

Seven Strategies for Telling Stories With Data

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Sharing data to inform communities and decision makers is an important function of state agencies, and agencies can make data even more easily understandable by developing stories that clearly present the data and their context. Determining the best ways to tell a story requires careful consideration of data, audience, purpose, and format. State agencies also must consider their internal capacity for communications activities to ensure that data-sharing efforts are done well. After making decisions about data, audience, purpose, and format, state agencies can begin to craft their stories. Agencies can use multiple communications strategies; below, we detail seven that apply to data and science communication.

1. Use clear and concise language that matches your audience.

Above all, your audience needs to understand the information in your product. One way to support this is by using clear and concise language. Clear language avoids using overly complicated words. If a complex, technical word must be used, it should be defined. Concise language emphasizes active voice and unnecessary words. These are principles behind [plain language](#).

You can communicate more easily when your language matches a specific audience's knowledge and the goal of a product. Engaging and building relationships with the groups you reach often can help you pick the [most appropriate language to use](#).

Example: Your evaluator's technical report of a school health program included information about practices associated with improved student health. You want to write a tip sheet for school nurses to improve their practice based on the findings.

When writing the tip sheet, you still use the clinical terms that reflect the nurses' expertise but opt for more action-oriented language and simpler sentences. You vet some of the language with your state's school nurse consultant and test out the resource during a session at a professional development event for first-year school nurses.

2. Be intentional with your data points.

It can be easy to overwhelm readers with details or numbers in a product. It can also make it harder for your audience to walk away with big-picture takeaways. Being intentional with data points can make it easier to identify the main ideas.

Example: Your analysis of your state’s annual school climate survey examined 10 characteristics of schools (e.g., school type, location, school size, and various student demographic characteristics) that might affect students’ perceptions of school climate. You share results in an annual report to your local education agencies (i.e., school districts).

Rather than include all results in the main report, you focus on the differences by school type (e.g., elementary, middle, and high) since there are consistent differences and the information applies across all school districts, as opposed to a dimension like school size. You use these school groupings throughout the product to give your reader anchor points throughout the piece. You include other breakdowns in an appendix.

3. Help your audience make sense of the data with context.

The meaning or significance of a research finding or statistic can be unclear—or misunderstood—without context. Providing context such as historical trends, comparisons, or the reason a study or survey was conducted can help audiences situate the data. A statistic may seem high or low, concerning or promising, depending on the context. Providing relevant context can also help you align your product with a community’s needs and larger concerns.

Example: Your state’s student behavioral health survey estimated that 15 percent of high school students will be bullied by their peers during out-of-school hours.

Instead of sharing this statistic as a single data point, you provide a graph showing data from the last 20 years to show that these levels have stayed consistent for decades. You also present individual districts’ data in comparison to the state average.

4. Do not assume connections are obvious—make them explicit.

Even when you provide context, do not assume audiences will connect the dots. People may not see the relationship between data points without authors making those ideas explicit. You can encourage reflection on important connections by stating them at the beginning of your product. Then, you can reinforce the message in the main narrative and in how you structure any visuals.

Example: As noted in the example above, you provided a graph showing data from the last 20 years to show the consistent levels of bullying among high school students. Community members have previously expressed concern that more students are being bullied because of the availability of social media.

Instead of assuming community members will look at the chart and realize that the rate of students being bullied has remained stable, even with new and increasing social media use, you make a statement at the beginning to explicitly state that, “Even as social media use has increased among our students, the number who say they are bullied outside of school hours has stayed the same.” This message is reinforced when specific years are highlighted to indicate years where new social media platforms were released.

5. Humanize the data.

Putting a face or name to data can help statistics seem more personal for a reader. There are a few options when taking this approach. One way is to frame data through an avatar who gives a name to people represented by a data point.

Example: A local school district’s climate survey found that 75 percent of ninth graders who identify as female in a school district strongly desire reforms to school dress code policies.

Instead of a plain statement about the numbers, you share: “Rachel, a ninth grader at Bloom High School, expressed a strong desire to see her school district reform their dress code policies. Three out of every four female ninth graders in Flower School District agree with her.”

Another option is a longer vignette. Vignettes tell the story of a hypothetical person who fits multiple attributes covered in your data. This longer form can especially help people understand how factors might build toward an outcome.

Example: In addition to the climate survey indicating disagreement with the school dress code policies, school discipline data found that female students and students of color were more likely to be suspended for dress code violations. Other data on suspended students showed links to lower participation in extracurricular activities and lower connectedness to their school.

You opt to create the following vignette: “Marisol is a ninth grader at Bloom and, like Rachel, she wants to see a different dress code. Two weeks into the school year, she has been sent home three times for dress code violations—once for wearing her natural hair in poufs and twice for having shorts that were too short. Marisol had a growth spurt prior to the start of school. She and her mother had plans to go shopping for new clothes after her mom’s pay day. Marisol was excited for high school and to try out for the soccer team, but being sent home multiple times meant she missed key introductory portions of class and the first round of tryouts. Missing out on these events has made her feel disconnected from her peers and teachers.”

6: Format text to support easy comprehension.

Audiences benefit from guideposts to follow a story. [Headers](#) that visually show clearly defined sections, bolding, and [lists](#) all allow people to skim for key ideas. If your audience is crunched for time or reading on a mobile or smaller device, headings also help readers navigate to sections they are most interested in instead of skipping your product entirely. People [skim websites](#) by starting at the top and focusing on headings and the left side of the page. Following this order can also make it easier for people to skim. As noted above, specific content formats may lend themselves to specific ways of presenting information.

Example: Instead of one long paragraph on your website to describe the three questions that shaped the evaluation of student health programs, you create a header from each question. You also use your website’s expander widget so that answers can be collapsed under each header, which allows visitors to get a quick glimpse of the questions and expand for greater details.

7: Embrace visuals.

A [well-designed visual](#) helps audiences see comparisons and trends quickly, making ideas easier to understand. Similarly, iconography can help encapsulate ideas or draw attention to recurring ideas within a product.

Example: Each year, you survey students about their experiences with a referral system from their schools to community health partners. This past year, you provided additional training focused on coordination of services and providing culturally relevant care. You want to compare how many students reported being satisfied with services over the last few years. In addition to overall satisfaction, you wanted to share satisfaction levels based on race and ethnicity. The statistics were originally written out in three paragraphs, one for each year, in an already long product. You decided to replace this prose with a clustered bar chart where each year has a bar for each racial and ethnic group.

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