



Governor's Institute for Data Driven Decision Making

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Two Important Elements

- 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 This Morning

- 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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Afternoon's Activities

- 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

- 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

- 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

- If you see the same thing the second time in a report, pay attention to it
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Review of School A

- 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

- 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

- 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
Top 3 Categories	54	45
Bottom 3 Categories	46	53

Interpreting Questionnaire Items

Calculator Usage

- 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

- 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

- 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

- 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

- 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

- 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

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

- 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

- 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

- 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



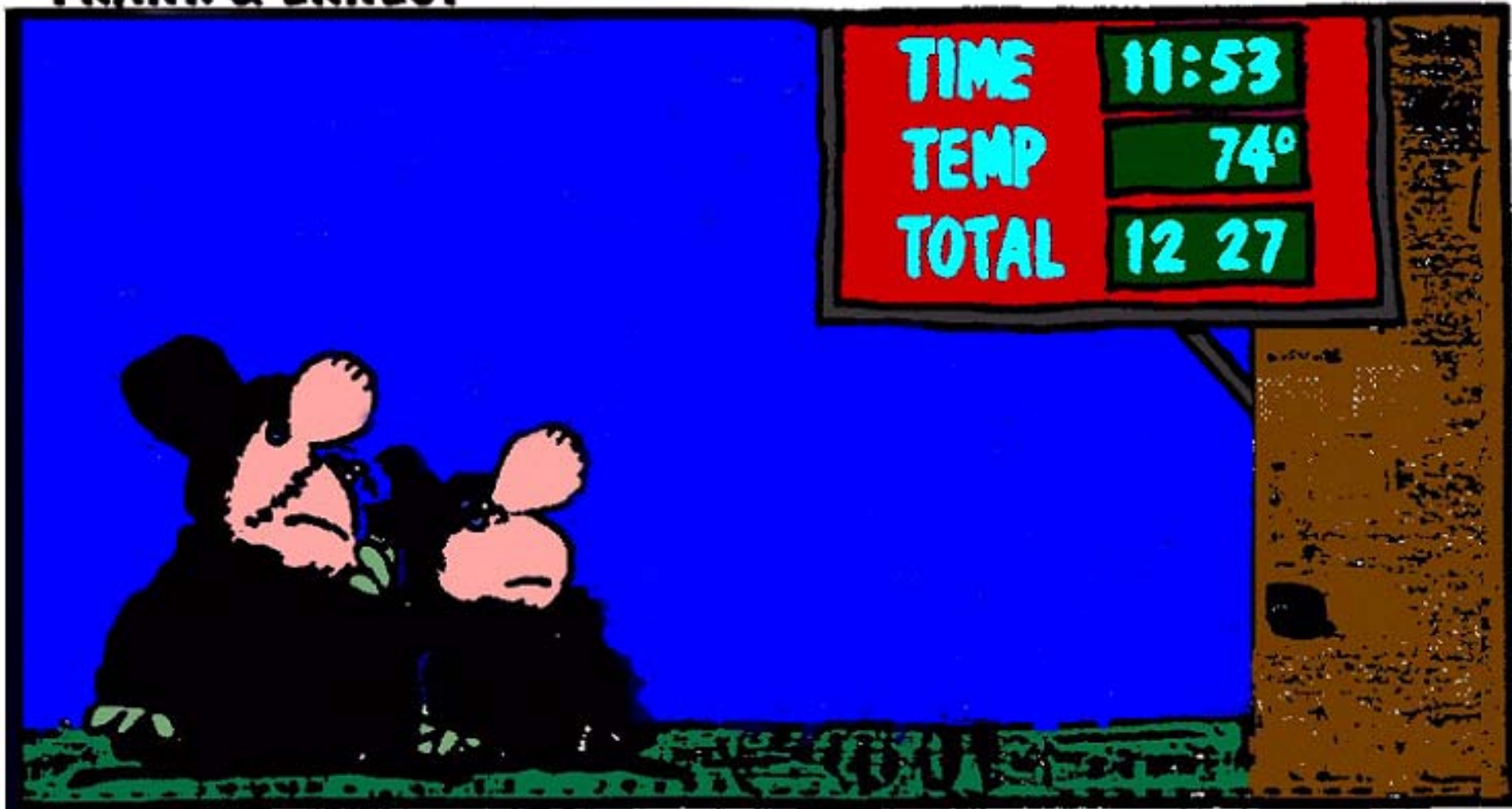
Difference Needed for a “Statistically Significant” Result

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	?

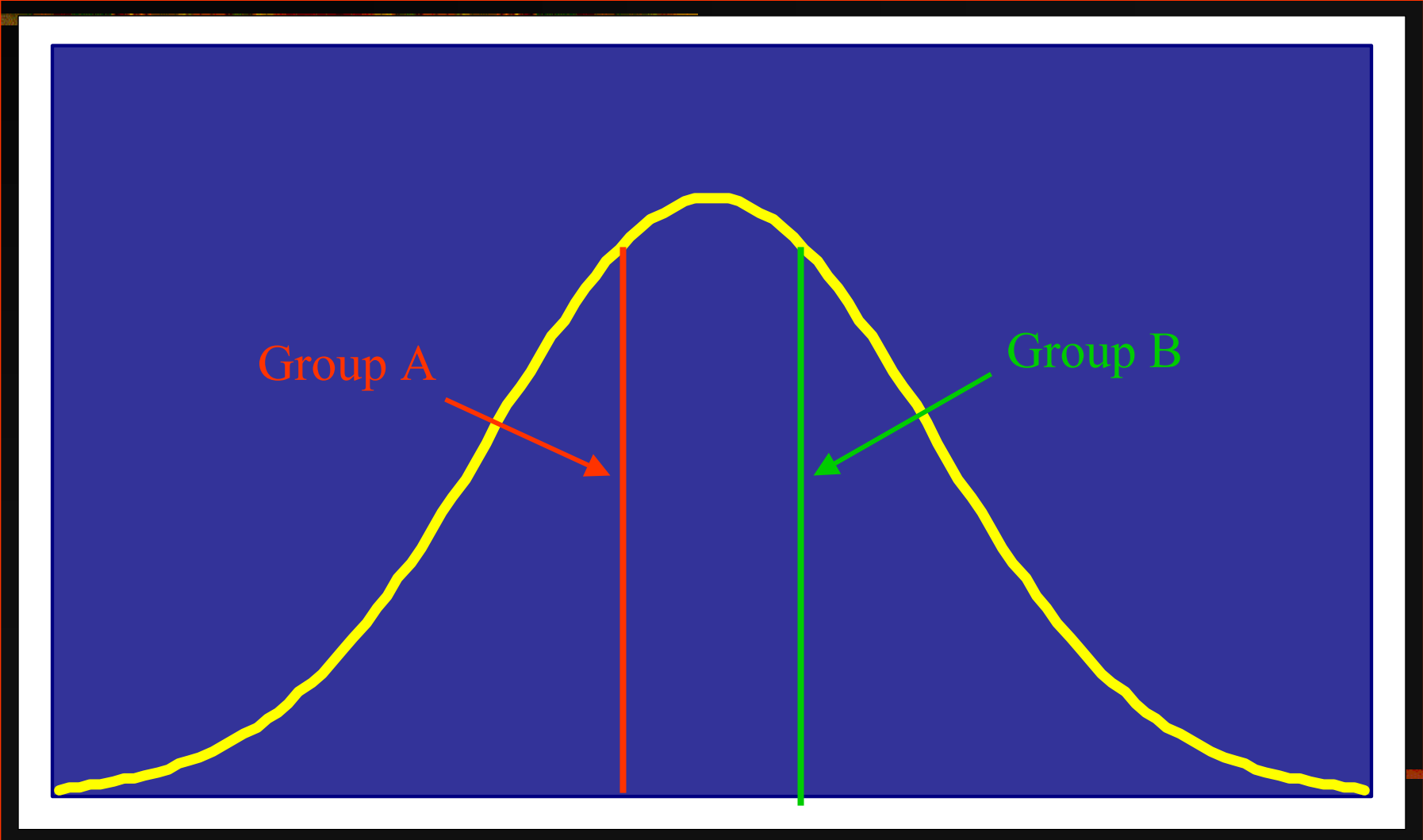
“Closing the Gap”

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

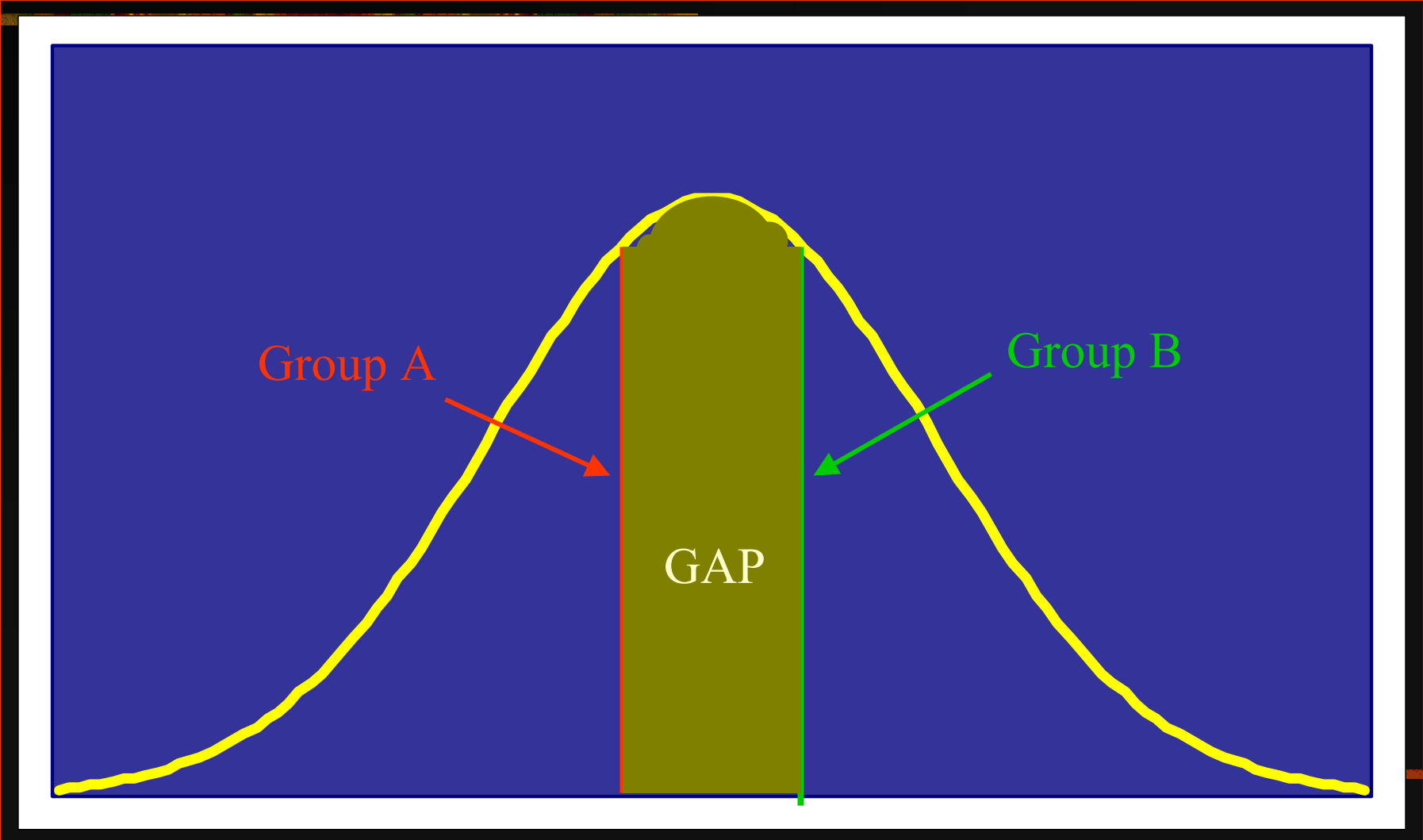
“Closing the Gap”

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

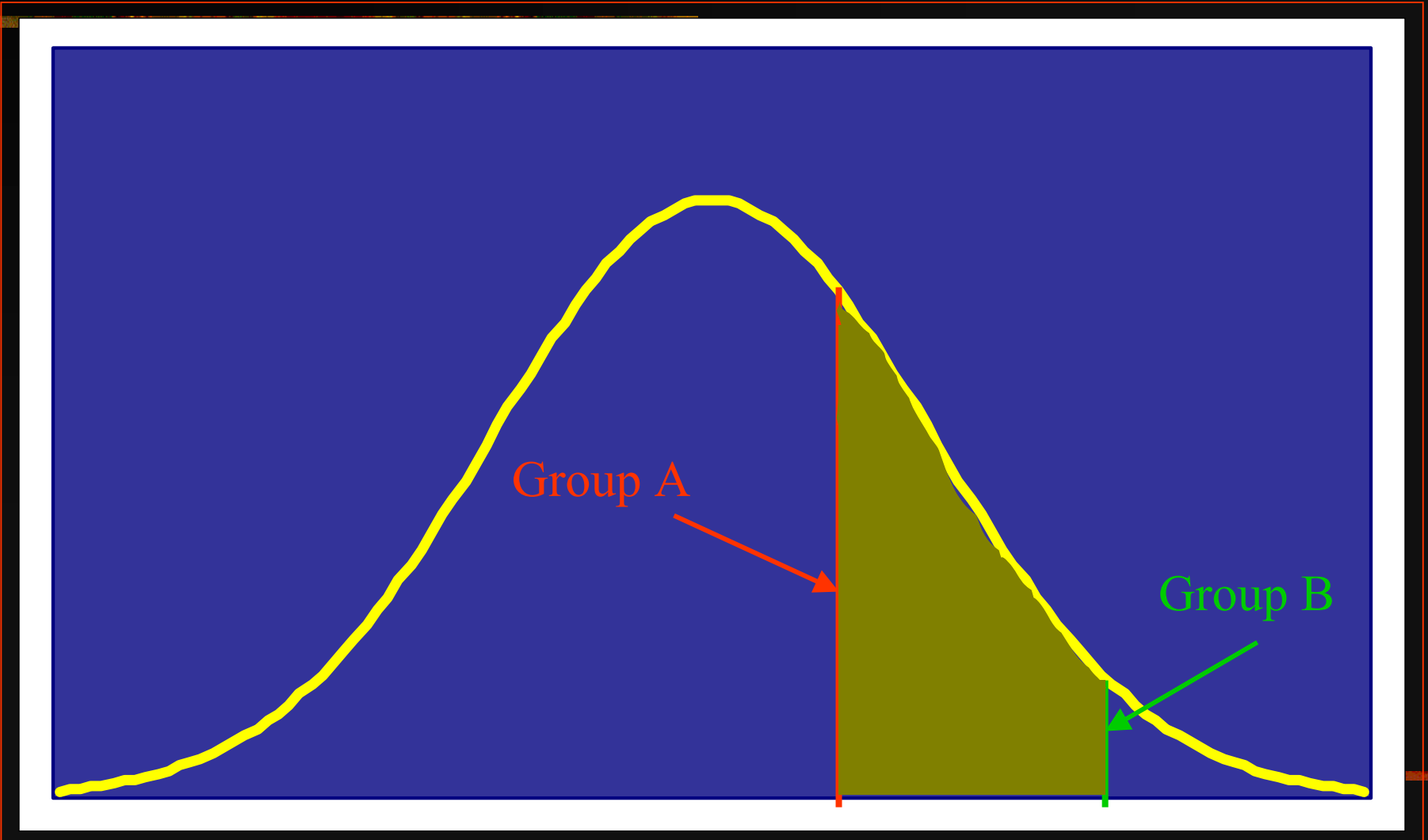
Initial Gap



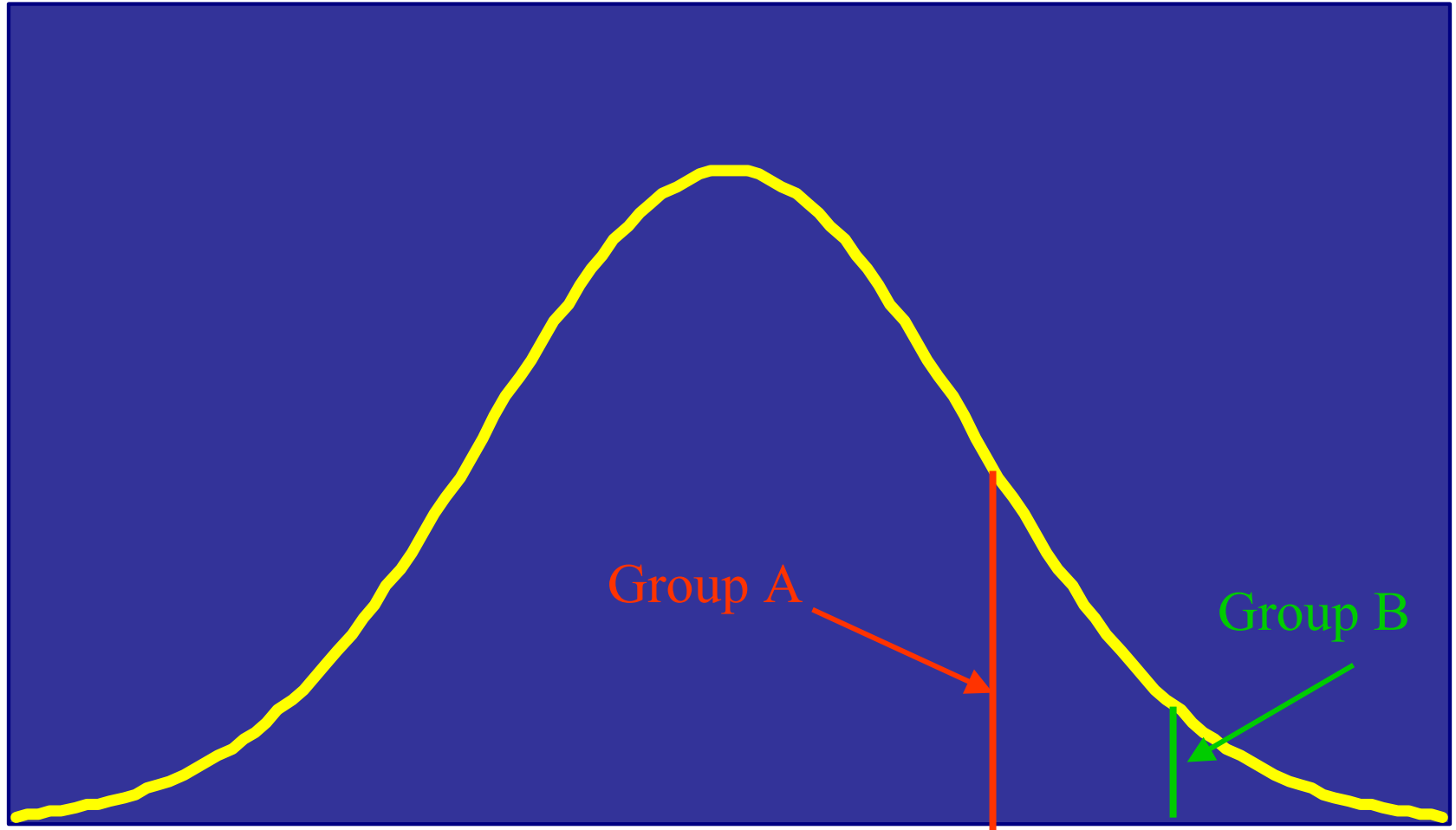
Initial Gap



Constant Percentage



Constant Gap



“Closing the Gap” in Texas

Year	White	Black	Gap
1994	66	31	35
1997	80	52	28
2000	89	67	22

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