

An analysis of Scientific Temper within Mizo Adolescents

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Abstract

The national curriculum frameworks (NCFs) have been highlighting the ways of learning and doing school science in a manner that nurtures the inbuilt natural tendencies of learners such as curiosity, creativity, cooperative investigation and spirit of inquiry to reveal the real truth. Scientific temper is an affective construct of an individual and its manifestation as a trait in school students helps in science learning. It is defined as a frame of mind that accepts truth in its real form without subjecting it to any kind of influence which is in harmony with nature of science (NOS). But sadly, the real nature of science is in a compromised state owing to widening gap between the intended and acquired school science curriculum. A misinterpreted nature of science is communicated to the students through traditional school science leading to misconceptions. Moreover, the traditional school science is taught in a way that very few linkages are made between the curricular content and the real life. This might also be the cause of declining interest of students in science as they grow up. The present research paper is an attempt to study the level of scientific temper within secondary school students of Mizoram. A comparative analysis of their scientific temper on various dimensions of scientific temper was also performed. Gender related differences were also investigated. The sample comprised of 1134 students (532 boys and 602 girls) of class X from 34 MBSE (Mizoram Board of School Education) affiliated schools in Aizawl district of Mizoram, India. Stratified random sampling technique was used to pool out the sample. Results revealed that scientific temper in the students is of satisfactory level. However, school practices are quite contradictory to the notion of scientific temper and hence students have developed a phobia towards science. It seems that in spite of favorability in student level factor for learning science there is an in-favorability of school level factors of teaching science. This incompatibility between teaching and learning creates tension, confusion, and fear within students. The way science is taught at secondary level it seems it is not taking advantage of this affective trait of students, rather students find science learning quite difficult for them.

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