

## Relative Effectiveness of Inquiry: Approach and Expository Instructional Methods in Fostering Students' Retention in Chemistry

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**Abstract :** The study was designed to investigate the relative effectiveness of inquiry role approach and expository instructional methods in fostering students' retention in chemistry. Two research questions were answered and three null hypotheses were formulated and tested at 0.05 level of significance. A quasi-experimental (the non-equivalent pretest, posttest control group) design was adopted for the study. The population for the study comprised all senior secondary school class two (SS II) students who were offering Chemistry in single sex schools in Enugu Education Zone. The instrument for data collection was a self-developed Chemistry Retention Test (CRT). Relevant data were collected from a sample of one hundred and forty-one (141) students drawn from two secondary schools (1 male and 1 female schools) using simple random sampling technique. A reliability co-efficient of 0.82 was obtained for the instrument using Kuder Richardson formular20 (K-R20). Mean and Standard deviation scores were used to answer the research questions while two-way analysis of covariance (ANCOVA) was used to test the hypotheses. The findings showed that the students taught with Inquiry role approach retained the chemistry concept significantly higher than their counterparts taught with expository method. Female students retained slightly higher than their male counterparts. There is significant interaction between instructional packages and gender on Chemistry students' retention. It was recommended, among others, that teachers should be encouraged to employ the use of Inquiry-role approach more in the teaching of chemistry and other subjects in general. By so doing, students' retention of the subject could be increased.

**Keywords :** inquiry role approach, retention, exposition method, chemistry

**Conference Title :** ICEIT 2015 : International Conference on Educational and Instructional Technology

**Conference Location :** London, United Kingdom

**Conference Dates :** January 19-20, 2015