## Who Can Participate?

Teachers of Science, Mathematics, Social Studies (History, Geography and / or Civics) and Language at the Class 6, 7 or 8 levels.

All those who enroll are expected to participate in all the workshops. On successful completion of all the workshops in the series, each participating teacher and school will receive a certificate of participation in PBL development and implementation.

## How can you apply?

Fill the application form supplied with this brochure and send it to the address mentioned on the form.

Alternatively you may access the form from a link to the **PBL Workshop Series** on the website: www.hbcse.tifr.res.in/events/PBLworkshopseries The filled forms may either be sent by normal mail to the mailing address given below, or sent as an attachment to the e-mail addresses below.

There are no fees for participating in the workshops. All materials needed, lunch at subsidised cost, and a token honorarium, will be provided to all participants for the days they attend. Light refreshments will be provided free by the organisers.

## **Venue and Contact**

Saurav Shome Homi Bhabha Centre for Science Education V.N.Purav Road, Mankhurd, Mumbai 400 088

 Ph:
 (O) 25072220
 Mobile: 9969872306

 Fax:
 25566803

 E-mail:
 saurav@hbcse.tifr.res.in; chitran@hbcse.tifr.res.in

# **Workshop Series**

## on

## **Project Based Learning**

for Middle School Teachers of

Science, Mathematics, Social Studies and Language

between

July and December 2010

The highest education is that which does not merely give us information but makes our life in harmony with all existence. Rabindranath Tagore

Conducted by

Homi Bhabha Centre for Science Education Mumbai Today's students need to become critically aware citizens of a democratic nation and a globalized world. Hence, students need to be exposed to problem solving in school as well as in their local and larger communities. Besides, the widening access to information implies that teachers and students need to be equipped with the ability to select knowledge and skills for use in solving problems.

Educators around the world perceive that **Project Based Learning** (**PBL**) addresses issues that traditional classroom learning does not. Several benefits of PBL have been reported in research literature.

## **Project Based Learning**

- Offers real world contexts and opportunities for learning
- Fosters self esteem and motivation among participants
- Helps develop critical thinking and communication skills
- Enhances problem identification and solving abilities
- Helps develop social skills: teamwork, leadership, civic responsibility
- Allows multiple modes of continuous assessment and feedback
- Leads to improvements in classroom and school climate

Major hurdles for implementing PBL in Indian schools include large class size, lack of teaching-learning resources, reluctance to embrace new approaches, and inflexible schedules. An important hurdle is lack of guidance to teachers in conducting PBL. According to research, empowered teachers and willing school systems are better able to implement PBL and reap its benefits.

Collaboration between teachers within and across schools and with school administration, parents and research institutions can help in implementing PBL. We hope to achieve this through a series of workshops to be conducted by the Homi Bhabha Centre for Science Education, TIFR, Mumbai, between July and December 2010.

The workshops aim to empower teachers with the knowledge, skills and tools to implement Project Based Learning effectively in their schools. We hope that a few motivated schools and teachers will volunteer to implement PBL at the level of Class 6, 7 or 8. It is hoped that the workshop will be beneficial to all participating schools and teachers.

## **Benefits from the Workshop Series**

- Introduction to desirable PBL practices and strategies
- Information on research literature and resources related to PBL
- Collaborative environment to develop PBL projects, implementation strategies and assessment rubrics
- Peer group of motivated teachers and researchers
- Forum for discussion of PBL challenges and evolution of solutions
- Network with researcher practitioners to help generate research papers

One of the outcomes of the workshop series will be a PBL Guidebook for teachers including a bank of PBL modules including assessment tools. A copy of this will be made available free to all participating schools.

## Structure of the Workshop Series

- 3 to 4 workshops will be held between July and December, 2010.
- The first 4-day workshop will introduce participants to PBL and initiate projects and implementation strategies.
- Subsequent workshops of shorter duration will discuss progression of PBL implementation and refine the strategies, assessment and evaluation tools.
- The last workshop will consolidate the evaluation and findings.
- The first Workshop in the series will be held from Wednesday, July 7 to Saturday, July 10, 2010.
- Timings of the workshops will normally be from 9.30 am to 5.30 pm.