

#### What Would Bones and Booth Do? Examining Levels of Data to Find Out "Whatdunnit"

June 21–23, 2022



IDEA DATACollect, Report, Analyze, andCENTERUse 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 that data are not free from bias
- Understand different levels of data and identify current data sources for each level
- Identify range of practices related to obtaining "street data" to identify "whatdunnit" regarding outcomes of children with IEPs
- Investigate questions to promote "street data" input to inform indicator analysis

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- What would Bones and Booth do?
- The nature of data
- Levels of data
- "Street data" practices
- SPP/APR indicator application



### What Would Bones and Booth Do?



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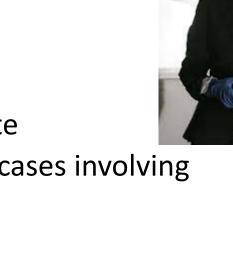
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## Who Are Bones and Booth?

- Dr. Temperance "Bones" Brennan
  - -Forensic anthropologist
  - -Team leader of the fictional Jeffersonian Institute
  - Provides scientific expertise in possible murder cases involving unrecognizable remains
  - -Believes in reason, facts, and evidence
- Seeley Booth
  - -FBI Special Agent
  - -Investigates possible murder cases
  - -Provides criminal investigation techniques
  - -Believes in intuition and "gut" reactions



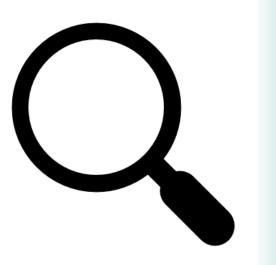






## **How Do They Solve Crimes?**

- Bring a team of experts together
  - Forensic anthropologist
  - FBI Investigator
  - Pathologist
  - Forensic artist
  - Entomologist
  - Psychologist
- Examine all kinds of data from the crime scene
  - Human remains/bones
  - Soil and minerals
  - Plants and insects
  - Photographs, videos, diagrams
  - Written/oral statements





## What Do Bones and Booth Have to Do With Me?

In the chat

- Reflect on the work of Bones and Booth in solving crimes
- Share any connections you see with Bones and Booth that you may have in your work in the agency in the chat box



# What Do Bones and Booth Have to Do With Me? (cont.)



- Bring a team of experts together
  - Assessment
  - Dispute resolution
  - Curriculum and instruction
  - Special populations
  - Significant disproportionality
  - District administrators



- Examine all kinds of data
  - Participation and proficiency levels on state assessments
  - Attendance, graduation, and dropout rates
  - Identification rates
  - Compliance with IDEA
  - Discipline/suspension rates
  - Surveys
  - Stakeholder input

#### The Nature of Data



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"The way we see and understand the world influences how we interact with others, make decisions, and interpret others' actions. To be equitable and inclusive leaders, educators, or humans, we must understand how our identities bias our perceptions."

– Meagan Pollock, PhD

mp@engineerinclusion.com

#### The Nature of Data—Addressing Our Biases

- Confirmation Bias
  - Our brains are constantly hunting for evidence that supports our prior beliefs.
    Even if we're trying our best to be open to alternative ideas, our minds are pushing back toward the safety and comfort of our first thoughts
- Selection Bias
  - This type of bias occurs when looking at samples that are not representative of the population
  - This can happen organically when working with small sets of data, or when the sampling methodology is not truly randomized
- Outlier Bias
  - Some data are convenient to visualize as an average, but this simple operation hides the effect of outliers and anomalies and skews our observations

Kangralkar, S. (2021, August). Types of Biases in Data. *Towards Data Science*. Retrieved from <u>https://towardsdatascience.com/types-of-biases-in-data-cafc4f2634fb</u>.



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#### Levels of Data



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• Satellite data



• Map data

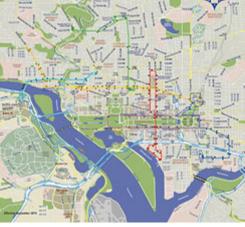


• Street data

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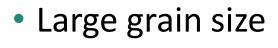




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## Satellite data

**Satellite Data** 



- Viewed from far above the classroom
- Include broad-brush measures like test scores, attendance patterns, graduation rates, teacher retention, principal attrition, parent participation rates





## Satellite Data (cont.)

Consider

- What satellite data are you currently using in your work?
- Write your responses on the chat box





### Satellite Data (cont.)

Advantages of satellite data

- Easy to collect and access
- Illuminate trends
- Point us in the general direction for further investigation of how the system is educating different groups of students



## Satellite Data (cont.)

#### Drawbacks

- Often lagging and reaching educators too late to inform instructional and resource decisions
- Used by policymakers to make decisions without being close to the classroom where learning occurs
- Can reinforce implicit biases and deficit thinking about Black, Latinx, Indigenous students, students with diverse abilities, and other historically marginalized students and families
- Focus on underperformance and the need to "fix" children and families
- Ignore the assets that every child and community brings to the table
- Don't address differential access to opportunity

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#### Map Data

#### Map data

- Medium grain size
- Exist within a school community
- Include social-emotional, cultural and learning trends
  - Running records, universal screeners, progress monitoring
  - Rubric scores on common assessments
  - Satisfaction surveys (staff, student, parent)
- Help us identify student skill gaps or instructional skill gaps for teachers
- Point us in a slightly more focused direction but we still have a deficit mindset



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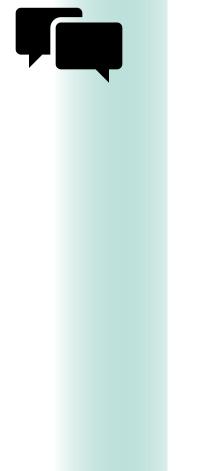


## Map Data (cont.)

Consider

- What map data are you currently using in your work?
- Write your responses in the chat box.





#### **Street Data**



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#### Street data

- Fine grain size
- Found everywhere
- Qualitative and experiential
- Focused on what is right with students, schools, and communities
- Helpful for understanding
  - Student, staff, and families' experiences
  - Misconceptions and mindset
- Helpful for monitoring students' internalization of important skills
- Collected systematically to provide information about equity
- Require focused listening and observation to identify how students are performing, feeling, or thriving
- Helpful for informing and shaping next steps for instruction or leadership



### Street Data (cont.)

Consider

- What "street data" are you currently using in your work?
- Write your responses in the chat box.





## **Break Out Room Discussion**

Write responses on the Jamboard assigned to your room: <u>https://tinyurl.com/BonesData</u> **Discuss in room # 1** 

- What are the advantages of satellite data?
- What drawbacks of using satellite data have you encountered in your work? **Discuss in room # 2**
- What are the advantages of using map data ?
- What drawbacks of using map data have you encountered in your work? **Discuss in room # 3:**
- What are the advantages of using "street data"?
- What are barriers to obtaining "street data" at the agency level?



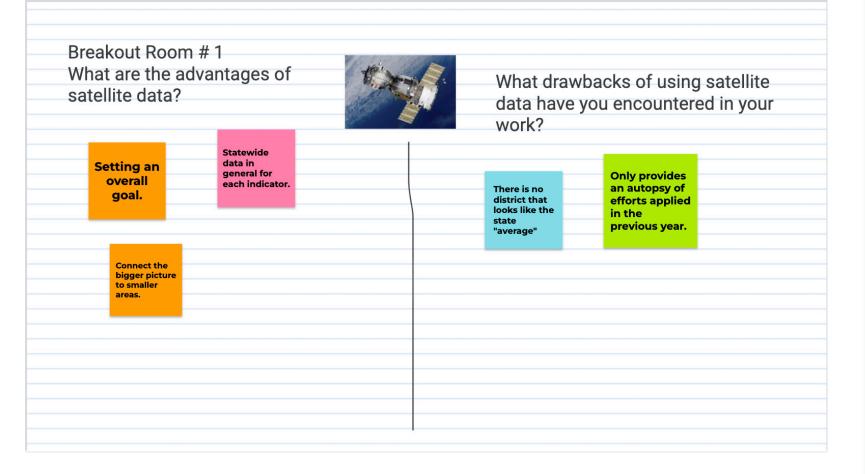
#### **Breakout Group Instructions**

- You have 15 minutes!
- Please select a notetaker
- Each notetaker should:
  - Share your screen
  - Navigate to the Jamboard for your respective Breakout Room
  - Share your reflections via sticky note

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#### Breakout Room #1

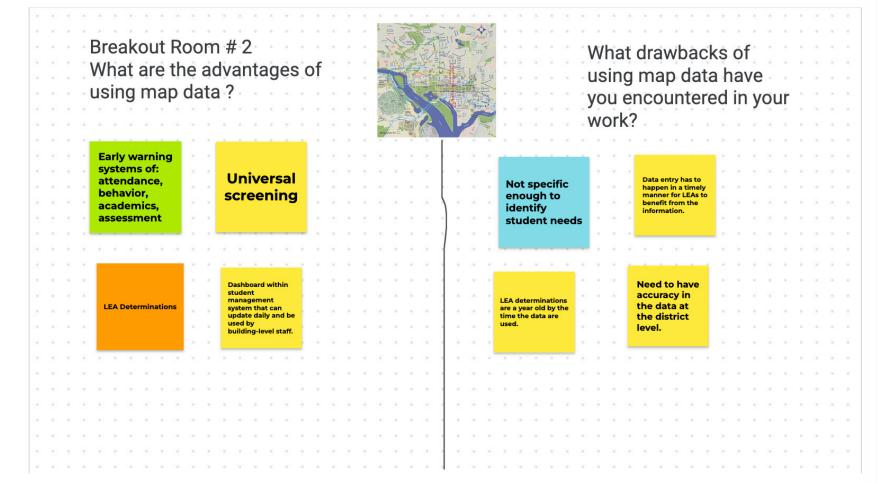




#### Source: Third-party application (Jamboard).

#### **Breakout Room #2**





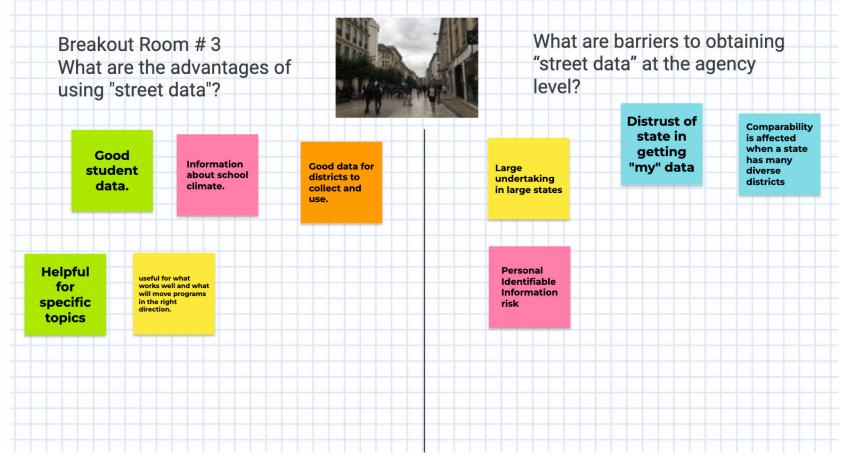
#### Source: Third-party application (Jamboard).

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#### **Breakout Room #3**





Source: Third-party application (Jamboard).



#### **Street Data Practices**



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#### **Reflection Questions to Consider**

- How can you collect "street data" about how your state systems educate all children with IEPs and their families?
- What "street data" could you collect about the lived experiences of all children with individualized education programs (IEPs) and their families?
- What do you wish you knew about the experiences of children with IEPs and their families?
- What are some ways you could collect that data?

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## **Types of Street Data**

- Artifacts: Anything created by people that yields information or insight into culture and/or society of its creators and users Examples
  - Student work
  - Video of a performance-based assessment
  - Audio recording of a student-to-student discussion
  - Teacher-designed task
  - Professional learning agenda
  - Instructional-coaching conversation plan



## **Types of Street Data (cont.)**

- Stories/Narratives: Oral and sometimes written sharing of stories, histories, lessons to maintain a historical record and sustain cultures and identities
   Examples
  - Empathy interviews
  - Home visits
  - Student-led community walks
  - Focal student case study
  - Oral histories
  - Identity maps
  - Surveys
  - Staff meeting comment cards
  - Listening campaigns



## **Types of Street Data (cont.)**

- Observations: The study of human behavior, microinteractions, micro-pedagogies, and micro-facilitation moves that focus on verbal and non-verbal behavior Examples
  - Equity participation tracker
  - Equity-focused classroom scan
  - Nonverbal observation transcript
  - Meeting observation notes
  - Instructional coaching transcript
  - Photos of classroom walls, library, shared spaces



#### **Collecting Street Data to Improve General Supervision System—Type the Numbers in the Chat Box**

How could you incorporate "street data" in your work in order to obtain student and family voices?

- 1. Interview or focus group students, families, teachers
- 2. Observe in classrooms and/or IEP meetings
- 3. Develop high-quality surveys on student and family belonging, connection, and agency





### **SPP/APR Indicator Application**



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#### Example: Possible Questions to Ask–Indicator 2

- Share a bright spot in your experience with dropout prevention in your district. What can we learn from that bright spot?
- Reflect on an experience that led you to consider dropping out? How did that experience affect you as a student/family?
- Imagine that you could wave a magic wand to strengthen equity, relationships, and dropout prevention in your district. What would change and why?
- What feedback do you have for me as a leader to support dropout prevention for students with IEPs?



#### **Street Data Applications**

#### Reflect on your most recent Indicator 2 data *Percentage of youth with IEPs dropping out*

- What questions could you ask to obtain "street data" to inform the analysis of the data?
- Whom would you want to ask?
- How would you obtain the information?





How will "street data" affect your work with stakeholders in the future?

Write your response in the chat box.







Safir, S., and Dugan, J. (2021). *Street Data A Next-Generation Model for Equity, Pedagogy, and School Transformation.* Thousands Oaks, CA: Corwin.





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





#### **For More Information**



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