

Pratham Science Program

An Overview



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Every Child in School and Learning Well...

Program Background: 2006 -2010

Program first piloted in 2006, in under-resourced communities of Mumbai & other cities of Maharashtra.

Teacher training conducted for ~2000 Govt. teachers in Aurangabad District in Pratham's 'Learning by doing' method.

Sky watching was piloted in communities (Ralegaon in MH). Reading material was developed for the program, to be used in workshops with children.

Pratham collaborated with Homi Bhabha Center for Science Education for developing reading cards.

2010: Science Program scaled up to 6 blocks in 5 states and then scaled up to 22 blocks of 15 states.



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Program Background: 2010 to present

- From 2010 onwards, the program took on its current model of working in schools and communities, by carrying out workshops, science fairs and forming science clubs.
- Pratham also went on to partner with other NGOs and individuals dedicated to science learning like Vigyanprasar, Homi Bhabha center, Arvind Gupta, etc., to collaboratively develop content.
- Through the approach of 'learning by doing', children are encouraged to
 - Carry out experiments and build different models on their own
 - Handle various apparatuses and tools
 - Explore the natural environment

The intervention aims to develop a scientific temper among children and the community at large.

In 2015-16, Science interventions reached 30,900+ children across the country.



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Our work in schools



Pratham-trained '*Vigyan Mitras*' or '*Friends of Science*' carry out the program in schools through:

- Thematic workshops: Workshops based on a particular topic, like '*Human Body*', '*Magnet*', '*Nature Exploration*', etc. Children carry out various activities, model making, etc.
- Science Fairs: Children are trained over 3-4 days to create simple science models and finally, present these models at a fair. Science Fairs are an effective medium of reaching out to the larger community, too.



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Our work in communities

To create awareness and popularise science learning in the community, the following engagement activities are carried out:

- Camp Galileo, a four-day long sky watching camp, to acquaint children with basic astronomy.
- Educational videos and films are screened.
- Workshops on topics like food adulteration, solar energy, water and sanitation etc. These are beneficial to the larger community.
- Basic libraries are being set up to promote reading and sustain children's interest in science.



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Mobile Science Van



- In some Pratham Science Programs, a 'Mobile Science Van' is used by *Vigyan Mitras* to transport science models, telescope, projector, and library books with relative ease.
- In areas that have difficult terrain and are inaccessible through local transport, the van plays a crucial role in ensuring that children in such remote areas have equal access to learning science and about the world around them.
- Following the workshops in schools, the *Vigyan Mitras* use the van to reach communities, where they conduct
 - Awareness workshops
 - Film screenings
 - Sky watching
 - Camp Galileo



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Science Centres



- To create a larger impact on local village communities, Science Centres equipped with models, apparatuses, and libraries, have been set up in 9 locations, across 7 states in the country.
- The main activities of these centres are
 - Workshops with children
 - Workshops with local youth and adults
 - Hosting exposure visits for various schools/DIETs/NGOs
 - Workshops and fairs in schools (upon request)
- In the centres, technology is integrated with learning, by using tablets and LED TVs with digital content.
- Some centres also use a Mobile Science Van to further their own outreach.
- Centres are also used as testing ground to pilot content and modules within the Science Program.



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Science Centres



Clockwise from top: Centres at Jhalda (West Bengal), Masuda (Rajasthan), Salipur (Odisha), Khultabad (MH) and the Science van at Raigarh (Chattisgarh)



Science Centres

Four Science Centres are currently equipped with a Science park, fitted with sundials, vermi-compost pits, butterfly parks, smokeless *chulha*, etc.



Clockwise from top - Butterfly park, Sundial, Compost pit, Students on an exposure visit to a centre, and a Sympathetic Swing set.



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THANK YOU!



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