



Using Data to Inform Decision-Making

Presented by:
Emilie Braunel
WI FACETS

 Serving on Groups That Make Decisions 


What is Data?

- Factual information
- Helps groups make decisions
- Must be:
 - reliable
 - valid
 - accessible




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Forms of Data





Quantitative Data

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



Qualitative Data

- Not something you count
- Examples are:
 - Family's story
 - Samples of a student's work

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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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Stage 1: Planning & Preparing to Use Data

> Some Ways of Planning and Preparing to Use Data

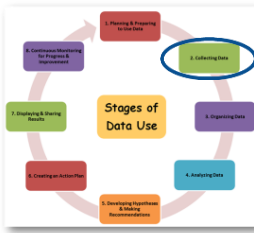
- Ask focusing questions
- Use a variety of methods
- Find data already out there
- Try to find gaps
- Pinpoint possible roadblocks
- Ask school staff

> Confidentiality

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Stage 2: Collecting Data

- **Data from Schools**
 - Student Learning Data
 - Student Demographic Data
 - School Perception Data
 - School Process Data
- **Ways Schools Can Use Families as a Source of Data**
 - Surveys
 - Focus Groups
 - Participants or Attendees

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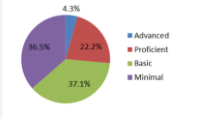
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Stage 3: Organizing Data

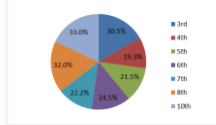
Aggregated Data:
a whole set of data formed by combining several parts

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

2012-2013 District Student Reading Achievement (1079 students)



Percentage of Students Scoring Proficient or Advanced (2012-2013)



Data & Graphs from WI DPI WISEdash
<http://wise.dpi.wi.gov/wisedash>

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Stage 3: Organizing Data

• **Triangulated Data:**

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



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Stage 3: Organizing Data

Tips for Interpreting All Graphs

Remember to read all of the labels on the presented graph or table.

Ask yourself:

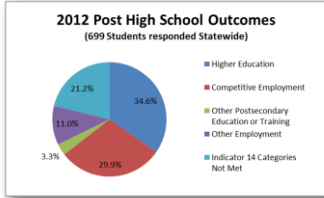
- What is in each column?
- What is in each row?
- What is the range of values?
- Does the data have a direct or indirect relationship?
- Do the lines have positive or negative slopes?
- Where was there the most change or growth?
- Where was there the least?

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Stage 3: Organizing Data

A Snapshot in Time

- Example: Pie Chart



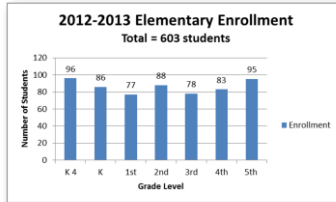
Data & Graphs from WI DPI WISEdash
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Stages 3: Organizing Data

Comparisons

- Example: Bar Graph



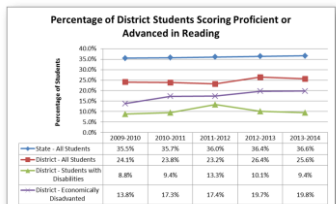
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Stages 3: Organizing Data

Trends

- Example: Line graph



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Stage 3: Organizing Data

➤ Validate the Findings

- Look for trusted sources
- Follow-up with questions to make sure data is accurate and understood
- Use many different ways of gathering data
- Make sure the group agrees and accepts your findings



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Stage 4: Analyzing Data

➤ Look for Patterns

- 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



Stage 4: Analyzing Data

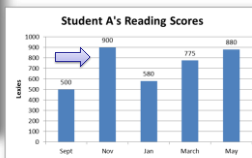
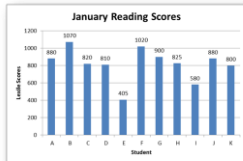
Working with Numbers

- 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

- Describe – understand why
- Interpret – look at other data
- Determine Meaning – ask additional questions
- Consensus – agree upon the conclusions
- Judgment – figure out possible solutions



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Stage 6: Creating an Action Plan

Action Planning

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



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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

- What is the purpose of your report?
- Does it need to provide information or to raise awareness?
- Will it be used to make decisions?
- What information is new and surprising?
- What does the audience already know about the topic?
- What level of information do they need?

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Stage 7: Displaying & Sharing Results

Make the Data Come Alive

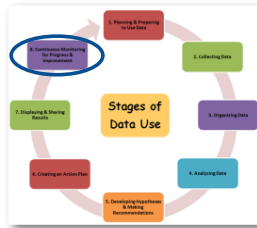
- Social Math
 - Relating data numbers to what is familiar and concrete to your audience.
- Data Stories
 - Find the compelling narrative.
 - Think about your audience.
 - Be objective.
 - Don't censor the data.
 - Explain the data.



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Stage 8: Continuous Monitoring for Progress & Improvement



- **Check Your Work**
 - Regularly revisit the action 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

Effective, continuous progress monitoring often addresses questions such as:

- 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?



Review



Section 6: Understanding Data as Information

Tool for Using Data



Section 6: Understanding Data as Information

How can I learn more about data that groups use?

- Ask if groups use data to make informed policy decisions
- Ask for copies of past collected data
- Ask how the results are usually reported back to the groups
- Ask if training about data is available
- ASK, ASK, ASK!



Serving on Groups That Make Decisions: A Guide for Families

- Guidebook Sections
 - 1. Opportunities to Get Involved
 - 2. Types of Groups
 - 3. Processes Groups Use
 - 4. Tools Groups Use
 - 5. Tips and Strategies for Groups
 - 6. Understanding Data as Information
 - 7. The Role of Families on Groups
 - 8. Skills for Serving on Groups



For more information, explore:
www.servingongroups.org



Thank you!

Please remember to complete the evaluation!



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