The purpose of this study was to determine the effectiveness of indigenous and improvised tools in teaching high school geometry. It also aimed to determine the reactions of students towards the use of indigenous and improvised tools.

This is a descriptive empirical survey on the use of indigenous and improvised tools in the classroom employing the experimental research design. It made use of the experimental and control, pretest and posttest design. Two matched groups with 43 third year students each of Sarrat national High School-Sta. Rosa Campus, school year 2004-2005 were the subject of the study.

Both groups were taught the same lessons using the same teaching strategies in mathematics but the experimental group was exposed to indigenous and improvised tools while the control group was not exposed to the said materials.

Essential data were gathered through the use of pretest and posttest on concepts and skills and a questionnaire to determine the reactions of the students regarding the use of indigenous and improvised tools. Statistical measures such as the mean and standard deviation were used to analyze the feedbacks (reactions) of the students toward the use of indigenous and improvised tools in presenting geometric concepts as well as the feedbacks of students toward the subject as a result of using indigenous and improvised tools.

Based on the analysis and interpretation of the data gathered, the following are the significant findings of the study:

There are indigenous and improvised tools which are available in the community that can be used as instructional materials to explain geometric concepts.
There is a significant difference in the mean gain scores in both the experimental group had higher posttest mean (20.35) than that of control group (16.28). This result proves that the use of indigenous and improvised tools as instructional materials is very effective in developing geometric concepts.

Positive feedbacks toward the subject-geometry particularly on the use of indigenous and improvised tools revealed that when indigenous and improvised tools are used in teaching, geometry class becomes interesting and motivating; challenging; enjoyable; not difficult to learn; relevant; valuable, helpful and not time consuming because they ease students burden in solving problems, encourage maximum participation among learners, make them feel comfortable and at ease while studying, and ensure greater retention of the concepts they learn.