
Country Report

Country Report from AABE India Chapter*

Narendra D. DESHMUKH

Homi Bhabha Centre for Science Education, India

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India organized the 12th Biennial Conference of the Asian Association for Biology Education (AABE) in New Delhi in 1988, and the 26th Biennial Conference of the AABE at Goa from 20 to 23 September 2016 (Figure 1, from AJBE vol. 9, p. 11).

During this conference AABE India Chapter was formed (Deshmukh, 2019). Under the umbrella of AABE, India Chapter has been working actively in biology education from kindergarten to college level. Many members of the AABE India Chapter are doing wonderful work in the area of biology education on their individual level. In addition, we are trying our best to work together and disseminate our AABE activities among Indian students, teachers and researchers. The President and other Executive Committee (EC) members of our AABE India Chapter also participate in the publication of AABE journal (AJBE) and other AABE activities.

Recent Activities

Since March 2020, because of COVID 19, there was a total lockdown all over the India. During this pandemic period we conducted various activities (both online and offline modes) related to life sciences for school students and teachers (Figure 2), such as project-based learning (PBL) on measurement of leaves (Figure 3) and model making by means of dough (Figure 4), and activities on detection of soil pH (Figure 5) and chromatography (Figure 6).

The AABE India Chapter has been organizing interactions with scientists, science teachers' workshops, Science Village, science film screenings and a Science Film Competition and Exhibition every year (Figure 7). Our team members actively participated in these activities and demonstrated science activities, conducted session on microscopes, delivered various lectures on health, environment and life science topics, etc.



Figure 1: Attendants of the 26th Biennial Conference of the AABE at Goa

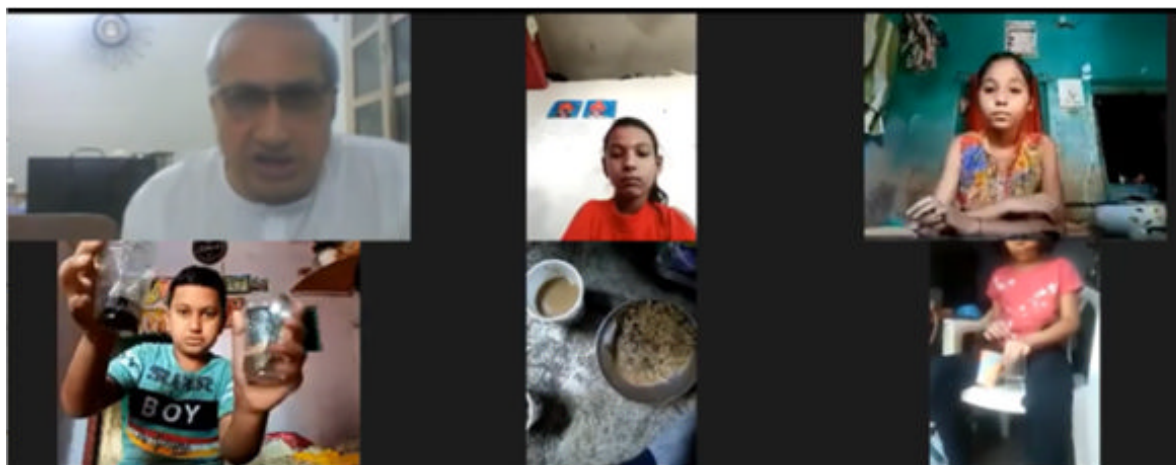


Figure 2: Online workshops for students

Picture of leaves	Name of leaves	Length of leaves	Type of leaves
	Coral Jasmine	7.1 cm	Simple leaf
	Tulsi	1.9 cm	Simple leaf

Figure 3: Project based learning - Measurement of leaves



Figure 4: Project based learning - Model making



Figure 5: A school level activity – Detection of soil pH



Figure 6: A school level activity- Chromatography

Under the umbrella of Discovery Science Exploratory we conducted various biological sciences activities for school students, teachers and community (Figure 8).

We also conducted teachers’ workshops on various biological topics, such as online tools for biology education, virtual biology practical, careers in life sciences, COVID awareness, etc. In



Figure 7: Science Village (left) and Science Film Competition and Exhibition (right)



Figure 8: Demonstration of sciences activities for school students, teachers and community

collaboration with other organizations we have been working on various biology-related projects and conducting seminars, workshops and research activities for students and teachers. Similarly, our AABE members conducted and actively participated in seminars, conferences and workshops, such as

- September 6, 2019, 'CUBE-STEM Meet', Acharya Narendra Dev (AND) College, University of Delhi;
- November 4-5, 2019, National Conference on Insect Plant Biology in 21st Century, Deshbandhu College, University of Delhi;
- February 22-28, 2022, International e-Conference on Mitigating Contemporary Environmental Issues by Sustainable Approaches (ICMCESA-2022), AND College, New Delhi;

- October 16-17, 2020, International e-conference 'NeuroEunoia 2020: A Neuroscience Affair', organized by Gargi College, University of Delhi.

In India there are various state and national level associations, institutions and organizations which are working in biological sciences, life sciences, health sciences, environmental sciences and agricultural sciences from KG to PG level. Apart from state and national level research laboratories, universities and colleges, state and national level associations and organizations are involved rigorously in biology education, research, training and material development.

The Homi Bhabha Centre for Science Education (HBCSE) is the nodal centre of the country for Olympiad programmes in mathematics and sciences including astronomy. Indian National Biology Olympiad (INBO) is for students studying in

Classes 11 and 12. The selected Indian teams undergo a rigorous training programme at HBCSE in theory and experiment.

The National Association of Biology Teachers empowers educators to provide the best possible biology and life science education for all students. *IndiaBioscience* is facilitating networking of undergraduate teachers in life sciences to share their ideas, experience and expertise in pedagogy and research (Figure 9).



Figure 9: IndiaBioscience-Manual

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REFERENCE

Deshmukh, N. D. (2019) India report. *Asian Journal of Biology Education* **11**: 21-24

Dr. Narendra D. Deshmukh

(ndd@hbcse.tifr.res.in) Homi Bhabha Centre for Science Education, TIFR, Mumbai, Indi