

Mathematics and Civic Engagement

<http://tinyurl.com/or8946j>

Keynote: Victor Donnay, [Presentation](#), [References](#), [Handouts](#).

Engaging Mathematics Workshop

Agenda:

10:15 - 10:20 (5 minutes). Introduction.

10:20 - 11:00 (40 minutes). Engaging Math Faculty each facilitate a group. They will present one (or more) lessons and lead the participants through the lesson. Informal. [Here are possible topics](#). Here is a draft [worksheet](#) that participants can fill in as they work through the lesson or think about modifying the lesson for their own school.

11:00 - 11:30 (30 minutes). Participants from each group report out to the whole group what their lesson was about.

11:30 - 11:40 (10 minutes). Individual work time. What have you learned?

11:40 - 11:45 (5 minutes). Share what you have learned with your group.

Presentations: [Participant worksheet](#).

Alioune Khoule, Mangala Kothari, Marina Nechayeva, LaGuardia Community College, Elementary Statistics: Learning concepts through social and environmental issues.

1. [Demographics of my class, my college and my neighborhood](#)
2. [Global warming](#)
3. [Basal Metabolic Rate \(BMR\)](#)
4. [Data Analysis Project - Historical Trends and Patterns in Temperatures around the World](#)
5. [Feedback sheet](#)

Cathy Evins, Barbara Gonzalez, Roosevelt University,
College Algebra: [Modeling the Chicago Homicide Rate](#)

Frank Wattenberg, United States Military Academy,
[Data analysis courses at all levels Keeling's Data and a Cautionary Tale.](#)

Data and Analysis

Keeling [Data in a Mathematica Notebook](#)

Keeling [Data in an Excel Spreadsheet](#)

Keeling [Mathematica Analysis -- Exponential](#)

Keeling [Mathematica Analysis -- Quadratic](#)

[Draining Experiment Data](#)

[Draining Experiment Analysis](#)

Victor Donnay, Bryn Mawr College,

1. [Arctic Sea Ice and Linear Equations](#) Algebra 1 version (Algebra 1, Pre-Calculus and above), [Teachers guide](#), [Pre-Calculus version](#), [Sea ice data](#)
2. [Atmospheric CO2 Levels and Rates of Change](#) (pre-calculus, calculus, statistics), [Teachers Guide](#), [CO2 Data](#)
3. [Solar Panels, Energy and Area Under the Curve](#) (pre-calculus, calculus), [Teachers Guide](#), [Sample Energy Bill](#), [Power Data](#)

4. [Lightbulb Lesson](#): Is it “Worth it” to change to a new type of Lightbulb?

Tony Dunlop, Normandale Community College

Mathematics for the Liberal Arts

1. [Mathematical modeling activities and data sets related to lake volume and species richness](#)
2. [Mathematical activities related to stormwater runoff](#)
3. [Reading material related to activities](#)
4. [Participant worksheet](#)