Alternative Methods for Conveying Data

If we want our audiences to truly understand our data, we need to wrap our findings within a context that our audiences understand. Context provides an important perspective, which allows audiences to connect our new information to things they already know and understand. Context makes our data move from the abstract to the concrete; it makes our data memorable.

Context can also humanize our data. This is critical to our success communicating our data because research suggests that data alone will never be persuasive enough to move audiences to action. The numbers by themselves are not enough to tell the human story of your work.

This is one reason why traditional charts and graphs often do not resonate with audiences—there is no context inherent in them. We need to supplement or even replace that graph with alternative methods for conveying data that offer greater context. If we want our audiences to sit up and take notice, we must paint the picture that will move them.

For the sake of illustration, let's consider one data set and look at several ways it can be conveyed. Let's say that 46.7 percent of high school students have no aspirations for their lives beyond high school, 38.7 percent don't believe an adult at school cares about them, and 30.3 percent regularly experience hopelessness.

These numbers paint an important picture. They tell a story of youth who are aching for help and don't see it around them. These data can help drive programmatic decisions, and they can be used to garner support for your curricula, your mental health services and referral process, your mentoring and after-school programs, and much, much more.

But here's how it looks when traditionally represented:
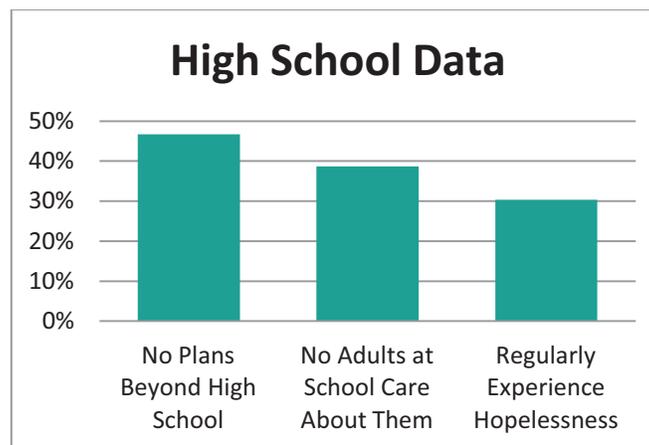
While the facts are very clear in the graph above, many audiences will not be able to visualize the story they tell. These alternative methods for displaying data may help:

Words and Pictures: The human brain is hardwired to relate more easily to images and language that it recognizes than numbers, and conveying data through words and pictures may help audiences see your story with immediacy. For instance:
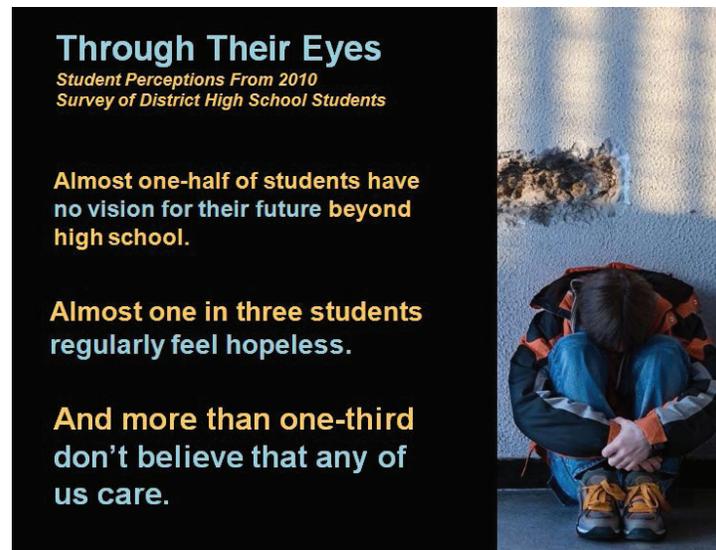
Note that numbers have been replaced by words. For audiences who do not need to see exact percentages, this is a perfectly acceptable alternative. Note also that we immediately get that we're looking at the story of troubled youth through the photograph. Finding good images for your presentations and materials may be as simple as searching Google (http://www.google.com) or Flickr (http://www.flickr.com). Flickr lets users list their photos for use under a Creative Commons License, allowing others to download images for use with simple attribution.

And you are not limited to still images. You can convey data effectively with video as well. Or, if you have a number of compelling images and several data points to convey, consider linking images to data by creating an easy Animoto video (http://www.animoto.com).

So, think about your audiences: Would a presentation like this make more or less of an impact than a traditional chart? Is it easier to read and retain? Which audience groups might prefer a presentation like this? Parents, teachers, school boards?

Infographics: An infographic pulls together words, data, and images (graphic and photographic) to tell a full story. Infographics are frequently seen in posters or online, allowing viewers the opportunity to absorb the story at their leisure.

As a relatively new communication tactic, infographics often fall into the trap of packing too much information onto the page. As with all communication products, we want to keep design simple, clear, and easy to understand. The following example was created in less than an hour using Microsoft Publisher and royalty-free graphic images.
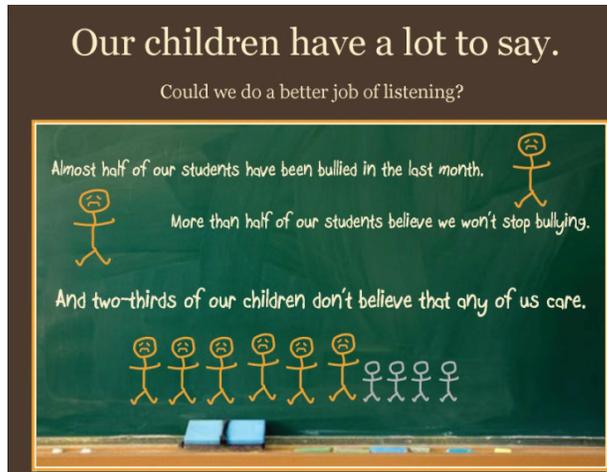
Again, this is the same data set, conveyed as an infographic. The layout and graphics are simple enough to communicate that the issue affects students and adults in schools, but it is not so visually busy as to complicate the message. Because the intended audience is teachers and school staff, it might be the kind of graphic that would work as a faculty lounge poster or in a PowerPoint presentation.

If you would like to view extensive samples of infographics—both good and bad—please look at the *Resources for Communicating Evaluation Data* at the end of this section for excellent online outlets. If simple infographics like the one above are not an option for you, however, there are other Web-based tools that can help the layperson visualize data in fresh ways.

Word clouds are an increasingly popular way of conveying data, and they are a particularly good tool for communicating answers to open-ended or multiple choice questions. An online tool such as "Wordle" (http://www.wordle.net/) can convert your information into a word cloud in which the size of words is an accurate reflection of their relative weight as an answer.

This sample "Wordle" word cloud illustrates student-reported data comparable to the data used in previous examples.

Social Math: This powerful tool uses language and/or pictures to crystallize data for audiences by offering it in a context that makes sense to them personally. It's a very effective way of reaching large numbers of people, too, and can be conveyed both linguistically and visually.

For instance, we could tell audiences that a medium bag of movie theater popcorn has 60 grams of saturated fat OR we could use social math to describe it this way: *The amount of saturated fat in one bag of medium movie theater popcorn equals three Quarter Pounders with Cheese and 12 pats of butter.* That same sentence can be illustrated this way:
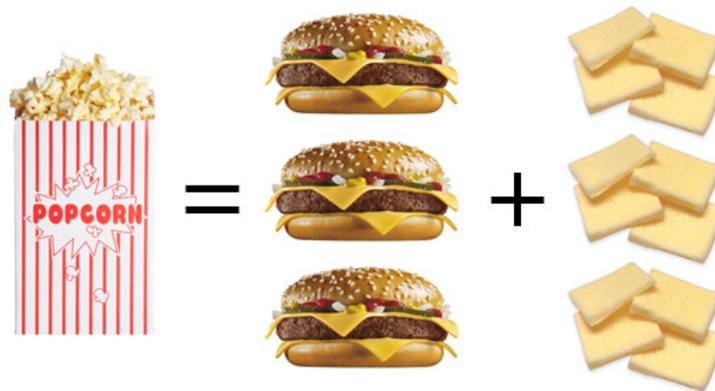
While this compelling example of social math was created by the Center for Science in the Public Interest, it's not that hard to create your own Safe Schools/Healthy Students examples.

Example 1: Let's say your teachers tell you that they spend approximately 1.5 hours out of each 7-hour day keeping their class calm enough to teach. Considering your audiences' priorities, needs, and values, you could demonstrate this in a number of different equations. This example tells us that 39 days (or 270 hours) of time is being lost to discipline in a 180-day school year. Now consider this impact on:

- **Time:** Who would care about that? Principals? Teachers? Parents? School board? Superintendent? How could you express this linguistically, and how could this be visualized? With a calendar that has 39 days crossed off? How else?

- **Money:** What is the daily operating budget for your school? What happens when you multiply that number by 39? Who would care about this figure? District leadership? School board? Parents? Taxpayers? If you stacked those $1 bills, how high would it go? To the top of the school building? How many times might it go around the same building?

Example 2: Let's say that your school district has 5,000 middle schoolers, and 7 percent report having missed a day of school in the past 30 days because they fear for their safety. That's 350 students in 1 month, and the school year is traditionally spread over 9 months, for an extrapolated total of 3,150 absences *as a result of fear!*

Consider:

- **Time:** Who in this equation is impacted by these days away from school? Are fearful students losing precious time from learning? Are their parents losing time from work to stay home with their children? Who else is impacted by time? How could you state this with linguistic and/or visual clarity? If you used 1 child to represent each absence, what do 3,150 children "look like?" Do they represent the population of a school in your district? Would they fill the bleachers in your stadium? How many times would they fill your cafeteria? How many classrooms would they fill? How many school buses?

- **Money:** If you live in a State that provides per-student funding based on the number of children at school each day, how much money is being lost to fear? If your district received $50 per day per student, it could be losing more than $150,000 a year due to student safety. And what could that $150,000 pay for? School resource officers? Safety training for bus drivers? Cameras?

These are just two examples of social math to stimulate your thinking—and your equations certainly do not have to be limited to issues of time and money. But as you consider how to integrate social math into your communications—from presentations to factsheets to press materials and more—here are the tools you will need:

- **Numbers—not percentages:** This is because social math requires that we operate in real-world quantities. Don't hesitate to ask your evaluator to supply this information and help you understand it.

- **A consideration of audience:** As with all our communication efforts, we want to find the equation that will make our audience go "Wow!" Think about their priorities, values, and needs as you construct your equations.

- **Imagination:** Start to think visually about what your equation can look like. Look around your schools and community for comparisons. Consider spaces, sizes, distances, objects, and anything that can convey a comparison with clarity so that audiences can visualize your equation in their minds.

No matter how you choose to convey your data, the key is simplicity. It must be easily understood by your audience. The *Resources for Communicating Evaluation Data* found at the end of this section of the Celebration Kit can help move you to the next level, and we urge you to talk with your communication specialist and your evaluator to brainstorm ideas for conveying data effectively to different audiences.

For assistance in using alternative methods to convey data to different audiences, contact your communication specialist. Our toll-free number is 800-790-2647.