



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

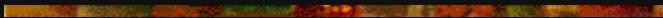
Reading Performance	State	School A	School B
Total Scaled Score	1310	1290	1300
Population			
Non-IEP	89%	88%	65%
IEP	11%	12%	35%
Scaled Score			
Non-IEP	1340	1310	1390
IEP	1110	1070	1130

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



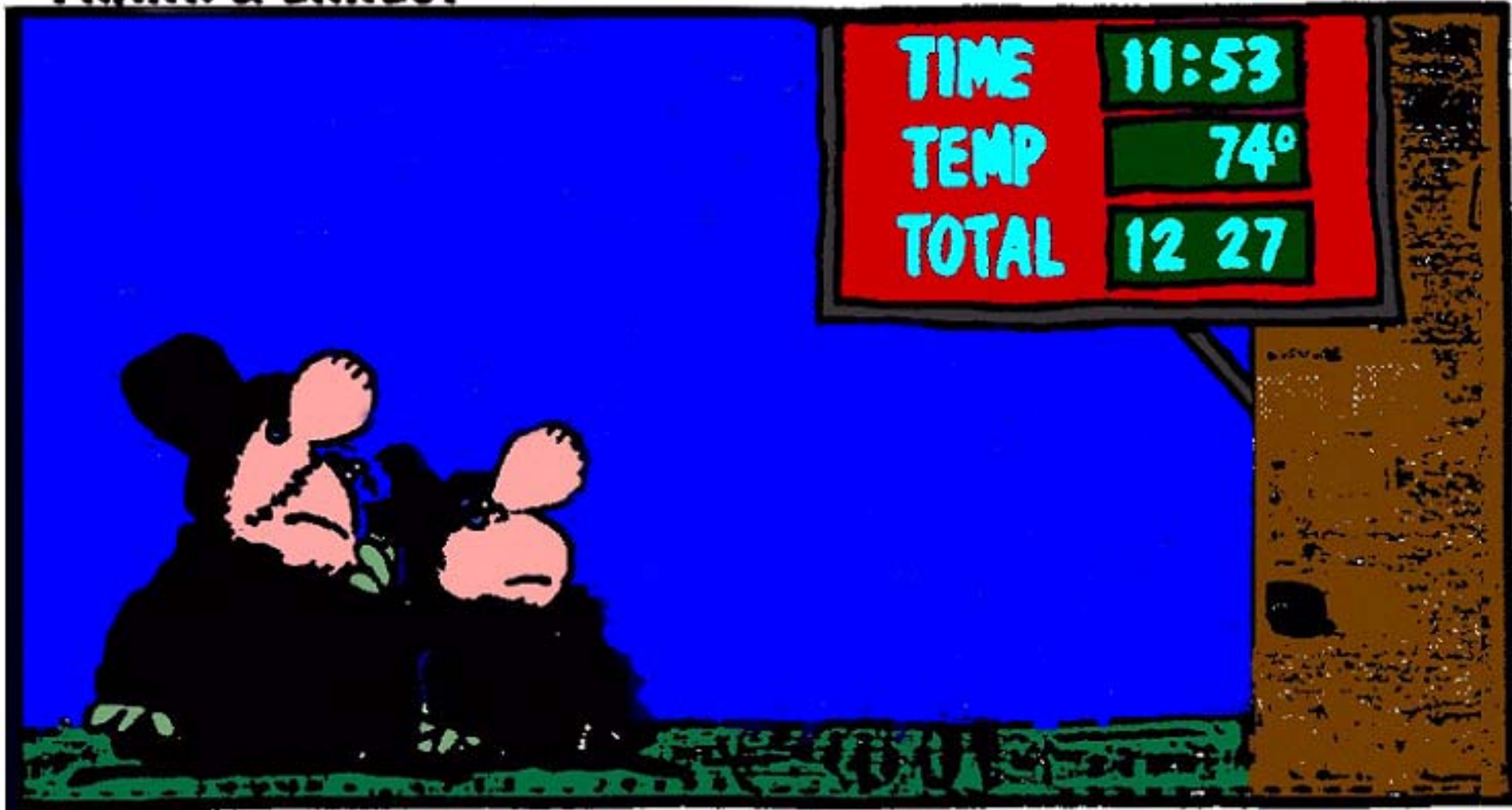
Difference Needed for a “Statistically Significant” Result

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	?

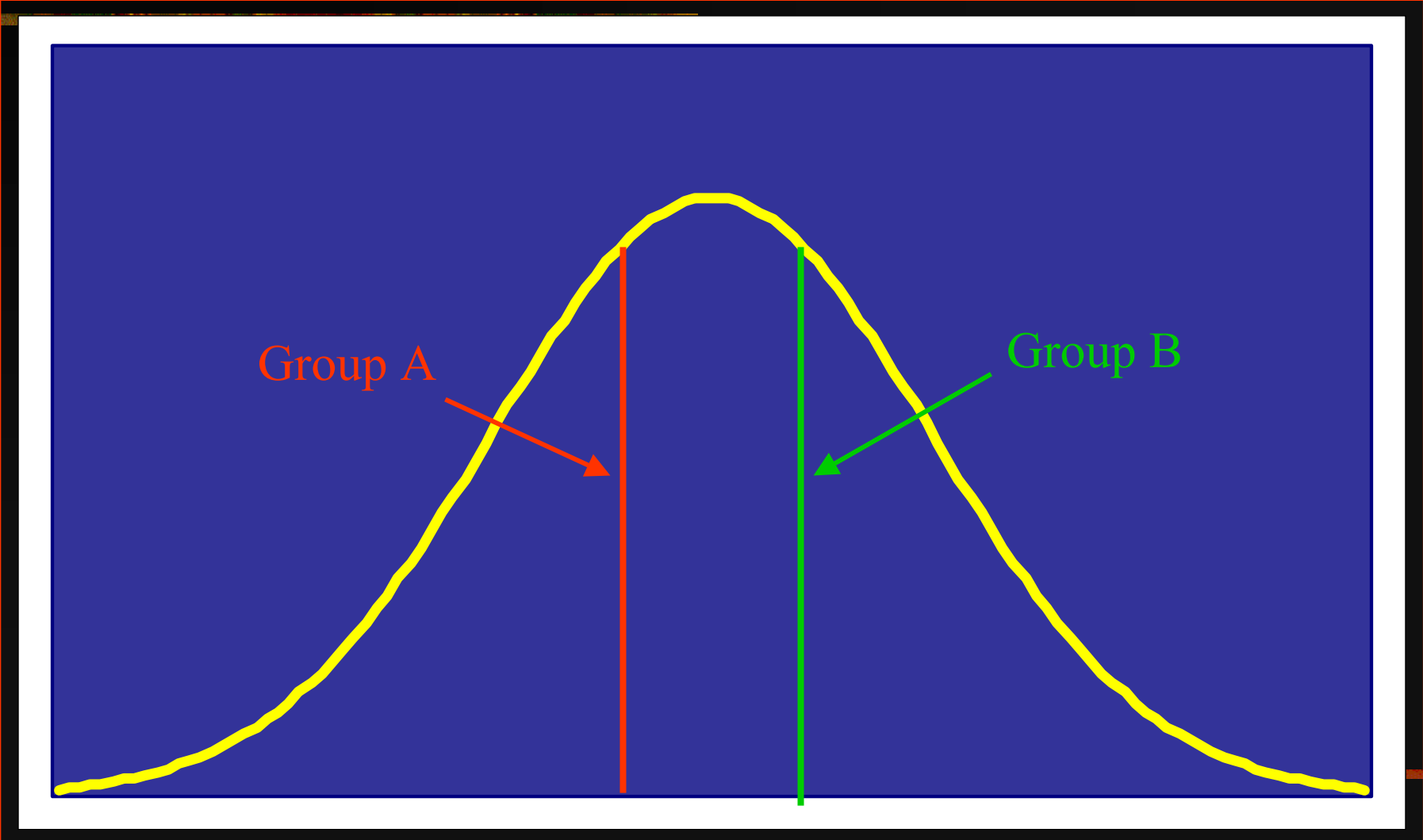
“Closing the Gap”

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

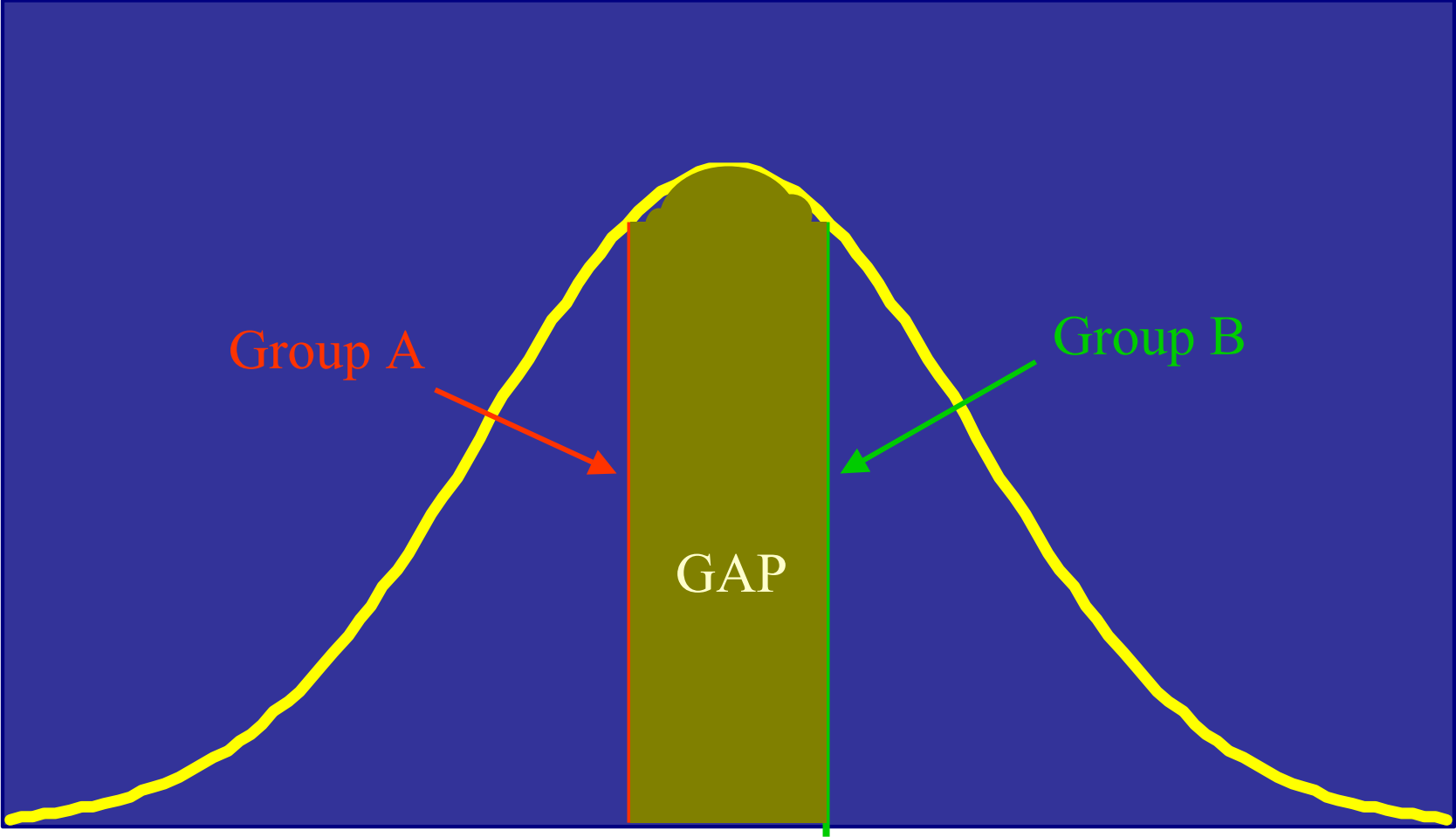
“Closing the Gap”

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

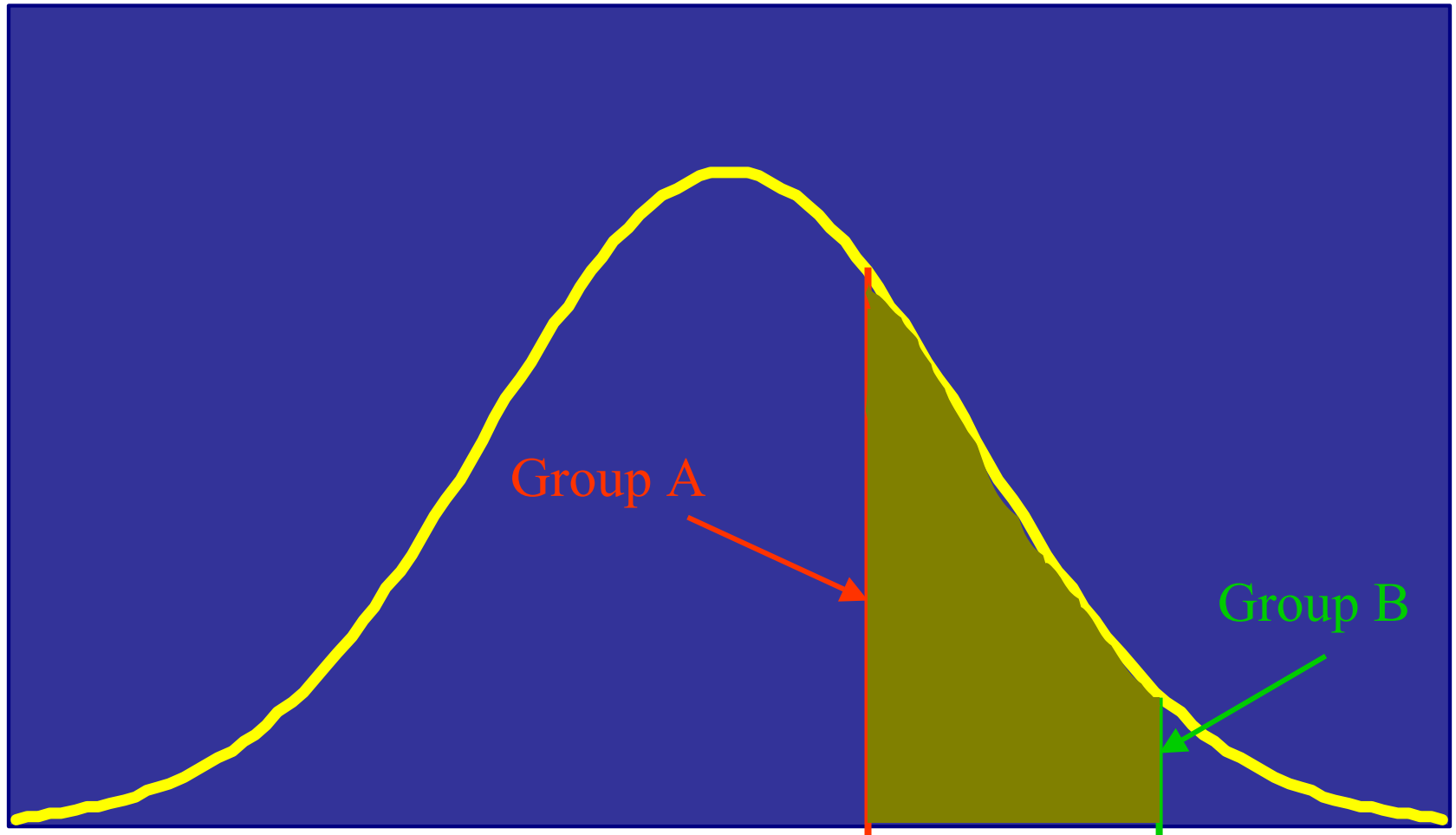
Initial Gap



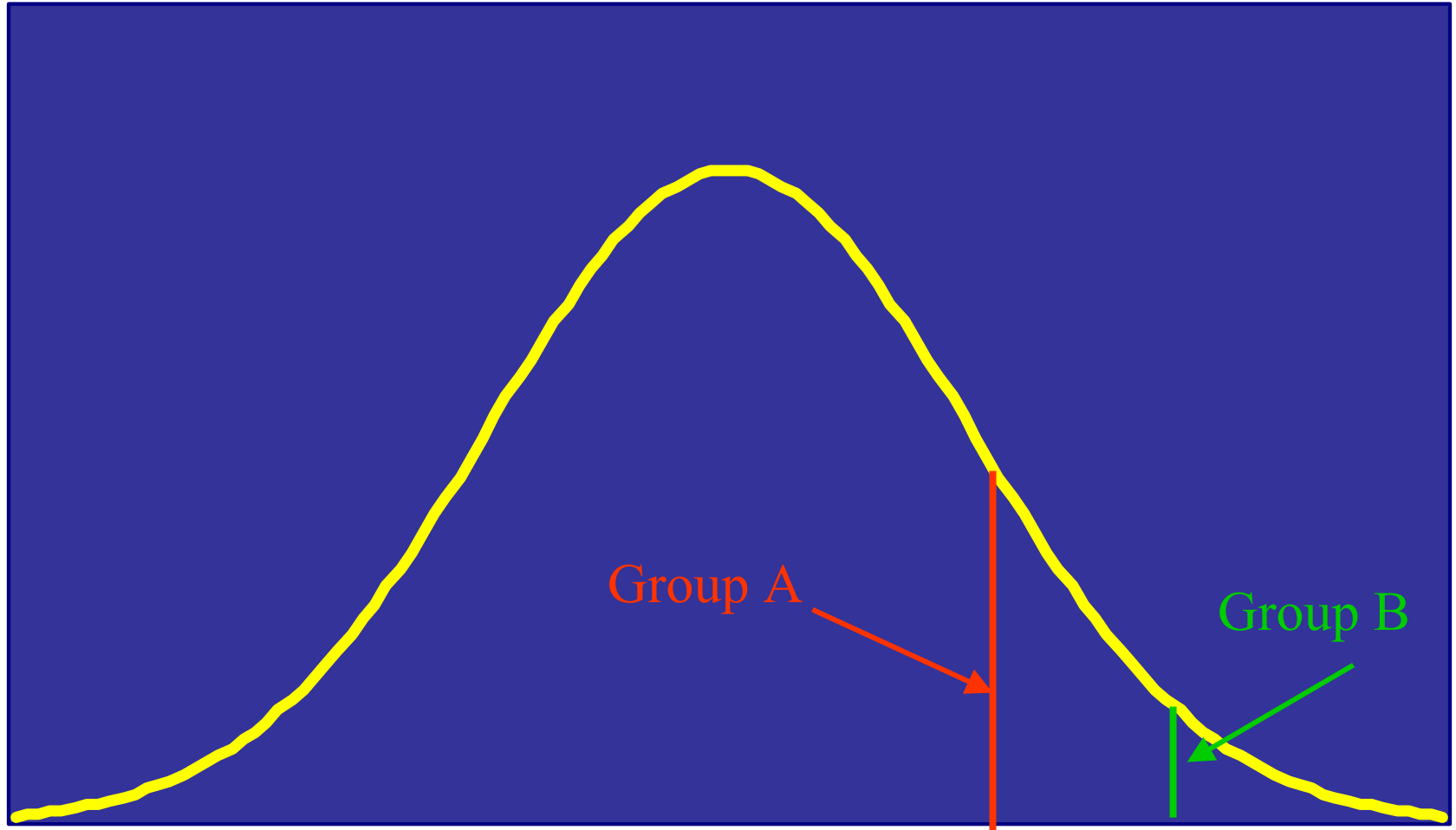
Initial Gap



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

Contact Information

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