Why?

Essential Questions

1. What is the difference between correlation and causation?
2. How strong is the relationship between two variables?
3. How do we determine a 'best fit' line for bivariate data?

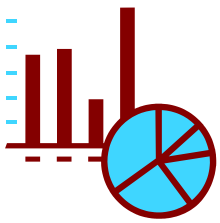
Enduring Understanding

Students will compare both graphical and numerical techniques to analyze two sets of data.

What?

MCPS Indicators and Standards

1. Analyze patterns in scatter plots of bivariate data.
2. Model a set of bivariate data with a least squares regression line.
3. Identify and discuss the impact of residual plots, outliers, and influential points.
4. Evaluate and discuss correlation and linearity of bivariate data.
5. Distinguish between correlation and causation.
6. Use quadratic, logarithmic, and power transformations on sets of bivariate data in order to achieve linearity.
7. Explore categorical data using marginal and joint frequencies in two-way tables.
8. Find and discuss conditional relative frequencies and association for categorical data.
9. Analyze sets of real data.



CollegeBoard AP