Income Inequality Control

Guide for Curriculum Unit 18.01.06
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This intention of this unit plan is to introduce high school students to linear regression in the context of a real-world issue – income inequality. By examining various types of graphs, students will alerted to the fact that income is unevenly distributed on both a domestic and global scale. They will come up with quantitative variables that might contribute to income inequality and research the variables that interest them in depth. They will use graphing calculator technology to obtain a linear regression equation that describes the relationship between their variable of interest and the level of income inequality in a location, as measured by the Gini coefficient. Specifically, they will assess the linearity of the relationship between their variable of interest and the Gini coefficient by interpreting the correlation coefficient for the scatterplot of their data and examining a plot of residuals. Their ultimate goal will be to come up with a proposal for alleviating income inequality based on their findings.

(Developed for AP Statistics, grades 11-12; recommended for Statistics, grades 8-12)