

GRADE LEVEL: 6-8

STRAND: Data and Statistics

GLCEs: 8th Grade

LESSON TITLE: The Impact of Zero

LEARNING OBJECTIVES:

- Students will examine the effects of receiving a test score of zero on their overall grade.
- Students will interpret measures of central tendency (mode, median, mean) and spread (range).
- Students will use box plots to represent data.
- Students will discuss the graphical representation from box plots.
- Students will analyze how changes in data affect the measures of centers for a set of data.

MATERIALS: Graphing calculator/overhead (optional)
Transparencies
Handout -- Impact of Zero Activity Sheet

BACKGROUND: Students should have some prior experience using mode, median, mean, and range as well as working with box plots and quartiles. This lesson is designed for students to work in pairs or individually.

INSTRUCTIONAL PLAN: (See ACTIVITY SHEET)

ASSESSMENT OPTIONS: (See ACTIVITY SHEET)

EXTENSIONS: (See ACTIVITY SHEET)

MICHIGAN GLCEs:

D.AN.08.01 Determine which measure of central tendency (mean, median, mode) best represents a data set (e.g., salaries, home prices) for answering certain questions, and justify the choice made.

D.AN.08.02 Recognize practices of collecting and displaying data that may bias presentation or analysis.

RESOURCES: Activity adapted from Eisenhower Regional Consortium For Mathematics and Science Education at AEL.