

SS/HS Communication University

Participant's Guide:

Data-Driven Stories



Data-Driven Stories To Support Your SS/HS Initiative Participant's Guide



DAY 1 CURRICULUM

Learning Activity/Session

Introduction: Overview of This Learning Lab

Nationwide, shrinking resources and funding increasingly require schools and communities to make data-driven, bottom-line decisions with numbers. The challenge, however, is that numbers alone cannot tell the full story of a Safe Schools/Healthy Students (SS/HS) initiative. Recent research also suggests that most audiences are moved to action only when messages appeal to *both* intellect and emotion.

Indeed, neuroscience tells us that humans are hardwired to resonate less with numbers and more with pictures and words. We form memories based on the images we see and the stories we hear and tell. Both linguistic and visual storytelling are among the oldest and most compelling forms of communication—the original social media—and SS/HS initiatives have hundreds of compelling stories to tell.

By learning to link data to the larger, human story of their initiatives—and by learning to present that data in compelling ways—SS/HS grantees discover a potent communication tool for delivering audience-specific messages that resonate. Combined, stories and data can make a particularly strong case for streamlining resources, deepening partnerships, and improving business as usual between schools and communities that audiences will find hard to ignore.

By the end of this training, grantees will be able to understand how data-driven stories can be used to move different audiences to action, identify the data and narratives that will resonate with different audience segments, review the many ways they can integrate data into their stories and communications (including traditional charts and graphs, social math, and new Web-based tools for data visualization), and create a compelling and credible story that supports their sustainability efforts.

Key Learnings:

- Key Learning #1: Most humans are hardwired to relate better to images and language than numbers.
- Key Learning #2: Data-driven stories—visual and linguistic—can be effective communication tools for an SS/HS initiative.

Notes



- Key Learning #3: The right data, presented in the right way, add credibility to stories.
- Key Learning #4: Compelling, data-driven stories can "stick" with audiences and compel action.
- Key Learning #5: Our stories can be delivered in many ways, to many audiences.

Objectives:

- Key learnings 1–3 will introduce the concepts of data-driven storytelling as a way of creating audience-specific narratives that generate enthusiasm and increase engagement in their initiatives. Grantees will learn how to identify the qualitative and quantitative data needs of audiences, then link this data to successes within their initiative to build the foundation for a compelling narrative that includes core messages and supports communication goals. Grantees will explore ways to integrate data and the larger messages of their initiative into these narratives.
- 2. Building on key learnings 1–3, grantees will be presented with a framework for creating data-driven stories that support communication goals and resonate with identified target audiences. Grantees will create their own audience-specific story, including data, from start to finish. They will then have the opportunity to share those stories with peers and discuss practical application of this process in their own initiatives.



Key Learning #1:

Most humans are hardwired to relate better to images and language than numbers, including our audiences for communication.

Learning Activity/Session Notes The Human Mind Wants to Connect New Information To Old Think about memorizing the following set of letters in the next minute: i tsea si ertore me mb erinf orm at ionw henit sorg anise dinw ay swea Ire adyu nde rsta nd You might be able to do it, but you probably wouldn't retain the information. Those letters are just raw data on the page. Now look at the exact same letters in a different way: It's easier to remember information when it's organized in ways we already understand. Think about it this way: If you consider "the story of your life," you recall specific memories of events, images, and stories—and this personal history provides you with a *context* for learning new information and having new experiences. When you hear something new, you instinctively want to relate it to something you already understand. Imagine, for instance, that you have never seen a spoon before and you have used just forks and knives to eat. If the first time you saw a spoon was in a full table setting, you would quickly understand that this is another utensil for eating food; the fork and knife nearby give it context. However, if the first time you saw a spoon was in your neighbor's backyard, you might think it's a small tool for gardening, because you would be viewing it in the context of the out-of-doors. This applies to data as well. Data, without a meaningful context, cannot resonate.



Facts Alone Cannot Change the Narrative in Your Audience's Mind

Many of our SS/HS audiences need to see our data in order to be persuaded that they should support our work. This may be particularly true for audiences who make decisions based on the bottom line—school districts, business, and policymakers.

Our challenge, however, is that even when we provide our data in a meaningful context, it is rarely enough to persuade audiences to action.

You have probably heard someone say, "That's my story, and I'm sticking to it!" But it may surprise you to learn that what appears to be stubbornness is actually very common behavior—even when a story and the facts don't necessarily match.

Consider a 2007 *Newsweek* poll: 41 percent of Americans still believed Saddam Hussein and Iraq were responsible for the bombings on 9/11—even though countless investigations supported no such conclusion. Even more surprising, this figure was *up 5 percent from 2004!*

As you market your SS/HS initiative, you may encounter audiences who seem to resist your facts because they have already formed their own assumptions or biases about your work.

Facts and data alone will never be persuasive enough to move these audiences to action. You will fare better if you can revise the story in your audience's mind—and insert your facts that way.

Hearts and Minds

Whether you want to promote change on the individual level, community level, or organizational level, research is becoming clear: Change does not happen until there is an appeal to both the mind *and* heart of an audience.

Appealing to the heart through stories:

Stories have connected individuals, cultures, and generations for thousands of years. They are one of the oldest forms of human communication—the original social media.

In marketing and communication, stories provide a context and framework for understanding an issue. They can take an abstract idea (e.g., 25 percent of youth ages 12–14



reported being afraid to go to school once in the past 3 months) and make it concrete (e.g., "Tom used to thrive in school. Every one of his teachers was moved by his enthusiasm, energy, and commitment. But in his sophomore year of high school, his work slipped, and he appeared anxious and nervous in class. Then he stopped showing up ...")

The example above shows that stories have the capacity to grab an audience's attention in a way that data alone do not. People are moved by stories; they reach hearts, they are remembered, and they are shared with others.

An effective story can compel audiences to ask "What do you need me to do?"

Appealing to the mind:

While stories may compel an audience to say "I want to help," they are not enough to prompt action.

If you are asking audiences to take action, they need specifics, too. They may need to know *why* a problem exists and *how big* the problem is. They also need you to point them toward a solution.

All of these needs are met by data. Data add credibility to your story. Data provide clarity and drive decisions.

Stories without data may leave audiences moved but without a sense of direction. Data without stories leave audiences with an abstraction that does not move them to any action.

Therefore, compelling communications that lead to change usually require an integrated appeal to both the heart and mind.

Now that you see the value of integrating an appeal to the heart and the mind, it's time to explore how data-driven stories can be a powerful communication tool that you can integrate into your larger communication strategy.



Key Learning #2: Data-driven stories—both visual and linguistic—can be effective communication tools for SS/HS initiatives.				
Learning Activity/Session	Notes			
Our Stories Should Be in Support of Our Communication Goals				
Good stories for their own sake may be lovely to listen to, but they won't help create change.				
For change to happen we always need to start with a goal. What's our desired outcome? What do we want our audiences to do? We can think of this as the "call to action" in our own stories.				
Stories can support the need for/success of key functions.				
Are you hoping to garner support for a specific program or issue? A story can interest your audiences to support your:				
 Mentoring program: Can a story illustrate how a struggling student went from being at grave risk of dropping out to getting ready to go to college because one adult cared enough to spend an hour with him or her each week? Bullying curriculum: Can a story illustrate how children learned to improve their own behavior by refusing to silently witness bullying? Counseling services: Can a story illustrate how all children in a classroom were able to learn better because new counseling services allowed one troubled child to receive the support he or she needed, turning a chaotic classroom into a calm one? 				
Stories can make the case for systems integration.				
Are you hoping to make the larger case for changing business as usual in your schools and community? A story can help make the case:				
 Have you been able to reduce recidivist behavior among at-risk youth because you now have a strong safety net for providing needed services? And has that turned around the life of a troubled child? Saved money? Streamlined services? Have incarcerations for juvenile offenses decreased because your initiative now works 				



closely with the juvenile court system to divert firsttime offenders? Has that new process relieved the burden of law enforcement and juvenile justice? Has saving a youth from incarceration allowed an opportunity for him/her to make a permanent change for the better?

In the examples above, we're connecting a story to a specific communication goal:

- Specific programs, like mentoring, after-school programs, mental health counseling, bullying prevention; and
- Improved systems integration that makes the case for continued/increased shared resources, funding, and leadership.

Stories can help make the case for goals large and small, but stories without a purpose are just stories.

Think about: What are your own initiative's goals? What do you need to accomplish? What behaviors do you want to change (both public health behaviors and organizational behaviors)?

SS/HS Stories Are All Around Us—We Simply Have To Listen/Watch for Them

The stories of SS/HS initiatives are particularly powerful because they are the stories of our neighbors, our colleagues, our peers, our world:

- Stories of youth whose lives have been changed back in school, bullied no more, graduating against all odds;
- Families whose homes are happier;
- Teachers whose classrooms are calmer;
- Volunteers and mentors whose lives have been enriched;
- Schools that have gone from underperforming to outperforming; and
- Partners whose missions have been enhanced.

The stories that SS/HS grantees have to tell are powerful because they remind us that we share common experiences, fears, and hopes—for ourselves, for our families, for our communities, for the world.

Create a story bank for your initiative. Talk to staff, teachers, principals, partners, parents, and students. Ask for stories that demonstrate successes for your initiative's programs. File the ideas and use them to develop stories



that can garner support for key functions or even to support the case for changing the way business as usual gets done.	
NOTE: Stories must never breach confidentiality. You must follow the Health Insurance Portability and Accountability Act guidelines and those established by your school district. To maintain confidentiality, you can always note that names have been changed in a story to protect privacy.	
Stories Alone Will Not Move Audiences To Action	
A story is a kind of communication channel. It's a way of delivering our messages to our audiences.	
But as with <i>all</i> communication, we need to make sure we're telling a story that will actually resonate with our audiences. It needs to match their interests and priorities.	

It's now easy to see how stories are a "natural fit" for talking about our SS/HS initiatives. They are everywhere around us, illustrating the need for our initiatives and demonstrating the successes we see.

Stories can be a powerful tool for our larger communication strategies, helping us meet communication goals to support specific programs and our overall mission. But stories may only appeal to the heart and, in order to truly resonate with our audiences, we must add data to ensure credibility. Data, delivered in ways that meet the needs and preferences of our audiences, can help compel our audiences to action.



Key Learning #3: The right data, presented in the right way, add credibility to our stories.				
Learning Activity/Session	Notes			
To Create Change, Audiences Must Hear Proof. Data Can Help Drive the Story and Are Particularly Important for Decisionmakers and Funders.				
Budgets have decreased for every organization in every sector, across the board. The need to do more with less means that data have never been more important.				
Beyond funding considerations, data give weight and credence to all of our communication efforts. Whether you are updating your school board, educating a legislator, or talking with parents, data can make a difference.				
Choose the Right Data for Our Audience				
Because you are collecting a considerable amount of data throughout your initiative, you may feel as though any opportunity to convey data means an opportunity to convey <i>all</i> of your data.				
While a few audiences may want to see the entirety of your findings, it is more likely that each audience will only want to see the data that is truly relevant to <i>them</i> .				
As you prepare to communicate your data, consider:				
 Are the data directly connected to my communication goal? Are the data what my audience will really wants to hear? 				
To answer this second question, consider your audience's priorities and needs. If they care about money saved, make sure that's what the data reflect. If they care about the safety of children, then present your findings on that. If they care about reducing truancy, that's the data you need.				
Do you have the data they want?				
Consider these "typical" SS/HS audiences and this partial list of their possible priorities. See if you have data that match those concerns:				



- School districts: Costs, test scores, academic outcomes, teacher satisfaction, school climate, attendance, truancy, graduation rates, safety, comparative data across the State
- *Parents:* Safety, academic outcomes, substance use, bullying
- Local, State, and Federal policymakers: Costs, safety, academic outcomes, comparative data across the State and country
- Faith-based organizations: Safety, family connectedness, substance use, out-of-school programs
- Business community: Community safety, graduation rates, out-of-school programs, program costs
- *Health care providers:* Mental health services, substance use
- Law enforcement/court system/juvenile justice: Youth violence, safety, substance use, truancy, gang activity.

Of course, this is an incomplete list and does not reflect the reality of each unique community. It does, however, serve as a reminder that your audience will be most interested in select data.

Are there gaps in your data?

Now that you understand what your audience will want to hear, you need to see if you have it. Work with your evaluator to inventory your data and identify the gaps between what you have and what you need. Look at ways you can collect the data to fill those gaps.

For instance, you may have data on the number of students who are truant or absent, but your audience is more interested in the financial impact of these numbers on the district. If you can extrapolate how much it costs the district when one student misses school, you can multiply that figure by the number of absent students and deliver the exact data your audience wants to hear.

Although you are collecting data from within your own initiative, some of your audiences may wish to know how their school district compares with others across your State or throughout the country.

Work with your evaluator to identify possible data sources that allow you to make an apples-to-apples comparison.



There Are Many Ways To Convey Data So Our Audiences Get It

Many of your audiences may be comfortable with traditional charts and graphs, but other audiences are decidedly uncomfortable with them. Either way, it is the rare line graph that truly piques the interest of most audiences.

Here are some general tips as you consider how to best represent your data.

Traditional charts and graphs

Effective for academic audiences, educators, and those professionals who regularly and comfortably use these tools to understand data.

Think about: Your superintendent and principals may be entirely comfortable with—and expect—this kind of representation. All of the members of your local school board, however, may not be as familiar with these representations.

Language

Because the human brain is hardwired to relate more easily to language than numbers, it may make sense to describe your data linguistically to some audiences.

Think about: News stories are often full of supporting data, but rarely do we see charts and graphs associated with these stories. Look for how data is linguistically presented the next time you read the paper.

Photographs and video

Images are even more potent and easily understood than language for most humans, and the right image can help tell the story of your data effectively.

Think about: Can a potent image supplement your data? Sometimes, a picture is worth a thousand words—and data points, too. If you have a number of resonant images, consider creating a short video using a simple tool like Animoto (<u>http://animoto.com/</u>) that links these pictures to your data.



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. 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.* (Source: Center for Science in the Public Interest).

Consider an SS/HS example. 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. If the school year is 180 days, that means 39 days (270 hours) are being lost to behavioral issues. That's 8 weeks of lost time—and money. You probably have a number of audiences who would find this kind of social math equation a compelling reason to support several of your programs.

Think about: How many children have you helped as a result of your initiative? How many school buses would they fill? How many classrooms or gymnasiums? In what ways could you describe this number so that audiences easily "see" it in their minds?

New data visualization tools

While an entire generation has been raised to use the charts, graphs, and tables built into the most common spreadsheet and word processing programs, new Webbased tools are emerging to help the layperson visualize data in fresh ways. This sample "Wordle" was created to illustrate student-reported data; the size of words is an accurate reflection of student responses:





Information graphics (or infographics) are another way to tell the story of your data. Here is an example from the White House's call for infographics to describe the Nation's childhood obesity epidemic:





We want our audiences to sit up and take notice when we share our data. The good news is that there are new and emerging tools that can help us stretch our thinking—and meet the needs of our audiences, too.

A list of Web-based tools and resources for data visualization and infographics is found in the appendix to this learning lab.



What's the Story Here?

We are so accustomed to seeing data delivered through tables, charts, and graphs that it does not necessarily feel comfortable to think outside of that box. Like many things that require us to get out of our comfort zone, we may need some practice.

Below are three sample data sets^{*}, and they can provide a point of departure for your own thinking. For each example, ask yourself:

- What story do the data convey?
- Which audiences would care about the data and the story?
- How could I convey the data so that my audiences would truly sit up and take notice?
- What display of data could improve the odds that my "call to action" would be accepted?

Example 1:

This table represents a "snapshot in time" and tells us how school staff feel about safety today. It compares a "typical" SS/HS middle school with a neighboring middle school.

Percent of School Staff Responses to School Climate Survey Safety Questions				
	Our School Is a Safe Place for Students		Our School Is a Safe Place for Adults	
	SS/HS Middle School	Neighboring Middle School	SS/HS Middle School	Neighboring Middle School
Strongly Agree	42	15	46	22
Agree	52	61	48	67
Disagree	3	22	5	11
Strongly Disagree	1	2	1	0

*sample data sets are representative of the types of data collected by SS/HS grantees.



Example 2:

This table also represents perceptions from a moment in time. In addition to comparing an SS/HS initiative with a neighboring district, it also compares findings from middle and high school.

Percent of School Staff Responses to School Climate Survey Questions				
	Harassment or Bullying Among Students			
	SS/HS Middle School	Neighboring Middle School	SS/HS High School	Neighboring High School
Insignificant Problem	9	2	14	26
Mild Problem	47	26	48	56
Moderate Problem	34	59	32	19
Severe Problem	5	13	5	0

Example 3:

In contrast to the tables above, this table represents a longitudinal look at changes within one district and assesses the fiscal impact of those changes.

Middle and High School Absenteeism: Students with 10 or More Unexcused Absences Per Year				
Year	Percent of Students	Number of Students/ Total Enrollment	Total Number of Days Unexcused	Fiscal Impact*
2007– 2008	15.9	362/2,280	5,939	\$463,242 lost
2008– 2009	15.1	338/2,241	5,476	\$427,128 lost
2009– 2010	14.8	318/2,152	5,247	\$409,266 lost

*based on State \$78 reimbursement rate per student per day



Use the notes section of your guide to jot down your thoughts about the stories told by these data, the audiences who would care, and the ways you might present the data to your audiences.

In this first day of training, we have looked at the need to reach both hearts and minds to persuade audiences to action. As with all communication efforts, the needs and preferences of our audiences come first. By first examining stories and data independently, we can now merge the two with a practical method for developing data-driven stories that can be used for multiple audiences, delivered in multiple ways.



DAY 2 CURRICULUM

Key Learning #4: Compelling, data-driven stories can stick with audiences and drive action.		
Learning Activity/Session	Notes	
How To Make Our Story "Sticky" ¹		
Powerful stories are remembered—and retold to others. In other words, they stick with our audiences.		
The SUCCES acronym can help you build a data-driven story that is memorable enough to stick with your audiences:		
 Simple; Unexpected; Concrete; Credible; Emotional; and Story. 		
Simplicity is understood by everyone.		
Don't think sound bites—think proverbs. Everyone understands the Golden Rule: Do unto others as you would have them do unto you. This profound and powerful message is simple, yet people spend their entire lives striving to achieve it.		
Think about tapping into a shared belief or value within your community to anchor your story in simplicity.		
An <u>unexpected</u> twist makes audiences sit up and take notice.		
No one expected President John F. Kennedy to declare, "We will put a man on the moon and return him safely by the end of the decade." It took the Nation—the world—by surprise. Its power still lingers, 50 years after the fact.		
Think about ways you could pique the curiosity of your audiences. What about your initiative or specific programs/services might surprise an audience?		

¹ Adapted from *Made to Stick* by Chip and Dan Heath, Random House, 2007.



A story becomes <u>concrete</u> when we connect it to our own experiences.

We hear a good story about a fabulous meal and we could swear we smell it and taste it ourselves. We hear a story about a death-defying car chase and we can hear the sirens in our heads. We hear about a child who has overcome tough times to graduate and we heave a sigh remembering our own adversities, our own graduations.

Once again, our brains are at work connecting new information (the story) to experiences we've already had and information we already know.

Think about ways to trigger an audience's senses and sense memory. Linking your story to a place, a time, an event can help.

Data can provide you with the <u>credibility</u> you need to create trust in your story.

When "four out of five dentists recommend it to their patients who chew gum," we have credibility.

Think about what data your audience wants—does it come from a source they trust?

Reaching an audience <u>emotionally</u> means you've locked into their core beliefs and values.

Not every audience will be moved by the same story. Let's say you are selling organic gardening supplies. One audience could be environmentalists who believe in community-based sustainable gardening. An equally viable audience could be survivalists who always want to prepare for the day the economy collapses. Both audiences could buy your products—but they will need a different story to persuade them, based on their values, beliefs, and priorities.

Think about your audience's values. If they value community and collaboration, does your story speak to that? If they value independence, can you speak to that? What if they value return on investment? Finally, are there values or beliefs on which almost everyone can agree (e.g., the need for children to get a safe, quality education)?



A strong <u>story</u> feels universal and complete—we can all relate to it in some way. It's easily shared because every culture tells stories.

Building off of every step before it, we conclude by pulling everything together. The audience feels as though they have been on a journey with us from beginning to end.

Think about how you can tie the elements of your story back to SS/HS. By story's end, your audience should see that if it weren't for your initiative's work, the ending might not have been so happy.

We can develop a compelling and memorable data-driven story that sticks with our audience by using the SUCCES tool. Once our stories are developed, we can reach many audiences through many channels to support our SS/HS goals



Key Learning #5 Our stories can be delivered in many wa	
Learning Activity/Session	Notes
There Is More Than One Way To Tell a Good Story	
As SS/HS project directors, including a data-driven story in your usual communication channels may make them jump to life for your audiences. Consider how your stories might improve the impact of:	
 Presentations to or meetings with: School board Teachers Parents Businesses Policymakers Faith-based leaders Community organizations (e.g., United Way, Boys and Girls Clubs) 	
 Materials like: PowerPoint slides Factsheets Newsletters 	
 Media outreach including: Press releases Press conferences Op-ed articles 	
All of these channels and materials are familiar to most SS/HS project directors—and data-driven stories may increase their appeal.	
They are not your only options, however. Here are a few options with which you may be familiar but might not immediately consider as a way to tell an SS/HS story.	
Additional ways to tell a story	
 Oral A song A speech One-on-one 	



- Written
 - o Children's book
 - o Op-ed/drop-in article
 - o Comic book
 - o Social media post
- Video
 - o Digital Storytelling
 - o Public service announcement
 - o Documentary
- Performing Arts
 - o Theater
 - o Dance
 - o Nontraditional performance art

Your choice of a storyteller can be as important as the story itself. If the President of the United States personally called to congratulate you on your SS/HS initiative, it wouldn't matter very much what *words* he used to congratulate you, would it? The message of respect and honor that comes with having the President personally call you would be far weightier than the words actually spoken.

With that in mind, think how the meaning and impact of your various stories might become more powerful as a result of the storyteller.

Sample list of possible storytellers

- Students
- Parents
- Elders (American Indian)
- Teachers
- Project directors
- Core Management Team/partners
- Staff members

As always, your choices should be a reflection of your audiences' preferences. These questions can aid you in determining who might best tell your story:

- Whom does your audience respect?
- Whom does your audience trust?
- Who is most likely to move your audience?
- Whom would your audience follow?
- Are there cultural considerations that may guide your decision?



Data-driven stories are a potent communication tool. They can move hearts by connecting your work to a human story. They can point the way forward by providing compelling data in a way that resonates with your audience. They can include your broader messages, and they can be delivered in any number of ways. Consider integrating data-driven stories into your larger communication strategy.



Appendixes



Appendix A: Resources

Recommended Reading:

Heath, Chip, and Heath, Dan (2007) *Made to Stick*. <u>http://www.heathbrothers.com/madetostick/</u>

Heath, Chip, and Heath, Dan (2010) *Switch*. <u>http://www.heathbrothers.com/switch/</u>

Gladwell, Malcolm (2000), *The Tipping Point*. http://www.gladwell.com/tippingpoint/index.html

Ganz, Marshall (2008), "What Is Public Narrative?": <u>http://grassrootsfund.org/docs/WhatIsPublicNarrative08.pdf</u>

Recommended Communication & Social Marketing Center Resources:

Communication Coach Online (2008, fall), "Telling Your Story With Evaluation Data," Vol. 1, No. 3: http://www.communicationcoachonline.org/HomeVol1No3/tabid/157/Default.aspx

*Victory Kit, "*Communication Templates" (factsheets, PowerPoint presentations): <u>http://www.sshs.samhsa.gov/communications/toolkit/Victory.aspx</u> (password-protected site)

Celebration Kit, "Using Evaluation Data" (audience preference and data worksheets, factsheet templates, PowerPoint presentations): <u>http://www.sshs.samhsa.gov/communications/toolkit/celebrationkit2007.aspx</u> (password-protected site)

Recommended Resources From the National Center for Mental Health Promotion and Youth Violence Prevention:

Reporting and Using Evaluation Results (evaluation toolkit): <u>http://sshs.promoteprevent.org/sshs-evaluation-toolkit/reporting-and-using-evaluation-results</u>



Web-Based Data Visualization Tools:

Wordle allows users to create data-based word clouds: http://www.wordle.net/.

IBM Many Eyes project allows users to create multiple visualizations with one data set: http://www-958.ibm.com/software/data/cognos/manyeyes/

Gapminder allows visitors to view and create global data visualizations over time: <u>http://www.gapminder.org/</u>.

Tableau Public data visualization software allows users to represent data in a number of ways, including mapping: <u>http://www.tableausoftware.com/public//</u>.

Kids Count Data Center (Annie E. Casey Foundation) provides users with the opportunity to assess the welfare of children on a State-by-State basis using an interactive Web-based tool: http://datacenter.kidscount.org/?gclid=CNnhg4gvoKkCFQwZ2god9HV6sg.

State Health Stats is an interactive map that ranks the 50 States along 42 measures, including happiness and mental health: http://statehealthstats.americashealthrankings.org/.

Vectortut+ provides a Web-based tutorial for creating an infographic: <u>http://vector.tutsplus.com/tutorials/designing/how-to-create-outstanding-modern-infographics/</u>.

New York Times Data Visualization Lab: <u>http://open.blogs.nytimes.com/2008/10/27/the-new-york-times-data-visualization-lab/</u>

Recommended Blogs and Web Sites:

FlowingData: http://flowingdata.com/

Information is Beautiful: http://informationisbeautiful.com/

A Goodman: http://www.agoodmanonline.com/red.html

Good: www.good.is

Visualizing: www.visualizing.org

Wild Apricot: <u>http://www.wildapricot.com/blogs/newsblog/archive/2010/05/25/make-your-own-infographic.aspx</u> ("Make Your Own Infographic," a specific post on the qualities of a strong infographic)



Potential Reference Data Sources:

The following sources of national and State data *may* be of value to Safe Schools/Healthy Students (SS/HS) grantees, but it is important to note the following:

- Remember that these sources are a point of reference and do not provide an apples-toapples comparison.
- Be sure that you and your evaluator understand the data source being referenced when you look at these data sources (e.g., sample or population size, exact wording of questions).
- Check for potential item changes or sampling changes from year to year.
- Explore the possibility of using data from different subgroups to point to positive changes, e.g.:
 - School climate survey data may show negative reports from parents but also show improvements from staff and students.
 - Sixth graders may show decreases in substance use while eighth graders do not; combining these findings can hide the improvement.

National:

Youth Risk Behavior Survey: http://www.cdc.gov/healthyyouth/yrbs/factsheets/index.htm#yrbs

The Youth Risk Behavior Survey (YRBS) provides data on health-risk behaviors among 9th- to 12th-grade students in the United States, including behaviors that contribute to injuries and violence, alcohol or other drug use, and tobacco use; sexual risk behaviors; unhealthy dietary behaviors; and physical inactivity. YRBS also measures the prevalence of obesity and asthma among youth and young adults.

Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Survey on Drug Use & Health (NSDUH): <u>http://oas.samhsa.gov/nsduhLatest.htm</u>

NSDUH is the primary source of information on the prevalence, patterns, and consequences of alcohol, tobacco, and illegal drug use and abuse in the general U.S. civilian noninstitutionalized population, age 12 and older. It is currently conducted by SAMHSA's Office of Applied Studies (OAS). Correlates in OAS reports include the following: age, gender, pregnancy status, race/ethnicity, education, employment, geographic area, frequency of use, and association with alcohol, tobacco, and illegal drug use.



Pride (and Communities That Care [CTC]) Surveys: http://www.pridesurveys.com/index.html

Pride Surveys was created in 1982 by professors at Georgia State University in Atlanta and Western Kentucky University in Bowling Green. Their purpose was to help local schools measure student alcohol, tobacco, and other drug use. Pride Surveys now measure behavior on many crucial issues that can affect learning: family, discipline, safety, activities, gangs, and more. With today's emphasis on evaluation and accountability, Pride Surveys have assisted single schools, school districts, State and Federal agencies, and other organizations such as community coalitions. In 1998 a Federal law designated Pride Surveys as an official measurement of adolescent drug use in America. More than 10 million students, parents, and faculty members have responded to Pride Surveys.

Sites that previously administered the CTC Youth Survey can continue to collect data using PRIDE's exact replica of the CTC Youth Survey. The 12-page questionnaire and report have been copied by Pride Surveys. No items have been added or deleted. SS/HS grantees from States including Kansas, New York, and South Carolina have used the CTC Survey, and grantees from Alabama, Ohio, and Texas have used the PRIDE survey.

Monitoring the Future: http://monitoringthefuture.org/

Monitoring the Future is an ongoing study of the behaviors, attitudes, and values of American secondary school students, college students, and young adults. Each year, a total of approximately 50,000 8th-, 10th- and 12th-grade students are surveyed (12th graders since 1975, and 8th and 10th graders since 1991). In addition, annual followup questionnaires are mailed to a sample of each graduating class for a number of years after their initial participation. The Monitoring the Future Study has been funded under a series of investigator-initiated competing research grants from the National Institute on Drug Abuse, a part of the National Institutes of Health. The Monitoring the Future Survey is conducted at the Survey Research Center in the Institute for Social Research at the University of Michigan.

State-Specific:

California Healthy Kids Survey: http://chks.wested.org/

The California Healthy Kids Survey also helps schools meet the current requirements of the Federal Safe and Drug Free Schools and Communities Act as embodied in Title IV of the No Child Left Behind Act (NCLB) of 2001. NCLB requires that the California Department of Education collect data on the incidence, prevalence, age of onset, and perception of health risks and social disapproval of drug use by youth as well as data on violence in schools and communities through anonymous student and teacher surveys.



Georgia Student Health Survey: <u>http://health.state.ga.us/epi/cdiee/studenthealth.asp</u>

The Georgia Student Health Survey (The Centers for Disease Control and Prevention's YRBS) obtains information from a random sample of public middle and high school students about the prevalence and age of initiation of various health-risk behaviors, such as tobacco use, physical activity, eating habits, and alcohol and drug use, as well as behaviors that contribute to unintentional injuries and violence. This survey is designed to collect information about specific topics including alcohol, tobacco, and other drugs; school violence; school climate; and nutrition.

Illinois Youth Survey: http://www.dhs.state.il.us/page.aspx?item=32228

Biannually, the Illinois Department of Human Services (IDHS) conducts a survey of school-aged children in grades 6, 8, 10, and 12 on their attitudes and behaviors about alcohol, tobacco, other drug use, violence, exercise, and nutrition. The survey contains demographic items and several questions addressing the five domains of risk— community, family, school, peers, and individual. Results of the survey are used by IDHS to determine the effectiveness of the State's prevention programs and to support communities in the use of data-driven decisionmaking.

Indiana Prevention Resource Center Survey: <u>http://www.drugs.indiana.edu/data-</u> <u>survey_monograph.html</u>

The annual survey of alcohol, tobacco, and other drug use by children and adolescents in Indiana is coordinated by the Indiana Prevention Resource Center in Bloomington, Indiana. This survey allows for State and local entities to coordinate prevention programs by providing information about the prevalence of alcohol, tobacco, and other drug use among children and adolescents in the State.

Oregon's Student Wellness Survey: <u>http://www.oregon.gov/OHA/addiction/student-wellness/index.shtml</u>

Oregon's Student Wellness Survey is an anonymous, research-based survey of youth in grades 6, 8, and 11. It is a source of data about health risks, such as depression and alcohol, tobacco, and drug use, and about delinquent behaviors, such as bullying, fighting, and harassment. The Student Wellness Survey examines factors that protect young people, such as supportive parents, good friends, safe neighborhoods, community connections, and schools. It also provides teachers, administrators, and school boards with school climate data—the degree to which students feel they belong, are valued, and are physically and emotionally safe at school.



Appendix B: Additional Tips for Developing Stories That Move Audiences to Action

Stories Have a Beginning, a Middle, and an End.

The beginning catches our interest and hooks us (think about the "Simple" and "Unexpected" qualities of a story from the SUCCES model).

The middle offers the information that helps us connect the story to our own experience (think "Concrete"). It provides us with specific details (think data and "Credibility").

As the story builds, we become more involved (think "Emotional").

The end of the story pulls every element together, providing us with satisfaction.

A Good Story Is Like a Fine Meal.

It pulls us in with an appetizer (beginning), delivers the main course (middle), and finishes with a lovely dessert (end).

Imagine an excellent meal at a five-star restaurant. We would not expect to be served the heavy main course first.

Instead, we would start with the appetizer. We would still be hungry, and it would whet our appetites for what's to come.

We might follow the appetizer with a salad, or soup, and bread. We're feeling more satisfied now, but we're really looking forward to the entrée.

Our main course would be ceremoniously delivered to the table. We would dive in and savor each bite.

Afterward, we would slowly lift our napkins from our laps, linger over coffee, and perhaps finish the night with dessert.

In the same way that we enjoy a fine meal, we want to enjoy a good story—from start to finish, in the right order.

When thinking about your own stories, remember: It may tempting to front-load our stories with details and data, but we don't want to serve the "main course" before we have piqued our audience's interest for more.



Remember Your Fairy Tales.

Fairy tales last for centuries. Most of us were raised on them, most of us have told them to our own children. They all have a comparable and predictable development, and you can borrow this framework as you consider your own stories.

Once upon a time ...

This is where we meet our hero/heroine and learn about his/her dreams and aspirations—these details tell the audience why it's important to care. We learn about daily life in the village, daily struggles, and daily routines.

Think about: Who is the hero (or protagonist) in your story? For the purposes of demonstration, let's say you want to tell a story about your bullying programs. Perhaps, then, your heroine is a happy young girl, an excellent student all throughout her elementary years. She's excited about graduating to middle school.

And then ...

There is a major change in the hero's and heroine's world. Something dangerous has happened: They are lost in the woods, or they are captured by a witch. It seems as though their lives will never be the same.

Think about: Your young heroine is now in middle school, but it doesn't seem like the friendly place she thought it would be. She becomes the victim of bullies whom she perceives as far more popular than she is. Our heroine becomes increasingly withdrawn and depressed. She is afraid to come to school, afraid to go online. Her grades drop. She wishes she were invisible. Her parents ask what's wrong, but she won't speak about it. They worry but have no idea what to do or where to turn. They hope it's just a phase.

Until finally ...

At this point in the fairy tale, our hero and heroine either find a way out of their predicament using whatever is at their disposal (including their wits) OR are rescued by a fairy godmother or handsome prince.

Think about: How is the heroine in our story "rescued?" Is her champion a thoughtful teacher who has been trained by your initiative to spot at-risk behavior? Is it a peer in the classroom who has learned through your bullying curriculum that it's not okay to be a silent witness to bullying? Whoever it is, this champion *represents the success of your initiative*. And once you have introduced your champion, it's time to add credibility to your tale. Include data on how your programs have trained more champions and succeeded in reducing bullying at schools.



And ever since ...

In fairy tales, they live happily ever after. In the real world, it depends ...

Think about: Is our young girl doing better now that the bullying has been addressed? And what about other children in the school? Are they better off as a result of your curriculum or services? If your goal is to increase the number of trainers and teachers in your district who are qualified to deliver your curriculum, you can use this part of the story to make the case for ongoing support by explaining what might happen to this work once Federal funding is gone.

This basic structure of fairy tales provides another way to look at crafting a beginning, a middle, and an end that can include data to support your communication goals.



Appendix C: Data-Driven Stories: Pre-University Worksheet

This worksheet can provide the basis for developing strategic, goal-specific data-driven stories.

What is your communication goal?

Why should the issue described by your goal matter to your schools/community?

What are two or more key data points that speak to your goal?



Appendix D: Story Bank: Index

Story Name	Brief Summary	Keywords



EXAMPLE: Story Bank: Index

Story Name	Brief Summary	Keywords
Bus Story	Violent incident on bus 2 years ago points to children feeling unsafe on trip to/from school. SS/HS pilots installation of security cameras on buses, and children report feeling safer.	Safety, violence prevention, school climate
Hank's Story	Ninth-grade at-risk student with a history of juvenile arrests is ultimately supported by caring School Resource Officer (SRO). Hank graduates, and data show that this result bucks the "trend" in our county.	Truancy, graduation, SRO, academic success
Stacy's Story	Stacy's single mom is a high school dropout (with GED), working two service-industry jobs. Stacy's education is her mom's #1 priority. Stacy (in 6th grade) has never missed a day of school <i>ever</i> . SS/HS works with Stacy's mom to link her to support services, such as afterschool tutoring/mentoring, that help Stacy stay in school.	Family, parent involvement, school connectedness, attendance, academic success



Appendix E: Story Bank: Story Page

Building off of your story bank index, use one page per story. Include the name and keywords from the index in the top line. In the next section, identify the communication goal that this story supports, the priority target audiences for this goal, the action you wish them to take, the data they wish to see, and the preferred delivery methods for your story and data. In the bottom section, sketch out your story using the SUCCES model.

Story Name:	Keywords:				
Communication Goal Supported:	Priority Audiences	Desired Action	Preferred Data	Preferred Delivery	
The Story (think SUCCES):					
Simple:					
Unexpected:					
Concrete:					
Credible (data):					
Emotional:					
Story:					



EXAMPLE: Story Bank: Story Page

Story Name: Bus Story		Keywords: Safety, violence prevention, school climate		
Communication Goal Supported:	Priority Audiences	Desired Action	Preferred Data	Preferred Delivery
Persuade school board and local businesses to share costs of installing more cameras in buses	School board	Share funding of cameras	Safety stats	PowerPoint and handout
	Local businesses	Share funding of cameras	Crime stats after school	Factsheet with infographic
	Parents	Write to school board on behalf of this goal	Student safety, specific bus routes	Oral presentation with social math

The Story (think SUCCES):

Simple: Children should feel safe coming to school.

Unexpected: It's hard for most adults to imagine that a school bus ride could be terrifying to children—but for many of our students, it is.

Concrete: Two years ago, that fear became real when a knife fight broke out on board a bus bound for our high school. Beyond the trauma to every child on that bus, two students were hospitalized—one of them an honor roll student who tried to stop the fight. In that moment, our SS/HS initiative stepped in to provide student support and, what is more important, a solution to this problem.

Credible (data): We asked all children who ride a bus to tell us if they were ever afraid while on it, and we learned that more than a quarter of our students districtwide felt unsafe or had been bullied or harassed on the bus. That's enough children to fill the football stadium. We used that data to identify the 10 most dangerous routes and installed cameras in those buses. Eighteen months later, we are here to report that only 11 percent of children on those routes still feel unsafe. We're working on that 11 percent, but we now know—cameras on buses work.

Emotional: If our children don't feel safe, they can't learn. All they can do is worry and wonder if today's the day they'll be a victim. Their grades fall, they may skip school out of fear, and they may act out or become withdrawn. No caring adult—no one who believes it's our duty and honor to see that all children have a safe place to learn and grow—can ignore the issue of school safety.

Story: When children feel safe, they can learn and succeed. Our SS/HS initiative has made this possible for some of our children—one busload at a time—and now it's time to make it a reality for every child who rides the bus. Will you help?