

Making Data Accessible, Understandable and Actionable for Families



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Serving on Groups That Make Decisions: A Guide for Families



Serving on Groups That Make Decisions

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?



Stages of Data Use

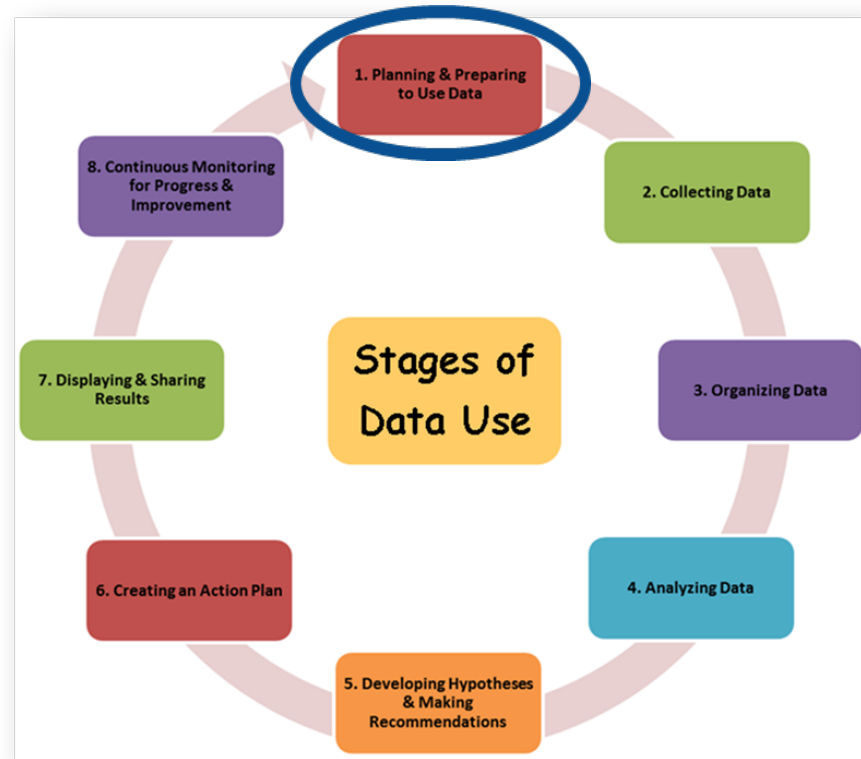
1. Planning & Preparing to Use Data
2. Collecting Data
3. Organizing Data
4. Analyzing Data
5. Developing Hypotheses & Making Recommendations
6. Creating an Action Plan
7. Displaying & Sharing Results
8. Continuous Monitoring for Progress & Improvement



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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



Stages of Data Use

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3. Organizing Data

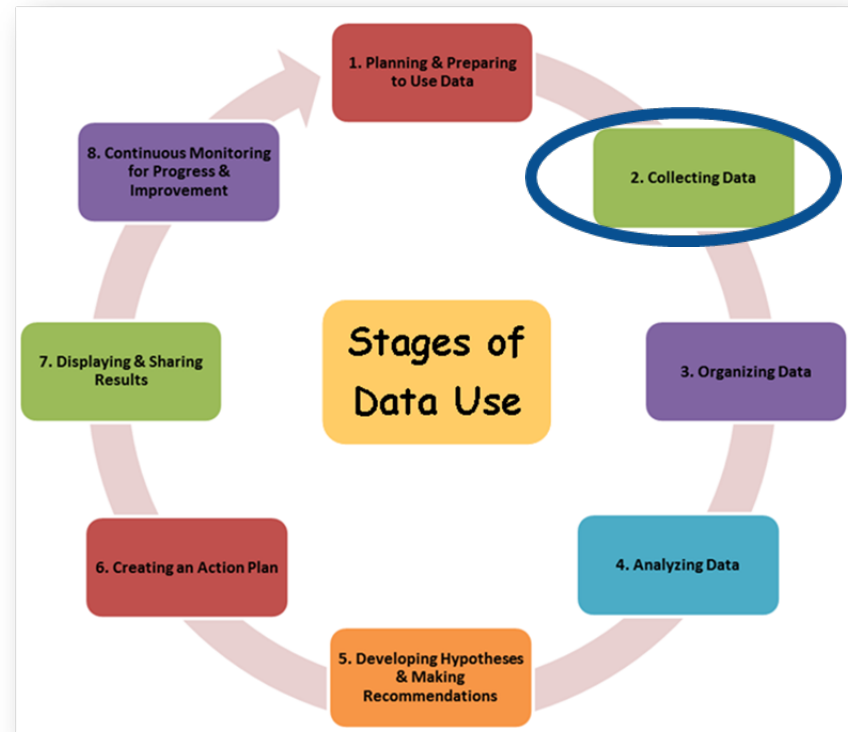
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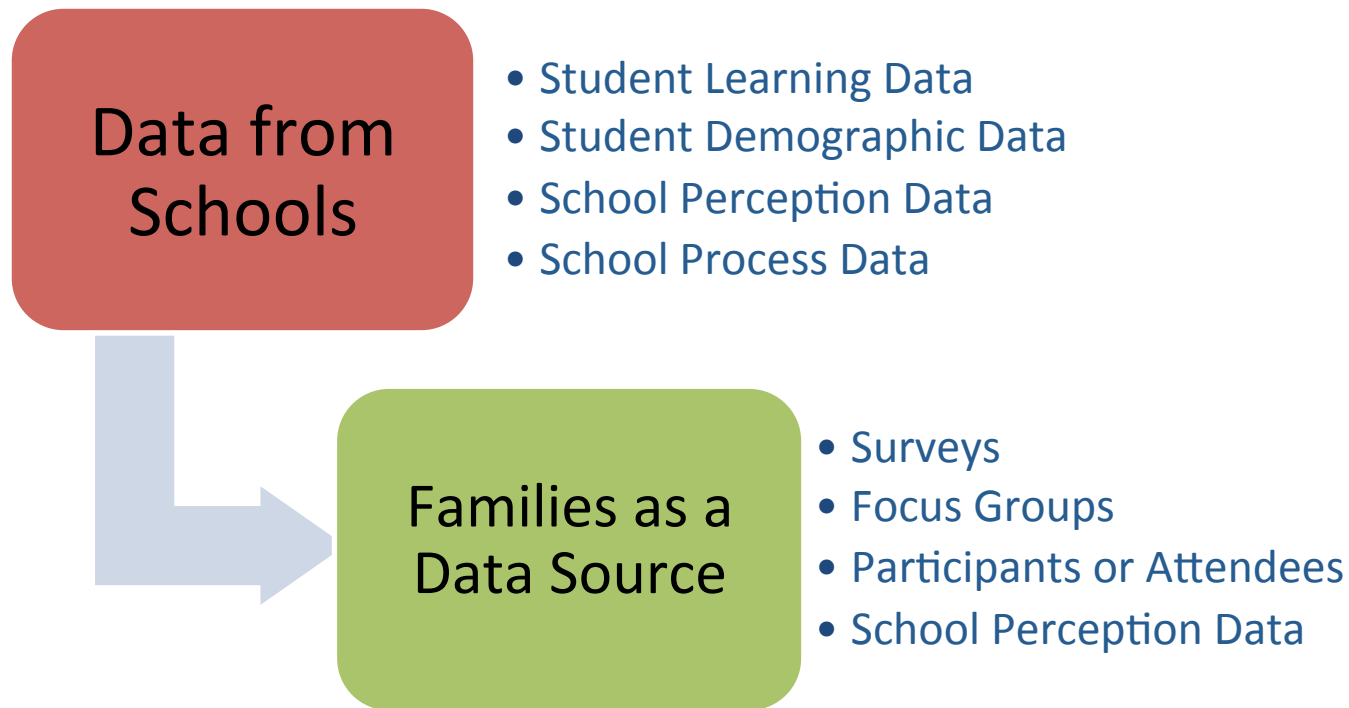
7. Displaying & Sharing Results

8. Continuous Monitoring for Progress & Improvement



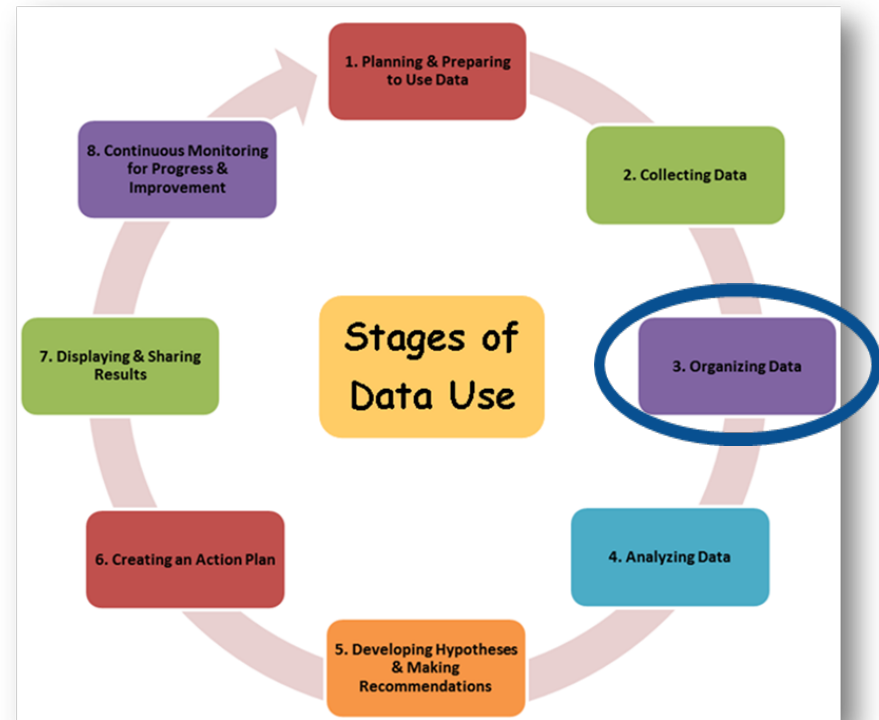
Stage 2: Collecting Data

Answer questions to make an informed decision and act.



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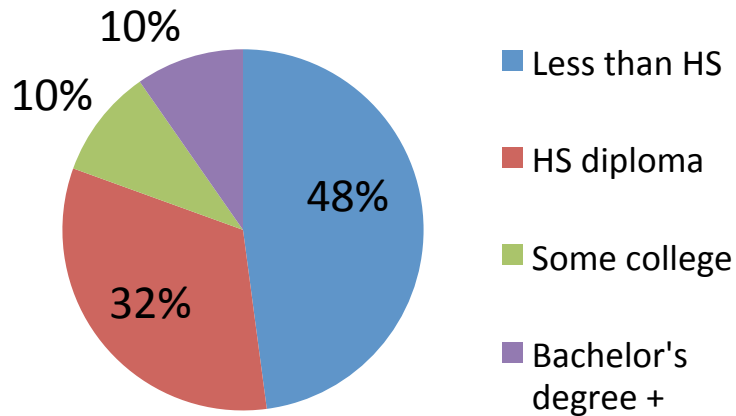


Stage 3: Organizing Data

Aggregated Data:

a whole set of data formed by combining several parts

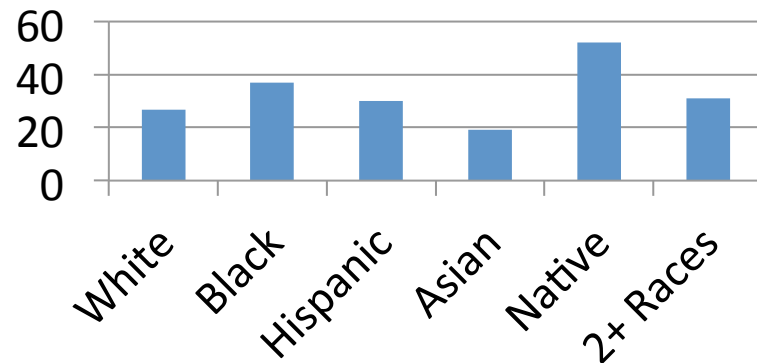
Youth 20-24 Neither Enrolled in School Nor Working



Disaggregated Data:

a whole set of data separated into its categories or subgroups

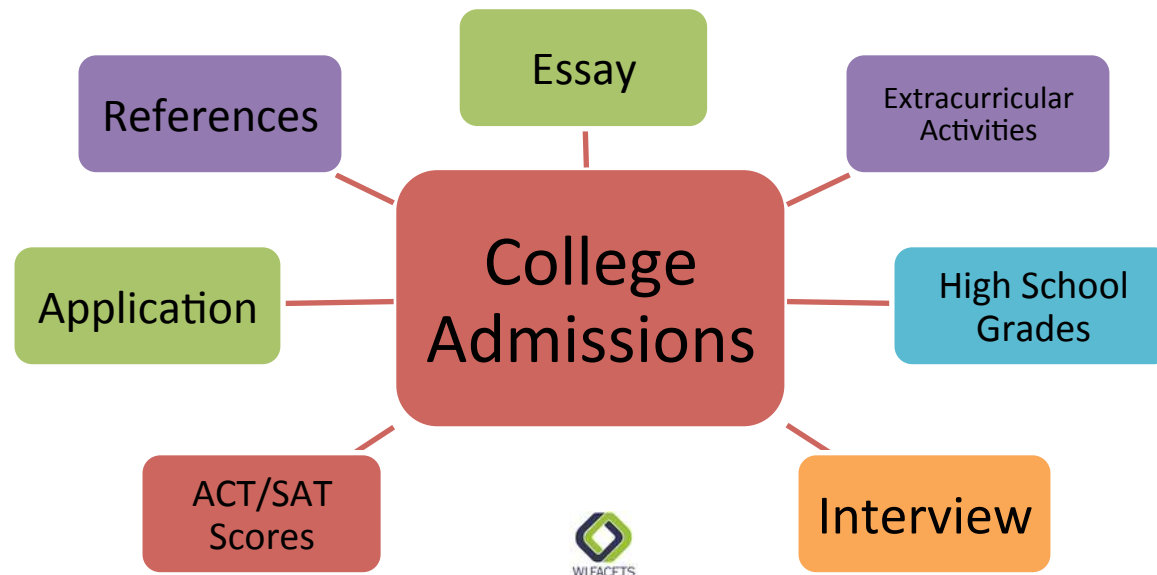
Youth 20-24 Neither in School Nor Working with HS Diploma by Race/Ethnicity



Stage 3: Organizing Data

Triangulated Data:

Use of multiple independent sources of data to establish the truth & accuracy of a claim.



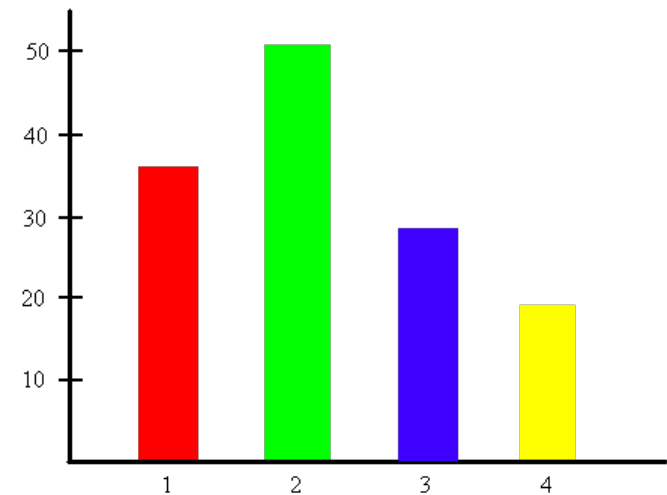
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Stage 3: Organizing Data

Tips for Interpreting Graphs

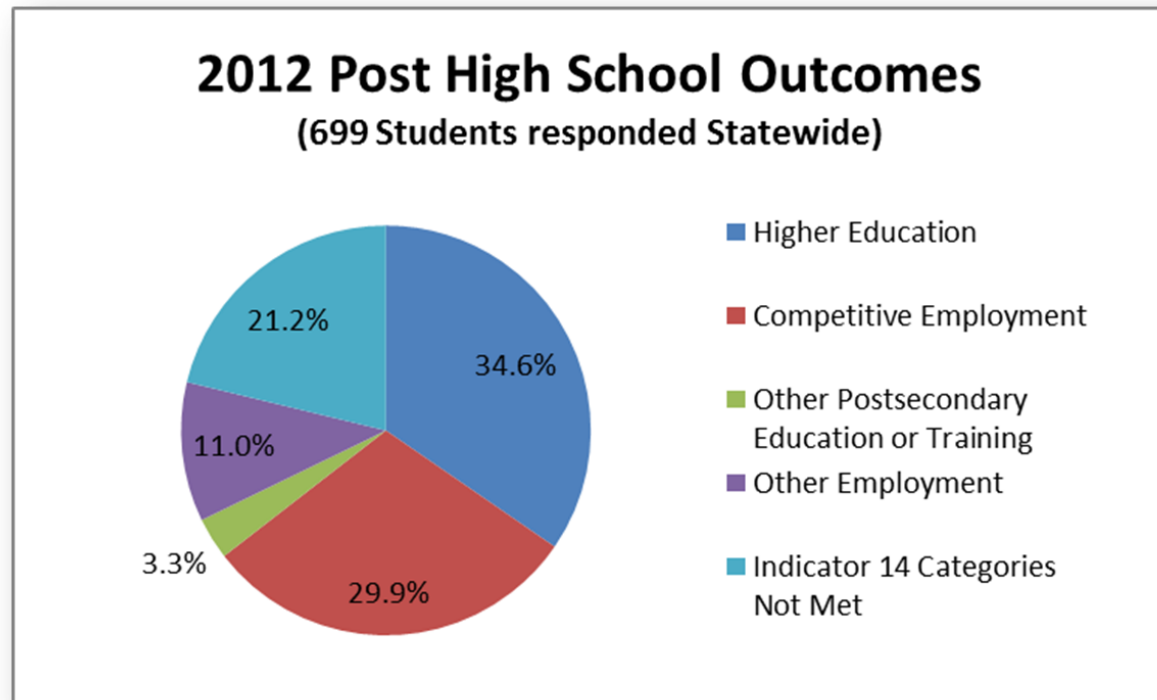
Read all labels.

- 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

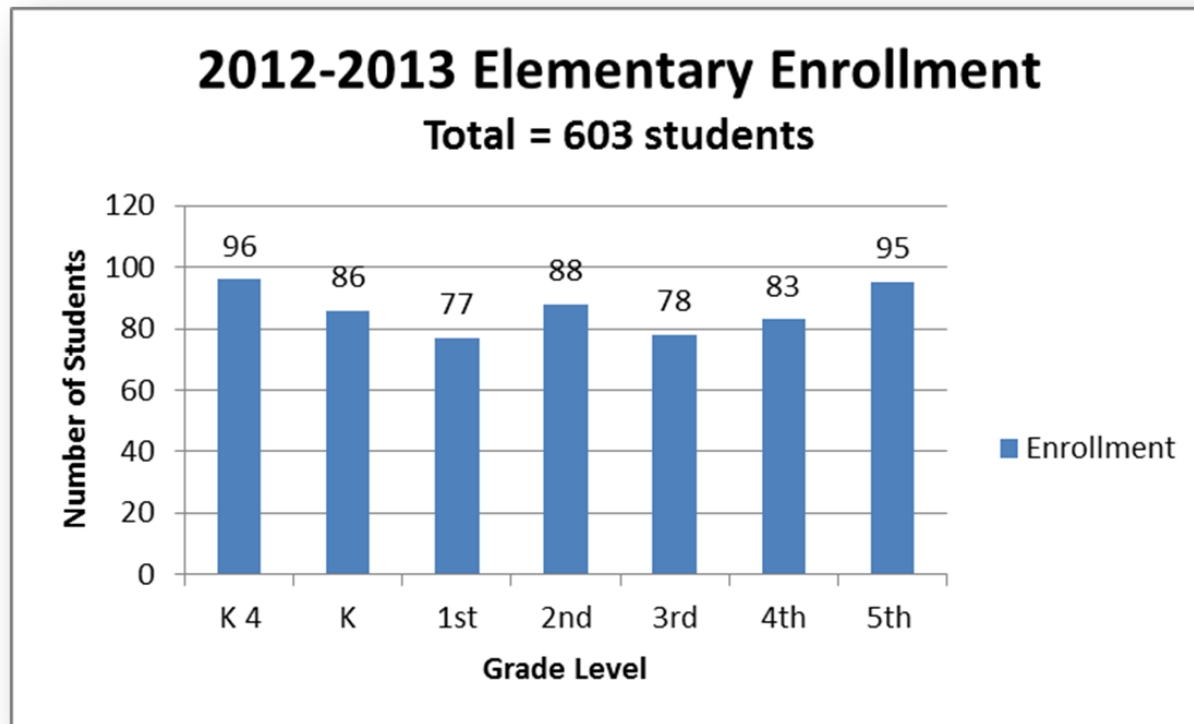
A Snapshot in Time



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Stages 3: Organizing Data

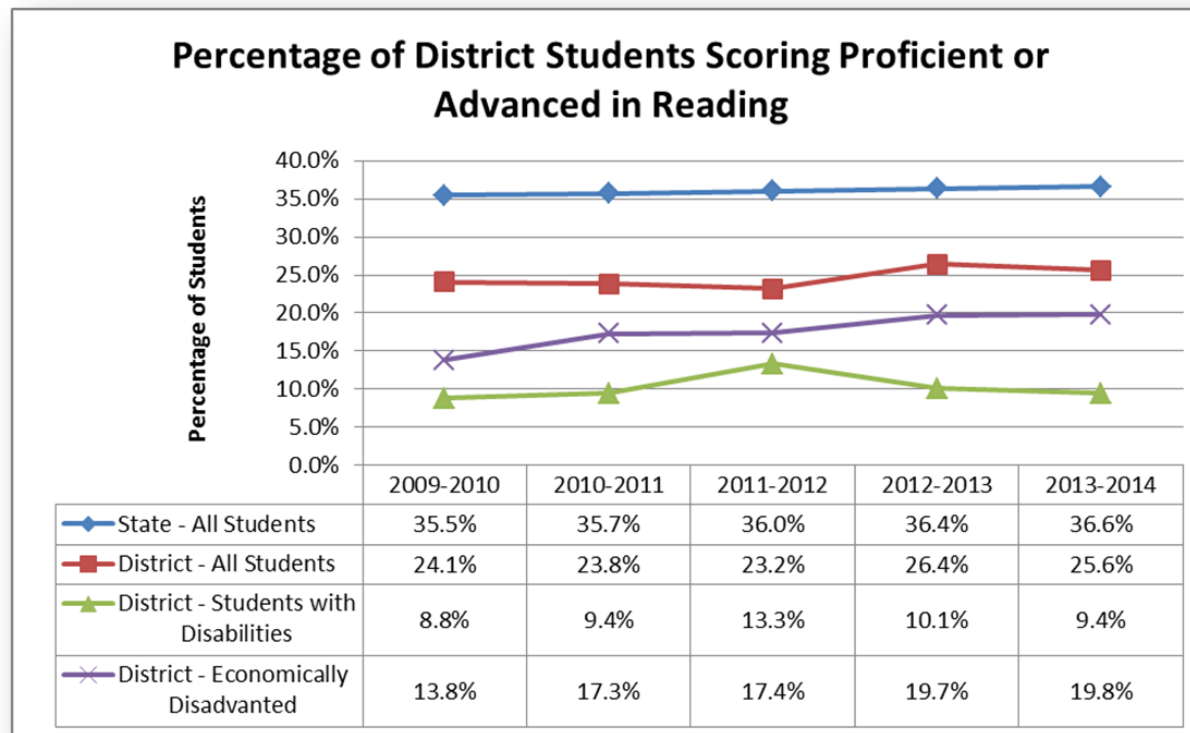
Comparisons



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Stages 3: Organizing Data

Trends



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Stage 3: Organizing Data

Tips to Validate the Findings

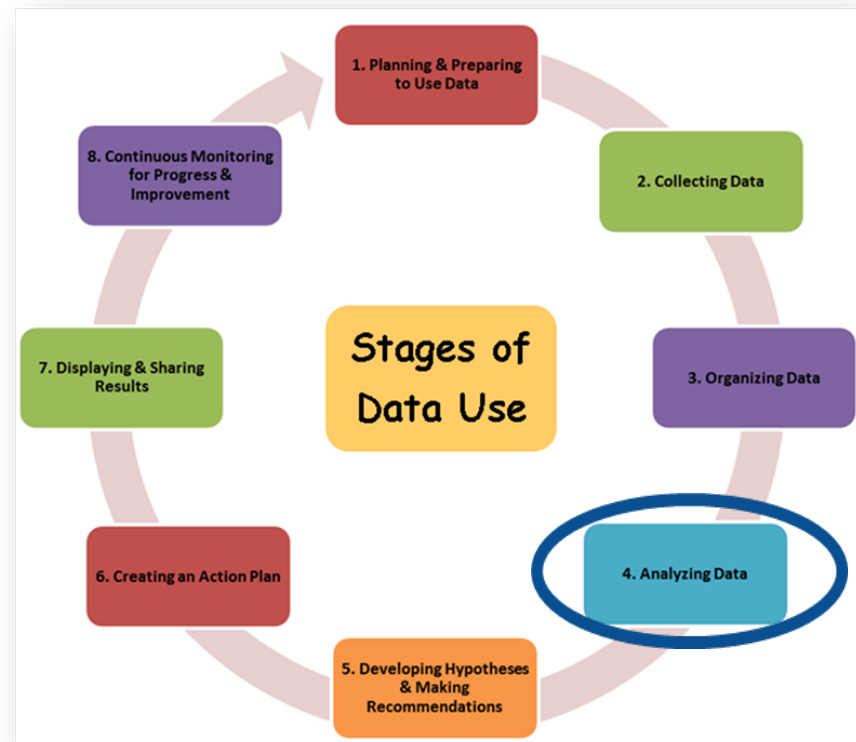
To make sure the data are sound:

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



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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



Stage 4: Analyzing Data



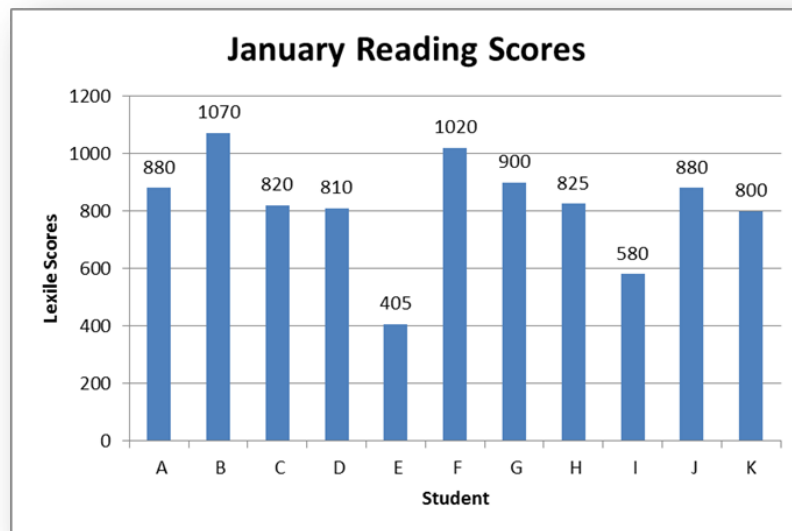
Terms when Working with Numbers

- MEAN – average of a group of numbers
- MEDIAN – middle value
- MODE – most frequent value
- RANGE – difference between lowest & highest values
- OUTLIER – very high or very low number
- STATISTICALLY SIGNIFICANT – results true & not because of chance



Stage 4: Analyzing Data

Examples of Working with Numbers

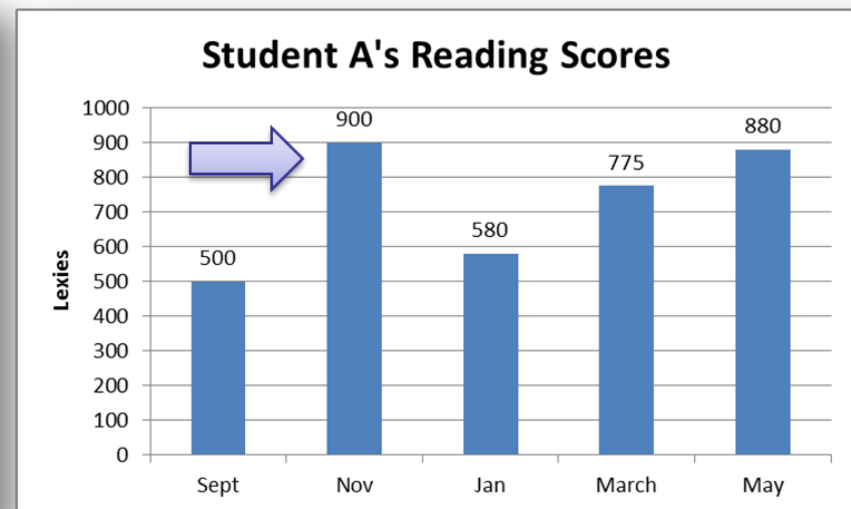


Mean = 817.3

Median = 825

Mode = 880

Range = 665

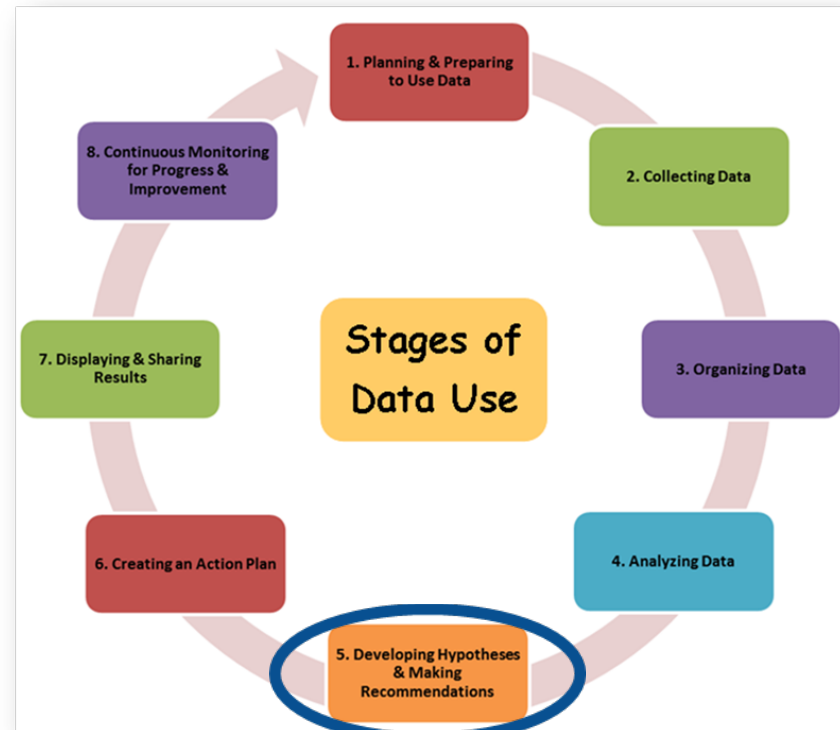


Outlier



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Stage 5: Developing Hypotheses & Making Recommendations

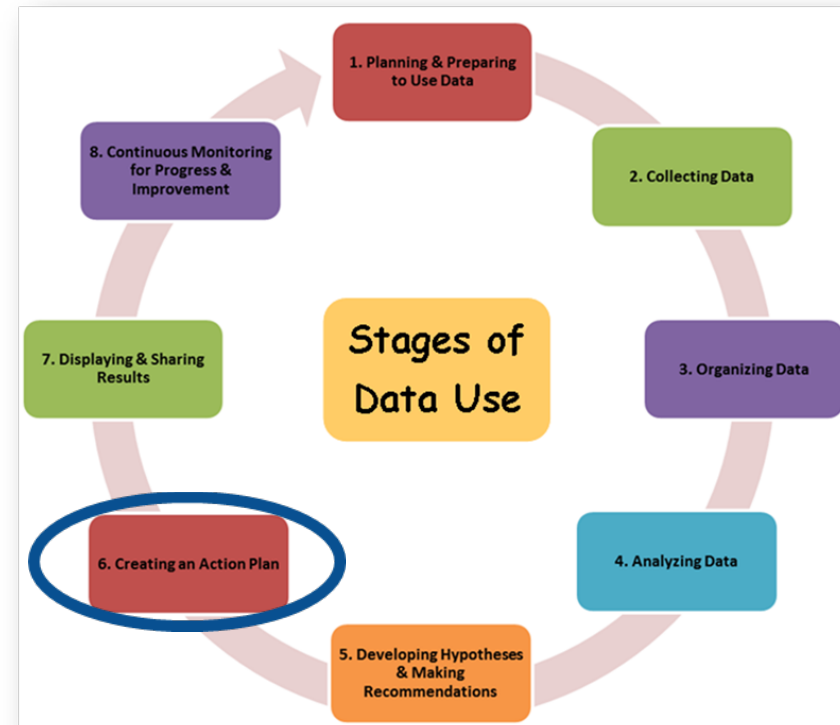
Hypotheses & Recommendations

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



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Stage 6: Creating an Action Plan

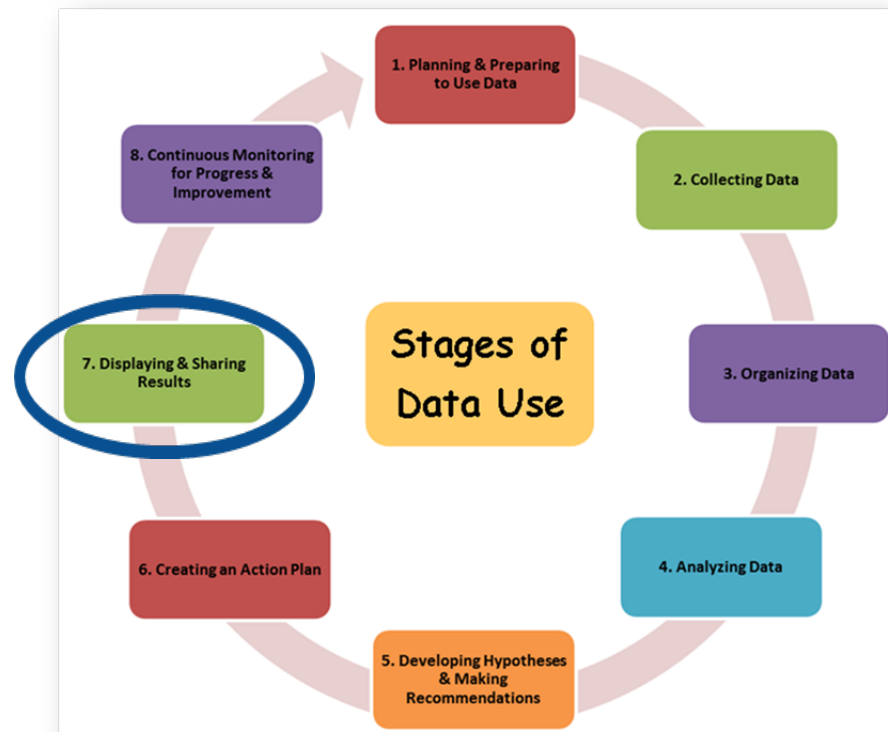


1. Bring key people together
2. Figure out:
 - What
 - Who
 - When
 - Where
 - Resources
 - Communication
3. Review completed action plan
4. Follow through
5. Communicate
6. Keep track of progress
7. Celebrate!



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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



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?

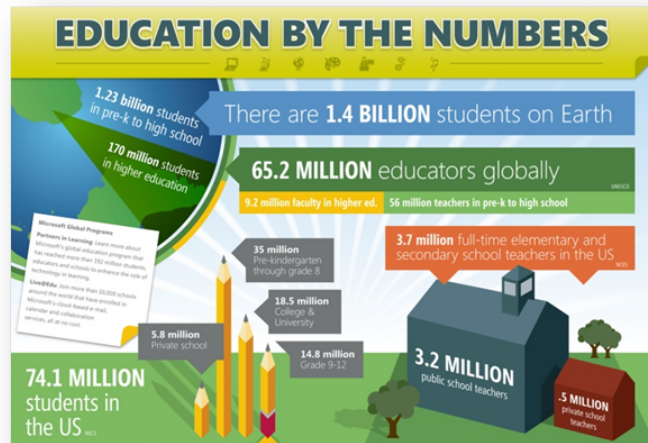


Stage 7: Displaying & Sharing Results

Make the Data Come Alive

Social Math

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



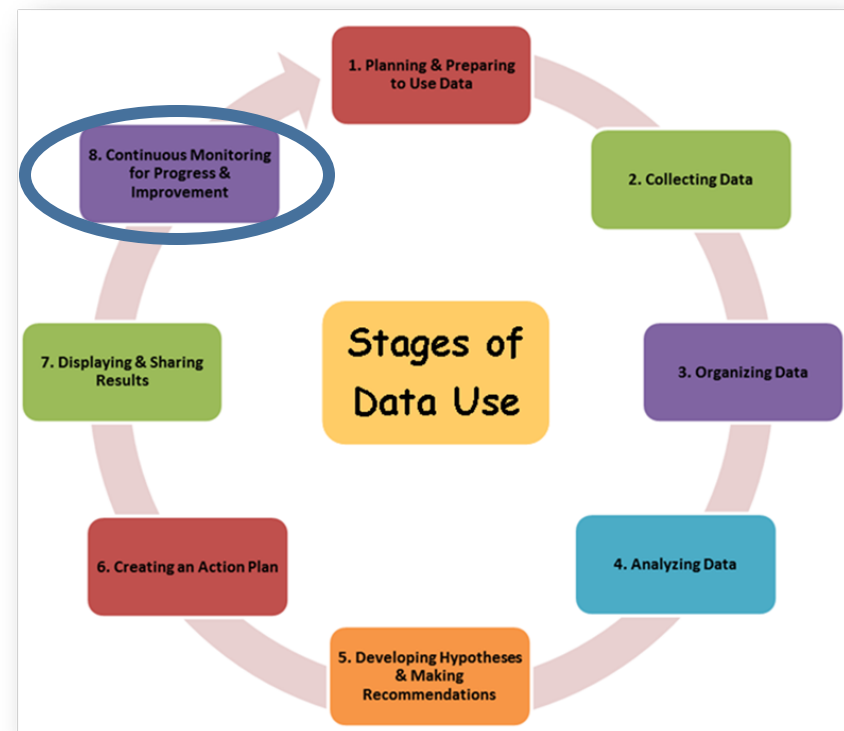
Data Stories

- 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



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?***



Serving on Groups That Make Decisions



Tool for Using Data

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Understanding Data as Information

Tool for Using Data
Page 1

Directions: This tool can be used individually or as a decision-making group to help in using data effectively.

STAGE 1: PLANNING & PREPARING TO USE DATA (page 38)
What is the question you start out with?

STAGE 2: COLLECTING DATA (page 39)

Describe the data you used. (Example: reading scores)	Where did you find the data? (Example: WISEdash)	Data as numbers (quantitative) X	Data as story or opinion (qualitative) X
1.			
2.			
3.			
4.			

Do you have reliable and valid data? YES ☐ NO ☐ NOT SURE ☐
Do you have all the data you need to answer your question? YES ☐ NO ☐ NOT SURE ☐
What other types of data would be helpful? (Examples: grades, surveys, assessments)

STAGE 3: ORGANIZING DATA (pages 40-44)
How is the data organized?
____ Snapshot in Time Trend Comparison Line Graph
____ Pie Chart Bar Graph Table
____ Aggregate Disaggregate Triangulated

Comments: _____

STAGE 4: ANALYZING DATA (pages 45-47)
Are there patterns in the data? YES ☐ NO ☐ NOT SURE ☐
What information is unclear or needs more clarification? _____

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Understanding Data

Tool for Using Data
Page 2

STAGE 5: DEVELOPING HYPOTHESES & MAKING RECOMMENDATIONS (page 48)
What conclusions are you making based on the data?
1) _____
2) _____
3) _____
4) _____
What other questions do you have now? _____
What will be included as recommendations for your action plan? _____

STAGE 6: CREATING AN ACTION PLAN (pages 49)
What are your goals? _____
How do you plan on achieving the goals? _____

STAGE 7: DISPLAYING & SHARING RESULTS (page 50-51)
What story does the data tell? _____
Are you sharing the data with? (Examples: school staff, students, community members) _____
What is the response to the data? _____

STAGE 8: CONTINUOUS MONITORING FOR PROGRESS & IMPROVEMENT
How often do you check how you're doing? (Example: Annual Report to Stakeholders) _____
How do you monitor your progress and improvement? (Examples: monthly, quarterly, annually) _____



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