

Project Profile

Computer Tablet/Notebook

Providing digital education



Gujarat CSR Authority

Project Profile – Computer tablet / notebook

Background & rationale

Information and Communication Technologies (ICTs) are ushering in unprecedented changes in the nature, content and way in which education is imparted. ICT has opened up new vistas for stakeholders in education – teachers, students, parents and the public – by making them more involved and engaged.

Computer tablet/notebook is an innovation, which can help create tools that help teachers teach better with audio-visual aids accessed from the internet and projected through these machines, engaging students in an interactive learning pedagogy.

Under Sarva Siksha Abhiyan (SSA), grant up to INR 50 lakh is available to each district for strengthening computer aided learning in schools to support enhancement of children's learning. The permitted activities include providing computer equipment or labs to schools, development of curriculum-based e-learning materials in local languages, and training of teachers in computer use. Since inception of the program, approximately 67,000 schools have been benefited from this intervention.

Further, The National Mission on Education through Information and Communication Technology (NMEICT) has been envisaged as a Centrally Sponsored Scheme (CSS) to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time anywhere mode. This was expected to be a major intervention in enhancing the Gross Enrolment Ratio (GER) in Higher Education by 5 percentage points during the XI Five Year Plan period. The three cardinal principles of Education Policy viz., access, equity and quality could be served well by providing connectivity to all colleges and universities, providing low cost and affordable access cum-computing devices to students and teachers and providing high quality e-content free of cost to all learners in the country.¹

Indian companies have spent close to Rs 2,250 crore on education & skill development programmes during the financial year 2015 trying to address various gaps in the educational scenario of our country as part of their CSR obligations. IT companies in particular have focussed a lot of their CSR activities in development and distribution of ICT enabled educational aids.²

However, the goal of digital empowerment of our schools still remains far from being realized. According to the latest DISE survey (2013-14), *only 26.42%* of our elementary schools (Class I-VIII) had a computer, with stark variation noted across major states.

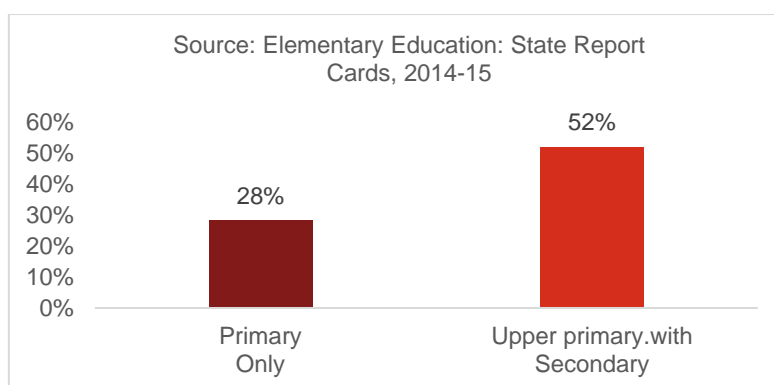
What is a tablet?

A tablet computer (tablet) is a thin, flat mobile computer with a colour touchscreen display, processing hardware, and a rechargeable battery in a single compact form. Tablets often come equipped with sensors, including digital camera and microphone. The touchscreen display uses the recognition of finger or stylus gestures to replace the mouse, trackpad and keyboard used in laptops. They usually feature on-screen, pop-up virtual keyboards for typing.

¹ Annual Report MoHRD 2014-15

² http://articles.economictimes.indiatimes.com/2016-01-20/news/69931061_1_csr-activity-623-crore-cent

Figure 1: Percentage of Schools in Gujarat having computers



Objective of the project

The objective of the project is to promote education and skill development in remote, isolated and backward regions of the State using digital technology. To deliver these services, (a) identification and nurturing teachers in a school, (b) training them on using tablets/notebook computers to tutor children in elementary education, and (c) spreading digital literacy among youth needs to be done. The key issue this project tries to address is to facilitate learning through web-enabled technologies to disadvantaged communities, due to lack of institutions in the remote and rural areas.

Expected benefits

The support provided by companies would result in tangible and intangible benefits for the Sponsor Company as outlined below:

Tangible Benefits	Intangibles
<ul style="list-style-type: none"> ❖ Community support & appreciation ❖ High levels of employee satisfaction through social responsibility toward the community ❖ Recognition through awards for the impact created and spill overs to other areas ❖ Enhancement of effectiveness of teachers thus leading to creation of a high skilled labour pool. 	<ul style="list-style-type: none"> ❖ Enhanced reputation by way of supporting projects benefitting communities at 'bottom of the pyramid' ❖ Social branding ❖ Enhanced credibility within community and sector ❖ Contribute towards the Ministry of Human Resources Development (MHRD) vision of increasing the gross enrolment ratio in schools

Opportunities for CSR intervention

Rural schools are often marred by the lack of qualified & trained faculty willing to teach at village level. Thus, students in these areas do not get ample opportunities to learn, limiting their educational growth. Going to district headquarters where quality institutes are based, is not financially and logistically possible for socio-economically deprived families.

The project aims to address the issue of 'equality of opportunity', by allowing students to access best possible educational resources from across the world. The Project intends to facilitate students to develop a holistic understanding of the subject matter through constant interaction and engagement with teachers / peer students / internet, rather than just rote learning and memorising the existing pedagogy in schools. The intervention envisages tablets/notebooks as learning tools in day-to-day classroom teaching to facilitate access of students to world class knowledge. Accordingly under this model:

- Corporate finances purchase of computer tablets/notebooks, its maintenance and training of teachers to operate the same

- The ownership of these new assets at the end of the agreement period is to be transferred to the government school, who will continue to use these tablets/notebooks
- The schools will ensure safety & handling of the tablets/notebooks. These support facilities and services would be bundled along with trainings for trainers and educational tool development / content development. The NGO would also try to link Government schemes to the extent possible
- A tripartite contractual agreement(s) shall be signed between all three parties (GCSRA, Corporate and NGO).

Potential project area

Schools in all the districts of Gujarat and government schools in urban Gujarat having lack of computers.

Target group

Target population covers children aged 6 - 14 years studying in the schools of rural and urban Gujarat.

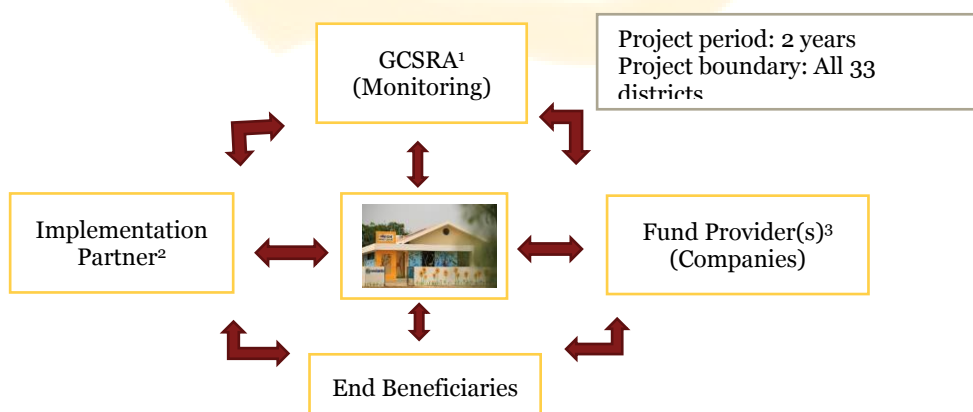
Project Implementation

The Project shall be implemented by GCSRA as a monitoring agency, with support from NGO(s) and corporates. The project aims to **cover all 33 districts** of Gujarat and hence multiple NGOs (on-ground project implementing partners) may need to be identified. The project would be implemented for a minimum period of two years:

A. Implementation

The detailed implementation plan is provided below.

Figure 2: Implementation model



¹ GCSRA will act as monitoring partner for the project. GCSRA will channelize the fund to implementing agency.

² Implementation partner will be an NGO having expertise in implementing educational tablet/notebook based projects

³ Fund Provider(s) are the companies undertaking the CSR project in partnership with GCSRA and responsible for timely disbursement of CSR funds.

Process of implementation:

1. NGO partner(s) would map the existing schools across all 249 talukas in all the 33 districts. The centres would then be prioritized based on the learning levels of children and availability of functional computers in schools (based on either DISE or ASER survey findings).
2. The NGO partner would suggest a relevant model for the project on basis of the secondary and primary survey findings (options cited below).
3. The NGO would identify vendors to procure and supply the tablets/notebooks.
4. NGO would engage resources to train the teachers on usage of the tablets/notebooks and deploy 1 tablet/notebook per 6 students in a school.
5. NGO would monitor usage of tablets/notebooks, identify challenge areas and address the same. It would also document the changes in learning levels, post the introduction of tablets/notebooks

Stage 1: PLANNING

- Identification of the macro-geography(s), where corporates would fund based on need assessment (secondary research)
- Commitment by Corporates on the purchase of tablets/notebooks for identified schools
- Gujarat CSR Authority shall identify the local implementing agency for the implementation
- Identified implementing agency would then be engaged by GCSRA to validate the need assessment and identify the schools with shortfall of computers and the numbers therein. The models of implementation are as follow:
 - ✓ Model 1: Provision of notebook computers from grades 1 to 5 in a school
 - ✓ Model 2: Provision of tablet computers from grades 6 to 8 in a school
 - ✓ Model 3: Provision of notebook computers from grades 1 to 5 and tablet computers from grades 6 to 8 in a school

Stage 2: IMPLEMENTATION

- Implementing agency to plan for hardware procurement that includes:
 - a) identify the requisite hardware specification for the tablets/notebooks and identify vendors
 - b) identify best internet service plan and provider in the target area.
- For the content bit and transfer of knowledge, the implementing agency will
 - a) identify and collaborate with content providers to develop customised tools
 - b) provide capacity building training of teachers.
- Implementing agency to periodically review the usage of tablets/notebooks for intended purpose.

Stage 3: MONITORING & REPORTING

- Implementing agency will monitor regularly on the stages of procurement till deployment and usage of tablets/notebooks and report back to GCSRA on the progress on a monthly basis, on the physical and financial progress to GCSRA.
- The agency shall provide GCSRA with a draft report on the CSR activities under the corporate sponsorship as to the desired outputs & outcomes on a quarterly frequency.
- GCSRA to then undertake an impact assessment study after 1 year of the implementation of the tablets/notebooks usage in schools for teaching and learning.

List of success indicators

Project Outputs

- Number of tablets/notebooks distributed over the project period
- Number of schools & children covered over the project period
- Increased teacher : student interactions and greater focus on other student development related activities with regards to computer literacy

Desired Outcomes

- Improvement of the educational status of rural communities at different blocks / districts of Gujarat, as validated by improved achievements of students and increase in the learning levels
- Change (reduction) in the dropout rates of students / absenteeism
- Changes in the transition rates from primary-secondary grades

Potential impact

- Computer literacy increased (as a result of usage of tablets/notebooks) thereby enabling students to take ownership of their own learning needs. Besides enhanced learning levels, such a tool is also expected to led to personality development of children

B. Implementing agency

The Project shall be implemented by GCSRA as an oversight & monitoring agency, with support from NGO/Implementing agency (having expertise in IT based education) being tasked with the responsibility of grass root implementation. The GCSRA/implementing agency shall work in collaboration with Corporates and local schools.

C. Partnerships

Roles and responsibilities

- **GCSRA:** Will provide CSR project monitoring support. GCSRA role shall include inter alia conducting baseline survey, preparing strategic plan for the project, coordinating between donors, technical service providers, project level monitoring & evaluation, project documentation and reporting (physical/financial), facilitating in issuance of compliance certificate for the CSR activities.
- **NGO:** Will provide technical and execution support towards on ground project activities. Implementation support and training of the trainers, maintenance of the tablets/notebooks and reporting of CSR activities under the project. Will also identify knowledge partners for sourcing free content appropriate for the school.
- **Corporates:** funding the initiative and timely disbursements of funds.

D. Anticipated benefits from the Project

- Improving the education status including computer literacy among students of government schools of Gujarat, by addressing the gap requirements by utilising computer tablets/notebooks
- Increased IT awareness and student engagement which would lead to better grades and higher achievement
- Fulfilment of the national agenda to bridge the digital divide

Work plan

#	Activity Description	Y1 Q1	Y1 Q2	Y1 Q3	Y1 Q4	Y2 Q1	Y2 Q2	Y2 Q3	Y2 Q4
1.	Conducting baseline survey to identify Govt. schools to understand the shortfall of computers in these schools								
2.	On-boarding of the NGO partner								
3.	Finalize the schools for tablet/notebook procurement								
4.	Identification of vendors for procurement								

#	Activity Description	Y1 Q1	Y1 Q2	Y1 Q3	Y1 Q4	Y2 Q1	Y2 Q2	Y2 Q3	Y2 Q4
5.	Identification of knowledge partners for sourcing free content								
6.	Conducting the training of trainers								
7.	Deployment of tablets/notebooks in schools								
8.	Monitoring of CSR activities by GCSRA								
9.	Reporting								
10.	Impact Assessment								

Estimated financial cost

The estimated financial costs for supporting a school from grades 1 to 8 is provided through 3 different models. Content development cost @ INR 43,000 per lesson³ maybe considered with the total budget of each model (Cost will vary according to requirement). The overall costs also include 4% administration costs to be paid to GCSRA as an overall agency for monitoring and managing the project.

The project cost for the proposed implementation models are given below:

Model 1: Funding for provision of notebook computers from grades 1 to 5 in a school (Table 1)

Model 2: Funding for provision of tablet computers from grades 6 to 8 in a school (Table 2)

Model 3: Funding for provision of notebook computers from grades 1 to 5 and tablet computers from grades 6 to 8 in a school (Table 3)

Table 1 : Estimated cost for supporting a school (Grades 1 to 5) – Notebooks (Model 1)

Heads	Nos.	Price/INR	Total Cost/INR	Assumptions
Notebook	30	10,000	3,00,000	Approximately 6 notebooks per class of 36 students from grades 1 to 5 in school; i.e. 1 notebook for 6 students
Replacement reserve	5	10,000	50,000	Mitigate hardware problems or increased demand
Internet Dongle with Wi-Fi	5	2,000	10,000	1 Internet dongle per class from grades 1 to 5
Internet service charge	5	500 per month for 24 months	60,000	1 Wi-Fi Dongle per class from grades 1 to 5 in a school. i.e. 1 dongle for 6 notebooks on a monthly plan of INR 500 for 2 years (24 months)
Annual Maintenance cost	24	3,000 per month	72,000	Assuming 1 visit in a month for a period of 2 years by a service technician
Teacher training	30	2,500	75,000	Assuming 2 sessions in a year for 15 teachers
Cost for 1 school	-	-	5,67,000	Cost for purchase and training for notebooks in 1 school
Implementing partner management cost	-	-	28,350	5% of the project budget for NGO partner implementation

³ As per interactions held with Subject Matter Experts and Resource Organisations

Heads	Nos.	Price/INR	Total Cost/INR	Assumptions
GCSRA Administrative costs	-	-	23,814	4% of the total project cost (including NGO management)
Total budget for 1 school			6,19,164	Funding for 1 school and its components
Cost for 5 schools			28,35,000	Cost for purchase and training for notebooks in 5 school
Implementing partner management cost	-	-	1,41,750	5% of the project budget for NGO partner implementation
GCSRA Administrative costs	-	-	1,19,070	4% of the total project cost (including NGO management)
Total budget for 5 schools			30,95,820	Funding for 5 schools and its components

Table 2 : Estimated cost for supporting a school (Grades 6 to 8) – Tablets (Model 2)

Heads	Nos.	Price/INR	Total Cost/INR	Assumptions
Tablets	18	5,000	90,000	Approximately 6 tablets per class of 36 students from grades 6 to 8 in school; i.e. 1 tablet for 6 students
Replacement reserve	3	5,000	15,000	Mitigate hardware problems or increased demand
Internet Dongle with Wi-Fi	3	2,000	6,000	1 Internet dongle per class from grades 6 to 8
Internet service charge	3	500 per month for 24 months	36,000	1 Wi-Fi Dongle per class from grades 6 to 8 in a school. i.e. 1 dongle for 6 tablets on a monthly plan of 500 INR for 2 years
Annual Maintenance cost	24	1,500 per month	36,000	Assuming 1 visit in a month for a period of 2 years by a service technician
Teacher training	12	2,500	30,000	Assuming 2 sessions in a year for 6 teachers
Cost for 1 school	-	-	2,13,000	Cost for purchase and training for tablets in 1 school
Implementing partner management cost	-	-	10,650	5% of the project budget for NGO partner implementation
GCSRA Administrative costs	-	-	8,946	4% of the total project cost (including NGO management)
Total budget for 1 school*			2,32,596	Funding for 1 school and its components
Cost for 5 schools			10,65,000	Cost for purchase and training for tablets in 5 school
Implementing partner management cost	-	-	53,250	5% of the project budget for NGO partner implementation
GCSRA Administrative costs	-	-	44,730	4% of the total project cost (including NGO management)
Total budget for 5 schools			11,62,980	Funding for 5 schools and its components

Table 3: Estimated cost for supporting a school (Grades 1 to 8) - Tablet & Notebook combined

Heads	Nos.	Price/INR	Total Cost/INR	Assumptions
Computer notebooks	30	10,000	3,00,000	Approximately 6 notebooks per class (36 students) from grades 1 to 5 in school; i.e. 1 notebook per 6 students
Replacement reserve	5	10,000	50,000	Mitigate hardware problems or increased demand
Tablets	18	5,000	90,000	Approximately 6 tablets per class (36 students) from grades 6 to 8 in school; i.e. 1 tablet per 6 students
Replacement reserve	3	5,000	15,000	Mitigate hardware problems or increased demand
Internet Dongle with Wi-Fi	8	2,000	16,000	1 Internet dongle per class from grades 1 to 8
Internet service charge	8	500 per month for 24 months	96,000	1 Wi-Fi Dongle per class from grades 1 to 8 in a school. i.e. 1 dongle for 6 tablets/notebooks on a monthly plan of 500 INR for 2 years
Annual Maintenance cost	24	3,000 per month	72,000	Assuming 1 visit in a month for a period of 2 years by a service technician
Teacher training	30	2,500	75,000	Assuming 2 sessions in a year for 15 teachers
Cost for 1 school	-	-	7,14,000	Cost for purchase and training for tablets/notebooks in 1 school
Implementing partner management cost	-	-	35,700	5% of the project budget for NGO partner implementation
GCSRA Administrative costs	-	-	29,988	4% of the total project cost (including NGO management cost)
Total budget for 1 school			7,79,688	Funding for 1 school and its components
Cost for 5 schools			35,70,000	Cost for purchase and training for tablets/notebooks in 5 schools
Implementing partner management cost	-	-	1,78,500	5% of the project budget for NGO partner implementation
GCSRA Administrative costs	-	-	1,49,940	4% of the total project cost (including NGO management cost)
Total budget for 5 schools			38,98,440	Funding for 5 schools and its components

Monitoring

- Based upon the perceived progress of the year, GCSRA will provide support to the company to develop a success framework, under which, performance indicators shall be defined and the baseline levels as well as targets defined over a 1-2 year horizon, on an annual basis.
- Once defined, the targets can then be broken down into yearly input-output-outcome targets, with impact criteria defined over 2-3 years on the learning levels achieved by the children.
- GCSRA team will supervise periodic monitoring of the project, whereas NGO will collect data and provide progress reporting as per the results framework. Under the same, the children's progress will be monitored on a monthly basis. New techniques and methods to improve the quality of the teaching – learning systems are evolving continuously. A progress report will be shared with the sponsoring organization quarterly.
- GCSRA will also conduct evaluation and impact assessment of the project

Reporting

The implementing agency would be responsible for the following:

- ensure regular monitoring and follow up and updation of records in the database and generate progress reports for GCSRA and company as per agreed timelines
- ensure reporting on CSR activities to GCSRA on monthly, quarterly and annual basis as against the funds disbursed to them

GCSRA would be responsible for reporting on the overall CSR activity management and annual compliance and issue a compliance certificate on the same to the company.

