

achievement in mathematics, and ascertain the influence of gender on students' achievement in mathematics when exposed to Guided Discovery and Expository methods.

Research Questions

The following research questions guided the study:

1. What are the mean achievement scores of SS2 students taught algebra with the use of Guided Discovery and Expository methods of teaching as measured by mathematics Achievement Test in Mathematics (MATA)?
2. What are the mean achievement scores of male and female students taught algebra with the use of Guided Discovery and Expository methods of teaching as measured by Mathematics Achievement Test in Algebra (MATA)?

Research Hypotheses

The following null hypotheses were formulated and tested at an alpha level of 0.05 of significance.

- i. There is no significant difference in the mean mathematics achievement scores of students taught algebra through the use of Guided Discovery and Expository methods.
- ii. There is no significant difference in the mean mathematics achievement scores of male and female students taught algebra through the use of Guided Discovery and Expository methods.
- iii. The interaction effect of method and gender on mathematics achievement is not significant.

Method

The population comprises SS2 students in all the Senior Secondary Schools in Enugu state as at 2005/2006 academic session. A sample of 160 students was selected using simple random sampling from 17 Secondary Schools in Enugu Education zone. Enugu Education zone was randomly selected from the five education zones in Enugu state. The study employed quasi-experimental research design of pretest, posttest non-equivalent control group. The instrument for data collection was a teacher made mathematics achievement test on algebra (MATA). It was a 20 item essay achievement test, chosen from twenty-five (25) questions used for trial testing with some provisions for those to be rejected during validation by experts. The instrument was used for both pretest and post test involving algebra. The reliability coefficient of the MATA was computed using Pearson Product Moment Correlation coefficient and obtained to be 0.060 which was considered reliable for administration. Means and Standard deviation were used to answer the research questions. The hypotheses were tested using ANCOVA.

Results

The results of this study are presented as follows: