## Shri Shivaji Science College, Shivaji Nagar, Amravati – 444603 (M.S.)

Two Days Workshop on "Inculcation of Activity Based Learning Practices in Science and Mathematics Teachers at Secondary Level and Exploration of Innovative Practices in Teaching – Learning and Evaluation Methods"

In Collaboration with

Homi Bhabha Centre for Science Education, Mumbai

and

Asian Association for Biology Education 8<sup>th</sup> and 9<sup>th</sup> August, 2015

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## REPORT

A Two Day Workshop on Inculcation of Activity based Learning Practices in Sciences and Mathematics Teacher at Secondary Level and Exploration of Innovative Practices in Teaching Learning Evaluation Methods was organized at Shri Shivaji Science College, Amravati in collaboration with Homi Bhabha Centre for Science Education, Mumbai and Asian Association for Biology Education. (08-09, August 2015).

The workshop also intended for setting sustainable goals, resources, practices and to seek the cooperation from the school teachers of science and mathematics run by Shri Shivaji Education Society for the proposed Science and Innovation Activity Centers to be started by the Society at Amravati.

The workshop was inaugurated at the hands of Dr. S.B. Lohiya, Principal, Brijlal Biyani College, Amravati, Hon'ble Adv. Arunbhau Shelke, President, Shri Shivaji Education Society presided the function. Shri Babasaheb Charjan, Vice- President of the Society, Dr. N. D. Deshmukh, Scientific Officer, HBSEC, Mumbai, Shrimati Satyawati Rawool, P.V.D.T. College of Education for Women, Mumbai and Principal Dr. V.G. Thakare shared the dais on this occasion.

Shri H. B. Thakare, Treasurer, Shri M.K. Deshmukh, Executive member, Shri. Arvind Mangale, Executive member, Shri. V.G. Bhamburkar, Secretary, and Dr. V.S. Jamode, Higher Education Director from Shri Shivaji Education Society, Amravati have also graced the function.

The list of 81 teachers for participation was given by society of which total 70 teachers participated in the workshop. The kit with notepad, pen, programme schedule, feedback format, programme evaluation format and Ice Breaking form was distributed to the participant. The arrangement of the breakfast, lunch and tea was made by organizers at the venue.

The Principal of Shri Shivaji Science College Dr. V.G. Thakare, briefed the purpose of organization of the workshop in his introductory speech. Inaugurator Dr. S.B. Lohiya, congratulate the management of Shri Shivaji Education Society for organizing such workshop and anticipate the fruitful results of it. Dr. N.D. Deshmukh, urged to the teacher participants to make use of activity based and innovative teaching methods.

Adv. Arunbhau Shelke, express the commitment of the Shri Shivaji Education Society to nurture scientific attitude in the community in his encouraging presidential speech. Dr. Dinesh Khedkar express vote of thanks.

In the first technical session followed by the inauguration conducted by Dr. Dinesh Khedkar, all the participants introduced themselves and informed about their activities at schools. Dr. Khedkar appealed the participants to share their ideas about the activities could be conducted at proposed Science centre. In this session an activities teachers are conducting at their school level were explored. Most of the teachers are conducting following activities –

- 1. **Haritsena (हरितसेना) :** Environmental awareness programmes were conducted by many schools under the aegis of this Haritsena.
- 2. Competitive Examinations: Most of the teachers have shouldered responsibility of the competitive examination guidance. Many students got prizes nad district level and state level in the exams like NTS, MMMS, State Board Scholership, Plympiads, etc.
- **3. Science Exhibitions:** Teachers are guiding students to prepare innovative projects to present during the Science Exhibitions at taluka and district level. Some projects own prizes and presented at state level.
- **4. Science Clubs:** Some schools have established science clubs to work together for different activities. They are conducting science experiments with the students.
- 5. Mathematics Labs: Innovative idea to establish Maths lab in the name of Ramanuj was established as Mathematics clubs to attract students towards subject. Different activities are planned to understand complex concepts of the mathematics.
- 6. Hastlikhit (हस्तनिखित): Some schools are preparing Science News Bulleting to make students aware of the recent developments and the classical concepts as well.
- **7. Activity centres:** The innovative ideas of the students could be materialize in the activity centres. The activities other than their curriculum can be performed in this centre.
- **8. Activity based teaching:** Many of the teachers are adopting activity based teaching for Biology, Chemistry and physics.
- ICT based teaching: Some schools have developed ICT facility for teaching Science and Mathematics.

- **10. Innovative Practices:** Schools are following innovative ways to make learning effective by organizing different events
  - a. Quiz Koun Banega Ganiti
  - b. Scientific Rangoli
  - c. Mathematical idioms
  - d. Essay Competition
  - e. Science Story Telling
  - f. Group Discussion, etc.

Dr. Naredra Deshmukh delivered the lectures on ICT –Best teaching Tool and Biology learning – A Fun. In the afternoon session Mr. Ankit Tiwari, TechShiksha Science Club, Nashik delivered a lecture on Activity Based Learning for Physics and Electronics and gave the live demonstration on low coast scientific models.

On the second day of the workshop Dr. Satyawati Rawool, P.V.D.T. College of Education for Women, Mumbai enlightened the delegates in his lecture "Rising Mathematics Understanding level of School Students".

Dr. Sunita Khadse, Bajaj Science Centre, Wardha delivered the lecture on Chemistry through Activities and had live demonstration on various simple chemical reactions in the afternoon session.

In the final session of the workshop the Dr. V. B. Bhatkar, Head Department of Physics appealed the participants to devote time, efforts, knowledge, and innovative ideas for the creation of Science Centre. Dr. Dinesh Khedkar sought the overwhelming response regarding the Science Centre from the participants.

The entire workshop was under critical evaluation of the participants. They have given

feedback about every resource person and the proceedings of the workshop were also

evaluated.

The valedictory function was chaired by Principal Dr. V.G. Thakare, Shri. M. K. Nana

Deshmukh, Prof. M. Ali, Dr. N. D. Deshmukh, Dr. Satyawati Rawool, Mr. Ankit Tiwari

and Dr. V. B. Bhatkar were present on the dais. Participants given feedback to be satisfied

with the programme and expected to have more such type of workshops in near future.

The workshop inaugural and valedictory functions were anchored by Dr. Rekha

Maggirwar and convened by the conveners Dr. Dinesh Khedkar and Dr. Pankaj Nagpure.

Dr. Ganesh Hedaoo, Dr. Pramod Padole, Dr. Swapnil Arsad, Mr. Anad Oke, Mr. Anand

Atre and all nonteaching staff of Botany, Computer Science and Physics department were

put their efforts to make the workshop successful.

Amravati 20.04.2016

Dr. D. D. Khedkar Organizing Secretary

