

Excel Graphing Workshop

Presented by the QSC

Part 1: Types of Graphs/Charts

Numeric/Quantitative Data

- Histograms
- Box Plots
- Scatterplots
- Line Graphs

Categorical/Qualitative Data

- Bar Charts
- Pie Charts

Part 2: Understanding the Dataset

Variable	Description	Quantitative or Qualitative
Gender	Gender of the student	
Parental Education	Education level of the student's parents	
Test Prep	If the student completed a test prep course	
Math/Reading/Writing Score	Scores in respective subjects	
Total Score	Total score from all subjects combined	
Average Score	Average score across all subjects	

Explain how the data might be used to draw insights on student performance. Make a few predictions of trends you expect to see.

Part 3: Graphing Numeric Data

1. Create a histogram of Average Scores.
 - a. What does this tell us about the shape of the distribution?

2. Create a bar chart comparing average test scores by Parental Education.
Hint: create a pivot table first.

3. Create a scatterplot comparing the effect of Math Scores on Reading Scores.
 - a. Add a trendline, correlation coefficient, and regression equation.

Part 3: Graphing Categorical Data

1. Create a pie chart to look at the distribution of Gender.
Hint: create a pivot table first.

2. Create a bar chart to look at the distribution of Test Prep.
Hint: create a pivot table first.