

Universalizing Scientific Temper, Maharashtra Foundation Souvenir
28th January 2023

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On the 20th of August 2013, activists of the All India Peoples' Science Network (AIPSN) gathered at the Indian Institute of Astrophysical Sciences at Bangalore for a national workshop on Comet Ison were shocked by the news of the murder of Dr. Narendra Dabholkar. On that afternoon as activists in Pune mobilized, with the slogan "Aaamhi Saare Dabholkar," the following resolution was adopted by the AIPSN activists gathered at Bengaluru :

We take inspiration from the life of Dr. Narendra Dabholkar and pledge to carry forward his work and ideals of spreading the scientific temper, and opposing all forms of superstition and religious obscurantism . We pledge to combat the forces of communal fascism and terrorism acting in the name of religion which are active in different parts of our country today . We affirm the values of the Indian Constitution- of scientific temper, secularism, equality and democracy and will work to carry their message to every school, to every town and village of our country.

Just as those who perpetrated the murder of Gandhiji could not stop his values and message , the values and message of Dr. Narendra Dabholkar will also not be stopped by this cowardly murder. All of us working in the people's science movement will work with greater determination and vigour to promote science and scientific thinking in the broadest sections of the public to win the battle of ideas and defeat the forces of obscurantism and communal fascism in our country.

Two years later, the task of "universalizing scientific temper" (UST) was discussed in depth at the All India People's Science Conference of

the AIPSN held in Bangalore in April 2015. There is a difference between 'promoting scientific temper' and 'universalizing scientific temper.'

Perhaps India is the only nation in the world which has scientific temper (ST) explicitly written into its constitution. Article 51A mandates promotion of Scientific temper as a fundamental duty of every Indian citizen. Article 51 A is not legally enforceable in a court of law. However, Article 21 A, and the Right to Education Act 2009 have made 'universalization of scientific temper' (UST) legally mandatory. UST is no longer just a fundamental duty, but a fundamental right of every Indian citizen between the ages of 6 and 14 years, approximately 20 crores in number. Achieving UST is now compulsory.

But, is Universalization possible? There are genuine achievements of universalization. Deadly diseases like small pox and polio have been eradicated by universal immunization. Universal literacy has been achieved in many countries. Today with almost every child in India in school irrespective of gender, or caste. universal school access is achieved. So the answer to the above question is - 'yes, in some areas'. But is universalization of scientific temper possible?

UST requires us to consider the constitutional provision for scientific temper in conjunction with the provision for the right to education. Universalization of good quality education, through the RTE Act and NCF 2005 is legally mandatory today. Accordingly, ensuring that every child obtains good quality education till class 8, and ensuring not mere equality of opportunity, but the achievement of equality in good quality educational outcomes for every child, is today a legal obligation of the Indian state. This is a far stronger requirement than mere school access. We are nowhere near this objective.

Unfortunately the present government in its NEP 2020 seeks to turn the clock back abandoning universalization of good quality outcomes

as a policy mandate and returning to the limited language of mere access.

As an important step to put UST on the national agenda, the AIPSN resolved in February 2018 at its 16th All India Conference at Bhubhaneshwar to initiate the national observance of “National Scientific Temper Day” (NSTD) each year on August 20th the anniversary of Dr. Dabholkar’s martyrdom. In 2018, AIPSN and MANS initiated NSTD with the slogan of “Ask Why”.

Many organizations and institutions now participate in the NSTD. Through their networks NSTD is now observed in most of the states and union territories of India in thousands of schools, colleges and public gatherings.

The AIPSN is a national network of peoples’ science organizations. It includes the KSSP in Kerala, TNSF in Tamil Nadu, JVV Andhra and JVV Telengana, BGVS and KRVP in Karnataka, Navnirmiti and BGVSM in Maharashtra, PSF in Pondicherry, MPVS and BGVS in MP., CVS in Chhattisgarh, BGVS in Orissa, PBVM and FOSET in West Bengal, HVM and BGVS in Haryana, BGVS in Rajasthan, DSF in Delhi, BGVS in HP, TVM in Tripura, ASS and ESM in Assam, BGVS in Manipur, Nagaland.

The choice of Dr. Dabholkar’s day of martyrdom as the NSTD was a natural choice. Scientific temper is not about the natural sciences, although we can learn about the method of science while studying natural science. Scientific temper is about applying the method of science to every aspect of human life to understand how better to live our lives. ST is primarily about human and social issues. UST requires us to work on a mass scale among the common citizens. Dr. Narendra Dabholkar was an outstanding exemplar of how to conduct

the task of UST. His one sentence definition of scientific temper - “JevdaPurava, tevdavishwas” is succinct, accurate and powerful.

The AIPSN translated two of his lectures on scientific temper into English. In 2018 these two lectures were further translated and distributed as booklets and pamphlets into many Indian languages including Malayalam, Tamil, Telugu, Hindi, Bangla, and Assamese. Excerpts from Dr. Dabholkar’s video lectures were dubbed into Indian languages and English and are being used widely during the NSTD campaigns.

The observance of NSTD is a step towards UST. But given the magnitude of the task of universalization it is yet a small step.

With the slogan of ‘Ask Why’, the NSTD campaign encourages citizens to ask questions about existing reality. Asking questions is the essence of the method of science on which ST is based. However, in today’s toxic political environment, asking questions about government policies is actively discouraged and described as ‘anti-national’. This distorted narrative is equally actively countered by the AIPSN which firmly asserts that because of Article 51 A, ‘deshbhakti’ requires us to ask questions. It is clear that UST will play an important role in defending and strengthening democracy in our country.

Universalizing good quality outcomes in science education can prepare the foundation for UST, if we understand that inculcating scientific temper is an integral part of good science education. However, though more than 10 years have elapsed since the RTE 2009 Act, the aspect of universalizing good quality

educational outcomes has not received serious attention anywhere in the country.

Defending the quality mandate of the RTE Act and NCF 2005 in the present circumstances and taking it forward is essential for achieving UST. Without the cooperation of schools and school managements which are committed to the values of our constitution this will be very difficult. But with their cooperation , major progress towards UST will become possible. In this 75th year of our Independence, let us take this forward as our national duty and responsibility.