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## COMPARATIVE EFFECTS OF CONCEPT-MAPPING, ANALOGY AND EXPOSITORY STRATEGIES ON SECONDARY SCHOOL STUDENTS' PERFORMANCE IN CHEMISTRY IN ILESA, NIGERIA.

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## Abstract

The study investigated the comparative effects of concept-mapping, analogy and expository strategies as well as the influence of gender and ability level on students' performance in chemistry. Three hundred and forty-seven (347) senior secondary one (SS1) chemistry students were randomly sampled while three research instruments: Chemistry Concept Test (CCT), Chemistry Performance Test (CPT) and Chemistry Achievement Test (CAT) were used for the study. The hypotheses generated were tested by mean score, t-test, analysis of covariance (ANCOVA) and Scheffe post hoc analysis. The findings showed that students exposed to concept-mapping performed better than those

exposed to analogy who also performed much better than those taught with expository method. Furthermore, there was no significant difference in the academic performance of male and female students exposed to any of the three treatments. However the ability levels of the students actually influenced their academic performance. Hence, it was recommended that new instructional strategies such as concept mapping and analogy should be incorporated into the school system to improve science teaching.