A Statistical Study By Adolescent Students On Relevant Issues

Guide for Curriculum Unit 85.08.03
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The measurement of adolescents can intrigue students when the subject is themselves and the measurements and statistics obtained concern topics which interest them. This unit relates to pregnant adolescent students with common interests, but could easily be adapted to any teenage group with different primary concerns. The lesson plans at the end of the paper are of a general nature, but the main thrust is still toward using data which the students provide to make the study more meaningful to them.

The following lesson plans could be used for a three week unit adapted to the middle school or high school math class.

Lesson Plan I will introduce the student to surveys, recording data, and graphing bar graphs, histograms, and frequency curves.

Lesson Plan II is a study of the use of mean, median, and mode, using class attendance numbers.

Lesson Plan III is a correlation study between two variables. The variables are height and weight. The students can gather data from their own class and make scatter diagram to see if they can find a correlation.

Lesson Plan IV is a further study of correlation of two variables. It consists of using the same height-weight data and scatter diagrams from Lesson Plan II, and checking it mathematically using the Pearson r.

(Recommended for General Math classes, grades 7 and 8; Applied Math classes, grade 9; Algebra I and II classes, grades 9 through 11; and Algebra III-Trigonometry classes, grade 11)

Key Words

Adolescence American Statistical Study Mathematics Graphs Construction Sexuality Human Adolescent Elementary