

# SCIENCE ON WHEEL

All Department of Arts, Commerce, Science and Computer science college, Ashvi,kd, reaches various schools in rural areas with a mobile science laboratory, which can carry science teachers along with various laboratories equipment and material. Nearly 700 students from 10<sup>th</sup> High school and junior collage of villages are benefiting from this program. The Physics, Chemistry, Zoology and Botany subjects taught by the teachers from Arts, Commerce, Science and Computer science collage Ashvi kd. using the various new methods of education.

## OBJECTIVE

To build a platform for creating foundational skills in a day in the students from underprivileged background and create awareness among them about the modern science and enabling them to choose a career path going forward.

## INTRODUCTION

Science on Wheels is a Activity to help students to explore their passion for science. The Activity helped students to gain increased self-confidence, have access to science, and sharpen their design-thinking skills besides the development of new attitudes towards modern-day science. Science on Wheels will allow to extend these and other benefits to thousands of High school and Junior college students in surrounding villages.

Almost all schools in remote backward villages do not have science laboratories and hence students are not able to carry out science experiments themselves. Thus the Activity "**SCIENCE ON WHEELS**" was run from 2015-16 and for the last 5 years our vehicle has been visiting nearly 14 to 15 High School (5<sup>th</sup> to 9<sup>th</sup> standards) (8<sup>th</sup> & 9<sup>th</sup> standards) and 3 junior college students. Every year in more than 10 villages, equipped with Science teachers and necessary laboratory equipment and material.

This shall not only help in instilling a scientific temper amongst the students but also make science a ground reality for them. And helps the student to think and come up with creative observations. The students and teachers together work towards the scientific conclusion without any division/barriers between them. Improves science based skills like -Observations. Developing one's own logic Testing one's creativity and Builds one's ability to express This method helps in stimulating the young fertile minds of the students, by the process of total and personal involvement in the experiments. The enquiry method helps in enhancing the thinking capacity and enables the students to understand the importance of lateral thinking. Expressing their thoughts and doubts in a free atmosphere motivates the students to build their personality and confidence. These methods are also used by some/few students in their daily life experiences. In the long run, this might help evolve a society, which will think scientifically instead of superstitiously.

The teachers here use their own ideas and techniques in their teachings, so that the process of learning takes place. They help the students in understanding a concept, in a much better way and identifying with the principles and theories of sciences. They break free of the monotonous activity of the regular classroom teaching style.

## **BENEFITS**

- Students get first hand science knowledge through simple experiments and hands-on activities.

- Students are introduced to the method of science & catalyzed to enhance their science skills like measurement, observation, analysis and testing it, classification etc.
- Students also learn physics through experience and experiments. Most of the students, who were poor in physics, gained confidence and talented students gained new ideas & understood the mathematical thought along with mathematical skills.
- Students enjoyed and understood many concept from Science, physics, chemistry and Biology, which they otherwise used to cram without understanding. Students are also introduced to issue based Science, and recent advancement in areas like Water, Land, Ecology, Earth Science and Life science etc.
- Students of rural areas were initially very shy and used to be passive listeners. Now they have become bold and ask for clarification if they don't understand. They even raise intelligent doubts and questions.
- Teachers were introduced to new methodologies to teach Science and Life science.
- **Activities & Outcome - indicates topics covered under the science on wheel**

**program**

<b>Particulars</b>	<b>Activities</b>	<b>Outcome</b>
Physics	Teacher conducted the simple Experiment related to the solar energy	<ul style="list-style-type: none"> <li>• Students are able to Operate the solar energy kit, solar cooker etc.</li> </ul>
Chemistry	Teacher Explained Chemical Experiment	<ul style="list-style-type: none"> <li>• About Chemical reaction and their role</li> </ul>
Zoology	Teacher Explained Animal classification, Identification key of poisonous and non poisonous snake. Sericulture Technique, Vermiculture and Vermicomposting Technique.	<ul style="list-style-type: none"> <li>• Students are able to classify the insect present in the campus of their school</li> <li>• Students got the opportunity to work on Sericulture and Vermiculture practice in their fields.</li> </ul>
Botany	Teacher Explained Botanical Plant	<ul style="list-style-type: none"> <li>• Students are able to identify the type of plants</li> <li>• Uses of plants in human life.</li> <li>• About the meditational plants.</li> </ul>

**Details of the Science on wheel activity conducted during the year 2019 to2020 in  
different High school/Jr. college**

Sr. No.	Year	Day and Date	Name and Address of High school/Jr. college	Number of students present
1	2019-2020	3-12-2019 and 12-12-2019	<ul style="list-style-type: none"><li>• Pravara Madhyamic vidyalaya, Pimpari lauki</li><li>• Pravara Madhyamic vidyalaya, Zarekathi</li><li>• SMBST Madhyamic vidyalaya, Khali</li></ul>	130







**Details of the Science on wheel activity conducted during the year 2018 to 2019 in  
different High school/Jr. college**

Sr. No.	Year	Day and Date	Name and Address of High school/Jr. college	Number of students present
1	2018-2019	3-12-2018 and 4-12-2018	<ul style="list-style-type: none"><li>• Pravara Madhyamic vidyalaya, Pimpri lauki</li><li>• Pravara Madhyamic vidyalaya, Shibalapur</li><li>• Pravara Madhyamic vidyalaya, Zarekathi</li><li>• Pravara Madhyamic vidyalaya, Varvandi</li></ul>	115







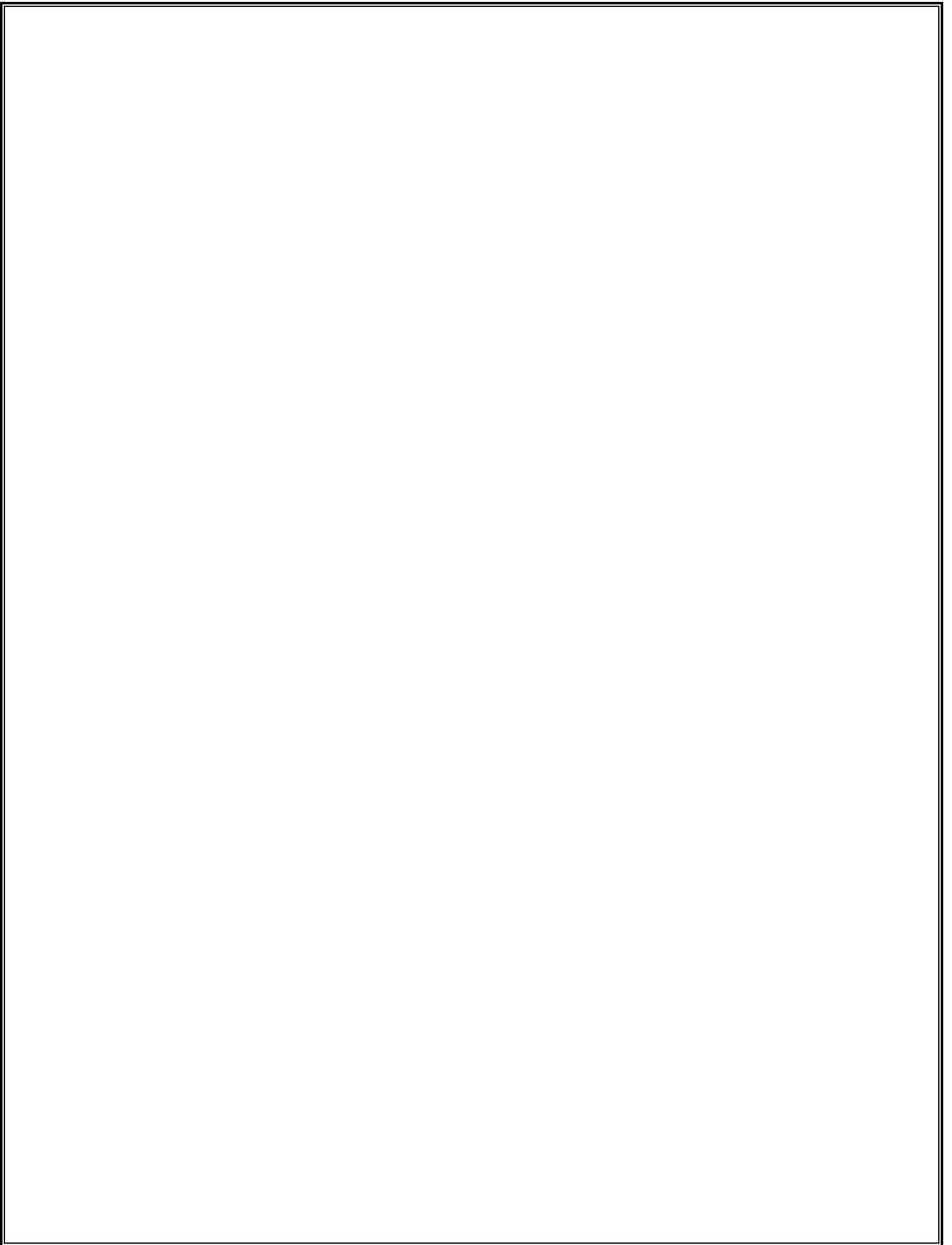


**Details of the Science on wheel activity conducted during the year 2017 to 2018 in  
different High school/Jr. college**

Sr. No.	Year	Day and Date	Name and Address of High school/Jr. college	Number of students present
1	2017-2018	11-12-2017 and 12-12-2017	<ul style="list-style-type: none"><li>• Pravara Madhyamic vidyalaya, Pimpari lauki</li><li>• Pravara Madhyamic vidyalaya, Shibalapur</li><li>• Pravara Madhyamic vidyalaya, Zarekathi</li><li>• Pravara Madhyamic vidyalaya, Varvandi</li></ul>	116







**Details of the Science on wheel activity conducted during the year 2016 to2017 in  
different High school/Jr. college**

Sr. No.	Year	Day and Date	Name and Address of High school/Jr. college	Number of students present
1	2016-2017	5-12-2016	<ul style="list-style-type: none"><li>• Pravara Madhyamic vidyalaya, Pimpari lauki</li><li>• Pravara Madhyamic vidyalaya, Shibalapur</li><li>• Pravara Madhyamic vidyalaya, Varvandi</li></ul>	120

**Photo Gallery**





**Details of the Science on wheel activity conducted during the year 2015 to 2016 in  
different High school/Jr. college**

Sr. No.	Year	Day and Date	Name and Address of High school/Jr. college	Number of students present
1	2015-2016	14-12-2015	<ul style="list-style-type: none"><li>• Pravara Madhyamic vidyalaya, Pimpri lauki</li><li>• Pravara Madhyamic vidyalaya, Shibalapur</li></ul>	165

**Photo Gallery**



