



INTERACTIVE INSTITUTES **2022**

BUILDING AND SUSTAINING A CULTURE OF HIGH-QUALITY DATA

Exhibiting Data So Your Audience Gets Your Message

June 21–23, 2022



IDEA DATA
CENTER

Collect, Report, Analyze, and
Use High-Quality Part B Data



Presenters



Nashville, TN - June 6–7, 2022

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Virtual - June 21–23, 2022

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Participant Outcomes

- Understand the importance of data literacy
- Understand best practices for writing about data
- Understand how to shape narratives for the intended audience

Agenda

- Data Literacy Discussion
- Best Practices for Writing About Data
- Gallery Walk
- Final Questions

Data Literacy Discussion



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Background

- SEAs are providing data to a much broader audience
- SEAs are trying to give people the ability to analyze and use data
- Study results showed there are many people who are not confident in their ability to read, understand, work with, and use data
- People believe data helps them do better in their job and provides credibility (Data Science Central).

Terminology



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Definitions

- **Data literacy:** The ability to read, work with, analyze, and argue with data (D'Ignazio and Bhargava 2016).
- **Data literacy gap:** Emerges when a group of data users have a cross-functional range of skills—some very technical and analytical—and others do not. Collectively, they have trouble finding a shared understanding of what the data are and how to use them effectively (Data Science Central 2017).
- **Data democratization:** Everyone has access to data and there are no barriers, human or technical, that create a bottleneck at the gateway to accessing them (Marr 2017).

Data Literacy Components



Data Literacy Components and Competencies



- Understanding Data
 - What is data?
 - What is the role of data in special education?
- Finding and Obtaining Data
 - Understand the data needed to answer questions
 - Know where to find the data



Data Literacy Components and Competencies (cont.)

- Reading, Interpreting, and Evaluating Data
 - Critically assess sources and the data they contain
 - Be aware of how someone is presenting the data and how to read charts and graphs
- Using Data
 - Have knowledge and understanding of statistics
 - Be able to make a data analysis plan
 - Effectively apply data to learning, decisionmaking, or problem solving

Best Practices for Writing About Data

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How can data help illuminate the complex picture of what is happening?

How can we make that data accessible for a wide audience?

Writing about data effectively is a study in what can be done with clear language to make difficult things accessible.

So How Do We Make Difficult Things Accessible?

- Understand
 - The data
 - The audience
 - Communication needs
- Create checklists to ensure consistency



Create a Plan

- Before writing, ask yourself
 - What is the goal?
 - Who is the audience?
 - What is the topic of the text?
 - What is the data source?
 - What is the message?
 - What are the equity considerations for this data?
 - What questions do these data address?

Data Descriptions

- When writing about a demographic category (such as race/ethnicity) did you address each variable?
- Does a sentence with a percentage in it clearly state what that percentage refers to?
- Did you address what you were expected to address?
- Does the text
 - Help people understand the data?
 - Address action steps from results when it applies?
 - Describe what happened?
 - Describe what needs to happen?

Data Descriptions (cont.)

- Does the description provide context for what you are examining through data?
- Is there appropriate context for the data itself?
 - Did you include the count and description of the whole population?
 - Is there a description of calculations you used for the data?

Data Visualizations

- Is there a title for the visualization?
- What data is it showing?
- How is it showing the data?
- How did you collect the data?
- What is the source of the data?
- Is the purpose for showing the data clear?
- Does the visualization illuminate the message?
- Are you using tables and visualizations as a guideline?

Reviewing

- Is the writing clear and concise?
- Is the tone warm and enthusiastic?
- Does it use an active voice?
- Are there acronyms where there shouldn't be?
- Is there jargon that you could take out?
- Did you write percentages in a way that is consistent?
- Did you use the terms percentage and percent point correctly?
- Did you write results with an equity lens?
- Is the language direct?

Gallery Walk



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Gallery Walk Instructions

- We will review each “exhibit” as a group
- Mark them up with one of the following
 - I like
 - I wonder
 - I’d edit...
- Group discussion

Gallery Walk Breakout

Indicator 14: Post-School Outcomes

Visuals needed

What does this mean? (I am sure we all know, but others not so much!)

What are possible exit reasons?

Sounds so cold- "exitors" rather than students/children/etc.



Include the State's analyses of the extent to which the response data are representative of the demographics of youth who are no longer in secondary school and had IEPs in effect at the time they left school.

The State used statistical significance testing to determine if one group was over- or under-represented based on the response rate. No significant differences were found by the gender, disability, or exit reason of the youth. Significant differences were found in response rates exiters who were Hispanic. Exiters who were Hispanic (24%) were less likely to respond than exiters who were black (35%) or white (46%). Although Hispanic exiters were less likely to respond than other exiters, the overall results are representative of the state because there were very few significant differences in the actual responses of Hispanic students.

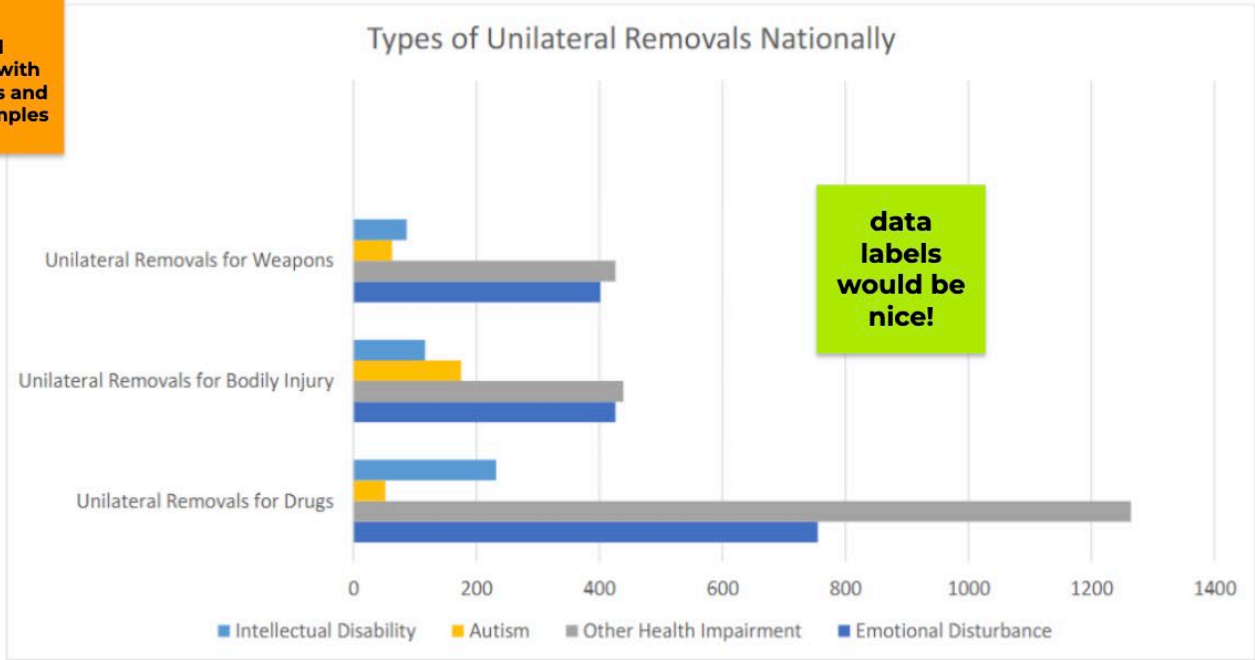
While our results are representative, we will take additional steps to increase responses from Hispanic youth. The post school outcomes survey is available in Spanish, but we will add additional avenues for Spanish language outreach.

Source: Third-party application (Jamboard).

Gallery Walk Breakout (cont.)

Define unilateral removal with examples and non examples

Do we need the word, unilateral? Can't we just say reasons for removal?



data labels would be nice!

Would percentages be more insightful?

what about the other disability categories?

Ages?

For what year

Source: Third-party application (Jamboard).

Gallery Walk Breakout (cont.)

Indicator 8: Parent Involvement

Include the State's analyses of the extent to which the demographics of the parents responding are representative of the demographics of children receiving special education services.

Asian families were the least likely to respond to the survey with only 27.58% of Asian families who received a survey responded, compared to over 51% of families of other race/ethnicities responding to the survey. Data analysis revealed that African American or Black families were more likely to respond to the family survey (65% of African American or Black families surveyed responded to the survey), they were also the least likely of all populations to have surveys unable to be delivered.

Asian families represent 1.56% of the State's Early Intervention population within this year's survey cohort, but only 0.57% of survey responses and represented 3.12% of all undeliverable responses. African American or Black families represent 2.28% of the State's Early Intervention population within this year's survey cohort and represented 2.49% of survey responses. Hispanic families represent 1.83% of the State's Early Intervention population within this year's survey cohort, and 1.48% of survey responses. Two or more races represent 6.57% of the State's Early Intervention population within this year's survey cohort and represented 6.0% of survey responses.

How was the survey sent?
Email, link,
hard copy?

Might be nice to see the breakdown of all families- why is the Asian %age so surprising?

A graph/visual would be great and way easier to read!

Feels so negative,

Define Early Intervention Population?

Bullet points would make this less repetitive and wordy

Source: Third-party application (Jamboard).

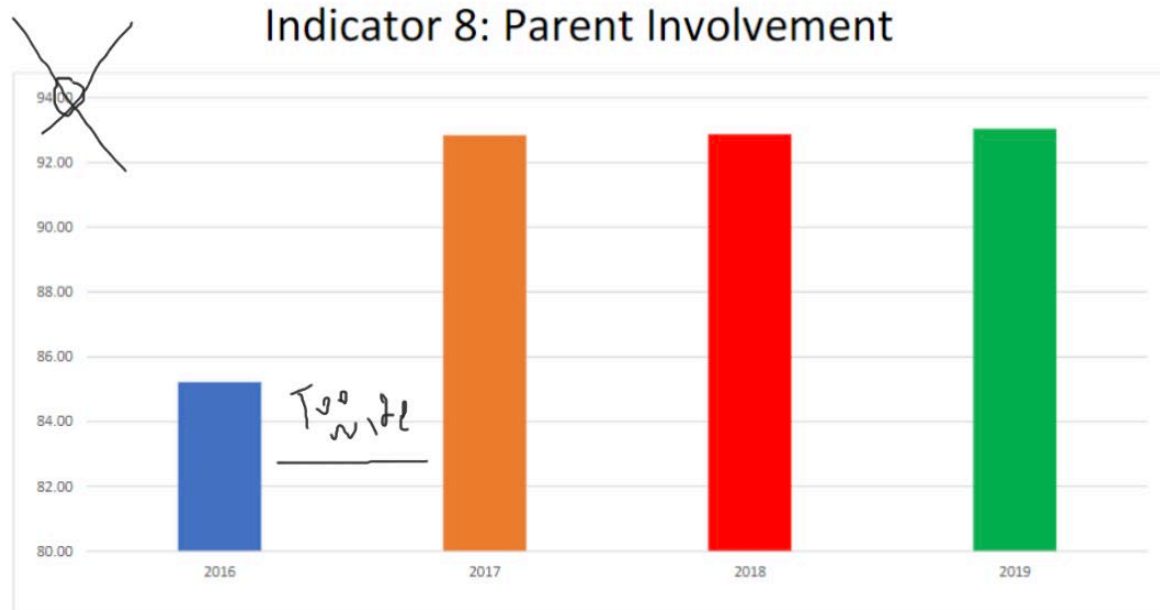
Gallery Walk Breakout (cont.)

Needs more labels

Percentages?

Weird data ranges!

Starting at 80?



What is this measuring?
What kind of parent involvement?

different colors are unnecessary and confusing

Colors don't mean much here!

What does the color of the bars mean?

Source: Third-party application (Jamboard).

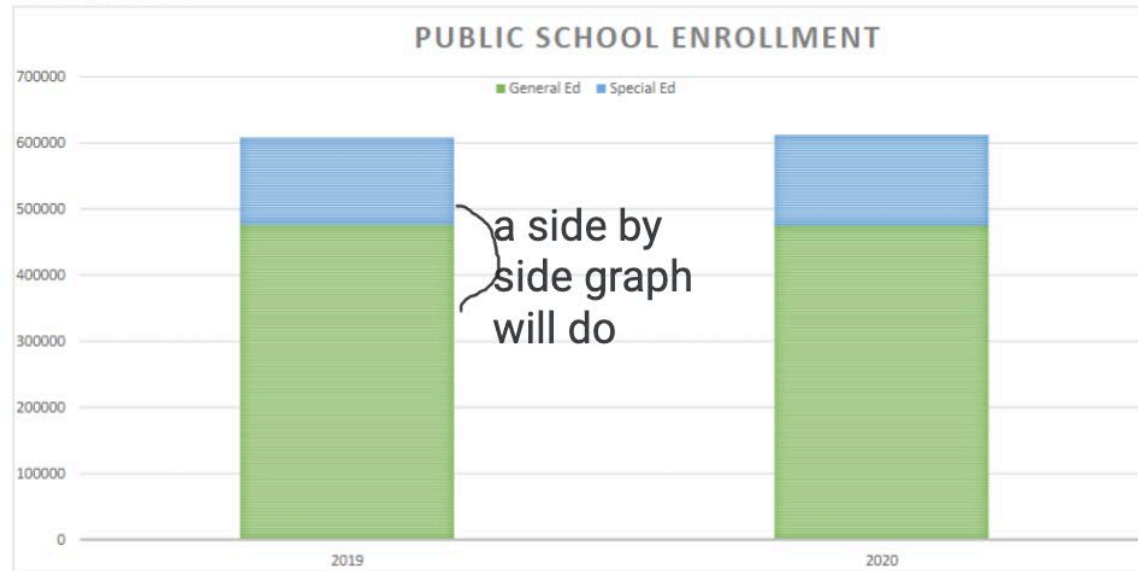
Gallery Walk Breakout (cont.)

very busy graph

maybe have that at the bottom of the graph

Label actual number, hard to see differences since they are so close

- In 2020, 162,470 children and youth ages Birth – 20 received special education services.
- Of those 136,454 were enrolled in grades K-12.
- This represents 22.3% of students enrolled out of 611,913 total students.



Source: Third-party application (Jamboard).

Gallery Walk Breakout (cont.)

What changes were made to increase graduation rates?

Putting these target statements in sentences is mentally taxing to think through.

Stakeholder Report

The State's percent of youth with Individualized Education Programs (IEPs) graduating from high school with a regular high school diploma has increased from FFY 2014 (66.50%) to FFY 2019 (71.02%). The State met or exceeded the targets for FFYs 2014, 2015, and 2017. The State did not meet the targets for FFYs 2016, 2018, and 2019. The graduation percentage increased for students in all disability categories for the same time period. See Table 1.

Table 1.

FFY	Percent Graduating
2014	66.50
2015	67.62
2016	70.01
2017	69.58
2018	70.52
2019	71.02

This could easily be a pretty graph :)

What are the targets?

Source: Third-party application (Jamboard).

Final Questions

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Data Science Central. (2017). *Data Literacy: Bridging the Gap*. Retrieved from [DSC Webinar Series: Data Literacy – Bridging the Gap - DataScienceCentral.com](#).

D’Ignazio, C. and Bhargava, R. (2016). Databasic: Tools and Activities for Data Literacy Learners. *Journal of Community Informatics*, 12. Retrieved from [View of DataBasic: Design Principles, Tools and Activities for Data Literacy Learners \(uwaterloo.ca\)](#).

Marr, B. (2017, July 24). *What Is Data Democratization? A Super Simple Explanation and the Key Pros and Cons*. Retrieved from [What Is Data Democratization? A Super Simple Explanation And The Key Pros And Cons \(forbes.com\)](#).

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What actions will you take to commit to being a Data Quality Influencer?



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