DePaul Center for Urban Education
Chicago Math Connections

This project is funded by the Illinois Board of Higher Education through the Dwight D. Eisenhower Professional Development program

Topic: Agriculture in the Chicago area
Goal(s): 8,10
Skills: Analyzing, interpreting and graphing Data

What’s the context?
Comparing Agricultural activities within the Cook County area

Which data will students use?
Farming profile in the Cook County Area

What will students learn from this project?

Know how – what will they be able to do better?
Analyze, interpret, and graph data.

Know what – what idea(s) will they clarify through the project?
Gain an understanding of patterns and trends in a set of numbers by creating and analyzing line graphs.

What’s the challenge?
1). Analyze data of agricultural items grown in Cook County.
2). Create a single line graph with the years 1987, 1992 and 1997 plotted on the horizontal axis along the bottom of the graph, and the number of acres used for crop plotted along the vertical axis on the left hand side of the graph.
   • Note: Students will need guidance in numbering the acreage along the vertical axis. It may be helpful to round off numbers to the nearest 100’s place. For example, 10,868 acres of corn could be rounded off to 10,800 acres - which would be a much easier number to chart on a line graph.
3). Students will then need to color code each of the five crops they want to chart. For example, the amount of corn grown could be plotted in red, and the amount of soybeans grown could be plotted in green etc.
   • When finished, each line graph will have five different colored lines plotted on a single line graph- each colored line to represent a different crop.

Checkpoint: Students will pair up to check each other’s graphs and to discuss and defend their predictions for future agricultural activities.