# Data as Art, as Science, as a Reason for Being

A Lesson from Computer Science Principles Pilot II course at Madison West High School 2011-12

**Guiding Questions**:   Can Visual representations of data be considered a form of art?
 If your school were to display data in a public place, what would you present?

**Big Ideas**:  Creativity, Abstraction, Data, Impact

**Learning Objectives :**
LO2:  The student can analyze computational artifacts.
LO9:  The student can use models and simulations to raise and answer questions.
LO14:  The student can analyze the considerations involved in the computational mainpulation of data.
LO28:  The student can analyze how computing affects communication, interaction, and cognition.

**Launch**:  Visit the web site "Think exhibit:  An exploration into making the world better." at
http://www.ibm.com/ibm100/us/en/thinkexhibit/index.html
Watch the video (down a bit on the page) called "A unique interactive experience."
Discuss:  How do you think the people who created the exhibits made them work?

**Read**:  "Data as Art, as Science, as a Reason for Being."
http://www.nytimes.com/2011/09/24/arts/design/think-at-lincoln-center-review.html?_r=1&pagewanted=all
What artistic perspectives does the author take on the "Think" exhibit? What was effective, and why?  What was not?  The article discusses the "data wall" and suggests other uses of the wall.  What are they?

**Explore**:  Go for a walk around your school (or building).  As you are walking, share ideas you have for what data might be shown on a particular wall.  How could you make that data artistic?  How would you collect that data?  What questions might it answer?  What questions might it raise?

**Reflect**:  Return to the classroom, and share your ideas with the whole group.  What kind of information would you need to collect?  How would you abstract that information visually?  How might you make your ideas work?

**Extend**:  Consider how you might collect this data, store it, and present it visually.   Can you make your ideas a reality?