

**Event: Workshop on ‘Understanding Pedagogical Content Knowledge’**

**Date: 13/10/2022**

**Organized by: GESCER**

**In-charge: Dr. Chetan Chavan**

**Resource Person: Dr. Narendra D Deshmukh, Ms. Sonali Kathale, Mr. Vinod C Sonawane, Mr. Karun Hambir, Ms. Pooja Lokhande**

**Venue: Homi Bhabha Centre for Science Education, Mankhurd**

**Time: 10:30 am**

The college organized a one-day workshop on ‘Understanding Pedagogical Content Knowledge (PCK)’ on October 13, 2022, at Integrated Laboratory HBCSE-TIFR, Mankhurd. The reporting time was 10:20 am and almost all the students came on time. The workshop began at 10:30 am. The first event was on Understanding PCK and was presented by Dr. Narendra D Deshmukh. Before this, he gave us all a brief introduction about HBCSE and when it was established, the purpose of the institute, and all the activities and academics there.

Then, he explained to us about PCK i.e. Pedagogical Content Knowledge, and how it is integrated with TSPCK i.e. Techno-Pedagogical Content Knowledge. This was done through an engaging PowerPoint Presentation. He explained the model of PCK by Schulman, teacher knowledge base components identified as part of PCK, and the approach from Pedagogical Content Knowledge (PCK) to Topic Specific Pedagogical Content Knowledge TSPCK, and also shared with us the various references. Then, we were asked to form groups according to our subjects and to present on any topic with respect to the TSPCK model (Mavhunga and Rollnick 2013). Accordingly, 6 groups were formed and were given time to discuss and reflect. Then, one member of each group presented their discussions. After each presentation, Narendra Sir gave his insights as well.

All dispersed for a lunch break around 12:50 pm. I must admit, the lunch in the canteen was tasty! Then we all assembled back after the short break at around 1:45 pm.



Then, Ms. Sonali Kanthale started the next session on the topic 'Heat'. She first gave three items made of different materials to all the groups and also gave a questionnaire. All the students solved the same and then the answers were discussed. The concept of exchange of heat and intermolecular distance was clarified and related to the actual process of heating up of land and water.

Next, Hands on Science Activity session was conducted by Mr. Vinod Sonawane and Mr. Karun Hambir. Here some demonstrations were shown to us regarding science. Atmospheric pressure, vacuum, and electromagnet - these concepts were demonstrated very interestingly.

Then Ms. Pooja Lokhande conducted a session on Activities on Mathematics. She asked us to form pairs and we played the 'Nim Sum Game'. Here, we were asked to discover various patterns in the game. Also, the 'Guessing the number' activity was demonstrated.

Finally, vote of thanks was delivered by Shubham Sharma. It was an insightful workshop that ended at 4:30 pm. The students thoroughly enjoyed the workshop. Many were also interested in the Post-graduate exams there. Even students from non-science background were happy to have participated in this workshop. All the students were also issued participation certificates. Following is a sample of one such certificate. Along with that, there is the schedule of the entire program.



**Homi Bhabha Centre for Science Education (HBCSE), TIFR, Mumbai**  
&  
**Gokhale Education Society's College of Education and Research, Parel, Mumbai**  
Jointly organised  
**One day workshop on 'Understanding Pedagogical Content Knowledge (PCK)'**  
(October 13, 2022 at Integrated Laboratory HBCSE-TIFR, Mankhurd)

**Tentative Schedule**

Time	Session Title	Resource Person
10.30 - 11.00	About HBCSE	
11.00 - 12.30	Understanding PCK	Dr Narendra D Deshmukh
12.30 - 01.30		Lunch
01.30 - 02.15	Feel the Heat	Ms Sonali Kathale & Dr Narendra D Deshmukh
02.15 - 03.30	Hands on Science Activities	Mr Vinod C. Sonawane & Mr Karun Hambir
03.30 - 04.00	Activities on Mathematics	Ms Pooja Lokhande
04.00 - 04.30	Valedictory	

