

MODULE : 4 (A.2) - Anticipated Outcomes of Teaching

Natural Science

SCIENTIFIC TEMPER

Scientific Temper is a way of life that calls for scientific attitude and scientific approach. It calls for a particular outlook and way of behaviour. An individual is considered to have scientific temper if he employs scientific method of decision making and have an attitude of logical and rational thinking in his everyday life. The spirit of inquiry and the acceptance of the right to question and be questioned are basics to scientific temper. It is compatible with observation and insight, reasoning and intuition, systematic work and creative impulse. It becomes a part of the culture, a philosophy and a way of life which leads to pursuit of truth without prejudice.

Scientific temper considers knowledge as open ended and ever evolving. It lays emphasis on verifiability and repeatability. It has deep emotional content and has, within it, a sense of beauty. A system of value judgements is inherent in scientific temper.

Social justice, widespread education and unrestricted communication are the pre-requisites for the spread of scientific temper.

Jawaharlal Nehru first defined and elaborated the concept of scientific temper in India ^{book} his "The Discovery of India", (1946) making the following noticeable points.

- * "The scientific approach and temper are, or should be, a way of life, a process of thinking, a method of acting and associating with our fellowmen."
- * "Scientific temper is the temper of a free man."

An effective method of fostering scientific temper is imparting knowledge of science through experimentation and demonstration, by involving students directly in activities similar to how scientists operate in discovering new knowledge. Through role play, quizzes, model making, visits to factories, hospitals, research laboratories, showing suitable films, organizing talks by eminent scientists, participating in science exhibitions etc. are the major ways of inculcating scientific temper among students.