Serving on Groups That Make Decisions: A Guide for Families

Section 6: Using Data as Information

October 28, 2021

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www.servingongroups.org

Agenda

- Serving on Groups Overview
- Section 6 – Using Data as Information
  - What is data?
  - How can I learn more about data groups use?
  - What are the 8 stages of data use?
- Resources

Serving on Groups Overview

- Developed due to an identified need
- Collaborative effort by stakeholders
- Audience – parents, educators, students, others
- www.servingongroups.org

What is Data?

Data…

- Is factual information
- Helps groups make decisions
- Must be:
  - Reliable
  - Valid
  - Accessible

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Confidentiality

- A set of rules or a promise
- Limit access or put restrictions on certain types of information

- When working with data as a group, it is important to state if certain information should not be shared with others outside of the group.

Forms of Data

Quantitative Data

- Typically numbers
- Answers the questions:
  - How much? How often? When? Where?

Qualitative Data

- Typically descriptions
- Answers the questions:
  - What is it like? What do you observe about it?

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Stages of Data Use

1. Planning & Preparing to Use Data
2. Collecting Data
3. Organizing Data
4. Analyzing Data
5. Developing Hypotheses & Making Recommendations
6. Creating an Action Plan
7. Displaying & Sharing Results
8. Continuous Monitoring for Progress & Improvement

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Tool for Using Data

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Stages of Data Use

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Stage 1:
Planning & Preparing to Use Data

What do we want to know?

Tips

- Ask focusing questions
- Use a variety of methods & sources
- Find data already out there - baseline
- Try to find gaps
- Pinpoint possible roadblocks
- Ask others knowledgeable of the data

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Serving on Groups That Make Decisions
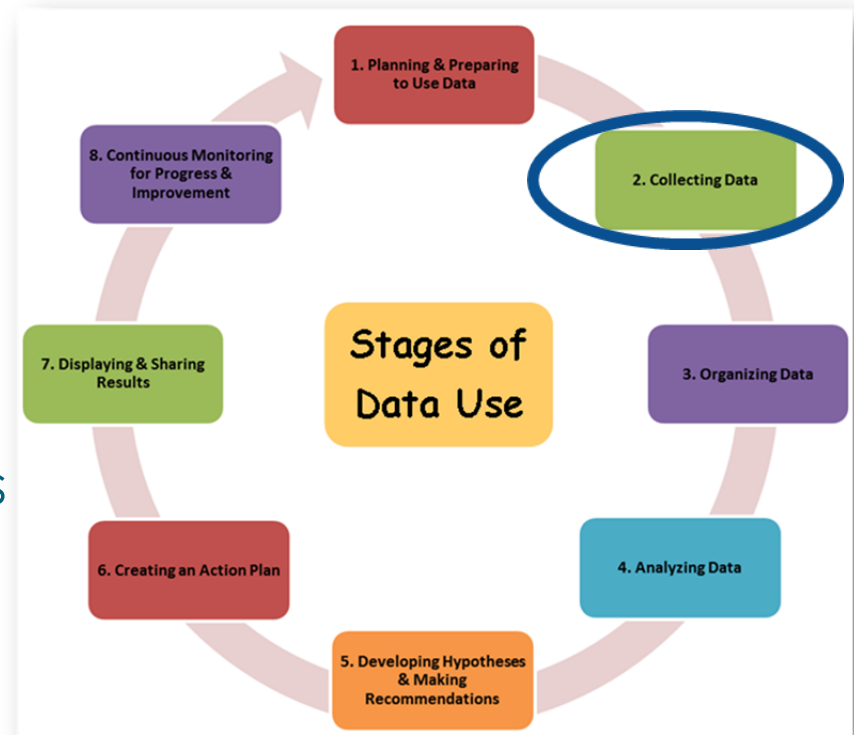
Stage 2: Collecting Data

Answer questions to make an informed decision and act.

Data from Schools

- Student Learning Data
- Student Demographic Data
- School Perception Data
- School Process Data
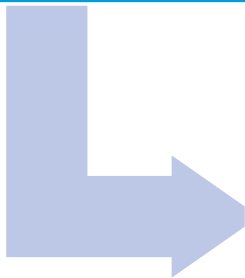
Families as a Data Source

- Surveys
- Focus Groups
- Participants or Attendees
- School Perception Data

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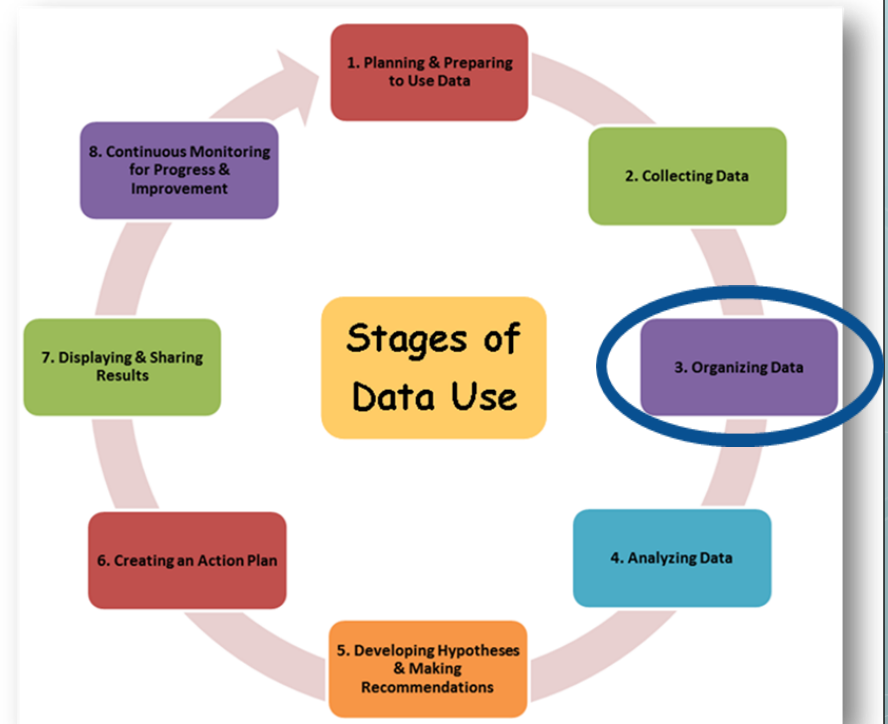
Stage 3: Organizing Data

Aggregated Data: a whole set of data formed by combining several parts

Disaggregated Data: a whole set of data separated into its categories or subgroups

Youth 20-24 Neither Enrolled in School Nor Working

- Less than HS
- HS diploma
- Some college
- Bachelor's degree +

10%
10%
48%
32%

Youth 20-24 Neither in School Nor Working with HS Diploma by Race/Ethnicity

White, Black, Hispa…, Asian, Nativ…, 2+…
(y-axis: 0, 20, 40, 60)

Stage 3: Organizing Data

Triangulated Data:

Use of multiple independent sources of data to establish the truth & accuracy of a claim.
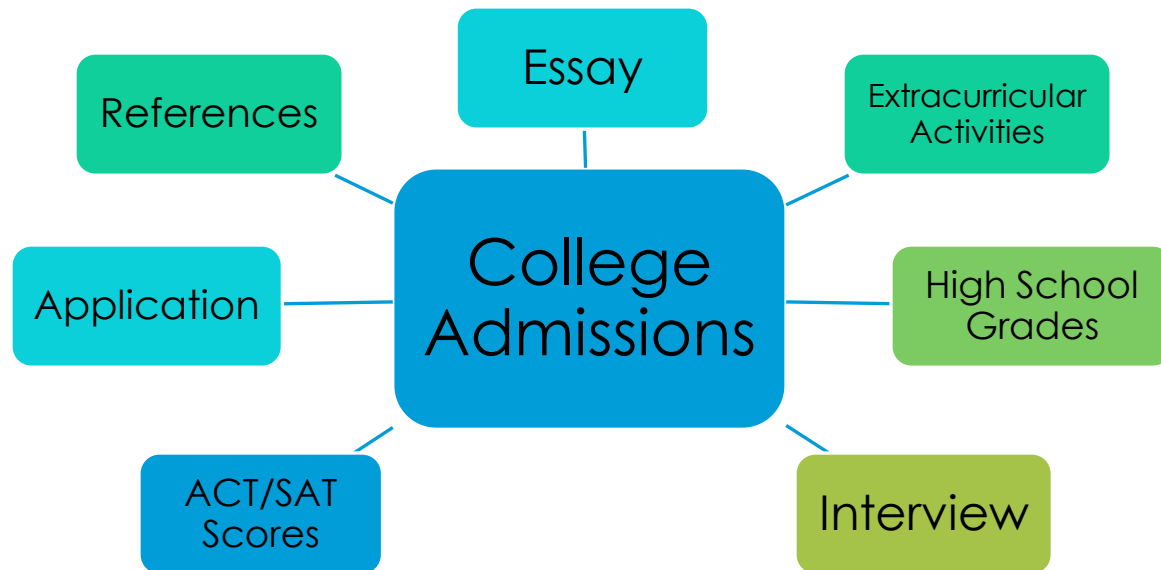
Stage 3: Organizing Data

Tips for Interpreting Graphs

Read all labels.

- What is…
  - in each COLUMN?
  - in each ROW?
  - the RANGE OF VALUES?
- Where was…
  - the MOST change or growth?
  - the LEAST change or growth?
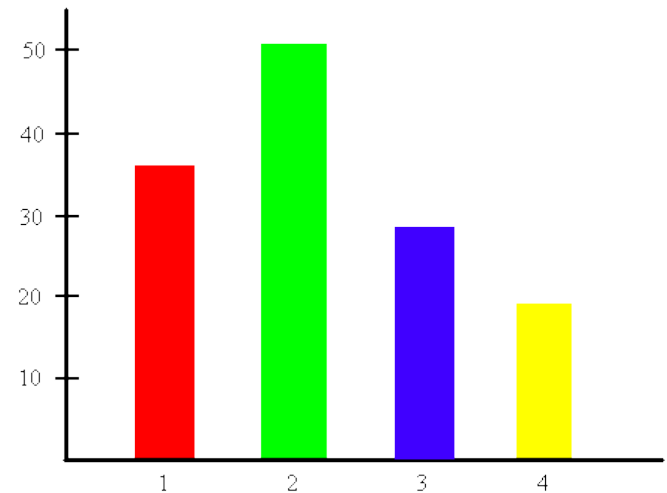
Stage 3: Organizing Data

A Snapshot in Time

2012 Post High School Outcomes
(699 Students responded Statewide)

Legend:
- Higher Education
- Competitive Employment
- Other Postsecondary Education or Training
- Other Employment
- Indicator 14 Categories Not Met

Pie chart values: 34.6%, 29.9%, 3.3%, 11.0%, 21.2%

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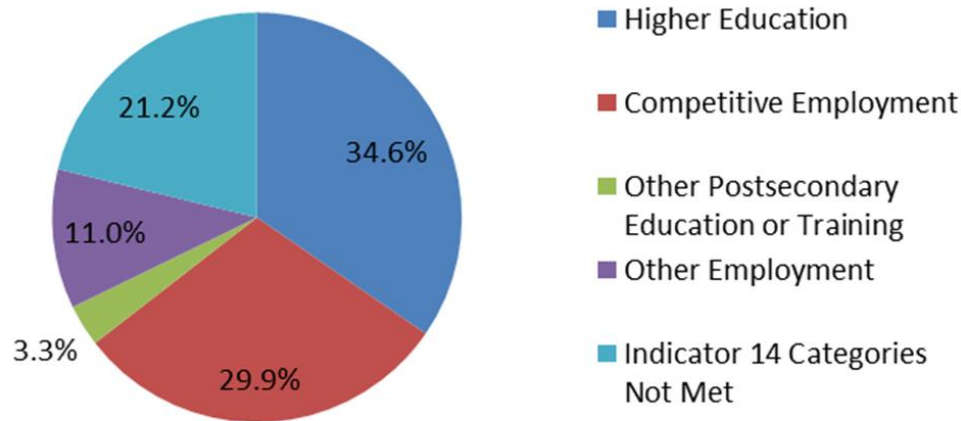
Stage 3: Organizing Data

Comparisons
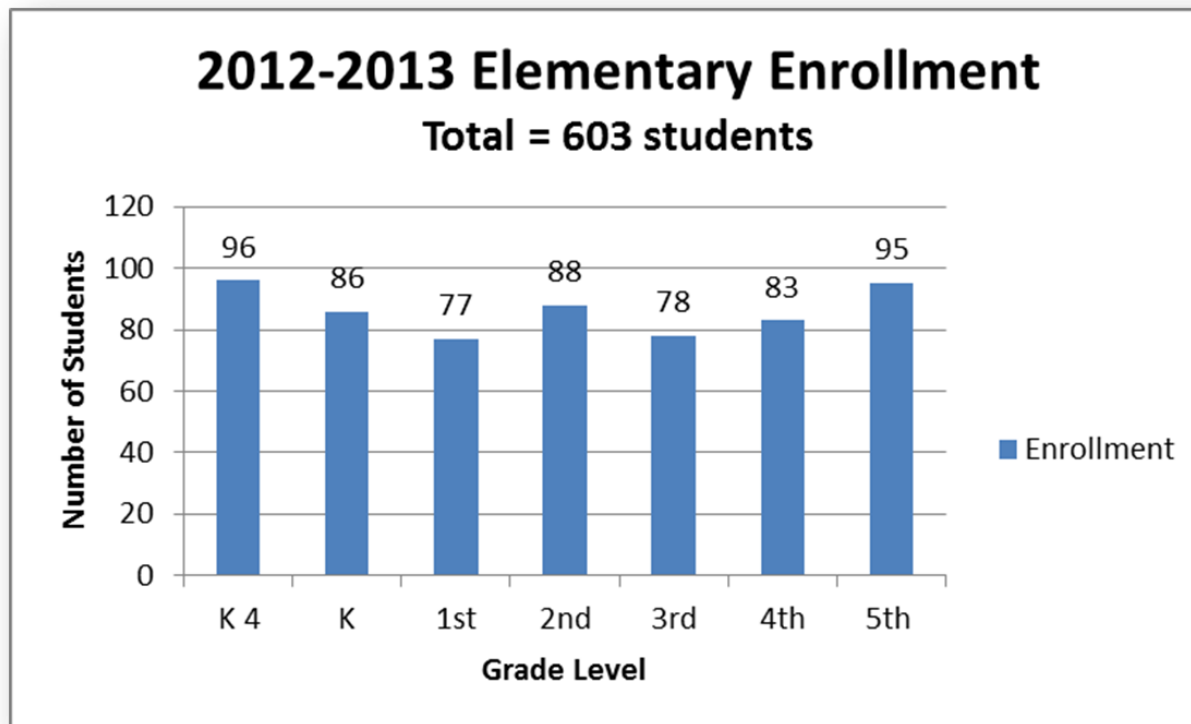
Stage 3: Organizing Data

Trends

Percentage of District Students Scoring Proficient or Advanced in Reading
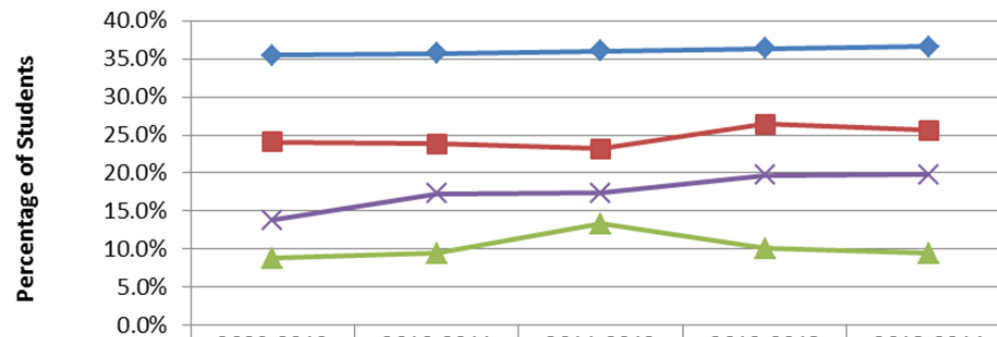
	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
State - All Students	35.5%	35.7%	36.0%	36.4%	36.6%
District - All Students	24.1%	23.8%	23.2%	26.4%	25.6%
District - Students with Disabilities	8.8%	9.4%	13.3%	10.1%	9.4%
District - Economically Disadvanted	13.8%	17.3%	17.4%	19.7%	19.8%

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Stage 3: Organizing Data

Tips to Validate the Findings

To make sure the data are sound:

- Use trusted sources
- Follow-up with questions
- Use different ways of gathering data
- Ensure everyone agrees and accepts the findings

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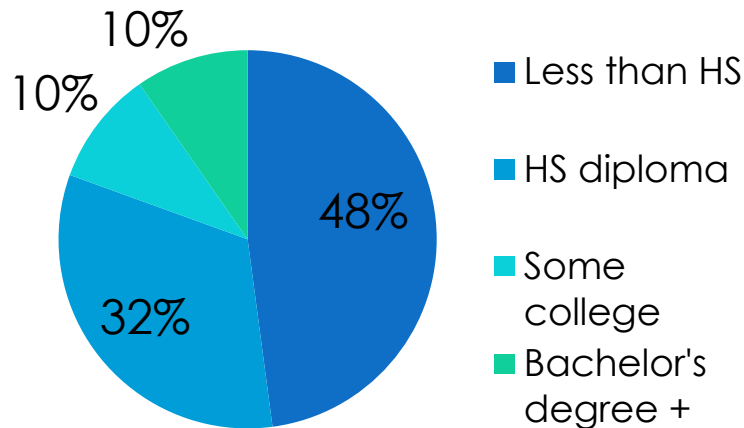
Stages of Data Use

1. Planning & Preparing to Use Data
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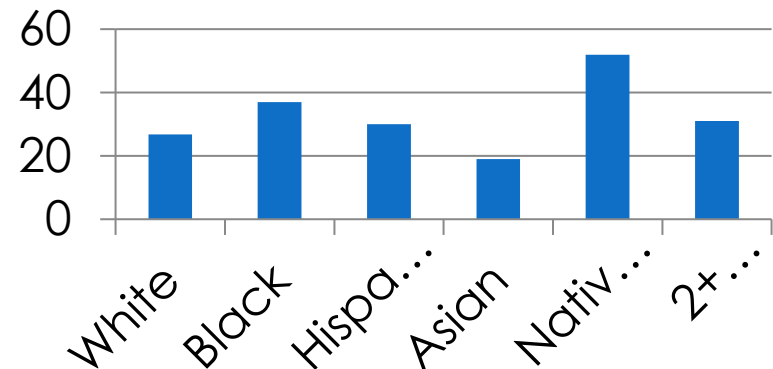8. Continuous Monitoring for Progress & Improvement

Serving on Groups That Make Decisions
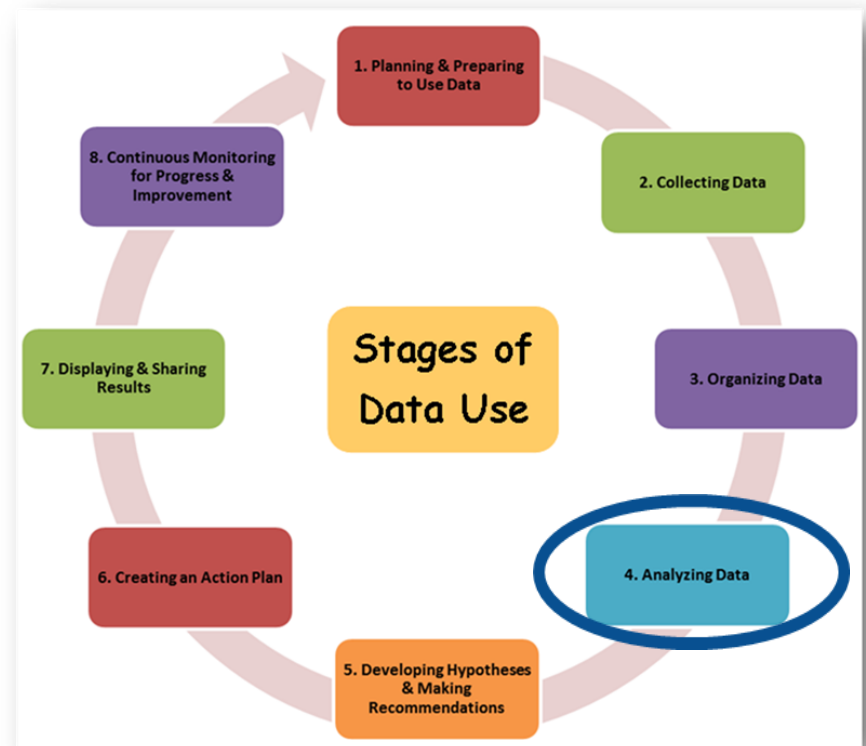
Stage 4: Analyzing Data

Look for Relationships in the Data

- Each view provides unique insight
- Look from many viewpoints
- Understand the parts as well as the whole
- Strengths and challenges
- Don't draw conclusions too soon
- Record information as it appears in the source

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Stage 4: Analyzing Data

Terms when Working with Numbers

- **MEAN** – average of a group of numbers
    1+2+3+4+5=15   divided by 5   **3 is Mean**

- **MEDIAN** – middle value
    2, 1, 8, 3, 6, 10, 2, 6, 7, 3, 3, 2, 2
    1, 2, 2, 2, 2, 3, **3**, 3, 6, 6, 7, 8, 10   **3 is Median**

- **MODE** – most frequent value
    2, 1, 8, 3, 6, 10, 2, 6, 7, 3, 3, 2, 2   **2 is Mode**

- **RANGE** – difference between lowest & highest
    1, 2, 2, 2, 2, 3, 3, 3, 6, 6, 7, 8, **10**
    10 minus 1   **9 is the Range**

- **OUTLIER** – very high or very low number
    2, 1, 8, 3, 6, 10, 2, **27,** 6, 7, 3, 3, 2, 2   **27 is outlier**

- **STATISTICALLY SIGNIFICANT** – results true & not because of chance

Stage 4: Analyzing Data

Examples of Working with Numbers

January Reading Scores

Student A's Reading Scores
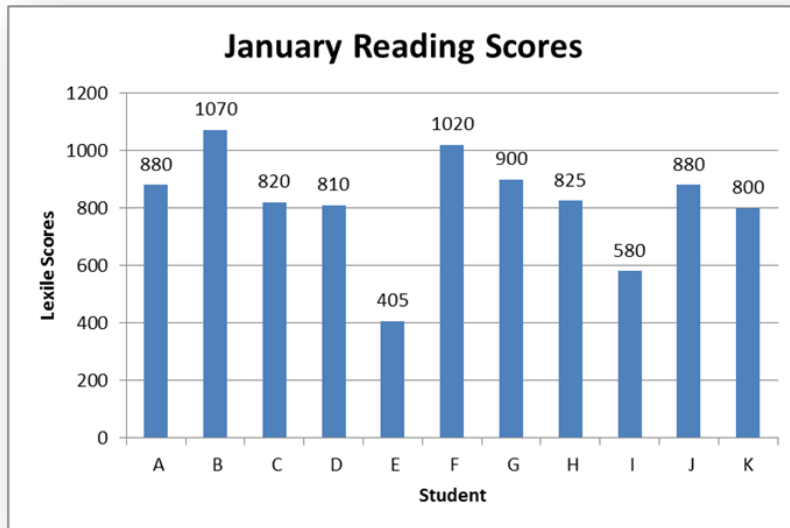
Mean = 817.3
Median = 825
Mode = 880
Range = 665
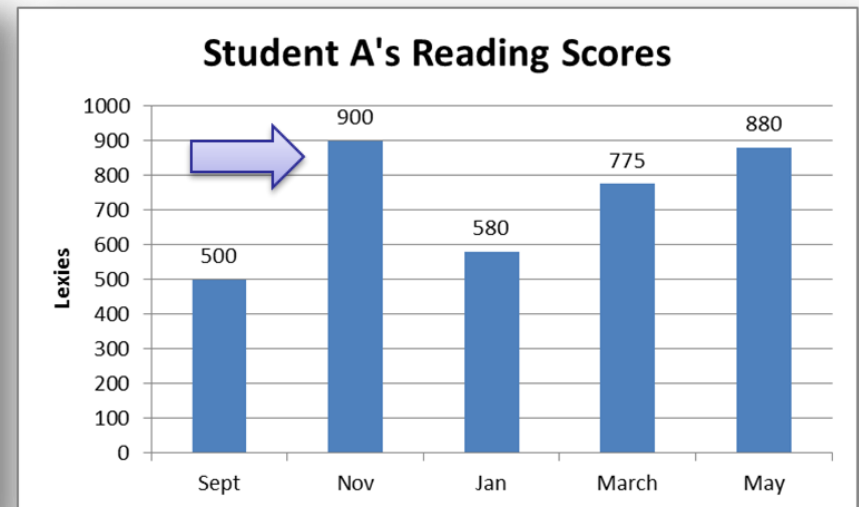
Outlier

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Stage 5: Developing Hypotheses & Making Recommendations

Hypotheses (if, then, because)

- Understand why we *think* it is happening
- Look at other data
- Ask additional questions
- Agree upon the conclusions
- Figure out possible solutions

Recommendations

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Stage 6: Creating an Action Plan

1. Bring key people together
2. Figure out:
   - What
   - Who
   - When
   - Where
   - Resources
   - Communication

3. Review completed action plan
4. Follow through
5. Communicate
6. Keep track of progress
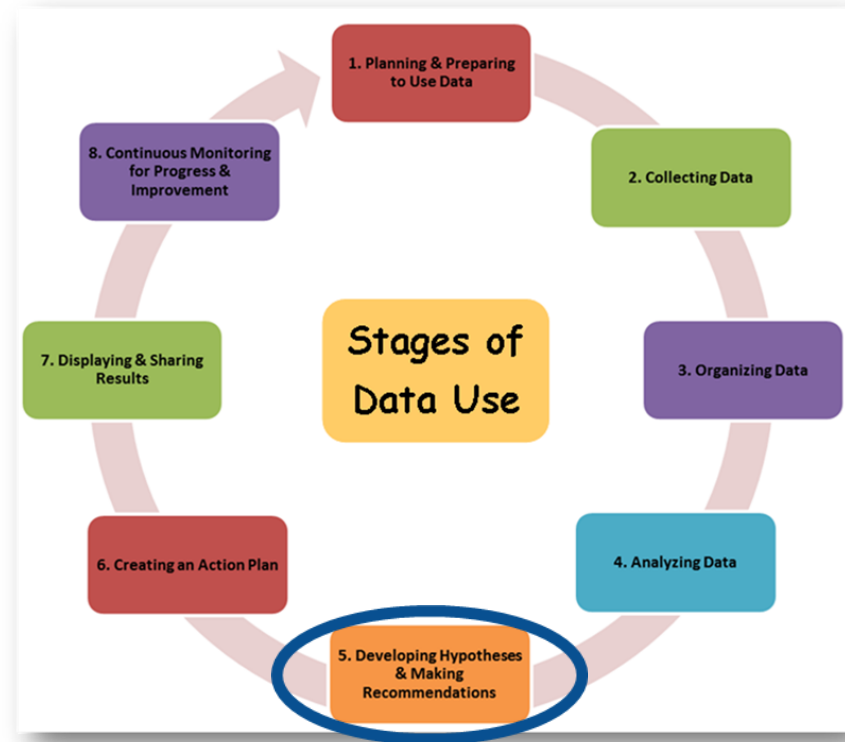7. Celebrate!

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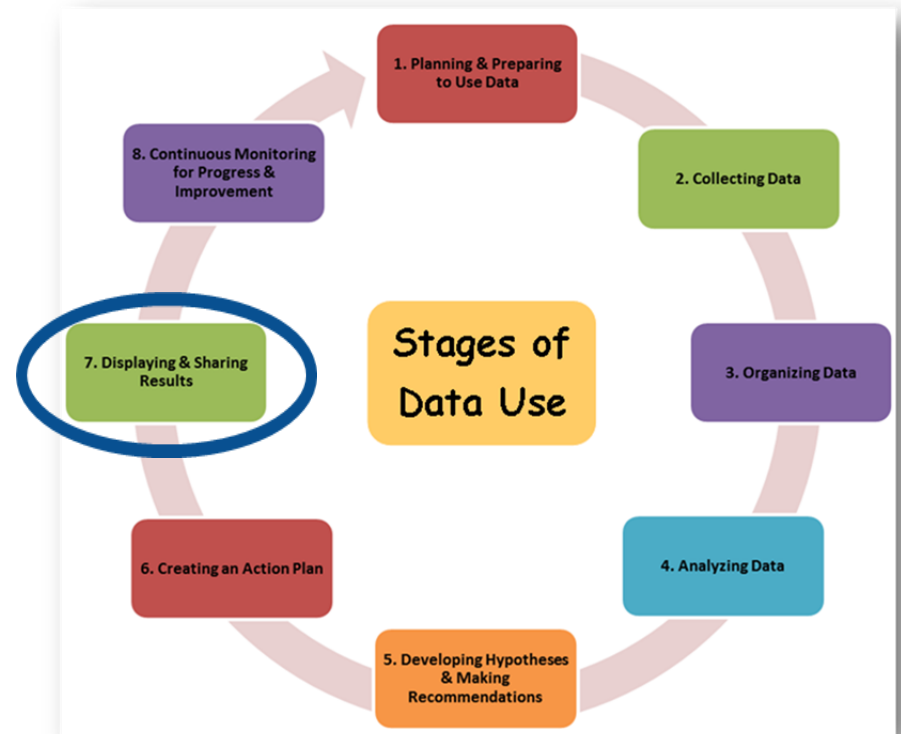
Stage 7: Displaying & Sharing Results

Displaying Results

- Make Sure the Report is:

  - Appealing
  - Accessible
  - Accurate
  - Audience-specific

- Be Fair and Objective

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Stage 7: Displaying & Sharing Results

Sharing Results

- Know the Purpose of your Report
    - Does it need to provide information?
    - Is it to raise awareness?
    - Will it be used to make decisions?

- Know your Audience
    - What do they already know about the topic?
    - Do they need the big picture or lots of details?

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Stage 7: Displaying & Sharing Results

Make the Data Come Alive

Social Math

- Relating data numbers to what is familiar and concrete to your audience.
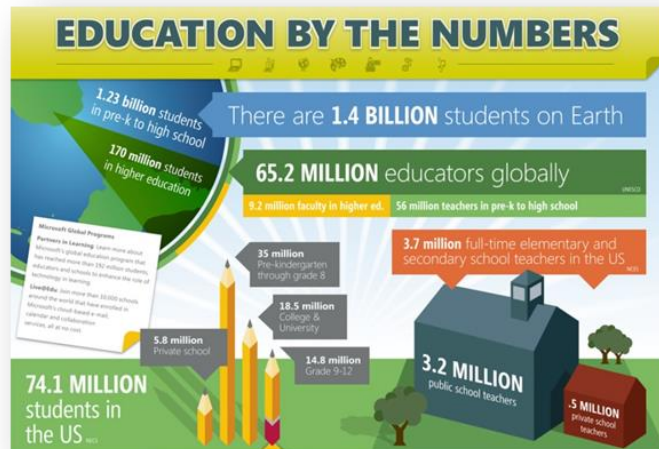
Data Stories

- Compelling narrative
- Audience-Specific
- Be objective
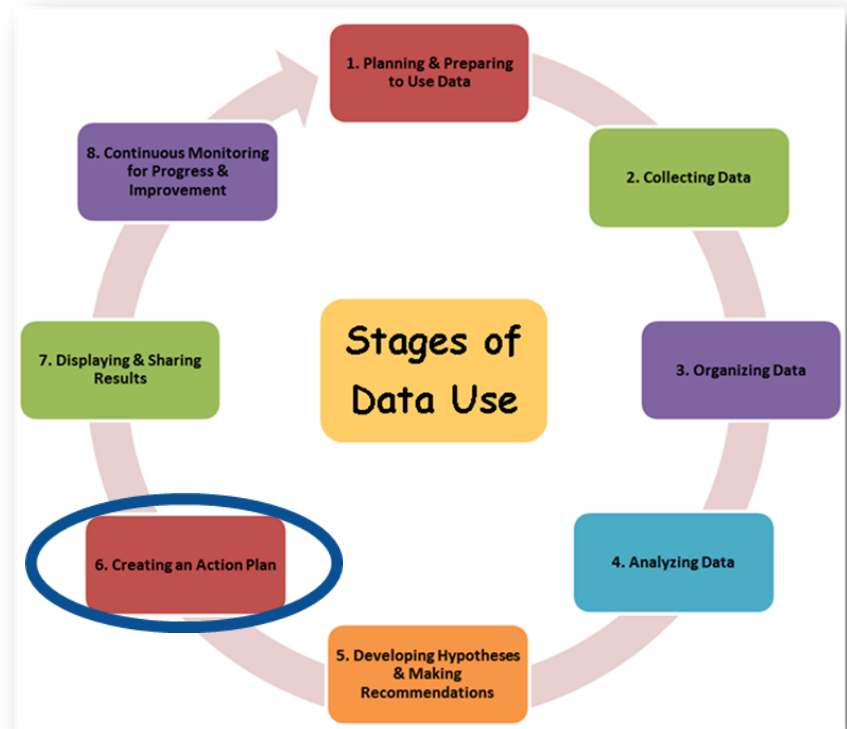- Don't censor
- Explain the data

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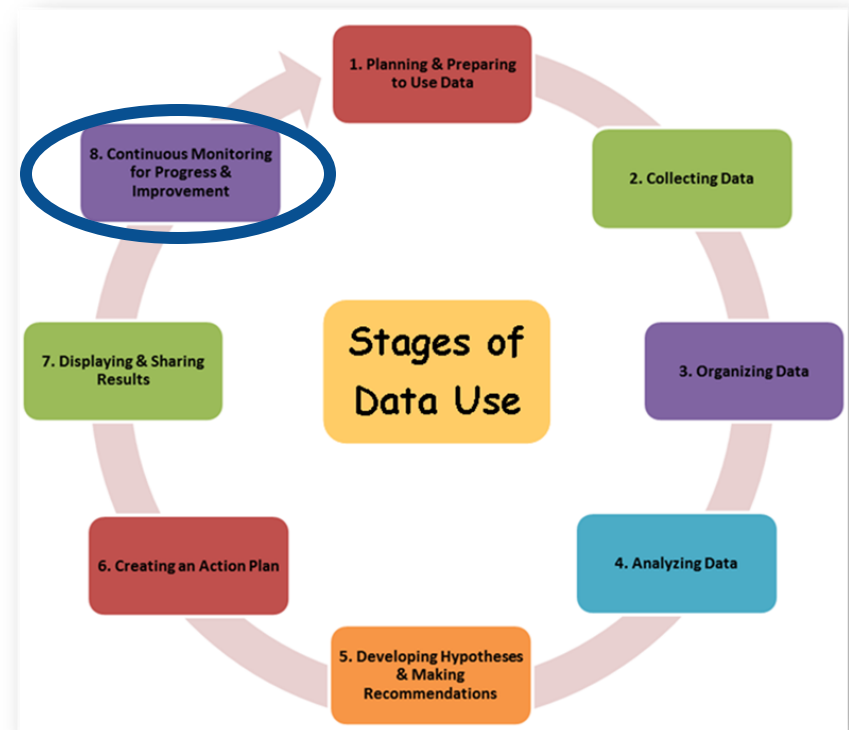
Stage 8: Continuous Monitoring for Progress & Improvement

Check Your Work

- Regularly revisit the plan
  - Identify challenges
- Make changes as needed

Evaluate the Action Plan

- Collect the same TYPE of data from the same data SOURCE

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Stage 8: Continuous Monitoring for Progress & Improvement

Process Begins Again

Ask yourself:

- To what extent has the initial question been answered?
- What new concerns or questions have come up?
- Which factors are clearly understood and which ones need more data?
- ***Has the situation improved?***

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Review

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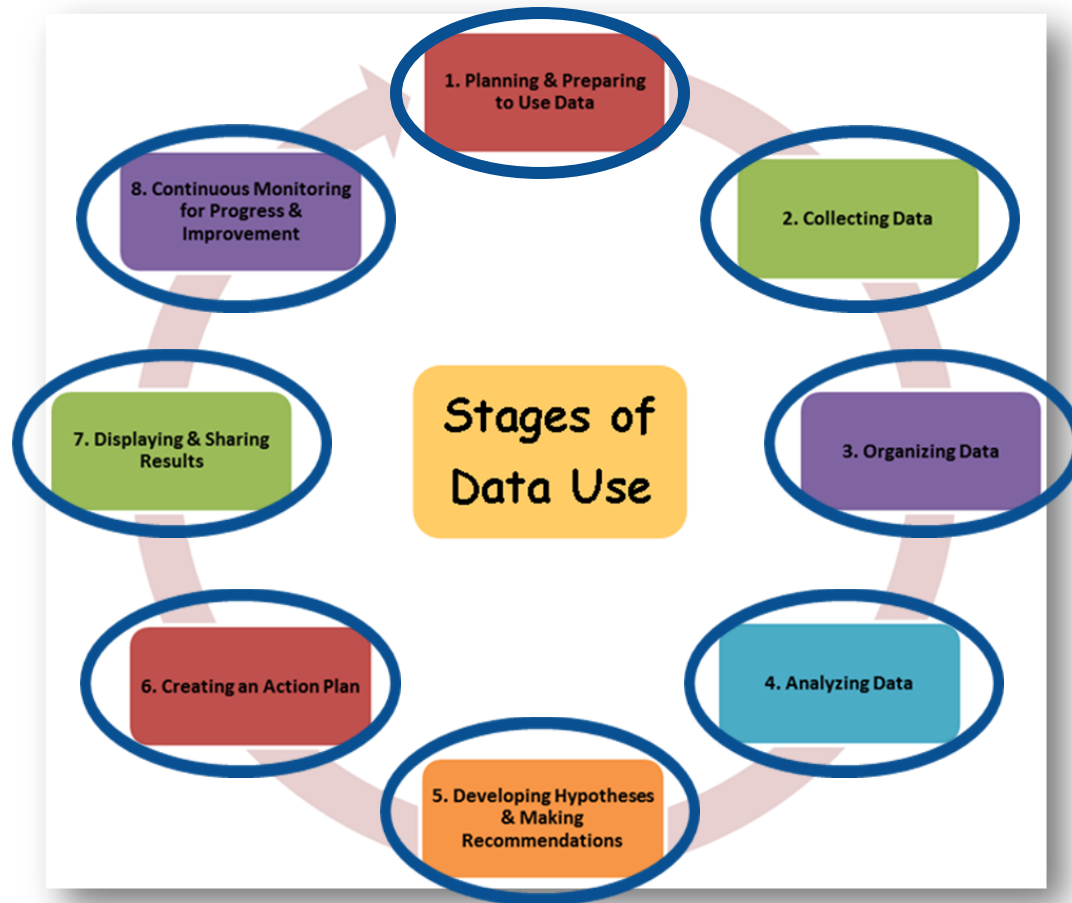
Section 6 Resources

- **Data-driven Decision Making** (video 3:28) https://www.youtube.com/watch?v=9Lew4yWlv5Q
- **What is Data-Driven Decision Making?** (video 4:17) https://www.youtube.com/watch?v=5efZCmUaTyw
- **WISEdash** (WI Information System for Education Data Dashboard) http://wisedash.dpi.wi.gov/
- **Intro to WISEdash** (video 3:27) https://www.youtube.com/watch?v=c5HicpvXoGI&feature=youtu.be
- **National Center for Education Statistics Kids' Zone** https://nces.ed.gov/nceskids/
- **Profile of Your State/County** https://data.census.gov/cedsci/profile?g=0100000US
- **Data about Children in Your State** http://datacenter.kidscount.org/

- **State Education Data Profiles** https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=MAT&sj=&sfj=NP&st=MN&year=2019R3
- **WI School Performance Report** https://dpi.wi.gov/spr
- **U.S. Dept. of Education Public Data Listing** https://www2.ed.gov/about/data/list.html
- **Data.gov** (U.S. Open Data) https://www.data.gov/
- **WI Post High School Survey Data (Indicator 14)** https://www.indicator14wi.org/reports.statewide.php
- **Census Bureau Quick Facts Data** https://www.census.gov/quickfacts/fact/table/US/PST045217

Section 6 Resources

- **Data Driven: Making Student and School Data Accessible and Meaningful To Families, U.S. Dept. of Ed.**(video 1:20:00) https://www.youtube.com/watch?v=BF-UPuEMyS8
- **A Nonprofit Dashboard and Signal Light for Boards** https://blueavocado.org/board-of-directors/a-nonprofit-dashboard-and-signal-light-for-boards/
- **Data Visualization: User-Centered Design** https://blueavocado.org/leadership-and-management/data-visualization-user-centered-design/
- **What is Data?** (video 2:45) https://www.youtube.com/watch?v=EhcWQmg9EeE

- **Data Use** (Institute of Education Sciences) https://ies.ed.gov/ncee/edlabs/projects/data_use.asp
- **Sample Confidentiality Policy** http://www.thebuilders.com/site/publisher/files/Confidentiality_Policy.pdf
- **Constructing a Hypothesis** https://www.youtube.com/watch?v=iMVuPJc1waY
- **Continuous Improvement -A Tool Kit** https://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL_2021014.pdf
- **National SEPAC Guide** https://www.parentcenterhub.org/wp-content/uploads/repo_items/National_SEPAC_Guide_120218.pdf

Where to Go From Here?

11/4/2021:
7. The Role of Families on Groups
8. Skills for Serving on Groups

Register: http://wifacets.org/events

Thank you!
Please remember to complete the evaluation!

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