ISSN : 0972-169X
Registered with the Registrar of Newspapers of India : R.N. 70269/98
Postal Registration No. : DL-11360/2001

Monthly Newsletter of Vigyan Prasar

DREAM 2047

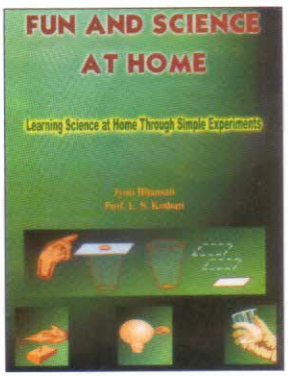
December 2001 Vol.4 No. 3

VP News

Inside

Learning Science Through Experiments

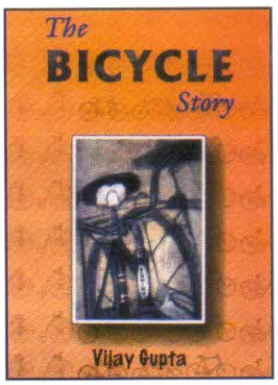
Learning science is fun and joyful. Any doubts? Pick up the latest book written by Jyoti Bhansali and Prof. L S Kothari. The book, "Fun and Science at Home", takes you to the fascinating world of science through some 120 simple and exciting science-related experiments that any child at an age of 8 and above can do at home. These experiments that require only cheap and ordinary objects used in everyday life are classified under broad topics such as air, water, sound, light, forces, and heat. The authors also include a few general activities in the book.



Apart from elaborately explaining how these experiments are to be done, the book clearly describes the science behind each experiment, thus making children understand many scientific principles they learn in schools better. Not just children, even adults will find many of the experiments described in the book educative and interesting. This book, by all means, could serve a good resource material for teachers teaching science up to higher secondary levels.

"Fun and Science at Home", By Jyoti Bhansali and Prof. L S Kothari, Published by Vigyan Prasar, 2001, pp: 124+vi, ISBN: 81-7480-078-6, Rs. 75/-

The Story of Bicycle



It has been the endeavour of Vigyan Prasar to popularise the science behind things we see, we hear and we use everyday through its publications. Continuing with this tradition, we this month publish a book, "The Bicycle Story", written by Vijay Gupta, Professor of Aerospace Engineering at the Indian Institute of Technology (IIT), Kanpur. Written in a simple

Dr. Hari Krishna Devsare, Fellow, Vigyan Prasar was presented 'Balsahitya Bharti' Award for his contributions to children's literature at a function held at Lucknow on 8th December 2001. The award was presented by His Excellency Shri Vishnu Kant Shastri, Governor, U.P. Shri Kesari Nath Tripathi, Hon'ble Speaker, U.P. Vidhan Sabha was also present on the occasion.

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... think scientifically, act scientifically ... think scientifically, act scientifically ... think scientifically, act...

Published and Printed by Dr. Subodh Mahanti on behalf of Vigyan Prasar, C-24, Qutab Institutional Area, New Delhi-16 & Printed at Shagun Offset, 132, Mohammadpur, Bhikaji Cama Place, New Delhi-110 066
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Popularizing Science Through *Matri-Bhasha*

Phenomenal growth in literacy ratio over the years, a higher level of general awareness among the people, and their growing participation in the decision making process have posed new challenges to science communicators in their tasks. With nearly three-fourths of the males and over half of the females being literate, the next step would be to help them understand and appreciate issues directly affecting their lives which may include issues like health, environment, sanitation and hygiene, nutrition, appropriate technology, means of income generation and the like; and that too without any conscious effort to inculcate a scientific temper among them. In order to bring them into the national mainstream, however, it would be necessary to put in efforts to help them attain a level when they can read newspapers / magazines with sufficient ease.

When we read a newspaper, we can follow with ease, understand, and interpret news items related to education, sports, politics and so on. If we can understand with the same ease news items / articles on topics like PSLV and GSLV launches, genetically modified foods, use of CNG for transport, anthrax as a biological weapon and so on, it could be said that we are scientifically literate. It is then that one can actively participate in the decision making process. This, however, implies information on and understanding of recent scientific developments and working knowledge of gadgets we come across in our daily lives. It may also require familiarity with a few scientific principles and natural phenomena. For example, information about AIDS or Dengue and how they spread could help us keep them at bay. Knowledge and information about ORS (oral re-hydration solution) could help save lives of thousands of infants. The challenge before science communicators is then imparting information on and interpreting such items and issues in a language and manner acceptable to the people.

However, imparting or acquiring information alone would serve little purpose. It is necessary to help people learn to organize, analyze and apply the information to arrive at a solution and understand the environment they live in - physical or social. Whatever the topic and whatever the media, scientific approach must reflect in the articles we write or radio / television programmes we produce. This means balanced reporting with objective analysis of different news rather than one-sided view or a story with hype and sensationalism. Media are expected to act as a mirror - be it newspaper, radio or TV - and reflect the true picture of the society; but this is possible only if the mirror itself is not distorted.

Making people scientifically literate, however, does not imply reproducing articles from research journals in local newspapers alone or translating them into a language even a person well versed in that language may find difficult to comprehend! A major effort is therefore called for to simplify the language of communication and develop terminology with words and phrases employed in daily life. Sometimes it is desirable to retain the original terms as they are if they have already been accepted in the language of translation rather than attempt a contrived translation (say *Vikiranadharmita* for radioactivity or *Gandhakamla* for sulphuric acid). There is no gainsaying the fact that every region speaking a particular language will have to evolve its own language with local nuances for science communication whatever the media employed. What is more, we shall have to learn to think in Matri-Bhasha if we hope to communicate science and technology to the people effectively.

Original articles / books written in one regional language also may need to be translated into other regional languages. Maybe we shall need to set up translation bureaus for this purpose as suggested by Shri M. V. Kamath, well known journalist, and President, Vigyan Prasar, in a recent meeting on science communication in Marathi at Mumbai. It is heartening to note that leading scientists like Professor J. V. Narlikar and a few others have taken upon themselves the task of taking science to the people in regional languages with a missionary zeal, and have inspired a whole lot of the younger generation to follow the suit. Of late, there has been a discernible growth in publication of popular science books / magazines in the regional languages. Government agencies like NBT, NCSTC, Vigyan Prasar, and several non-Government organisations have also significantly contributed to accelerate the process.

Many of us – scientists, science communicators, social workers, students, teachers, administrators, etc., have been actively engaged in a variety of societal problems in a bid to transform our country into a nation of not just literate, but scientifically literate and scientifically minded people. For this purpose, it is imperative that we start thinking and writing in Matri-Bhasha.

❑ ***V.B. Kamble***

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