



A SATELLITE EDUSAT: CHANGING THE STATE OF EDUCATION IN INDIA

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Bridge The Gap

INTRODUCTION



- Indian Government launched a satellite named EDUSAT for imparting education to both the rural and urban population of India.
- It provides live audio- video interactive sessions between student and faculties.
- Online classrooms, virtual schools, evening coaching classes, radio and television based classes are the new modes of educating people living in areas with poor infrastructures and electricity.

EDUSAT- A NEW BEGINNING



- Launched on 20 September 2004[1]
- Geo-synchronous satellite
- It is co-located with METSAT and INSAT-3C
- The mission life is minimum 7 years.
- The downlinks provided in schools are provided with solar power facility. Which makes the project green .

Potential Use of EDUSAT



EDUSAT- CHANGING THE CONVENTIONAL EDUCATION SYSTEM

- The mission is monitored by **ISRO** (Indian Space Research Organization) and also the **Sarv Shiksha Abhiyan** [2]
- The hardware required at community level is a computer system with a webcam, mike and speaker and LAN for internet connection. Projectors, screen, Osprey Card, NVidia Card[3] are the technical requirements
- Its network is spread through schools, universities, state capitals and places with only its receiving terminals

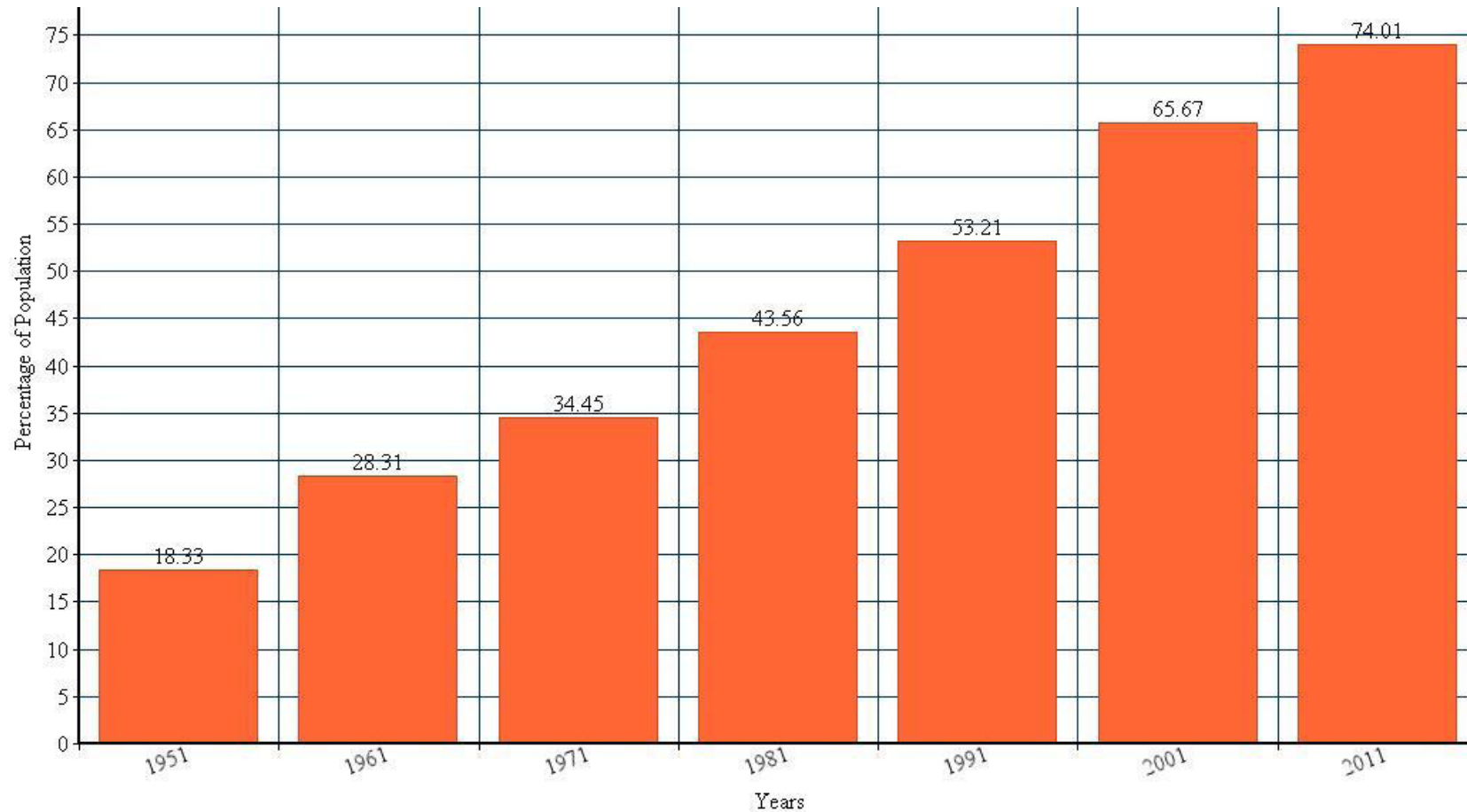
[2]<http://nssdc.gsfc.nasa.gov/nmc/spacecraftOrbit.do?id=2004-036A>

[3]<http://www.nvidia.in/page/home.html>

TWO WAYS:- SYNCHRONOUS AND ASYNCHRONOUS

- **Asynchronous** is through CD-ROM, document and e-books, bulletin boards etc. these can be used at any intended time.[4]
- The **synchronous** mode is under use when a teacher is guiding and the students have to be present in the temporary classroom to listen and reciprocate his views and answers.

LITERACY IN INDIA FROM 1951-2011



THE PROBLEMS FACED :

- Huge **youth** percentage in total population.
- **Literacy** rate in India is quite low.
- A huge population resides in **rural** India
- Literacy rate of **women** is too low; specifically in rural area.
- No proper infrastructure for **schools**.

ROLE OF EDUSAT: STATE-WISE

HARYANA

- 3.8 meter antenna for uplink at Panchkula[6]
- These lectures are received by 9000 Primary Schools, 1250 Secondary Schools and 92 Government- aided College through Satellite Interactive Terminals.



GUJARAT

- 22,000 primary schools were linked to the satellite[7]
- The Chief Minister of Gujarat is using EDUSAT as a channel to interact with 40,000 teachers once every month
- A network for blind people's association was formed using this satellite covering 10 schools

EDUSAT AIMS TO PROVIDE THE FOLLOWING FUNCTIONS IN GUJARAT



- A uniform primary education to all the rural schools.
- Provide training to teachers about the latest teaching technologies.
- Providing training to health-care staff especially nursing.
- Helping the blind students by making specialized lectures for them.

KARNATAKA

- Separate e-learning center is established in Visvesvaraya Technological University (VTU) where all the 120 engineering colleges are linked up via EDUSAT[8]
- Web- based e-learning have prepared the course for 12 full semester subjects
- With the help of a scheme named “Sarva Siksha Abhiyan” has covered 885 primary schools

[8]Book Section 2012 978-94-007-2668-0 Pedagogies for Development Education in the Asia-Pacific Region: Issues, Concerns and Prospects 10.1007/978-94-007-2669-7_4

Education Reform in Karnataka: Two Pedagogies for Development http://dx.doi.org/10.1007/978-94-007-2669-7_4 Springer Netherlands 2012-01-01 Sriprakash, Arathi 47-69

KERALA

- The first state to use EDUSAT in 2004 [9]
- A dedicated EDUSAT lab was set up and introduced the concept of virtual university.
- After being associated with Kerala University, live interactive sessions have started with students to impart quality education.



PUNJAB

- 2960 schools of Punjab were linked to EDUSAT[10]
- A studio is built to facilitate the smooth working of the e-learning activity.



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MADHYA PRADESH

- Most advanced use of EDUSAT
- provide training to the forest officials[11]
- 52 Satellite Interactive Terminals (SITs) have been set up for 27000 forest employees and forest communities

INCLUDING ARTIFICIAL INTELLIGENCE IN SATELLITE FOR FUTURE

- It can simulate and recognize the change in number of students per class.
- They also store information on the level of questions being asked by the students in a class.
- Framing of questions, their evaluations, allotment of faculties, deciding the syllabus all can be done in an automated manner by including advance technology in this satellite like AI.

CONCLUSION

- This mode of providing education to masses with very less resources has proved to be highly beneficial for all the developing countries .
- A small investment that was done for development of this satellite has proved to be the best asset in the Indian Education.
- Due to its over-whelming success, we should expect that there would be more countries which will involve themselves and there will be a day where a group of satellite can serve the whole of world for all its educational need

THANK YOU

QUERIES?