

Executive Summary of Minor Research Project entitled ‘An Investigation of +2 Level Students’ Concepts of Magnetism’

Present study entitled ‘An Investigation of +2 Level Students’ Concepts of Magnetism’ is a pilot study related with the concepts of magnetism and administered over students of plus two level of Ajmer District. Research tool which comprises of conceptual multiple choice questions was developed in workshop mode. Multiple-choice questions comprised of four options, one of them was correct answer and other three were having suspected alternative frames. To ensure the validity and reliability of the Research tool each test item was scrutinized in a brainstorming session of experts. The test was administered over 267 students of plus two level studying in schools having well equipped facilities and devoted staffs dealing with physics education. Students’ were directed to give correct option for multiple-choice questions. They were instructed to write supportive reasons for selecting the options. Nine schools affiliated to CBSE/BSER of Ajmer district were selected for the said purpose. Comprehensive analysis of the responses of the students indicates a significant gap between the learning outcomes as expected from the curriculum given to the students and their real learning (Fig.1).

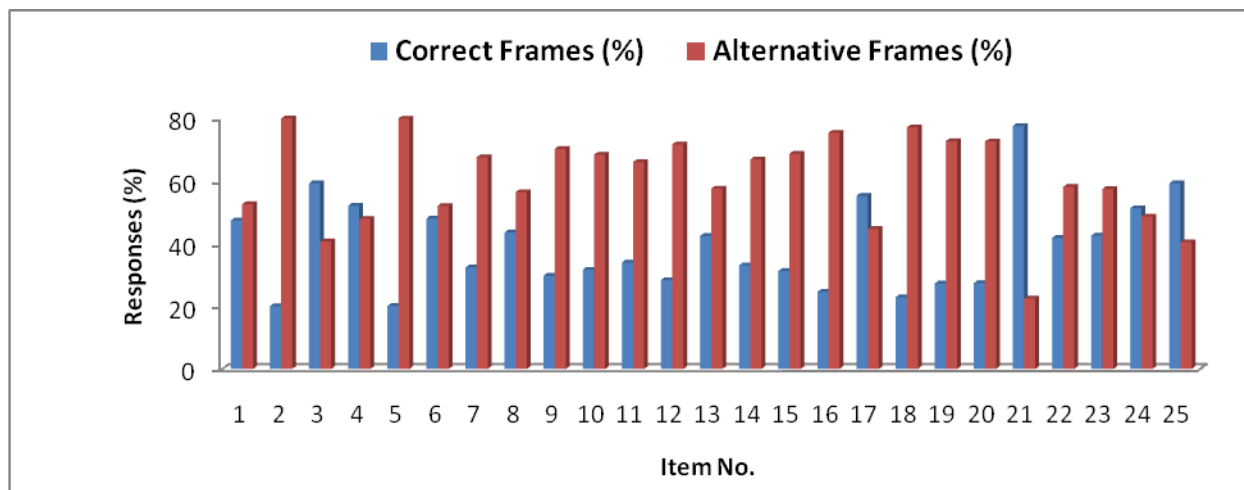


Fig. 1 : Graphical representation of students’ frames about the concepts of magnetism

It is envisaged that a carefully planned system of instruction taking into consideration students’ alternative frameworks may help to improve the situation. Prof. S.V. Sharma, Head DESM was the Principal Investigator and Dr. V. P. Arya was the Co- PI of the project. The report of the project was submitted on 31st March 2017. Investigators are thankful to National Council of Educational Research and Training, New Delhi for the financial support.