

**Effect of Problem-solving Method on the  
Achievement in Mathematics of  
Secondary School Students of Ibadan  
Municipal Government Area of Oyo  
State, Nigeria.**

Gbenro, Dejo Tihamiyu

M.A. Curriculum Studies

Department of Special Education & Curriculum Studies

Obafemi Awolowo University, Ile Ife, Nigeria

1985.

## **Abstract:**

This study examined the effect of problem-solving method on:  
1. the cognitive achievement of learners in mathematics and  
2. the attitude of learners towards mathematics.

The research design used in this study was the pretest-post-test control group design. The study involved 130 Form II students in Ibadan Municipal Local Government area of Oyo State. The students were randomly assigned into two equal groups, one of which was the experimental group and the other the control group. The two groups were exposed to the same topic but with different instructional techniques. Two research instruments were used: (i) thirty word problems based on problems involving simple equations and (ii) a ten-item student attitude towards mathematics scale.

The attitude scale and the achievement test were administered to the students before the teaching/learning of the chosen topic on mathematics. At the end of the teaching, using two different approaches, the problem solving method and the traditional method, the same set of instruments, attitude scale and achievement tests, were re-administered on the students. The effect of problem-solving method on the experimental group was found using the t-test.

Results from the analysis of the achievement test revealed that the overall achievement of students exposed to problem-solving method was better than those that were exposed to the traditional method. The findings of the study also confirmed that the students exposed to problem - solving method showed more positive attitude towards mathematics.

Derived from the above, the study recommended that problem-solving method should be made available to primary school teachers who are the builders of the foundation for mathematics learning. Ideas on problem-solving should be shared on a national level among various agencies of education. It is also recommended that in- service training be organised on problem-solving methods for teachers of mathematics in the secondary schools and books be written on problem-solving method

**Keywords:** Problem solving method/ pretest-post-test control group design

**Supervisor:** A. Ojerinde