

Students' Ability Levels and Effectiveness of Problem-Solving Instructional Strategy

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ABSTRACT The paper investigated the impact of problem-solving instructional strategy on the performances of students of different ability levels in Chemistry. The performances of students in the high, medium and low ability levels in a problem-solving task were compared after exposing them to teacher-directed problem-solving instruction. It was detected that there was no significant difference ($P > 0.05$) in the performance of students in the different ability levels after the treatment. Method of instruction was found to influence academic achievement of low achievers as found out by Long (1981) and Kempa and Dupe (1974) and that problem solving in science depends on student's cognitive ability level (Salami, 2000). The need for good instructional strategy like problem-solving technique was advocated for teachers of science. This would go a long way in improving problem-solving skills of students no matter their ability level.