



# Governor's Institute for Data Driven Decision Making

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# Two Important Elements

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- Create a culture in which you use data to drive decisions
    - Can you point to any decision in your school that ever was made on the basis of data?
  - Interpret the data correctly
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# Point from Yesterday

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- Committee—A group of people who individually can do nothing, but as a group decide that nothing can be done  
--Fred Allen
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# Day's Activities

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- Look for trends in School A reports, together
  - Look for trends in School B reports, each table individually
  - Contrast School A and School B, together
  - Look for trends in School C reports, individually or as district teams
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# Goals

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- Locate notable trends in data
  - Do not overinterpret differences that might be due to sampling error
  - Be cautious about inferring causal relationships
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# Example 1

School	2000			2001		
	Enr.	Test	%	Enr.	Test	%
A	117	107	47	130	129	52
B	55	55	58	60	60	52
C	356	354	54	363	361	55

# Rule # 1

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- If you see something in a report that you are seeing for the first time that does not square with your own experiences, question it
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# Rule # 1A

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- If you see the same thing the second time in a report, pay attention to it
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# Be Comfortable with the Reports

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- Understand the assessment program
    - Test Design
    - Test Format
  - Understand where the numbers come from
    - Scaled scores
    - Performance Levels
    - Similar schools
    - Error Bands
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# Know The Limitations

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- This is only a test...
  - What's included in the reports?
  - What's not included in the reports?
  - What's not included in the assessment?
  - What other resources are available?
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# What's not included in the reports?

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- Performance in previous years
    - Is performance improving?
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# Know Your School

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- What are your expectations?
  - Attitude toward the assessment
  - Who was tested? Who was not tested?
  - What are your strengths and weaknesses?
  - What new programs or approaches have been introduced?
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# Review of School A

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- Number of students tested
  - Percentages of students in each demographic
  - Scaled scores for Total Reading and Total Math the same
    - Both below district and state averages
    - Both within similar schools band
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# Performance Levels

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- Percentage of students Below Basic in math higher than state
    - How many students is that?
    - In 2000, percent in Bottom Group in math was *lower* than the state average
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# Academic Standard Results

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- 2.4 Mathematical Reasoning and Connections
    - Items: Multiple-Choice 12, Open-Ended 1
    - School: 1230
    - State: 1310
  - 2.5 Mathematical Reasoning and Connections
    - Items: Multiple-Choice 0, Open-Ended 13
    - School: 1380
    - State 1330
  - 2000
    - 2.4 = 1320; 2.5 = 1360
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# Performance on Open-Ended Items

## What Does the 1380 Represent?

Level of Response	School	State
Advanced Understanding, Excellent	9	7
Satisfactory Understanding	20	14
Almost Satisfactory Understanding	25	24
Partial Understanding	27	27
Minimal Understanding	11	16
Incorrect	8	10

# Interpreting Questionnaire Items

## Calculator Usage

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- Think about the questions on **this** test for which you were permitted to use a calculator. For about how many of these did you use a calculator to find your answer?
  - Response: *For at least half of the questions*
    - School 34%, District 35%, State 24%
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# Questions beyond the Report

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- How many test questions required the use of a calculator?
  - Which students tended to use a calculator the most?
  - Did the use of a calculator help or hurt student performance?
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# Reading

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- No particular strengths or weaknesses
  - Performance on open-ended worse than state
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# Reading Strategies Used 'Almost Always' More Often at the School than the State

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- Before reading, I ask myself questions that I think may be answered by the story (37% v. 19%)
  - I go back and reread parts of stories that do not seem to match what I already know about the topic (44% v. 30%)
  - When I know that my mind is wandering, I go back and reread. (61% v. 46%)
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# Interpreting Questionnaire Items

## Reading Strategies

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- Which strategies are *almost always* applied?
  - Which strategies are applied more/less at the school than the district or state?
  - How often *should* the strategies be applied?
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# IEP

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- School: 12 percent
  - State: 11 percent
  - IEP students in school 60 SS points below IEP students statewide in math, but only 10 in reading
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# Other Demographics

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- Is 0 correct?
  - Ethnic groups in school all outscore statewide averages for their group
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# Questions about the Use of Accommodations

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- Is reported use of accommodations consistent with students' IEPs?
  - Is reported use of accommodations by students with an IEP consistent with district and state?
  - How did students who received accommodations perform on the test?
  - How many accommodations did each student receive?
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# Interpreting School Performance

Reading Performance	State	School A	School B
Advanced	20%	16%	15%
Proficient	36%	31%	40%
Basic	21%	26%	20%
Below Basic	23%	26%	25%
Totals	100%	100% (n=129)	100% (N=60)
Scaled Score	1310	1290	1300

# Additional Information

## Part 1

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- Similar Schools Band:
    - School A: 1290-1320
    - School B: 1340-1390
  - Racial/Ethnic Breakdown:
    - School A: White 32%, Minority 64%, Unknown 4%
    - School B: White 70%, Minority 23%, Unknown 7%
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# Additional Information

## Part 2

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- Economically Disadvantaged:
    - School A: 0%
    - School B: 40%
  - Non-IEP v IEP:
    - School A: Non-IEP 88%, IEP 12%
    - School B: Non-IEP 65%, IEP 35%
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# Results for Non-IEP Students

Reading Performance	State	School A	School B
Total Scaled Score	1310	1290	1300
Population			
Non-IEP	89%	88%	65%
IEP	11%	12%	35%
Scaled Score			
Non-IEP	1340	1310	1390
IEP	1110	1070	1130

# Results for Non-white Students

Reading Performance	State	School A	School B
Total Scaled Score	1310	1290	1300
Population			
White	74%	32%	70%
Non-white	?	?	?
Scaled Score			
White	1350	1360	1330
Non-white	?	?	?

# Results for Non-white Students

Reading Performance	State	School A	School B
Total Scaled Score	1310	1290	1300
Population			
White	74%	32%	70%
Non-white	26%	68%	30%
Scaled Score			
White	1350	1360	1330
Non-white	1200	1260	1230



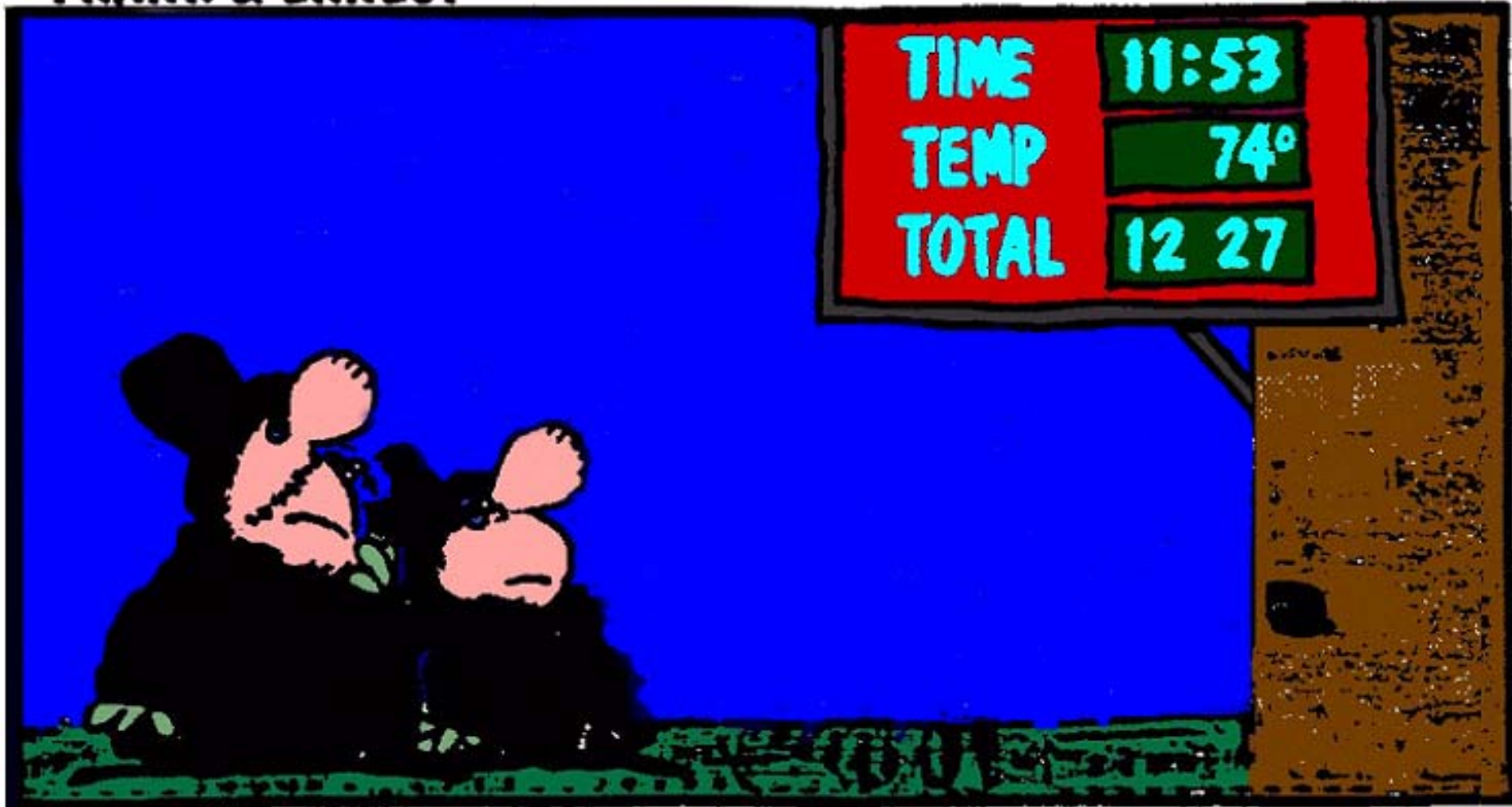
# Difference Needed for a “Statistically Significant” Result

Number Included	PSAA SS Points	Percentage
20	93	31
50	59	20
200	29	10



# Misusing Data

FRANK & ERNEST



# “Closing the Gap”

	Year 1
Group A	40
Group B	60

# “Closing the Gap”

	Year 1	Year 2
Group A	40	50
Group B	60	?

# “Closing the Gap”

	Year 1	Year 2
Group A	40	50
Group B	60	70

# “Closing the Gap”

	Year 1	Year 2	Year 3
Group A	40	60	90
Group B	60	80	?



# Understanding Subgroup Data

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- IEP: 12%
- Title I: 25%
- LEP: 1%
- Economically Disadvantaged: 22%
- Black: 11%
- Other Minority: 9%

‘Total’ in Subgroups: 80%

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# How much overlap is there among subgroups?





# What other 'subgroups' are there in the school?

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- Students in the school less than one year
  - Students from different feeder schools
  - Students in new or special programs
  - Students participating in extracurricular activities
  - 'Schools within the School' or teams
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