**Transcript: Telling Your Story with Data with Betha Gutsche**

Let’s talk about telling a story with data.

There are many elements to telling a persuasive story about your library and your project. And it’s likely that you want to include some data in any presentation. So, I want to go over some ways to do that effectively, and it’s much more than just putting some numbers up on the screen.

I want us to look at two Simple Rules. The first rule of thumb: What is the message you want to convey? You want to keep it simple, so it can be grasped quickly, but you want it not so simple that it loses meaning. And we’ll look at what that an example of that in just a second.

And you also want to make sure that the data supports your message. So, let’s look at this example from AASL. It’s an infographic. Looks like there’s a strong clear message: School Librarians Transform Learning. Wow. Hard to get simpler than that. My problem with this is that there are so many ways that school librarians transform learning. Is this poster going to cover the whole range? Is it looking at something more specific? That simple message doesn’t tell us enough.

So, if I start looking at some of the smaller print, and I would encourage you if you want to look at your own version of the poster where you can zoom in on some of the small print, if you copy that URL that’s at the bottom of the slide and open it up in a separate browser, or if you want to go to ala.org/aasl and search for the AASL infographic, that would work, too. So, when I start trying to read a little bit more and find out, over to the right of that heading, it says, “School librarians ensure their students have the best chance to succeed.” Okay, that’s still pretty general. Then I look at the line in the dark blue box: “The internet makes doing research easier—easier to do well and easier to do poorly.” Wow. Well that just makes things murkier. Now I really don’t know what this poster’s talking about.

So, looking around some more, I realize that over in that speech bubble on the right in that sort of wine-colored purple, that’s really what I think is the intended message of this poster, and that says, “Your school librarian can help you co-plan and co-teach lessons that focus on the evaluation of sources and information, providing your students with the discernible eye they’ll need to survive in college and the workplace. So, one, I learned that this the audience for this poster is teachers, and that this is the message: that school librarians will help you teachers in turn help your students to have that discernible eye and be more successful in the ways that they’re using resources for research assignments.

So, I invite you to pause this video now and think about and jot down some ideas you have of turning this sentence into a clear short concise message. So, takes a little bit of time, and when you’re ready, restart the video.

Okay. Well, I hope you came up with something. I’m gonna just go forward with what I came up with as a heading: “School Librarians Help Students Become Smart Researchers.” So, it doesn’t directly say how school librarians help teachers help students, but there’s an opportunity in a line below that. And I would use a larger font than what’s there in the couple of dark blue lines. But that’s an opportunity to have kind of a tagline that then is more explicit that school librarians are helping the teachers as the intermediary who then in turn helps students.

So, that second piece of our first rule of thumb is making sure that your data supports the message. So, let’s look around this poster and see what jumps out at you in terms of the numbers shown here. Well, what jumps out at me first, and the eye—they’ve done lots of eye tracking studies—the eye very quickly goes to the center of that light blue box. It says, “Today’s Digital Technologies Teachers Report.” And I see some high numbers. So, I think, “Oh that’s gonna support this net message.” But really when you look at and read those, those high percentages are saying that a lot of students are overwhelmed or discouraged by digital technology, and it makes it harder for them to find and use credible sources. So, okay, so this is a problem. They’re stating the problem with these prominent numbers.

The next number that jumps out at me, because it’s really the biggest in terms of font size, is right below that, in the orange bar, that there are twelve billion Google searches per month. Is that across the country, across the planet, is that just students? What does that twelve billion mean? It’s not giving me any meaning.

And then as the eye sort of scans around looking for numbers that jump out, in the lower left, not necessarily where the eye goes very readily, but I think just because it’s so large, there’s a bubble circle that says, “94% Google.” Okay, 94% Google, what? It's very confusing.

So again, looking more for, I’m just still looking for data that will support this message. And if I look over sort of the right, middle, vertical, aquamarine set of data points, where it starts to talk about, how school librarians, in the orange box, talks about how school librarians are enabling and empowering teachers’ skills with digital content. That could be an alternate brief message for a heading, because that is what the poster’s talking about, but then look at, look at the data that is supposedly supporting that message. It says that “85% of school librarians help teachers answer questions about tech tools.” That's good. “66% participate with teachers in professional learning communities.” Well, that's good, but it’s not clear what these learning communities have to do with helping students become smart researchers, and then “33%,” only “33% of school librarians train teachers how to locate and evaluate digital content.” That seems to undermine the message. So, in general there’s some major problems here with, once we’ve defined what the message is, how in the world is the data supporting that?

Okay, second rule: use the right kind of chart for the data. So, once you’ve decided and come up with your data, numbers and data sets that you think are strongly supporting your message, directly supporting it, using the right kind of chart is going to also make a difference for how people are absorbing that. Again, keep it simple and emphasize the key data points that are supporting your message.

So, starting again with that infographic, and if we isolate out that bubble chart that was in the lower left corner of the poster, it’s graphically colorful and appealing, it’s fun and splashy. What the biggest barrier here for communicating what this means is, that the heading for, which is critical to understanding what these numbers are representing, the heading that says, “Sources students are very likely to use in a research assignment,” it’s in a small font, and it’s vertical. The eye does not respond well, especially when that was lost in a whole sea of other data and other shapes.

So, let’s immediately put that in a more conventional format as a pie chart. So here you can see relationships more readily. You can see that Google occupies a healthy, more than a healthy quarter of the pie as the source that students are very likely to use. If you combine Google and Wikipedia, that’s a good half of the pie. A problem with pie charts is that it’s harder to see more subtle relationships. So, for example, if you really wanted to illuminate the difference between peers as sources and YouTube as sources, so that green slice and the dark blue slice, they look pretty much the same, and yet they’re 10% percentage points apart, which could be a significant difference. Another weakness with pie charts is that the big chunks stand out and the eye gravitates to that. Up in the upper left quadrant. There are four more or less even slices and the eye and the mind tend to just dismiss those like, “Oh, well, they’re less important. They’re a small piece of the pie. I’m not really going to look at that.”

So, the same data presented as a bar chart is much more effective at showing relative quantities and relationships and at showing a progression, which that original bubble chart, there was no progression. You had to kind of scatter your eye all over trying to pick out the little pieces. So, this I think much more clearly shows that, at the bottom, Google and Wikipedia by far have the largest chunk of students’ attention when they were starting on a research assignment. And the librarian at the very top, because you have the data label, 16%, is clearly the least likely resource for students to use, followed closely by online databases and print or electronic textbooks. Those are all kind of lumped into those more academic, more reliable sources. This I think this is the most effective way so far.

But think about your audience. What is the essential message you want to convey? Do you need them to look at all of those varieties of ways, or do you want them really just to focus on that large gap between those students who will go to the librarian to start a research assignment and those students who go to Google or Wikipedia? And remember, when you’re giving a presentation and telling your story, you’re speaking to an audience and probably showing these PowerPoint slides at the same time with the data. It’s a cognitive load on an audience to listen to what you’re saying and to be looking at something visual and trying to read numbers and make sense of them.

So, the more clear and simple you can make it, so that as you’re speaking, as you’re saying, “Students are very likely to go to Google or Wikipedia long before they are likely to go to a librarian,” if the data is simple, clear, and graphically, also graphically clear, your audience is going to get the point of your story. So, this is just to start. There’s a lot more things to consider. But when you’re putting data together as part of your story, always stand back, step back from it and check. Is it really telling the story you want to tell? Is it supporting your message? And is it doing that effectively? It can be a really good practice to get somebody outside of your library, maybe even a member of your audience, to look at your data slides and check for you, because they will have those fresh eyes that aren’t so immersed in the story, and will be able to give you a good, more objective reflection on how well you’re doing this. So, we’re gonna be saying more about telling your story, and I hope this is very helpful. Thanks.

*\*Small edits have been made for clarity.*