DePaul Center for Urban Education

Chicago Math Connections

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Topic: Distance Between Chicago and Places in the World
Goal(s): 6,7,8,10
Skills: Calculating rates of travel, ratios, and conversions.

What's the context?
Calculating travel times to worldwide destinations from Chicago

Which data will students use?
Distances between Chicago and places in the world.

What will students learn from this project?

Know how – what will they be able to do better?
Calculate rate and distance problems
Locate points on a map

Know what – what idea(s) will they clarify through the project?
Improve ability to work with ratios in real world applications
Gain an improved sense of the relationship between distances and travel times from Chicago to important places in the world.

What's the challenge?
1). Choose five locations you would like to travel to from Chicago. Study the distances and estimate how many hours it would take to fly to these locations.
2). Make a chart to organize the number of miles these places are from Chicago and your estimated travel times.
3). If a plane can travel at an average rate of 550 miles per hour (mph), calculate the approximate number of hours it would take to reach each of the places you have chosen.
4). Create a bar graph to visually represent the relative distances you would have to travel to reach these five locations.

Checkpoint: Check calculations and bar graphs for clarity and completeness.
As added enrichment – convert each of the locations you have chosen to kilometers. Remember that most of the world uses the metric system and that a kilometer is equal to approximately **.**62 miles. As a ratio, a kilometer is equal to **.**62/100 of a mile, or just over 6/10 of a mile.