

# Aakash

for school education

Aakash school pilot project is major initiative for school education, by IIT Bombay, under the umbrella project NME-ICT, funded by MHRD, Govt. of India.

Motivation for this is, to improve the quality of school education, by empowering teachers and students using LCAD Aakash.

SVERI's College of Engineering, Pandharpur being NKN node, and remote center of IIT Bombay in NME-ICT project, has been chosen for infrastructure and technical support in Aakash school pilot project.

## Objectives of the Project

1. To provide textbooks which are blended with rich interactive content.
2. Deploy innovative methods of student evaluation systems, and encourage students to tackle complex problems.
3. Create opportunities for skills like creativity, social awareness, teamwork, etc. among the students.
4. Provide environment to enhance participation and enthusiasm of students towards learning.
5. To enhance learning, teaching methodologies.

## NKN node and Schools

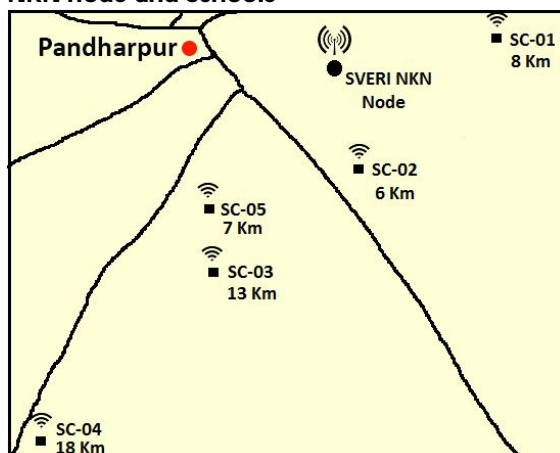


Fig-1: NKN Node and School Map

NKN Node: SVERI's College of Engineering, Pandharpur.

SC-01: Darling Vidyamandir, Chale.

SC-02: New English School, Anawali.

SC-03: Daulatrao Vidyalaya, Kasegaon.

SC-04: Shri Sitaram Maharaj Vidyalaya, Khardi.

SC-05: Lotus English School, Kasegaon.

SVERI and five schools are connected through NKN, with average internet Link speed of 35-40 mbps.

## Overview of Initiatives in the Pilot Project

At the start 285 Aakash tablets were distributed in five schools on 9<sup>th</sup> July 2013. Tablets were distributed among 9<sup>th</sup> class students and their teachers of science, algebra, and geometry.

School Code	Total Tablets Given	Tablets For Teachers	Number Of Students	Tablets For Students	Student: Tablet Ratio
SC-01	75	7	135	68	2:1
SC-02	50	5	82	41	2:1
SC-03	75	8	185	60	3:1
SC-04	70	6	120	60	2:1
SC-05	15	7	15	8	2:1

Table - 1: Tablet Distribution details

Additionally, teachers have been offered external memory devices to collect ad-hoc information for utilization in teaching.

## Workshops for Teachers and Students

Workshops were conducted on "Aakash Tablet Usage", to encourage teachers and students, towards effective use of tablets in schools. Teachers from all 5 schools were gathered in SVERI for training on Aakash tablet.

Individual workshops were conducted in each school for Aakash tablet training. Additionally, students have been trained rigorously with the help and support of project representatives from SVERI, by conducting weekly workshops and providing user manuals in regional language. Students have been trained on basic

hardware accessories of tablets, basic operational functionalities of tablets, interactive content, and android applications like Inquizitive and Gurukilli.



Img-1: Workshop for Teachers' at SVERI

### Content Deployments at a Glance

Variety of interactive contents, applications, and systems have been developed, keeping in mind the ease of use, and understanding capability of students.

School Code	Learning Medium		
	Marathi	Semi-English	English
SC-01	Y	Y	N
SC-02	Y	N	N
SC-03	Y	Y	N
SC-04	Y	Y	N
SC-05	N	N	Y

Table-2: Languages for Content deployment

**Kaksha** - Interactive textbook of Science, Algebra, and Geometry, blended with animations, extra images, information and quizzes, which helps to understand subject easily.

**Gurukilli** - Practice quiz application containing quizzes of Science, in Marathi medium, which motivates students for self evaluation.

**Inquizitive** - Practice quiz application containing quizzes of Science in English medium, which motivates students for self evaluation.

### Aakash for extra curricular activities

Students have been motivated to work on extra curricular activities using tablets. They have completed mini-projects in context of social awareness, like, 'Aashadhi Ekadashi in Pandharpur', visit to sugar factory, interviewing workers in different professions, etc. In addition, projects have been assigned to students, to work in fields like environmental, industrial, eco-system, agricultural, resource management, healthcare, etc.



Img-2: Extra Curricular activities by students

### Feedback from schools

- Improvement in attendance of students.
- Understanding of concepts is easier through animations, images and contents.
- Time saving in teaching due to LCAD.
- Effective to teach concepts of Science and mathematics.
- Students' enthusiasm is increased.
- Improvement in school results.

### Future Roadmap

- To provide interactive contents for all subjects.
- Blending Algebra and Geometry with more interactivity.
- Find innovative methods of interactive books.
- Use Real time student evaluation system in schools.
- Monitoring the improvement in performance of students.

### For more information visit

[http://www.it.iitb.ac.in/armdg/dokuwiki/index.php/Aakash\\_for\\_School\\_Education](http://www.it.iitb.ac.in/armdg/dokuwiki/index.php/Aakash_for_School_Education)