Understanding the innovative ICT module running in the Government schools of Ahmedabad



SSA, Gujarat Council of Elementary Education Government of Gujarat

Table of Contents

Preface	4
INTRODUCTION (Background & Objectives)	4
Background	4
Education in Gujarat-A Fact File	5
Objective:	6
KEY PROGRAMMES RUNNING THROUGH SSA, GUJARAT	6
Smart School	6
Computer Aided Learning Program (CAL)	6
About Gyankunj	8
Teaching-learning through e-Content and online resources:	8
Guidance, Usage and Monitoring at schools:	9
"Gunotsav"	10
Background	10
Child Tracking System for Learning Outcomes	12
Main domains assessed in Gunotsav	12
PRAGNA:	14
II: Impactful Measures taken by the Government	15
Observations and Findings	15
CASE-STUDY OF AAMJA PRIMARY SCHOOL	16
Relevance	19
Effectiveness	19
Sustainability	20
III: Challenge Areas and Viable Replicable Models	20
SUGGESTIONS AND SCOPE THROUGH GUJARAT MODEL:	21
Introducing ICT Module and Digitization of Classrooms	21
1) Recruitment based on Merit for the School Head-Masters and Principals	22
2) Enhanced roles of IT Tools in School Administration and Management	22
3) Strengthening and Capacity building of Government Authorities	22
4) Community Participation	23
Conclusion & way forward	23
Facilitators:	25

PREFACE

HCL-Foundation has been pro-actively working for the holistic development of villages in Hardoi District. The Education Sector at HCL-F has been successfully implementing Shiksha Classes (IT-enabled classrooms) for Grade 1&2. In the course of discussing the emerging trends and innovative techniques in School Education, HCL-Education team met Director, Basic Education and discussed with him the positive impacts of ICT classes on Learning Outcomes of students in Hardoi District. The Director was not only impressed by the overall improvements in scores and indicators but also recommended conducting a Workshop at State Level and reward the efforts of ten best teachers who have made remarkable influence through Innovative Methods of teaching and learning in the three Blocks where Project Samuday is currently being implemented.

Along with this "Gyankunj Project" being run by the Education Department in Ahmedabad (Gujarat) was also discussed and it was decided to meet the Government Departments and Schools having similar ICT Modules of Education which has garnered huge accolades. The Team from HCL-Foundation had a two-day Exposure Visit to Ahmedabad whereby the Sarv Shiksha Abhiyaan (SSA) Officers facilitated meetings and visits to Schools.

Mr. Pranav Suthar, who is not only the Master Trainer for the Computer-Aided Learning at the State but also holds the position of Head-Master of AAMJA PRIMARY SCHOOL in Gandhinagar District. He has re-inforced the teachinglearning process through the use of technology and ease of learning through new interactive learning methodology

Altogether, the Visit being a fruitful one brought fresh perspectives and also insights to many replicable features that could be recommended to the Government of Uttar Pradesh.

INTRODUCTION (Background & Objectives)

Background

HCL- Foundation is running Project Samuday in three blocks of Hardoi District. The Project encompasses development of all the villages in these blocks across all sectors and areas that possibly have an impact on the community. One of the key element in this process is making impact within the community through "Education" sans which it would almost be impossible to see development especially in sustainable terms.

The Project's Education Sector focusses on the overall Community and runs programmes for both children and the Adults in the villages. The School Infrastructure and Environment are being improved through provision of Library books, Sports Materials, Desks, TLMs on the one hand parallel to which there is focus on quality improvement of Student and Teacher Learning process, Classroom Interactivity and Students' Learning outcomes. "SHIKSHA" – The word which is a simple translation of Education in Hindi, it has redefined its own upgraded version in Project Samuday. It refers to the ICT based Module classes functioning in Grade 1 and 2 of the Primary Schools in the three blocks of Hardoi District (Uttar Pradesh). There is close working with the Government Officials at the State, District and Block levels.

There are experiences on and off the field and then there are learnings "Inside" and Outside; and the team has always been proactive in inculcating the Best Possible ideas and techniques to evolve continuously and keep doing better. In continuation to the process, the team visited Ahmedabad (Gujarat) to understand the Modus operandi of the ICT Module and online classes running in the Government Schools of the State.

Education in Gujarat-A Fact File

The primary and secondary/higher secondary education infrastructure available in Gujarat has been able to cope with the demand generated so far. While primary education has traditionally been, and continues to be, a government strong-hold, the secondary/higher secondary education is fast becoming a private sector forte.

Gujarat had an estimated 8.2 million children enrolled in the primary classes with the Gross Enrolment Ration (GER) touching almost 100%. There were about 2.77 million children enrolled in institutions imparting secondary and higher secondary education. Both the government and the private sector are increasingly playing a larger role in ensuring that children are not left out of the education system for want of infrastructure.

Gujarat ranks 9th on the Education Development Index (EDI); Planning and prepared by the National University of Educational Administration (NUEPA). This index measures the performance of states on the Universalization of Elementary Education programme. The Gujarat Council of Elementary Education was established as a state level society for implementing District Primary Education Programme. Under Sarva Shiksha Abhiyan (SSA), all the 33 districts and 4 Municipal Corporations in Gujarat are being covered.

The HCL-Foundation team visited both the Rural and Urban Govt. Primary Schools facilitated by the Officers from Sarva Shiksha Abhiyaan in Ahmedabad. The schools are implementing "Gyankunj" which is a Demand-Based Digitized form of Classroom Education. Apart from this there are several unique models and systems adopted for the overall development of school to enhance the Learning levels of students alongwith development of School Infrastructure. Rigorous efforts were made to nurture the schools with innovative and sustainable initiatives which have now started yielding

positive results for children of the school. Radical transformations have been made through participatory support of Community and Government. The schools in Gujarat got new identity by reinforcing teaching-learning process through innovative use of technology and ease of learning through new interactive learning methodology both in Urban as well as Rural Areas. The Schools visited were Borij School (Urban), Shahpur (Rural) and Aamja Pr. School

Objective:

The Objective of the Visit was basically to understand the functioning of the ICT based classes in Gujarat State Board Schools through "Gyankunj" (a school digitalization program). Gujarat State is among the few States in the country that have not only established but also successfully implemented norms and practices as per RTE norms. While many states are still struggling to establish the basic infrastructure in Schools and meeting demands of the elemental Resources, Gujarat Education System has taken a leap forward in Digitized and Online teaching in Government Schools.

As the Education vertical of HCL- Samuday is implementing teaching through the ICT Module in Hardoi district of Uttar Pradesh, there lay a huge scope to observe and understand similar programmes running in other parts of the country.

KEY PROGRAMMES RUNNING THROUGH SSA, GUJARAT

Smart School

The concept of Smart School project focuses on enhanced interactivity in a classroom using Information and Communication Technologies (ICTs) and Multimedia based resources as well as comprehensive development of school in pedagogic and infrastructural context, like availability of proper rooms, network connectivity, security of school premises, maintenance of infrastructure, use of building components in learning, activity based learning etc.

The concept of 'Smart School' is not only to build 'Technologically advanced schools' but also to use the entire environment of learning by integrating the concepts of Pragna - Activity Based Learning (ABL), Computer Aided Learning(CAL) and Building as Learning Aid (BaLA) using the infrastructure of the school in proper manner for teaching-learning process.

Computer Aided Learning Program (CAL)

The main objective of the CAL programme is to attract the children, retain them in the schools and to improve the quality of the education through animated multimedia based educational content. CAL objective is sought to be achieved through story based, animated cartoons, interactive games and riddles with the use of multimedia features. Spontaneous, self-initiated and self-regulated, the three critical aspects that make an activity play are integrated in CAL to make Learning Play and use of cartoons, story line and music is intended to make CAL as self-initiated and engaged in learning. It enables the government school students especially rural area students to be at par with the urban and advance school students.



Aims to improve the IT literacy in the rural areas particularly and removing the digital divide in the state.

Improvise the interest of students in school studies and increasing school attendance and better performance in examinations.

Enhances the teaching process with the integration of the IT in the class.

About Gyankuni

Gyankunj is school digitalization program enhance classroom interactivity and teaching-learning process with the help of technology tools, like Projector, Interactive Infrared Camera, Laptop, Speaker, Whiteboard, Wi-Fi Router etc. The program is being implemented in 6 districts,



1609 Schools, 3173 Classrooms to accelerate the efforts of Gujarat Government in Digital Mode of Education. It aims to make ease of understanding for each unit of curriculum in classroom itself by using technology as a medium. Gyankunj model uses whiteboard, laptop, projector, IR camera and interactive software for interactivity in classroom, the laptops are connected wirelessly or via USB or serial cables. A projector connected to the laptop displays the desktop image on the whiteboard and IR camera uses high speed image sensors which can intelligently track and learn the environment and allow for a seamless information control with any display with real-time interaction and writing speed without any lag and superior interactive performance. The IR camera accepts touch input from infra-red enabled pen. It also helps schools, teachers and students to stand globally competent with the help of education technology.

Facilities at Classroom under Gyankunj Model

- Projector
- IR Camera
- Laptop
- Speaker
- · White Board



It is pertinent to note here that the "Gyankunj" Project in Gujarat is a Demand-based Concept. The interested Schools and teachers have to file an Application and there is a process of selection based on fulfilling the Eligibility Criteria.

Teaching-learning through e-Content and online resources:

The processes of teaching-learning and evaluation are being executed with the use of various technology tools, e-content and open source resources from the internet on the global pattern of education. The e-Content comprises of various images, videos, animations, virtual labs, demonstration & visualization of activities, self-learning, evaluation and reference material. The e-Content covers more than 450 units of 52 textbooks, more than 3,000 animated videos, 3,000 interactive animations, over 1,000 games on various topics, virtual lab for science experiments and question bank of more than 50,000 questions.

A total of 10,000 tablets have been provided to students of class VII and VIII in 100 schools (100 tablets per school) under "Gyankunj" project. Each tablet contained pre-loaded textbooks in PDF form, as well as apps like National Digital Library, English Grammar Master, Hello English, English Gujarati Dictionary, Type it, ByJUS, Khan Academy (English Version) and QR Code Reader. It provides self-learning opportunities to students for better understanding on each unit of curriculum.



Guidance, Usage and Monitoring at schools:

Web based application (www.gyankunj.org) and mobile app have been deployed for the successful implementation of the entire project. Using this application, the head teacher / nodal class teacher from the school level, logs complaint online for problems related to hardware / software. Under this system, the real-time progress of the Gyankunj project can be ascertained at all levels on the basis of details of the project being updated from the school level.

ILFS has been hired as the Partner Agency on contract-basis for issues-resolution and overall maintenance of the smooth functioning and running of the servers and Device-functionality.

The Database is maintained in the form of repository with SSA and a standard format is designed for Monitoring at the Schools.

In case the issue is not resolved within the stipulated time, there is a penalty fine of Rs. 500 that is to be paid by ILFS to SSA.

"Gunotsav"

Strengthening Quality Outcomes in Primary Education

Background

While in Gujarat there has been notable focus and efforts on enrollment, and have brought a fair share of success for the primary education, concern for learning outcomes and quality provided in primary education has been addressed by various enhancement programmes for learning improvement. It is for strengthening the quality outcomes, the government of Gujarat launched a programme called Gunotsav, or 'Celebrating Quality'. Therefore, Gunotsav is defined as an accountability framework for quality of primary education which includes learning outcomes of children as well as co-scholastic activities, use of resources and community participation.

This programme was started by the state Education department during November 2009, with an aim to evaluate primary education scenario and grade school teachers accordingly. State Government has seen primary education as a grass-root sector and initiated with revolutionary experiments. The government of Gujarat has initiated a series of steps to improve the level of learning in its schools across the state and wishes to take these efforts forward, so as to achieve visible and

measurable positive change. Government's efforts have succeeded in increasing school enrollments and bringing down school drop-out ratio, two major concerns in education field. The aim is to ensure that Gujarat should be among the top three states of the country in terms of student learning outcomes over the next 5 years.

Gunotsav is carried out with the participation of all state departments to strengthen 'quality'

components of the Deptt. Education. Different state departments take up additional responsibilities for this period. This statewide exercise has been an annual feature.

A key focus of Gunotsav is to highlight the levels of student learning (with a focus on basic skills like reading, writing and arithmetic operations in the lower classes and subject knowledge in the higher classes) and provide systematic year-on-year data and insights to improve learning levels in a measurable way.

Gunotsav is carried out state wide in two phases:





The assessment is conducted for over 52 lakh children of classes 2-8. In the first phase, self-evaluation is done by covering 100% schools and is also known as Self Evaluation phase.

In the second phase, evaluation is done by 3000 senior government officials of Gujarat covering around 9000 schools. As a part of the exercise top IAS, IPS, IFS and other officers besides ministers went to the schools to access the parameters and grade them to evaluate the status of education in the state. Thus 25% of schools in each block (taluka) are assessed personally by senior Government bureaucrats and Class I & II officers.

The assessments conducted are consciously designed to test appropriate levels of conceptual understanding and their application by the children. Data from both phases is collated, compiled and analyzed by INDEXT B using latest information technology and the results are shared with stake holders enabling them to take appropriate action for the identified shortfalls. At the state level, Gunotsav visits yield valuable inputs and perspectives for policy making, along with identifying needs for making special efforts post Gunotsav.

PHASE 1: Self Assessment by All School

PHASE 2:

Assessment in 9000 Schools by 3000 officers 3 day visit @1 school day selected randomly in assigned cluster

Remedial Extra Coaching Program Diagnostic Assessment

Monitoring by External Parties - Unicef, Pratham & Educational Initiatives

Child Tracking System for Learning Outcomes

The IT centre prepares CDs with district data for each of the 26 districts. The data has grading starting from teachers, schools, learning levels of children, CRCC and the cluster, BRCC and the block and a district report at a glance. Additionally, printed certificates for each of the above will be distributed by Sarva Shiksha Abhiyaan -SSA

The Guntosav portal developed by Education department & iNDEXTb is a store house of data for primary education, and can be used for planning annual activities at state, district and block levels. The web portal also strives to make data collection robust at all levels.

Gunotsav now uses OMR testing for children from standard II to VIII and OMR based assessment tools for school evaluation parameters also. It has made the process of data collection and data analysis even more credible and further enable complex analysis. It has enabled the state to initiate Child Tracking System for Learning Outcomes on a longitudinal basis for each individual child which will strengthen accountability within the system. This Program has been recognized as one of the best practices in the 12th Five Year Plan document published by Planning Commission, Government of India.

Main domains assessed in Gunotsay

- Scholastic Activities
- Co-scholastic Activities
- · Utilization of School Infrastructure
- Community Participation
- Reading, Writing, Maths, Science, Social Studies, English
- · Cultural Activities
- Electricity Facility
- School Mgmt. Committee Meetings
- Effective use of Workbooks
- Exhibitions
- Drinking Water facility
- Tithi Bhojan in MDM
- · Science Practical and Map Book
- · Prayer and Yoga
- Sanitation Facility
- · Parents gathering/discussion
- Educational Tours and Local Visits
- · Sports Meet
- School Health
- School garden maintenance
- Students' Attendance
- · Hygiene and Cleanliness

Exposure Visit Report

PRAGNA:

An activity based learning approach for Std. 1 and 2. It was initiated with an objective to correct and overcome the problems of conventional classroom teaching methods and to open the classroom to a more holistic and learner based way of working with children.



PRAGNA - An activity based learning approach

Children as well as teacher also sit on the floor rather than table-chair, benches or any kind of fixed furniture, Carpet or mat is provided to all the schools.

Classroom: The Pragna Classroom is child friendly place for children where they would love to come and learn. It is a place where the material is within their reach and they also have freedom to use them as per their need.

Subject Classroom: There are subject specific rooms instead of common classroom. The subject specific rooms are designed keeping in such a way that the child can have an easy access to the material related to particular subject. Separate room for Language-EVS and Mathematics- Rainbow activities are organized in the schools.

Group Formation: Children of Standard 1 and 2 at together in any of the two classrooms. The combine group of children of standard one and two are divided in six groups according to the stage of learning. These groups are (1) Teacher Supported Group (2) Partially Teacher Supported Group (3) Peer Support Group (4) Partial Peer Support Group (5) Self learning Group and (6) Evaluation Group.

Physical Environment of Pragna Classroom: Rack and Tray, Ladder, Group Chart, Student Slate, Teacher Slate, Student Progress Chart, Display, Learning Card / Activity Card, Workbooks, Flash Cards etc. are used to enhance the learning process.

II: Impactful Measures taken by the Government

Observations and Findings

Administrative

The Funding is catered to by the SSA Fund. The School Development Fund is generated through a Tehseel Resource Person (TRP) that sends the demand to SSA for every school.

The payment for School Infrastructure is directly transferred to the Head Master's bank Account.

Two systems of fund disbursement through SSA:

- 1) Demand-based: The TRP notes down specific demands from Schools for repair and Maintenance and raises the requirement to SSA.
- 2) Through Grant: Based on the number of students, a sum of Rs. 75,000 is allocated to the Schools.

"Aapno Taluko Vibrant Taluko-(ATVT)" Scheme throughout Gujarat to provide basic amenities at the village level. Government has initiated the concept of ATVT-a sub district citizen centric approach where governance and development is facilitated at the grassroot level.

Recruitment of Head-Masters/ Principals is done through Entrance Exams, thereby eliminating Seniority as the only basis of selection. The deserving candidates are selected based on Merit giving opportunities to young and fresh minds in position.

IAS Wife's Association (GIASOWA) functional where Schools are adopted by wives of IAS Officers who regularly take classes in the schools. This has been running in 10-12 schools of Gujarat.

Attractive educational environment in school campus has been created by painting informative sketches on the walls under BaLA (Building as Learning Aid) to enable students to learn innovatively.

CASE-STUDY OF AAMJA PRIMARY SCHOOL

The Head-Master of Aamja Primary School, Pranav Suthar is a motivated and dedicated teacher who not only pursues teaching as a profession but continuously evolves innovative techniques for ease of Teaching-Learning process and find solutions to the cons of Conventional Teaching methods.

Initiatives taken for overall development of school:

Life Skill education is provided to develop healthy values of mutual respect and responsibility in children towards each other, teachers, parents, community and the environment around them.

Innovative use of technology like, Augmented Reality (AR), Virtual Reality (VR), QR Codes have been used.

An education committee has been formulated which comprises of students who have a better understanding of different subjects; these children provide support to their peers for improving their learning levels in case they face any difficulty in understanding anything.

All classrooms of Std. 5 to 8 have been converted into Smart Classrooms by equipping them with Projector, Laptop/PC, IR Camera, e-Content, Wi-Fi network and Pin up Boards.

The school has successfully adopted Green & Sustainable School approach which covers components like Rain Water Harvesting System, Plantation, Kitchen Garden, Herbal Garden, colour coded dustbins for waste segregation, Compose Pit for reusing and recycling biodegradable waste and overall School augmentation & modification.

The school has also developed a healthy relationship and sense of ownership in community through various interactions and interventions. It is the result of this that the community has come forward to improve school infrastructure by providing support for construction of School Gate, Gazebo, Stage for cultural program, etc.

The school has designed special uniform for all its children that makes them feel comfortable and wellgroomed.

Introduction:

Aamja Primary School is located in Kalol taluka of Gandhinagar District.

With conscious participation of all stakeholders, the school has initiated special efforts since year 2015 to begin a unique journey of enhancing the quality of education and environment in school.

Rigorous efforts were made to nurture the school with innovative and sustainable initiatives which have now started yielding positive results for children of the school. In a short period of time, the school has transformed radically through participatory support of Community and Government. The school has got new identity by reinforcing teaching-learning process through innovative use of technology and ease of learning through new interactive learning methodology. Now, Aamja Primary School has become a shining Smart School where students love to learn.

Wi-Fi facility has been made available throughout the school campus for easy access to internet.

Unit tests are conducted regularly to assess the learning levels of children and regular interactions with parents are held to discuss the progress, strategy and role of parents and schools to further improve the learning levels of children.

The Concept of BaLA has been taken to a next level by making it Dynamic. Rather than a regular

painting, chalks can be used to change the Pictorial Representations on daily basis for better Learning and Retention Methods.







Relevance

SSA is an Indian Government programme aimed at the universalization of elementary education "in a time bound manner", as mandated by the 86th Amendment to the Constitution of India making free and compulsory education to adults between the ages of 6 to 14. While the day to day functioning might vary between States, there are mandates that have to be followed.

- Comparatively, the major difference between Uttar Pradesh and Gujarat Education Department is visible in terms of funding. While, the Govt. in U.P suffers from Monetary Resource crunch, the Gujarat Schools both in Rural and Urban areas have sufficient Funds for the development and improvisation of overall School Environment.
- · Another notable difference was in terms of Community Willingness and Literacy Levels. In some schools of Gujarat, huge contributions have been made by the community for developing Infrastructure at Schools. This greatly comes in through Understanding of the importance of Education by the Community itself.

Effectiveness

The education reforms being spearheaded by Government represent a new horizon of social policymaking not for the usual academic reasons of innovative ideas, but because of pragmatic policy design that reasonably accomplishes the basic objectives of education policy. The emphasis on

important stakeholders like teachers, employees, administration, parents and most importantly students is responsible for tangible accomplishments. Another important factor is the nature of political investment and social engagement that has become the driving force of policy initiatives in a largely tumultuous policy environment. This sui generis focus on stakeholder empowerment and pragmatic implementation helps in improving the Education system overall.

Although huge funds have been invested along with policies revisions etc. the output still remains bellows expectations. One can also observe that various States of the country have their own varied experiences for the progress and improvement of Education.

Sustainability

III: Challenge Areas and Viable Replicable Models

While on one hand the Schools suffer from basic Infrastructural problems like no electricity connections, poor buildings etc. there is also a decline in learning levels among school students. Teacher vacancies and teacher absenteeism continue to plague government schools in which dropout rates are still high. The Low Motivation levels and low job satisfaction of teachers in the Government Primary Schools greatly hampers the progress and deteriorates their output. Along with this the Community Participation is extremely low and there is lack of ownership due to reasons like low-level income of families. The schools are still following traditional methods of teaching and learning which are depriving the students from the new systems and technology.

Improvement of primary education means improvement of students studying in government primary schools. i.e. if we want to improve primary education in Uttar Pradesh we should think about all those means by using which we can improve the physical, mental, economic, social and living standard of students studying in government primary schools in Uttar Pradesh. Few key points hampering the Objectives in Effective Implementation and outcomes are:

- The Government spends a lot of funds every year for the progress and development of primary education but due to inactiveness of government the result is very poor. Government has launched many programmes and schemes for the progress and development of primary education but timely supply of funds for these schemes is always questionable. MDM, free books, free two set uniforms and tuition without fee are very wonderful schemes of government for primary education but their execution and proper supply of funds is not up to the mark due to which expected result is not achieved.
- ii. In the era of smart classes, air conditioned class rooms, WI-FI campus, students with laptops, well equipped laboratories and libraries where highly modern and advanced technologies are being used to make teaching-learning more easy and effective, government primary schools are yet lacking teachers, class rooms, separate toilets, drinking water, chalk-dusters and electricity etc. The work style in government primary schools is totally traditional like uses of Tat-Patti for sitting of students, only cramming on the name of education; go outside for urinal & toilets, hand pumps for drinking water and facing punishment for discipline etc. Although Operation Black-Board, DPEP, SSA, RTE, 2009 has proven very effective to maintain standard of primary schools to some extent yet we have to travel a long journey for improvement of primary education.
- iii. The Low Motivation levels and low job satisfaction of teachers in the Government Primary Schools greatly hampers the progress and deteriorates the output of the teachers.

- iv. India's largest state by population has the worst pupil-teacher ratio (PTR) in India, with a teacher for every 39 students at the primary level, according to the Unified-District Information System for Education (U-DISE) Flash Statistics 2015-16. The all India average is 23:1.UP recorded an enrolment of 25.3 million primary students (including both private and government schools) in 2015-16, taught by 665,779 teachers (even including schools where primary, upper primary and secondary co-existed), according to government education data. At 30 students per teacheras prescribed by the Right to Education Act (RTE)-at the primary level, the state should have 840,000 teachers but is short by 21%.
- The digitization of classrooms will require Internet and Broadband facilities which will pose hindrances considering several Government schools in the Districts are still facing electricity issues. Internet connectivity will be a pre-requisite for the functioning of Online classrooms.

SUGGESTIONS AND SCOPE THROUGH GUJARAT MODEL

Introducing ICT Module and Digitization of Classrooms

The National Policy on Education 2016 in its Recommendation Report recommends "Appropriate use of Information Technology in every aspect of governance of the sector".

The Committee notes that while the MHRD has continuously supported new initiatives and experimentation in this field, the large number of expert organizations attached to the Ministry of HRD have not adequately addressed the issue, with research and analysis, to roll out programmes designed to harness IT to improve education in India. The usage of interactive boards, digitized forms of Assessments and online classrooms will open avenues for updated technology usage for knowledge dissemination in classrooms.

The Report also cites the "SHIKSHA" Programme running under the flagship programme of HCL. It is clear that the above potentially path-breaking initiative, and perhaps other experiments elsewhere in India, will open new vistas for enhancing quality of learning, particularly in lower classes (primary). Further experiments need to be embarked upon to test the methodology, with suitable adaptation, for higher classes, in the secondary level - the efficacy in conveying concepts relating to say physics or mathematics surely should be explored.

The Committee notes that as Digital India is rolled out, cost of delivery system per classroom likely to decline dramatically; high quality teaching material, once prepared, can be reproduced at nearly

Recruitment based on Merit for the School Head-Masters and Principals

The selection of headmasters and principals has also to be done carefully. Promotion based only on seniority is not desirable. A separate cadre of school principals, selected on merit and aptitude, from among the teachers with at least 5 years of teaching experience. Selected candidates should be required to undergo vacation training in leadership and school management. Principals should be held accountable for the school to improve its academic performance and achieve prescribed learning levels assessed through internal n and external tests.

Enhanced roles of IT Tools in School Administration and Management

A number of IT-based applications for monitoring the performance of schools and student achievement can be utilized. Not only Gujarat Govt. but Delhi Govt. is successfully implementing

Successfully since 2005-06. E-Classes are functional that are run through satellites (Vande-Gujarat Channel). Apart from using satellite servers, Attendance monitoring of students through Biometric systems and GPS Technology can be introduced.

For better Administrative level functioning, a Centralized MIS System can be devised that will track Students Learning Levels, Attendance of Students, Teaching Plan variance etc. This shall function as a data-base where the data can be accessed simultaneously by State, District, Block, Nyay Panchayat and at School levels. The above indicators should be available with the click of a button.

Strengthening and Capacity building of Government Authorities

It is crucial to build upon the capacity of the Human Resources at the Block levels. Not only the Infrastructure of Block level offices like BRCs, NPRCs should be improvised where adequate space and provisions are made for trainings and events at regular events can be organized for continuous development. Collaboration with DIET at the District level for trainings of the teachers. Regular meetings should be conducted amongst the Block level officer for continuous Progress Monitoring.

The Teachers Training Program for Capacity-building of Teachers through Development of Resource Group at the three levels: District-Block-Nyay Panchayats.

Community Participation

The School Management Committee (SMC) should be given more powers to attain prominent roles. They should be given more funds and there is need to ensure greater Transparency and accountability within this system. Coordination among community and teachers is very necessary for improvement of primary education. It should be maintained by both teachers and community. It is vital that the Community be mobilized through various measures so it takes ownership and plays pro-active roles in the functioning of Schools. Likewise, if we speak about Urban Scenario, there is need to ensure Parents' Participation in the School Activities of children.

Similarly, better coordination among officers also reduces the complexities of bureaucracy and saves the time, money and energy. Better coordination among officers increases the rate of success of programmes and policies governed for primary education.

Conclusion & way forward

While there are certain differences that can be noticed in the working and functioning of the Sarv Shiksha Abhiyaan in the states of Gujarat and Uttar Pradesh, there are common set of compliances that have to be adhered to as per RTE Norms and other Frameworks. It is a dual challenge for government of Uttar Pradesh as this decline in learning is also coupled with a double digit drop-out rate in primary schools and adds to this the need of infrastructure and other basic facilities that our government schools do not adhere to as per the RTE compliance; improving the education scenario is no mean task in hand. With changing times, there is need to move two steps forward and adopt technologies that will have enhanced roles in dissemination of knowledge. States like Gujarat have made efforts in introducing next level technologies through handholding with Partner Agencies to bring in innovative techniques in Classroom teaching and Learning Methods.

A lot can be learnt and implemented from Gujarat Model, beginning from Administrative functioning and strengthening the Block level administration to introduction of online teaching in the classrooms.

- With the "Composite School Grant" to Schools in U.P Government, that has been initiated this year can be one of the sources for the Development and Improvement in the Schools in the following areas:
 - a. Infrastructure; buildings, furniture, structures, stationaries, TLMs etc.
 - b. Innovative Methods like Computer Aided Learning and Interactive Classrooms.
 - c. Digitization of Conventional Methods of Assessments and Learning, etc.

Also, the School cannot be separated from community/society both being interrelated and interdependent on each other. Community can help the school by supervision of programmes and providing supports to the schemes & programmes executed in schools. In other words, teachers can help the community by making aware the community members about education, pollution, population, early marriage issues, voting, cleanliness, and health & hygiene etc. School can run properly with the support of community and teacher can lead the community properly. Therefore, coordination among community and teachers is very necessary for improvement of primary education. It should be maintained by both teachers and community.

In Gujarat, the Community's pro-active participation and involvement in School Development has shown some remarkable outcomes. Through collaboration and other joint action methods, the Community has made efforts for developing the overall School Environment.

Better coordination among officers also reduces the complexities of bureaucracy and saves the time, money and energy. Better coordination among officers increases the rate of success of programmes and policies governed for primary education. Therefore, improvement of primary education can be done easily if there is better coordination among officers.

Facilitators:

The entire visit was facilitated by the SSA Team. Every Resource Personnel that helped in garnering key information is enlisted below:

The details of the Officials are as follows:

S.No.	Name	Designation	Contact Details	Address
1	Mr. Vijay	SSA Office		
2		UNICEF		
3	Ms. Kaavya	Principal, Borij School		
4	Pranav Suthar	Principal, Aamja School		
5	Ashwinibhai Patel	Principal, Shahpur School		

22 | Exposure Visit Report

Exposure Visit Report | 23

ANNEXURES: