) + answering 2 questions (1 direct + 1 indirect) based on the story

Assessment Tools

Reading Test		Story Comprehension and Picture Identification	
A simple reading test to understand the reading level of the child.		Q1 and Q2 are questions based on the passage, and a child is asked to answer these questions. Section 3 is Picture Identification.	
Section 1 ADMINISTER THIS SECTION WITH ALL CHILDREN AND MARK THEM AT THEIR HIGHEST LEVEL.		Section 2 ONLY FOR CHILDREN WHO ARE MARKED AT 'SENTENCE LEVEL' IN SECTION 1	
<p>Capital letters</p> <p>D J E</p> <p>N</p> <p>O P</p> <p>Ask the child to read all letters. At least 4 out of 6 must be correct.</p>	<p>Small letters</p> <p>i p</p> <p>u d</p> <p>h t</p> <p>Ask the child to read all letters. At least 4 out of 6 must be correct.</p>	<p>Ask the child to read the story. Listen carefully while the child is reading and mark her accordingly.</p> <p>Section 3 ADMINISTER THIS SECTION WITH ALL CHILDREN</p> <p>Ask the child to identify each picture in English one by one and mark the child according to her response. Do not ask about any picture more than twice.</p>	
<p>Words</p> <p>cat head sit</p> <p>shop fan sing</p> <p>fan</p> <p>Ask the child to read all words. At least 4 must be correct. Ask child to say the meanings of correctly read words in his/her local language or point to object that explains the word. Meaning of at least 4 must be correct to give code 3 in meaning column.</p>	<p>Sentences</p> <p>What is your name? This is a <u>small table</u>. I like to <u>sleep</u>. He has <u>many pens</u>.</p> <p>Ask the child to read all sentences. At least 2 must be correct. Ask child to say meanings of correctly read sentences in his/her local language. Meaning of at least 2 sentences or underlined words must be correct to give code 3 in meaning column. Do NOT point to underlined words.</p>	<p>क्या कर रहे हैं?</p> <p>1  2  3 </p> <p>कौन है?</p> <p>4  5  6 </p> <p>क्या है?</p> <p>7  8  9 </p> <p>10  11  12 </p>	
		<p>Salma has a little kitten. Its name is Kitty. It is white. It has green eyes and a short tail. It likes to eat fish. Salma plays with her kitten every day after school. One day, the kitten ran away. She could not find it anywhere. She was very sad.</p> <p>• Ask the first question and wait for the child to answer. After the child has responded, ask the second question. • Do not repeat each question more than twice. • The child can answer orally in English or her local language. • Mark the child according to her answer.</p> <p>1 किट्टी को क्या खाना पसंद है? 2 सलमा उदरस क्यों थी?</p>	

5

Innovation in the Programme

- Delivery of content through SMS.
- Use of Whats'app for sending letter sounds and related Jingles.
- Graded printed material according to learning levels of children.
- Talk centre concept for teachers to help them upgrade their language skills.

Program Components (Phase-1)

- During the first phase, the focus was on developing students' skills to identify letters particularly through their sounds. Phase 1 is being implemented will help of SMSes and flash cards. Each teacher received 2 SMSes every day – one with a story and one with a lesson plan.

Objectives:

- Identify letters - shape + name and sound

- Write letters
- Associate letters with their sounds and pronounce them appropriately in the context of different words
- Read simple, phonetically decodable words and understand their meanings
- Read simple texts (3 - 6 easy sentences) and understand their meanings
- Answer (in English or bilingually) simple and direct questions based on the simple text
- Respond to common greetings
- Follow one / two worded instructions

Key Success: (Phase 1)

- Children who have basic understanding of Hindi are also able to read SMS stories comfortably.
- Children who were at beginner level in baseline assessment have attained fluency in story reading.
- Children have learnt a lot of new words.
- They have developed clarity in understanding and reciting of sounds.

Program Components (Phase 2)

- Second phase was an extension of Phase 1. It introduced students to more difficult vocabulary and relatively lengthier texts (about 6 - 15 sentences).
- Read relatively complex and non-decodable words
- Build their vocabulary - synonyms & antonyms
- Recognize the purpose of different grammatical elements (nouns, verbs, sentence connectors, etc.)
- Use basic punctuation marks correctly
- Read texts of elementary, intermediate or advanced level difficulty (depending upon their own learning levels) and comprehend them
- Summarize texts (of different genres) in their first language or bilingually
- Understand and write answers to direct, indirect and inference based (simple) questions based on the text (v)
- Brainstorm relevant vocabulary and write meaningful sentences on a topic from their immediate environment

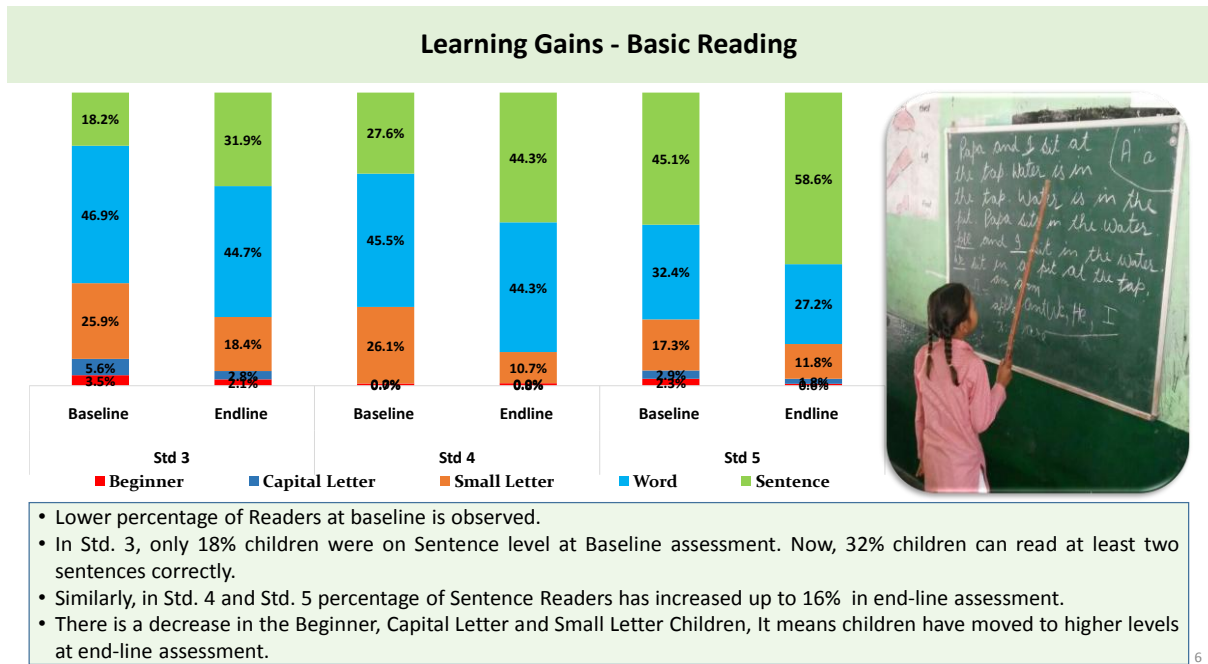
- Converse on routine topics with ease

Program Components (Phase 3)

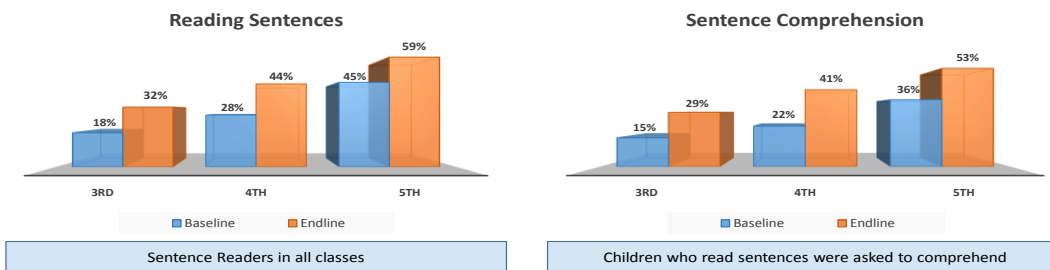
The final phase would aim at bringing students at par with their with their grade-level English textbooks.

Talk Centre: A talk center has been set to help teachers from government schools enhance their spoken English skills. The module consists of 30 different topics

Results of Shimla District



Sentence Reading and Comprehension



- There is overall increase in this section as the children are now becoming able to read sentences.
- Children who read at least two sentences were asked to comprehend them.
- Initially in Std.3, only 15% children were able to comprehend at least two simple sentences but now 29% children can comprehend. Similarly 21% and 17% points improvement is observed in Std.4 and Std.5 respectively in Sentence Comprehension.

Sentences

What is your name?

This is a small table.

I like to sleep.

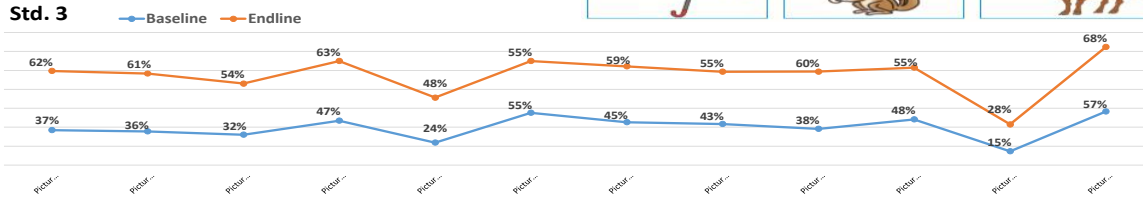
He has many pens.

Picture Identification

- Section-3, Picture Identification**
- In this section, children were asked to identify the pictures (12 pictures) and say out aloud in English what they could see in picture.
 - Picture number 1-3 were based on Actions.
 - Picture number 4-6, children were asked "Who they are?".
 - Picture 7-12, children were asked "What is this?".

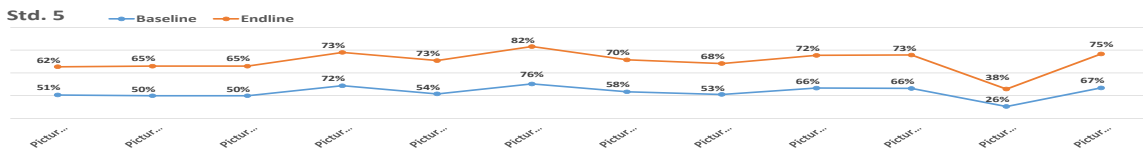
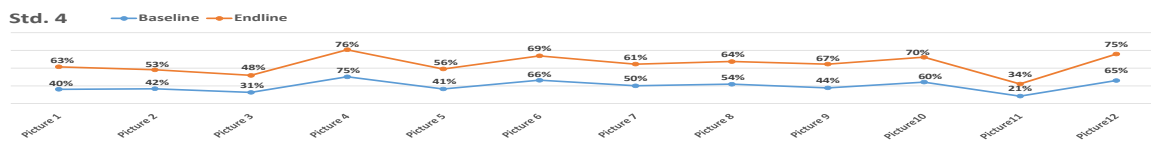


Picture Identification Analysis
Children are now becoming able to identify the objects. Below are the results



Cont... 9

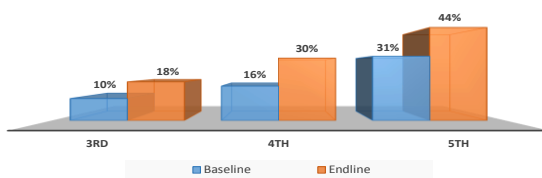
Picture Identification Analysis



10

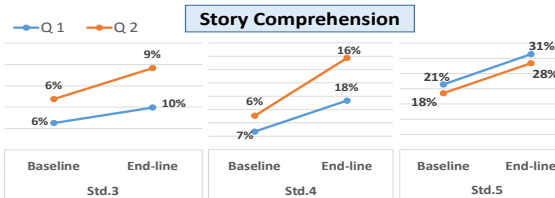
Story Reading and Comprehension

Story Readers



Section-2, Story Reading and Comprehension. Children marked at sentence level were asked to read Story

- In Std.3, initially 10% children were able to read a simple story but now 18% children are able to read a story fluently with 6 or less than 6 mistakes.
- Similarly, there is a significant increase in the number of Story Readers in Std.4 and Std.5 at end-line assessment.
- After reading the story, the children were asked to comprehend two simple questions based on Story.
- There is a negligible improvement in Story Comprehension in Std.3 whereas an improvement of 10% points is observed in Std.4&5 at end-line assessment.



Story

Children were asked two simple story based questions and they were supposed to answer in English

Salma has a little kitten. Its name is Kitty. It is white. It has green eyes and a short tail. It likes to eat fish. Salma plays with her kitten every day after school. One day, the kitten ran away. She could not find it anywhere. She was very sad.

- किट्टी को क्या खाना पसंद है?
- सलमा उदास क्यों थी?

8

I. “PRAYAS” - AN INITIATIVE TO IMPROVE SCIENCE AND MATHEMATICS AT UPPER PRIMARY LEVEL



A program for the popularization and innovation in Science and Math for Std.6-8 was also launched by Hon'ble Chief Minister of Himachal Pradesh. **Science** and Mathematics are generally considered as tough subjects and keeping in mind the learning gaps of the students in the internal achievement survey, a program was designed in which 40 models from 10 themes in the subject of Science, 23 models from 5 themes of Mathematics were selected.

A strategy was made to enhance the teaching and learning skills of the teachers and further in classroom with the students in workshop mode followed by a Science and Math fair. Rationale of this training was to make teaching and learning more interesting, practical and innovative not only during the training but also in the classroom. Children are expected to learn by doing and present /exhibit their model in school. All the cluster head schools and two more schools of these clusters were selected for this initiative.



Quality Initiative Launched by Hon'ble Chief Minister Himachal Pradesh

Activities undertaken under “PRAYAS”:

- SRG Training
- Teachers’ Training at DIET level
- Base Line Testing
- Base Line Data Verification
- Pre Fair Workshop
- Fairs/exhibition of 1st Phase
- Observation of Fairs
- End line testing

First threedays workshopwas organized with teachers and next 2 days teachers worked with students in nearby selected schools and last day for Science and Math’s exhibition/ fairs in selected school.

SMC members and community are being invited by the school head and their presence has been seen in the fair. Parents are happy to see the demonstration of the models made by their wards. Parents are being requested to participate in all kind of school events to promote the students learning and to encourage them. Parents are requested to help their children to

facilitate at home when they require material in their creative work.



Base Line Testing:After the completion of teacher’s training, a base line test was conducted. This was done to assess the prior knowledge of the students in Science and Math. A common child wise testing tool was designed for this purpose for Std.6-8



Pre fair workshops:According to the planning, material of Science and Math was delivered at school level to start the workshops with the students. All the models were made by the students in groups which were facilitated by the teachers. All the conceptual clarity and discussion on the models was the part of class room practice. Some of the raw material was to be explored by the students from their surrounding or from home. After the sufficient time for the workshops, it was the time to express the learning and sharing of knowledge with others to build more confidence.



CLASSROOM TEACHING LEARNING PROCESS- LEARNING BY DOING

Exhibition /Fair Days:

On the fair day all the students, teachers, parents and community are being involved. Observation sheets have been developed to observe these exhibitions /fairs by team comprising school heads, DIET faculty.



II. IN SERVICE TRAINING

In order to make the training of teachers more meaningful and fruitful for all students in particular and for all teachers in general, State has started all the block level trainings organized at the cluster / complex school along with follow up both for primary and upper primary according to the following existing school set up of the State:-

Primary clusters: There are total 2102 Centre Government Primary Schools (CGPS) in the State catering to the needs of class I to V children. These schools are the clusters for 10711 primary schools. Every CGPS/ Cluster is headed by a designated Cluster Head called Centre Head Teacher-cum-Cluster Resource Centre Coordinator for all the primary schools in her / his jurisdiction.

Upper Primary Clusters:

State has notified 353 cluster head schools for upper primary and 9th and 10th. These Head Teachers/ Head Masters / Principals are entrusted with the following responsibilities to ensure:-

- ✓ The implementation of all the education related schemes and programmes of the State and the Central Government.
- ✓ Every school has required infrastructural facilities for all children as mandated in the RTE Act, 2009.
- ✓ Every school in the cluster functions better and moves towards transformation.
- ✓ Every teacher in the cluster performs well.
- ✓ Every Child; Every Day; In Every Classroom learns as per the expectations of the parents, teachers and school head.

From 2016-17 onwards, block level teacher training intervention as teacher development will be implemented at the cluster / complex school along with follow up activities to ensure that every teacher stays back in the school and is at the disposal of children. Her / his professional development is the job of the School Head and the Cluster Resource Group. The action plan for teacher development as detailed below will be implemented through the above clusters / complex schools.

RASHTRIYA AVISHKAAR ABHIYAN (RAA)

In Himachal Pradesh 72 schools have been identified as lab schools. Steering committee has been formed and notified by the government under RAA. Meetings have been organized to discuss the RAA activities. Two Mentoring Institutions for RAA have been identified by GOI. Meetings have already been conducted. Besides NIT Hamirpur and IIT Mandi all the district have identified mentoring institutes like central universities, colleges, Engineering college ,Agriculture university Palampur, Horticulture university at Nauni. All the Identified lab schools under RAA have submitted proposals for implementation of RAA in which different activities have been planed as per need. Following activities are being implemented in RAA lab schools:



Consultation at NIT Hamirpur

S. No.	Activity	Level	Status
1	Exposure visit of meritorious girls to Science City Kapurthala.	District	Activity has been completed
2	Meetings of Steering committee	State	Two meetings have been organised

3	Orientation/Meetings with Deputy Directors(HE/EE) , District Project Officer (SSA/RMSA) regarding implementation of RAA activities	State /District	Three meetings at State Level and Three meetings at district level.
4	Participation in Children Science Congress:	Block , District and State Level	Science quiz, Mathematic Olympiad, Activity corner, Survey report, Innovative Science model, Science Skit. Outcome: 15089 children participated in sub-division level CSC 3124 students participated in district level. 16 Child scientists participated in National Science Congress.
5	Science and Mathematics Exhibition at School Level.	School Level	Under RAA initiative to improve learning level in the subject of science and mathematics, science fairs, exhibitions and competitions are being organized in a big way. Community has been involved during this exhibition.
6	Science and mathematics Quiz at school level	School	All RAA schools have organised quiz competition.
7	Exposure of students (through guest lecturer and visit to different project sites)	School level	Schools in Chamba ,Kullu ,Hamirpur , Mandi and Solan have given exposure to students through visits to project sites and institutes of HE .
8	Development of DIET Science Centre“ APJ Abdul Kalam Vigyaan Kendra ” - an initiative by district Bilaspur	District	To create a room, where teachers, students and community from different corners of the district could explore and experience the idea a Science centre “ APJ

			Abdul Kalam Vigyaan Kendra” with Science lab and park has been established in DIET Bilaspur.
9	Orientation of School heads and science mathematics teachers of Lab schools	State and District level	All the Science and mathematics teachers of 72 schools have been oriented at State level workshop to implement RAA activities.
10	Development of mathematics lab	School	All the schools under RAA have science labs but there are no separate mathematics labs. Mathematics labs to be established in these schools. All the schools have started development of maths lab
8.	Strengthening of Science labs.	School	All the 72 schools have started strengthening of science labs.
8	Development of Botanical Labs	School	Botanical labs are being developed by schools having space in their schools
9	Teachers circles	School	Science and mathematics teachers groups have been formed through face book and whatsapp
10	Students science and mathematics clubs	School	At school level students science and mathematics clubs have been formed .They are being actively involved in conducting science and mathematics exhibitions, competitions, display of material and organising environment, mathematics and other important days related to science and mathematics.
11	Convergence with mentoring institutes.	District level	All districts and even heads of RAA lab schools have identified mentoring institutes. Convergence meetings have been organised.

DEVELOPMENT OF SCIENCE CENTRE IN DIET BILASPUR



To further strengthen RAA & to create a room, where teachers, students and community from different corners of the district could explore and experience the idea , a Science center “ **APJ Abdul Kalam Vigyaan Kendra**” with Science lab and park in DIET has been developed with following objectives;

- 1) To create a stimulating and engaging learning environment for children to explore Science.
- 2) To develop a spirit of inquiry among children and community.
- 3) To exhibit, popularize and to link Science in everyday life.
- 4) To hit innovative ideas among teachers (Pre service & in service).
- 5) To connect school based knowledge to life outside the school.

DIET is the institute where all types of teachers trainings (in-service and pre-service training) have been conducted .Teachers, SMC members ,School heads and students comes to attend training programmes in DIETs. They all get benefitted from this science centre. Students right from class-1st to class-12th will get exposure of science related concepts in this centre.

- A big room has been utilized as a part of Science centre where some equipments have been added & displayed and a space has been left for hand on activities by the visitor students.
- A separate entry gate has been constructed so that pre-service training will not get affected by the visitors.
- There are medicinal plants in DIET campus. This area will be developed as Science Park where some more plants and equipment will be set up. Vermicompost plant, butterfly garden etc will be developed.
- Specified CWSN friendly path (3 feet wide) has been developed all around the park.
- In Science Park, parabolic dish, Sun dial, Periscope, butterfly garden, vermicompost, PSLV model, Solar cooker etc. will be established in current session and more equipment would be added in coming year with proper protection.
- In Science centre lab, telescope, Microscope, Physics & biology models have been displayed. A corner has been developed for Science related books. Space has been created for hand on activities where visitors ,teachers and students do activities by raw material under the guidance of Quality Coordinator. Every corner of the room will be utilized for science related activities.





APJ ABDUL KALAM VIGYAN BHAWAN



SCIENCE PARK

A Science Exploratory Centre has been set up with science models, equipments, raw material for hands on activities, Science Park, reading material and ICT equipments.

Multiple activities will take place both inside and outside Science Exploratory Centre serving as a resource hub.

Location	Activity	Target Group	Outcomes
INSIDE THE CENTRE	Workshops with children (on weekends after school time)	Children from the local communities (and/or) from schools.	To create a stimulating, engaging learning environment for children to learn and explore Science. Thereby, children develop a scientific bent of mind. The centre also serves as a space for other learning activities like studying etc.
	Workshops with community members	Youth and adults from the community who are curious about the centre or are keen to volunteer/teach	To build scientific awareness among youth, to invest them in the education of children in their communities.

Location	Activity	Target Group	Outcomes
	Exposure visits	Visitors from schools, Govt. officials , DIET faculty/students, community and other organisations	These visits are conducted to understand the ‘learning by doing’ approach; to understand the program model and activities.
OUTSIDE THE CENTRE	Workshops in schools	Students of classes 6-8. Workshops and Science fairs in schools will be conducted.	To create a stimulating, engaging learning environment for children to learn and explore Science. Thereby, children develop a Scientific bent of mind.
	Community engagement activities Awareness workshops, film screenings, sky watching	Village community members of all age groups.	To build awareness in the community of concepts like ‘Food adulteration’, ‘Hygiene and sanitation’ and activities like sky watching.
	Training sessions	DIET students, school teachers etc.	To share the ‘learning by doing’ approach with other teachers and stakeholders.

III. TEXTBOOK TRACKING

There have been delays ranging from 2 to 137 days in delivering textbooks to children, with an average delay of approx. 2 months in Himachal Pradesh. There were multiple factors for this delay including, late/staggered availability of books at depots (which meant that the same officials had to make multiple trips), late notification of demand to the printer for number of books required, no clear packaging of books which resulted in massive amounts of time being spent in counting books, and even delays in collection of books from block offices by cluster and associated schools. However, to ensure timely delivery, the education department as a whole along with HPBOSE has systematized the supply chain process to deliver books to schools. Moreover, the department is using technological solutions to bring speed, efficiency, transparency and real-time visibility in the system.

Benefits of this intervention include:

- On time / before time delivery of books to all schools
- Online collection of block wise demand for textbooks to make the demand collection process smoother and faster

- Dedicated tele-helpline for textbook delivery to address queries from field officials
- Online dashboard for real-time monitoring of the delivery status of each consignment of books
- New supply chain to streamline delivery process to schools from printer to cluster school
- Funds, basis submitted cost estimates, to hire a truck/vehicle to deliver books from block offices to cluster schools
- Online route-chart to help blocks identify the most optimum route to distribute books to cluster schools
- Recognition to best performing district and block officials

Achievement: Class 1-5 textbooks for all winter closing schools in ~68 blocks delivered to all cluster schools and to most schools BEFORE start of session.

IV. e-SMS PORTAL

To streamline communication with the Education System, the Education Department, Government of Himachal Pradesh, is using an e-sms portal to send SMSes to various stakeholders in the education system. While circulars and notices often take some time to reach the ground, SMSes can be delivered instantaneously to multiple recipients. As a powerful supplement to official communication because of its reach and speed of delivery, SMS is an indispensable medium. The Education department is using the SMS portal built by C-DAC for the Ministry of Electronics and Information Technology, GOI to send one-way communication to all its stakeholders. These recipients include teachers, block officers, district officers, MDM-in-charges, and even some private schools.

Key features and benefits of this intervention include:

- No/low-cost, easy-to-use official communication channel to reach stakeholders instantaneously even in the most remote locations
- Separate log-ins for state, district and block officials to send SMSes within their administrative jurisdictions
- Deliver information regarding various initiatives/notices/requirements/news etc. with minimal chances of delay/failure
- Dashboard for tracking and monitoring use of portal

Achievement

Customized portal for Himachal Pradesh prepared with support from the DIT, HP. Over 3 LAKH messages sent to teachers, schools, block and district officials.

Himachal Education Department amongst the top-3 state departments in using e-SMS services

V. CONTINUOUS LEARNING TIPS FOR TEACHERS VIA SMSes

One of the unique applications of the e-SMS portal described elsewhere is sending teaching and learning tips directly to teachers via SMSes. Although the state often organizes teacher-training sessions, much of the training does not translate into practice on the ground. SMS-based tips are an excellent medium to encourage the implementation of new pedagogies, methods or best teaching practices, as they can be delivered directly on a teacher's mobile phone as per a pre-defined SMS plan. After a pilot of the initiative was executed on the ground, an IVRS-based poll revealed that 85% of recipients responded that they actually used the tips they received via SMS in the classroom. Moreover, 4/5th of all respondents said they wished to continue receiving such tips.

Key features and benefits of this initiative include:

- Separate logins for Teacher Training Instructors (TTIs) in each of 12 districts.
- Sets of continuous learning tips created by expert content developers
- Periodic tips to participants of each training to ensure better field-to-forum results
- Actionable and continuous tips will promote teachers to use best practices in classes
- Better compliance of training at cluster and block levels

Sample PRERNA message: इस हफ्ते सिखाये गये विषयों का पुनरावलोकन के साथ साथ बोल भाई कितने, पीठ पर लिखना, हवा में लिखना इत्यादि खेल करवायें।

Sample CCE message: Share the Student-Portfolio and class work-homework and various assignments done by all the students with parents. This would motivate students to do better.

Achievement

Prepared set of CCE-related SMS tips to send directly to teachers Partnered with other organisations to prepare comprehensive set of pedagogy-related teaching tips to be sent to teachers all around the year starting from the next academic session

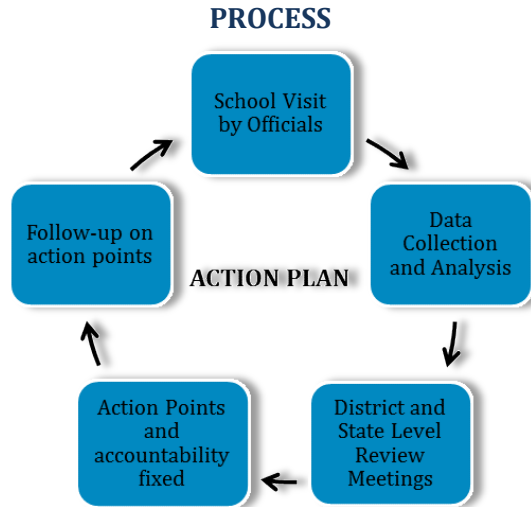
OMR-BASED REVIEW AND MONITORING

There is a need for systematic and regular data-based review meetings in the state at both state and district levels. To improve the quality of review and monitoring, a detailed OMR-based quality monitoring tool, which is easily digitisable and analyzable, has been prepared and distributed to various block officials. The state has mandated block officials (initially BRCCs, and then BEEOs) to visit schools in their blocks and inspect schools on various key parameters like CCE performance, basic infrastructure, classroom teaching and school management. The resulting data from these inspections is collated, analyzed and then discussed at district and state levels to come up with solutions which can improve the performance of schools on each of these parameters.

The image displays two pages of an OMR-based Quality Review and Monitoring form. The left page is titled 'QUALITY REVIEW AND MONITORING' and contains sections for 'I. SCHOOL INFORMATION' and 'II. BASIC INFRASTRUCTURE'. The right page contains sections for 'IV. SCHOOL MANAGEMENT' and 'V. CCE ASSESSMENT RECORD'. Both pages feature a grid of circles for data entry and include instructions for using black and blue ballpoint pens. The forms are designed to be filled out by school officials to monitor various aspects of school performance and infrastructure.

Benefits of this intervention include:

- A single OMR-based quality monitoring tool integrating multiple forms
- Regular school visits and inspections by state officials to identify problems / best practices, basis data, and to take timely action, if required
- Easy digitisation of detailed school-wise data
- Monthly review meetings at district and state levels basis data
- Increased accountability and culture of data-backed decision making within the government
- Reduced burden on state functionaries by replacing multiple review forms with one comprehensive quality monitoring tool .



Review and monitoring observations by block and district officials are recorded on a comprehensive OMR sheet which allows quick digitization and analysis. These are submitted to the state office as per strict timelines where the material is digitized and analysed. Thereafter, the state supplies each district with district-wise analyses of school visits in the previous months, basis which meetings are held at the district level. District-level meetings are followed by zonal meets (4 districts each) at the state. Consequently, district and block officials meet regularly with the Director (Elementary) and State Project Director (SSA/RMSA) to identify root causes of problems and solve them. Proceedings from the meetings and action points for the districts are recorded and circulated to each district via a detailed action-point tracker which is also reviewed at the state meeting (see images below).

SCALE (OCTOBER TO NOVEMBER)

	October, 2016	November, 2016	December, 2016	Total
Total Districts from which Data Received	11	12	12	12
Total Blocks from which data received	91	98	107	117
Total Schools Observed	504	817	986	2,307
Total Classrooms Observed	1,705	2,520	3,944	8,169
Total Students Observed	43,311	53,007	56,541	1,52,859

Basis this new system, over 4000 schools have been comprehensively reviewed along different parameters including basic infrastructure, school management, fund utilisation, assessment results

and classroom teaching-learning transactions in just 4 months. In the process, 8000 teachers have been observed in the classroom along with 2 lakh students. All of this information flows into a detailed user-friendly dashboard that allows the state to take immediate corrective action and replicate best practices.

Analysis

The state is able to assess and rate the performance of each block/district and school along each of the parameters described above. The analysis is prepared at the state level and district level analyses are shared with each district ahead of their district meetings.

BLOCKWISE CCE OBSERVATIONS															
District	Blocks	Overall score A & B across all class	Hindi Class 3 & 5			Mathematics Class 3 & 5			Science Class 8			Mathematics Class 8			
			% students in A & B	% students in C	% students in D & E	% students in A & B	% students in C	% students in D & E	% students in A & B	% students in C	% students in D & E	% students in A & B	% students in C	% students in D & E	
UNA		47%	51%	23%	26%	53%	21%	26%	43%	22%	34%	31%	29%	40%	
KANGRA		44%	47%	28%	25%	49%	25%	26%	40%	21%	39%	28%	20%	52%	
CHAMBA		42%	46%	28%	26%	41%	22%	37%	26%	19%	55%	62%	11%	27%	
HAMIRPUR		51%	59%	17%	24%	63%	16%	21%	47%	16%	37%	25%	19%	56%	
UNA	AMB	54%	62%	21%	18%	61%	22%	18%	37%	29%	34%	37%	29%	34%	
KANGRA	BAIJNATH	38%	54%	22%	24%	54%	16%	30%	23%	31%	47%	10%	22%	68%	
UNA	BANGANA	54%	61%	23%	16%	65%	14%	21%	60%	7%	33%	32%	18%	50%	
CHAMBA	BANIKHET	39%	51%	30%	19%	43%	25%	32%	37%	30%	33%	24%	17%	58%	
KANGRA	BHAWARNA	45%	57%	33%	10%	52%	10%	38%	20%	10%	70%	5%	20%	75%	

Action Point Tracker

To keep a tab on the various decisions taken at the district level and the status of their execution or implementation on the ground, the state also reviews a detailed school-wise action point tracker of decisions taken at the district level. Close monitoring of action taken by identified schools is possible via the action point tracker (sample snapshots given below).

राज्य स्तर पर बैठक का महीना Month of State Review Meeting	ज़िला District	खंड Block	यू.डाइएस UDISE	विद्यालय School	किस प्रकार की चिट्ठी Type of letter	जवाब पाने की अपेक्षित तिथि Expected Date of response	ज़िला अधिकारी द्वारा उठाये गये कदम Step taken by District Official	ज़िला द्वारा उठाये गये कदम की तिथि Date when step was taken by District official
Month when State Review Meeting was conducted	Name of District	Name of Block	UDISE Code	Name of School	Type of letter: - Low CCE Result - No/Unclean Toilet - No Electricity etc.	Date when authority written to is expected to provide response about action taken	Example(s) of type of step taken by the district official: - Meeting at district level - Made phone call to relevant officials - Approved action plan	The date when the District Official called a meeting at the district level/ telephoned relevant officials/approved action plan
Oct-16	KANGRA	BAIJNATH	2020107001	GPS MAHALPATT	Low CCE Result	15 December 2016	Meeting at district level	13 December 2016
Oct-16	KANGRA	BAIJNATH	2020102902	GSSS GHIRTHOLI	Low CCE Result	15 December 2016	Meeting at district level	13 December 2016
Oct-16	KANGRA	BAIJNATH	2020102002	GHS DHANAG	Low CCE Result	15 December 2016	Approved a ction plan	13 December 2016
Oct-16	KANGRA	BAIJNATH	2020107002	GMS MAHALPATT	Low CCE Result	15 December 2016	Meeting at district level	13 December 2016
Oct-16	KANGRA	BHAWARNA	2020200702	GHS BARI	Low CCE Result	15 December 2016	Meeting at district level	13 December 2016
Oct-16	KANGRA	CHADHIAR	2020303401	GPS CHADHIAR	Low CCE Result	15 December 2016	Meeting at district level	13 December 2016

जवाब पाने की अपेक्षित तिथि Expected Date of response	ज़िला अधिकारी द्वारा उठाये गये कदम Step taken by District Official	ज़िला द्वारा उठाये गये कदम की तिथि Date when step was taken by District official	ज़िला द्वारा निर्णीत सुधारात्मक कार्यों का विवरण Details of action decided by the district	पुनर्विलोकन तिथि Review date	पुनर्विलोकन स्थिति Review Status	कितनी सुधार हुई Improvement Observed
Date when authority written to is expected to provide response about action taken	Example(s) of type of step taken by the district official: - Meeting at district level - Made phone call to relevant officials - Approved action plan	The date when the District Official called a meeting at the district level/ telephoned relevant officials/approved action plan	DETAILS of the corrective action taken to resolve issue: (e.g. - - Remedial classes started - Monthly visit by district official - Special focus on students who are regularly absent - Arrange for helper to clean toilet etc.)	Date when actions decided upon will be reviewed	Status of review of actions decided. Select from drop-down list.	Details of improvement(s) observed post review, e.g. : - SA2 results improved by 7% compare to SA1 - Student attendance improved from 60% to 76%
15 December 2016	Meeting at district level	13 December 2016	Action taken report awaited from Schools	19 January 2017	Initiated	Awaited
15 December 2016	Meeting at district level	13 December 2016	Action taken report awaited from Schools	19 January 2017	Initiated	Awaited
15 December 2016	Approved action plan	13 December 2016	Action taken report awaited from Schools	19 January 2017	Initiated	Awaited
15 December 2016	Meeting at district level	13 December 2016	Action taken report awaited from Schools	19 January 2017	Initiated	Awaited
15 December 2016	Meeting at district level	13 December 2016	Action taken report awaited from Schools	19 January 2017	Initiated	Awaited
15 December 2016	Meeting at district level	13 December 2016	Action taken report awaited from Schools	19 January 2017	Initiated	Awaited

Snapshots of State Review Meetings in-Progress



Achievement

**Over 3000 school visits
with a 360 degree assessment of schools
conducted over 4 months (October'16 to January'17)
by ~300 state, district and block officials.**

**Letters issued to all 12 districts identifying shortcomings
in ~1500 schools across various parameters
(low CCE performance, basic infrastructure and use of teaching material).**

VI. ONLINE TRANSFERS OF TEACHERS VIA AN UP TO DATE PMIS

The NIC ManavSampada portal was redesigned to increase its ease-of-use to and incorporate additional functionalities to address the specific requirements of the Directorate of Elementary Education. Once service records (including complete service books) are updated for all cadres of teachers, the PMIS will be a single-window platform for processing all service-related activities (transfer, joining, relieving etc.) and accessing real-time teacher and employee information. Teachers who are transferred will receive an auto e-SMS notification, and details of the transfer will simultaneously be published on the ManavSampada portal.

Key features and benefits of this initiative include:

- Instant online access across state, district, block and school level to view posting information of employees
- Online posting of transfer/ promotion/ appointment orders for employees to view instantly
- Automation of employee services e.g. APR submission, application for pension and reimbursement etc.

Achievement

95% updation of full service books of JBT, CHT and HT on PMIS portal. Online transfers initiated. Transfers now being conducted exclusively online across the state.

VII. KHAAS SHIKSHA:

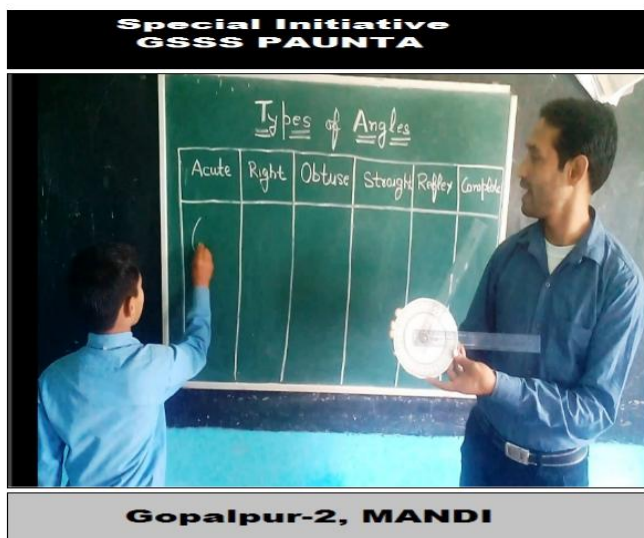
RECOGNITION FOR BEST TEACHING & TEACHING-RELATED PRACTICES

In addition to the existing system of annual awards at the state and district level, the state is instituting a continuous system of recognition, called KhaasShiksha, to celebrate its Teachers, Head Teachers (HT's), Head Masters (HM's), Principals etc. who have undertaken initiatives of their own accord to make their students learn better. These nominations are received will be made by the BRCCs/BEEOs of the block monthly, based on the schedule distributed to them.

As with any other line of work, it is imperative to motivate and encourage good performance in teaching and education. A well-functioning system of recognition has twofold advantages:

- It encourages well-performing employees to keep up the good work by catering to the human need for recognition.
- It inspires other employees to work harder in the pursuit of the same recognition.
- Boost morale of high-performing employees who deliver results.
- Encourage innovation and independent initiative by employees (at all levels) to improve quality of education for children
- Realign long term focus on output (LLOs) but also recognize input efforts through continuous recognition

Some of the best practices recognized in the month of October are as follows:



The school has focused on increasing student learning levels by doing several activities in class like Student Profile, Portfolio, School Calendar, Student of Month award, Lost and Found Box, live and working Models of Pahada Machine, Number System wheel, etc. Efforts of Mr. Naresh Kumar have been appreciated in particular.



School made the classroom environment attractive through Flash Cards, Charts, Slogans, Computer, Neat and clean classroom, fully equipped for assignments making and other learning works. Efforts of Mr Sunil Kumar have been appreciated in particular.

Special Initiative GPS TEEL



Banjar, KULLU

The school uses projects , Model and concret things to make the students understand the topic taught. On the whole the teaching process is very smooth in the classes. The classroom ambience is also enhanced. Efforts of Mr. Ami Chand have been appreciated in particular

Class Room Ambience GCPS LUDDU



Hardaspura, CHAMBA

Creates a positive class ambience, teach the students through modern technology and ABL i.e. through Laptop. Efforts of Mr. Rakesh Kumar have been appreciated in particular

Achievement

Over 90 nominations for best practices in various categories received. 20 schools/teachers recognized in media and by personalized letters from the Government

VIII. e-Samadhan

eSamadhan is a portal for monitoring citizen grievances and demands. The Education Department has recently made efforts to revive this portal which has been lying defunct for the past few years.

Nodal Officers for eSamadhan have been created at all levels - State Directorate, District Directorate and DIET Offices. Clear instructions for resolving grievances/demands regularly and for answering past/pending complaints have been communicated to nodal officers with defined timelines. The State Nodal Officer maintains a dashboard to monitor the progress of grievance redressal and take corrective action in case of delays.

Key features and benefits of this initiative include:

- Up-to-date dashboard monitoring of grievance redressal
- Grievance resolution to citizens of Himachal Pradesh
- Greater transparency in governance

INSPECTORATE: Directorate of Education

In order to achieve the quality in Education Govt. of Himachal Pradesh has notified as inspection cadre comprising of 12 Dy. Directors one each from each district, 20 Principals and 20 Block Primary Education Officers.

The monitoring team of SSA will work in tandem with the inspection cadre and would assist the inspector cadre in every district. The main objective of the inspection cadre is as under:-

- a) The focus of the inspections will be on academic performance with emphasis on quality parameters.
- b) Quality of teaching, academic discipline availability of teachers, coverage of syllabus etc will form an integral part of these inspections.
- c) The inspection team will issue an inspection note to be uploaded online from the school itself pointing out specific areas of improvement. Compliance to these suggested improvement will be seen during the next inspection.
- d) The inspections will cover all GSSS/GHS and Middle school every year and Primary schools twice each year.
- e) The inspection team will assess the school mainly based on academic evaluation of the students through written and oral evaluation.
- f) In addition, the inspection team will analyze and use the following documents to evaluate the performance of schools:-

- i. Board Results
 - ii. Continuous Comprehensive Evaluation (CCE)
 - iii. School Internal Evaluation
- g) The Inspection team will also inspect all internal and external examinations to curb copying in the School and markings.
- h) Annual Report of Inspection will be submitted by the Joint Director (Inspection Cadre) to the Government.
- i) The Entire inspection will be supervised under the overall control of Secretary/ Principal Secretary (Education)

The proposed monitoring under SSA/RMSA would be done along with the officers of inspection cadre, so that the required action or corrective measure could be taken.

NOTIFICATION

Department of Higher Education
Notification

File No. EDN-B_B(15)-5/2015, dated: Shimla-171002, 3-8-2016

The Governor of Himachal Pradesh is pleased to create an Inspection Cadre Cell in the Education Department. The structure of the Inspection Cadre Cell will be as under:-

- (i) The Joint Director (Inspection Cadre) will head the Inspection Cadre Cell.
- (ii) In the Districts, 12 Deputy Directors (Inspection Cadre), one in each district with 20 Principals (Inspection Cadre) and 20 BPEOs (Inspection Cadre) will be distributed proportional to the number of schools in each district. The distribution of posts is suggested as under -

Sr. No.	District	Dy. Director (inspection)	Principal (inspection)	BPEO (inspection)
1.	Kangra	1	3	3
2.	Mandi	1	2	2
3.	Shimla	1	2	2
4.	Kullu	1	2	2
5.	L&S	1	1	1
6.	Solan	1	1	1
7.	Sirmour	1	2	2
8.	Bilaspur	1	1	1
9.	Kinnaur	1	1	1
10.	Hamirpur	1	2	2
11.	Una	1	1	1
12.	Chamba	1	2	2
	Total	12	20	20

- (iii) The office of Joint Director (Inspection) will be provided office support in the form of One Supdt. Gr. II, One Senior Assistant, Two Junior Office Assistant (IT), One Steno typist, one peon.
- (iv) The offices of Dy. Director (Inspection) will be provided office support in the form of One Senior Assistant, one Junior Office Assistant (IT) and one Peon.
- (v) Joint Director (Inspection) and Dy. Director (Inspection) will be provided vehicle (by hiring Taxi as per policy of Government) to facilitate mobility.

- (i) The office of Jt. Director (Inspection Cadre) will be located in the Directorate of Higher Education.
- (ii) The focus of the inspections will be on academic performance with an emphasis on quality parameters.
- (iii) Quality of teaching, academic discipline, availability of teachers, coverage of syllabus etc will form an integral part of these inspections.
- (iv) The inspection team will issue an inspection note to be uploaded online from the school itself pointing out specific areas of improvement. Compliance to these suggested improvements will be seen during the next inspection.
- (v) The inspections will cover all GSSS/GHS and Middle schools every year and Primary Schools twice each year.
- (vi) The inspection team will assess the school mainly based on academic evaluation of the students through written and oral evaluation.
- (vii) In addition, the inspection team will analyze and use the following documents to evaluate the performance of schools:-
 - a) Board Results
 - b) Continuous Comprehensive Evaluation (CCE)
 - c) School Internal Evaluation
- (viii) The Inspection team will also inspect all internal and external examinations to curb copying in the Schools and markings.
- (ix) Annual Report of Inspection will be submitted by the Joint Director (Inspection Cadre) to the Government.
- (x) The entire inspection will be supervised under the overall control of Secretary/Principal Secretary/ACS (Education).

By Order,
Principal Secretary (Education) to the
Government of Himachal Pradesh
as above, dated: Shimla-171002, 3-8-2016
Copy of the notification is sent to:-

The Addl. Chief Secretary (Finance) to the Govt. of Himachal Pradesh.
The Accountant General, Himachal Pradesh, Shimla-171001
The Director of Higher Education, Himachal Pradesh, Shimla-171001.
The Director of Elementary Education, Himachal Pradesh, Shimla-171001.
The State Project Director, RMSA/SSA, H.P. Shimla-171001.

Joint Secretary (Education) to the
Government of Himachal Pradesh

