ABSTRACT

Active learning is a term generally used to denote teaching learning strategies that engage and involve students in their learning process. Active Learning can be instructional activities involving students in doing things and thinking about what they are doing. In active learning, the learner takes the responsibility of his or her learning that gives them opportunity to make decisions about various dimensions of the learning process and to perform higher order thinking and self regulation. Any Pedagogic Strategy that enables the students to be actively involved in the learning process rather than being passive can be considered as Active Learning Strategy.

The present study is about the influence of Active Learning Strategies on Critical Thinking, Thinking Styles and Achievement in Physics among secondary school students. Instructional materials were prepared integrating active learning strategies like Group Investigation, Think-Pair-Share, K-W-L, Concept mapping and One minute papers for transacting Physics to the students of class IX and its influence on the variables were studied. The study was quasi experimental in nature with a non-randomized pre-test and post-test design, whereby the experimental group was taught using Active Learning Strategies for about five months and the control group was exposed to usual classroom practices like lecture, demonstration and group discussions. Tools developed and validated for the study were test on Critical Thinking Skills in Physics, Critical Thinking Dispositions Scale, Thinking Styles Inventory
(adopted), Achievement Test in Physics and Students Reaction Scale. Data collected using the tools were analysed using statistical techniques like ANCOVA, ANOVA, t-test and Partial Correlation. Percentages were also used to analyse the qualitative data.

Results of the study revealed that Active Learning Strategies were effective in enhancing the Critical Thinking Skills, Critical Thinking Dispositions, Legislative Thinking Styles, Judicial Thinking Styles and Achievement in Physics among the secondary school students. The study also showed a positive significant correlation between Critical Thinking Skills and Critical Thinking Dispositions, Critical Thinking Dispositions and Judicial Thinking style, Critical Thinking Skills and Achievement in Physics and Judicial Thinking Styles and Achievement in Physics.