

**LOUISIANA**



**DEPARTMENT OF EDUCATION**

**PAUL G. PASTOREK | STATE SUPERINTENDENT**

# **LOUISIANA'S**

## **Value-Added Assessment Initiative**

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# Organization of Today's Presentation

- I. Value-Added Method Review and Deeper Dive (45 minutes)**
- II. Getting ready to make key recommendations to BESE (90 minutes)**



# I. Value-Added Assessments in Education

**Use Achievement History and Key Factors  
to Predict Each Student's Achievement**



**Assess Actual Academic Achievement**



**Compare Actual Achievement to  
Predicted Achievement**



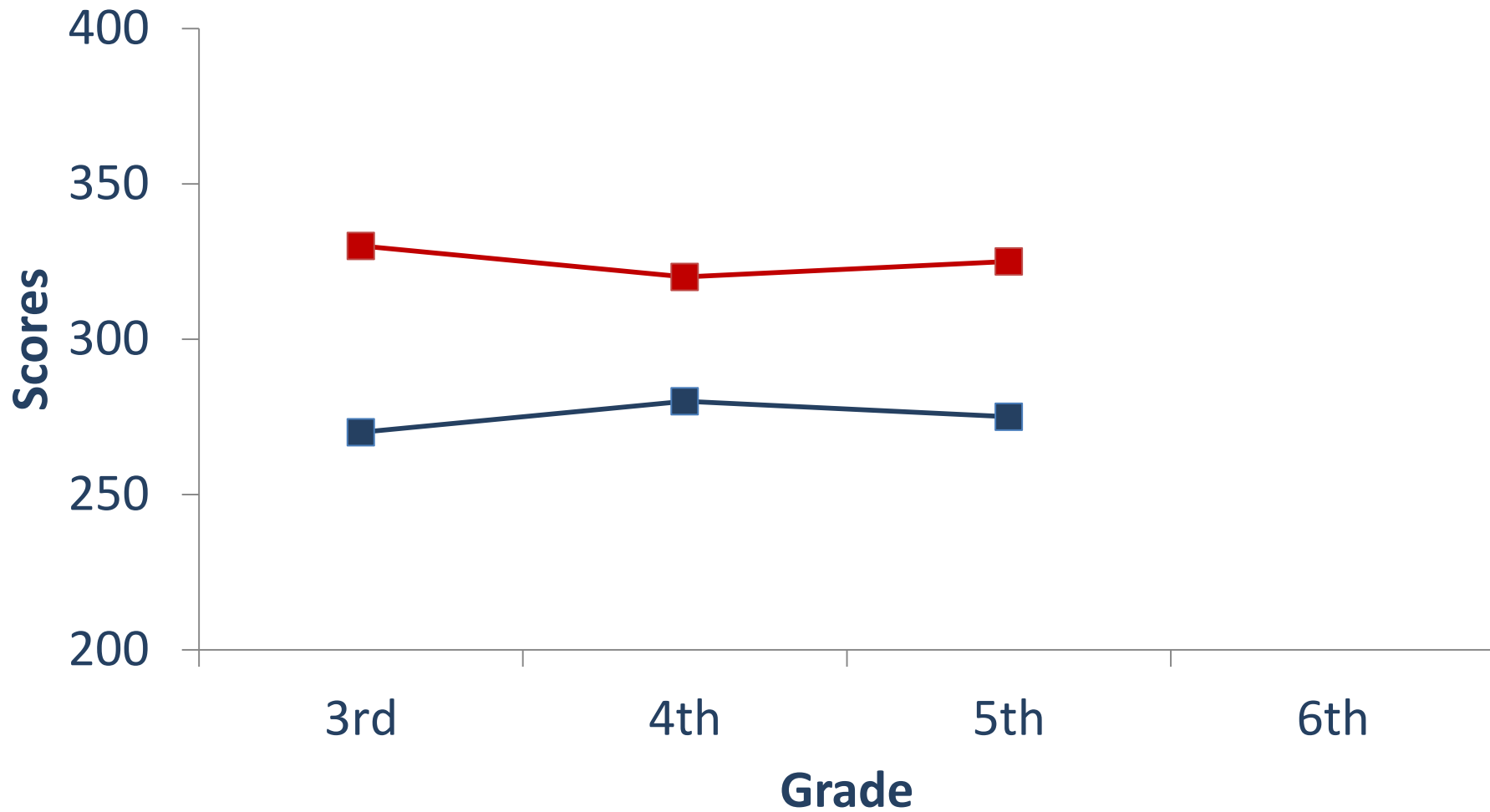
**Provide the Information to Responsible  
Educators and Leadership**

## Students are Included in the Assessment if.....

- Prior Achievement Data are Available
- Attended School for a Full Year
- Take the Regular State Assessment
- Enrolled in 4-9 Grade Levels
- If a Teacher Agrees They Taught that Student

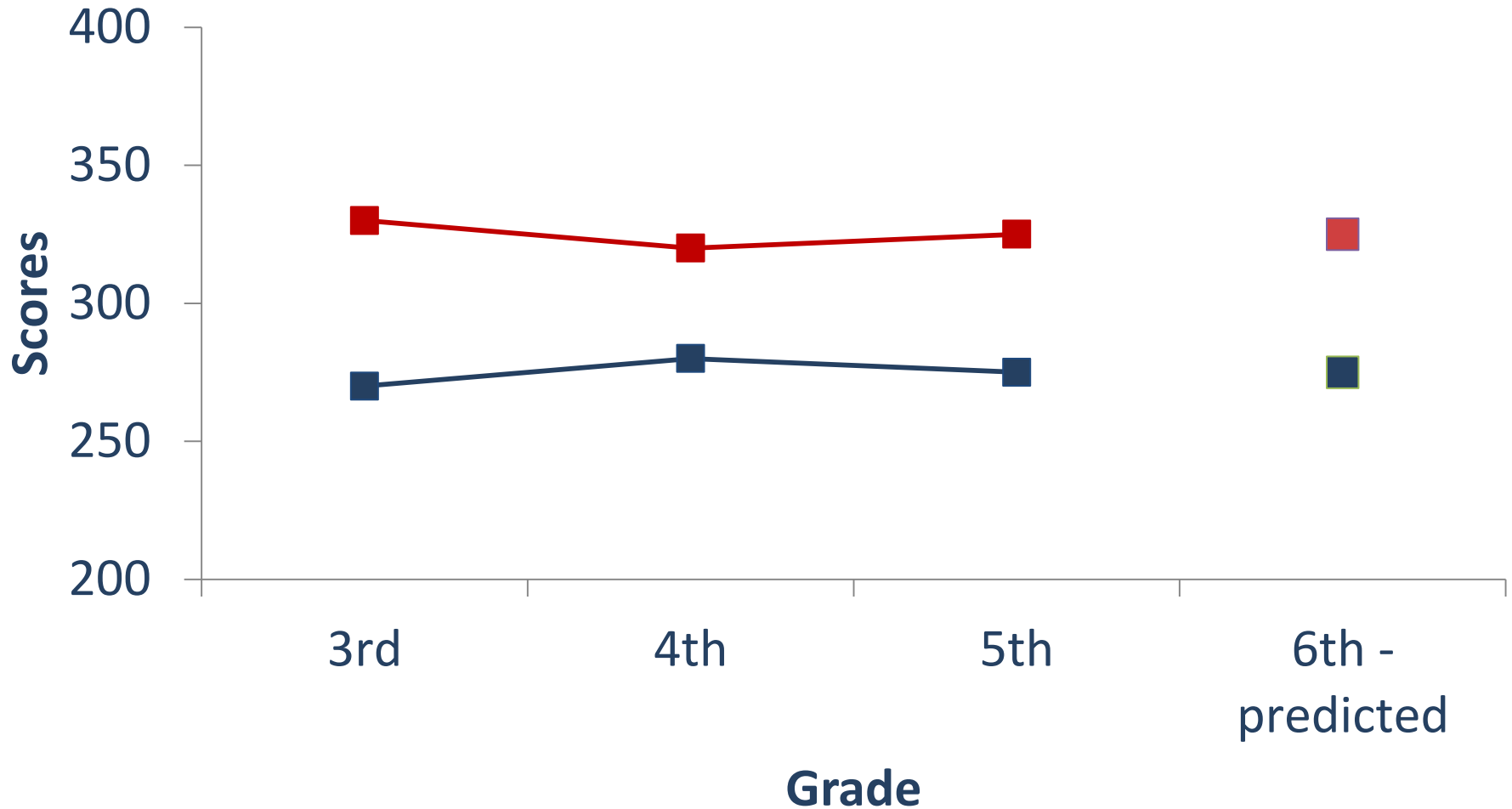
# What Scores Would You Expect for These Students This Year?

## Two Student's Test Data



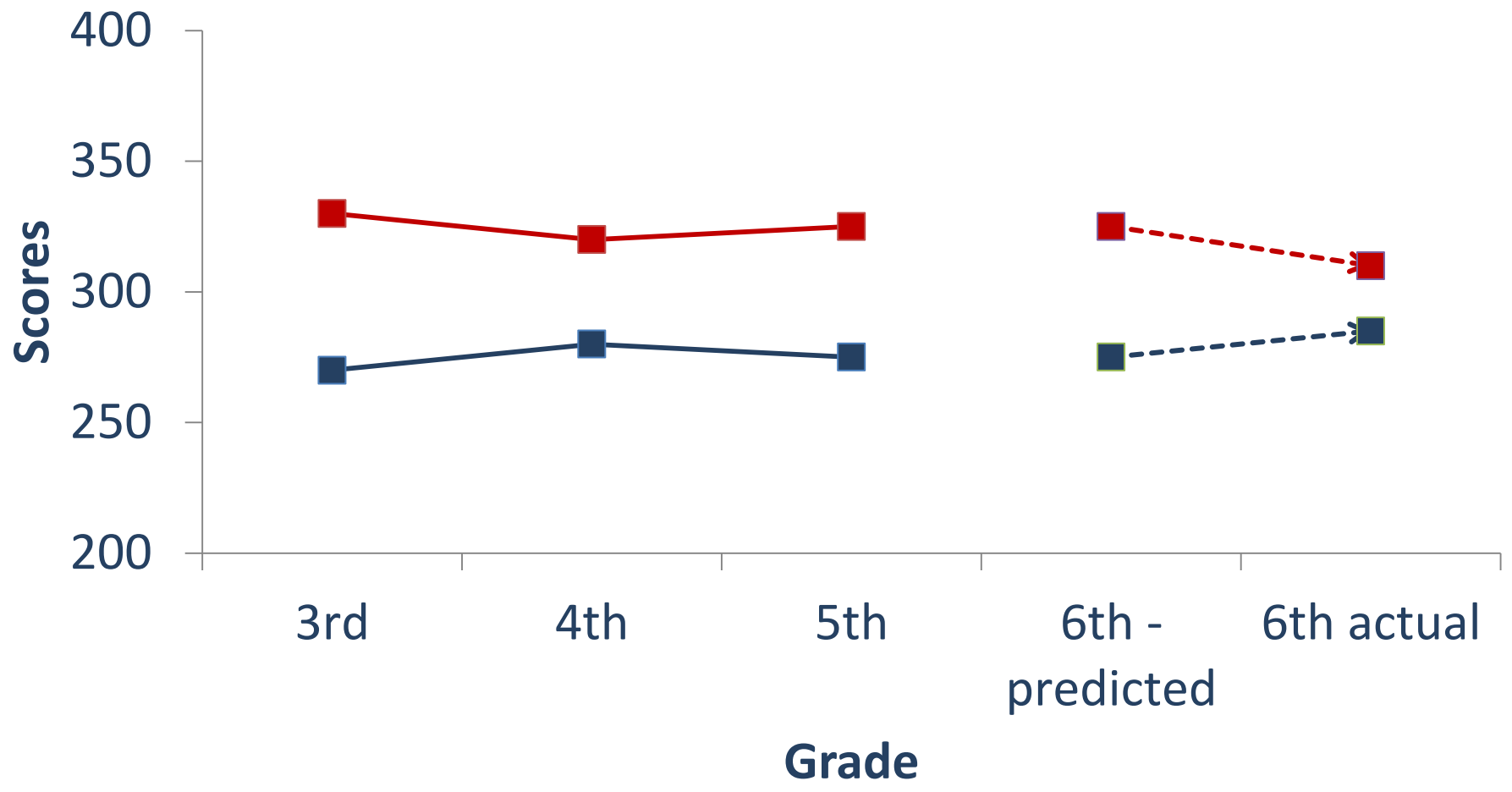
# The Pattern Should Come From the Trajectory

## Two Students' Data



# Which Student Made More Progress in 6<sup>th</sup> Grade?

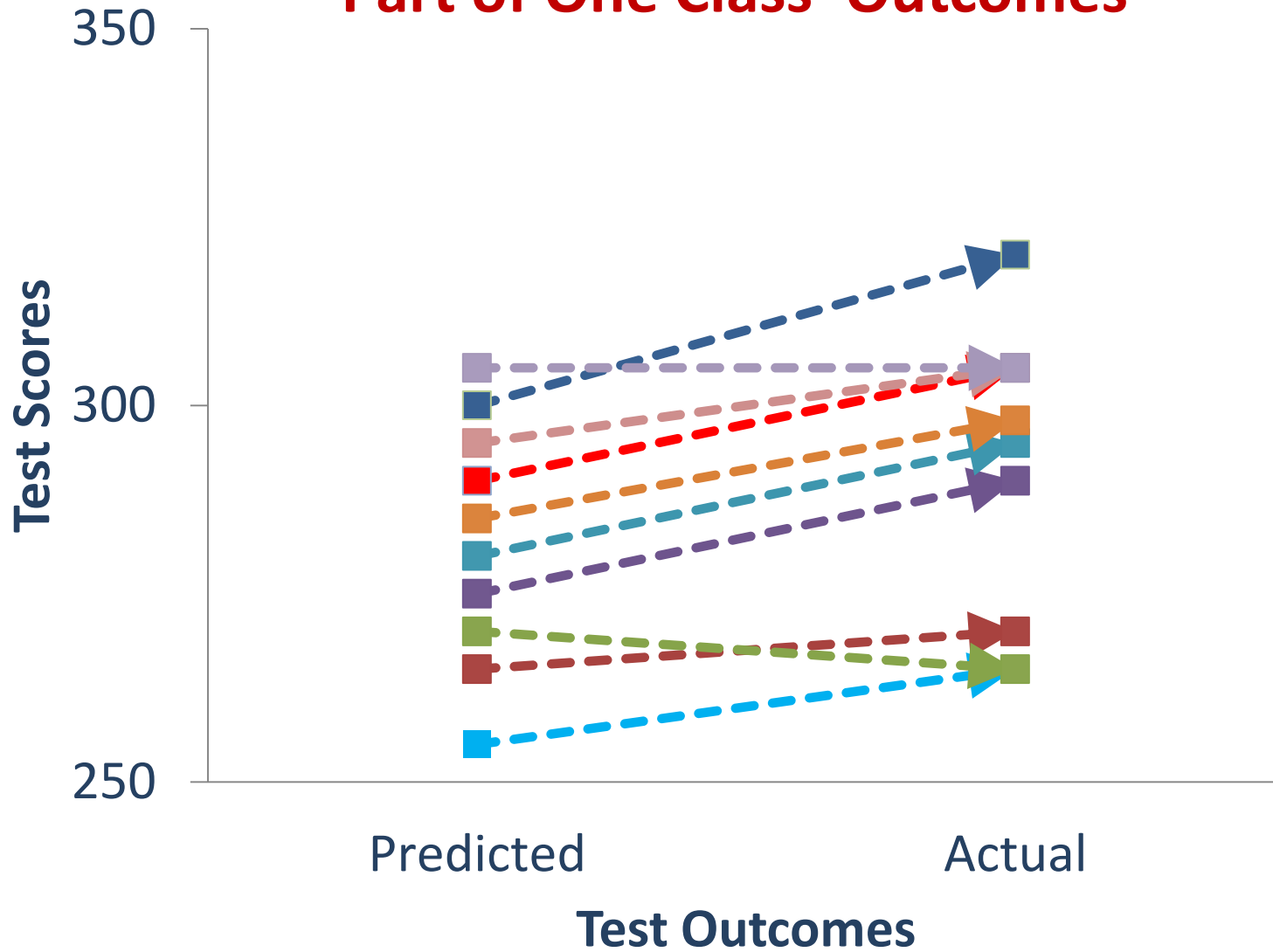
## Two Student's Data





# What Does This Look Like for a Class?

## Part of One Class' Outcomes



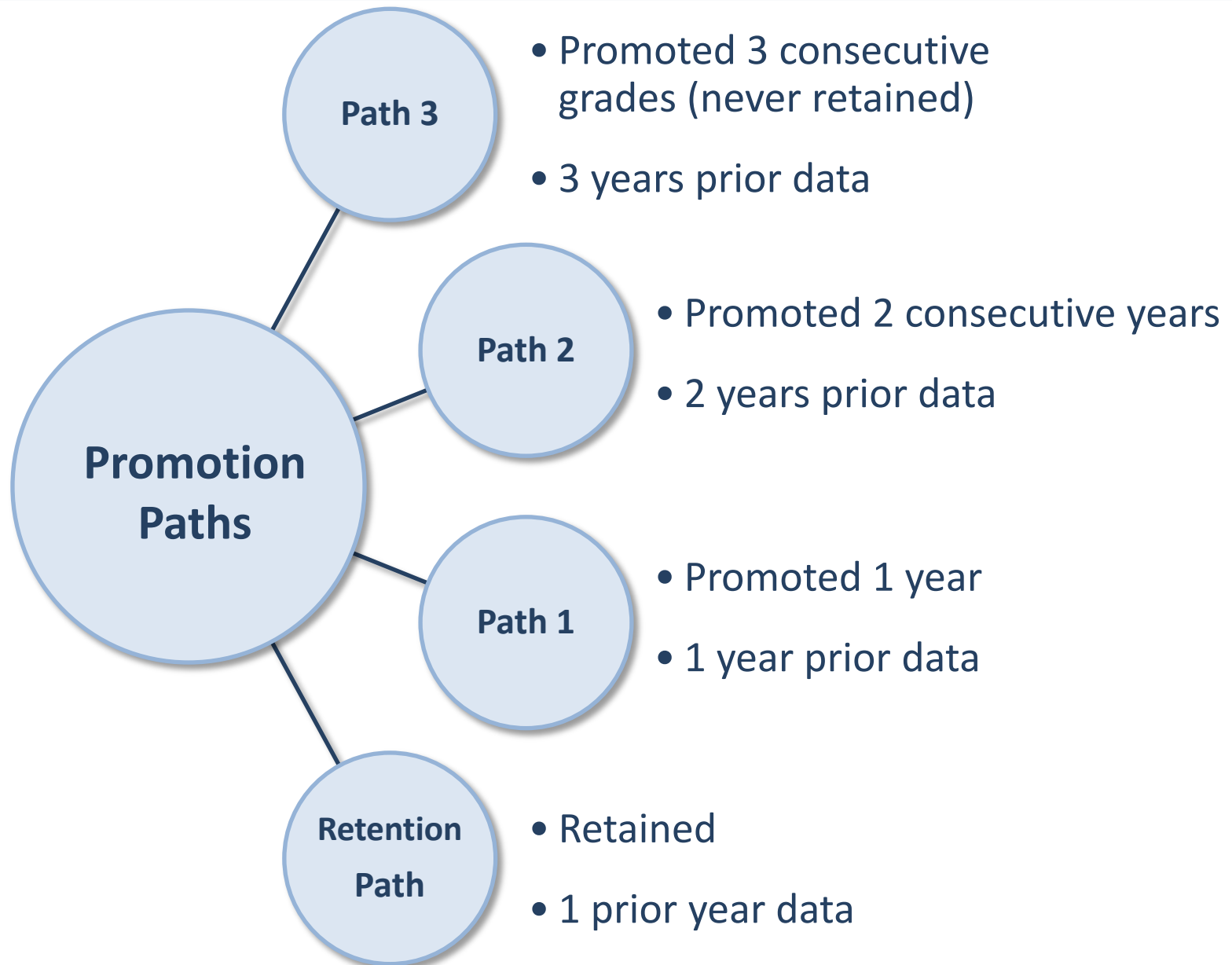
# What Information is Used to Predict Achievement?

## Variables in Louisiana's Model:

- **Prior achievement** on State Assessments (ELA, Reading, Mathematics, Science, Social Studies)
- Gifted Status
- Section 504 Status
- Free Lunch Status
- Reduced Lunch Status
- Student Attendance
- Disability Status (Emotionally Disturbed, Speech and Language, Mild Mental Retardation, Specific Learning Disability, Other Health Impaired, Other)
- Discipline Record (Count of Suspensions and/or Expulsions)

*Note: Value-Added Assessment is Based on a Mathematical Model that Determines How Much Each Factor Contributes to Estimating Expected Student Achievement. By Far, the Strongest Predictor is Prior Achievement.*

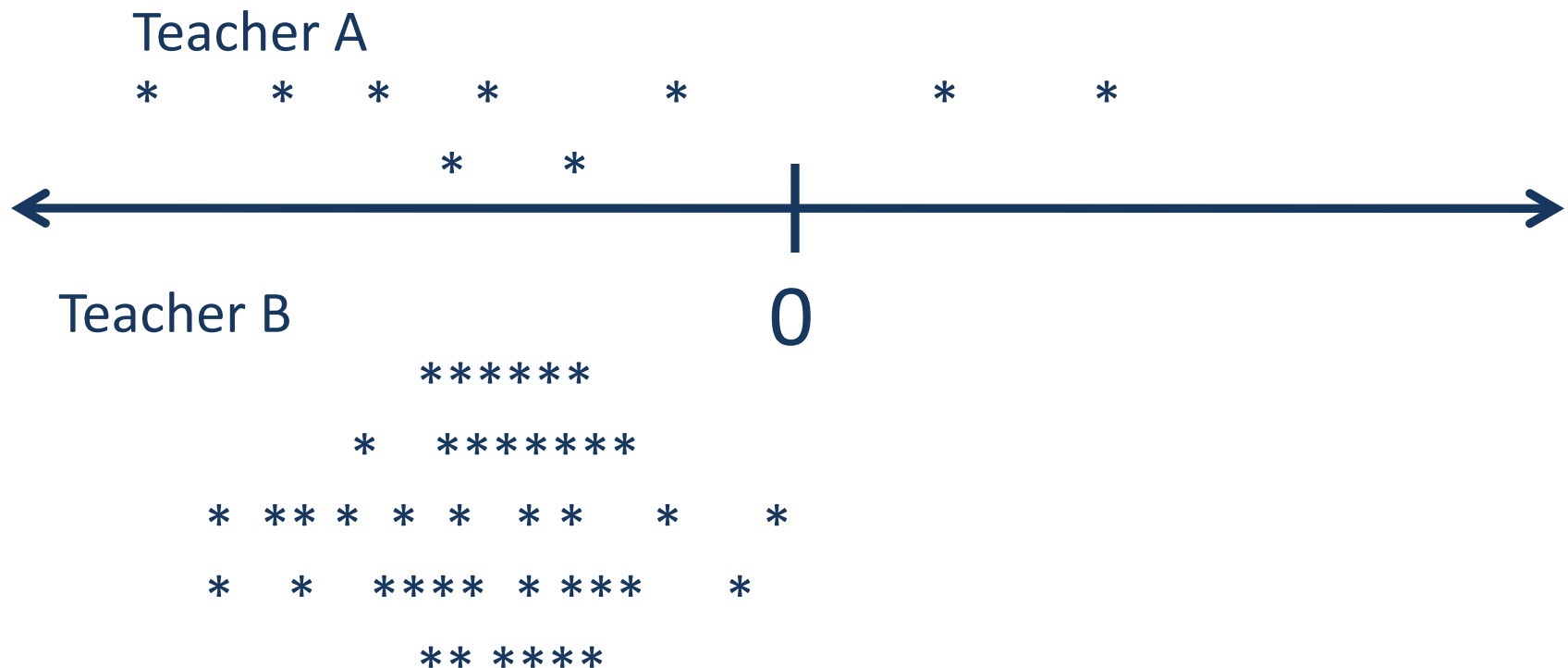
# Standardizing by Grade & Developing Predictor Weights



# Adjustment for Stability of Data

Applying a statistical correction to adjust for

1. Inconsistent student results
2. Small amounts of student data



# Value-Added Assessment: Concerns and Action Steps

## Concern

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Scores are variable



## Action Plan

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- Improve data
- Use multiple years of data for decisions

Omitted variables



- Include more variables

Narrowing of the curriculum



- Recognize as accountability issue
- Improve assessments

Many teachers not included



- Alternative measures for non-tested grades and subjects

# Sample Teacher Results Report



Class List Student List Verified Data **Teacher Results Report** Course Data Source Data Results Data Control Tables Login Account

View By Teacher View All Teachers

## Student & Teacher Achievement Results Teacher-Student Achievement Results Report Summary Sheet

School Year: 2008-2009  
School District: XYZ School District  
School: XYZ School  
Teacher: XYZ Teacher

— Overall Achievement Results —

Content	Teacher Achievement Result	Percentile	
English	+4.0	66%	
Mathematics	+5.0	71%	
Science	-1.0	31%	
Social Studies	+1.0	53%	

Print Teacher

Print All Teachers

### What is the Student & Teacher Achievement Results Report?

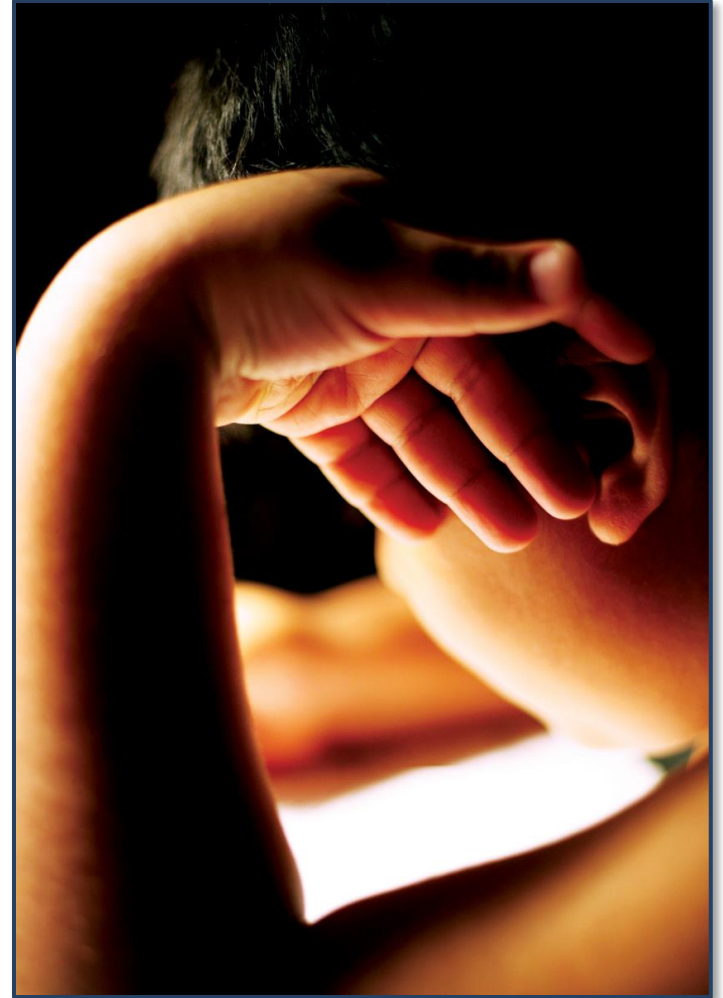
Results Report:

The report describes the extent to which students taught by a specific teacher achieved the level of educational performance on standardized tests that would be expected based on their prior achievement. Teachers were compared to other teachers statewide who taught in the same content area.

**Achievement Result:** The difference between students' actual level of achievement and the level that would be expected based on the students' prior achievement and demographic characteristics. An average teacher would have a result of zero, indicating that students

## II. Big Recommendations to be Made

1. Going to a non-statistical model
2. Student level variables
3. Classroom composition variables
4. Protection against single year anomalies
5. Minimum number of students for a result
6. Teachers in tested grades who don't have a value added result
7. How to handle multiple content area teachers



# Value Table: A Non-Statistical Approach

		Current Year Result				
		Unsatisfactory	Approaching Basic	Basic	Mastery	Advanced
Previous Year Result	Advanced	?	2	3	4	5
	Mastery	?	3	4	5	6
	Basic	?	4	5	6	7
	Approaching Basic	?	5	6	7	8
	Unsatisfactory	?	6	7	8	9



# Trade-Offs Between a Statistical and Non-Statistical Approach

## **Non-Statistical Approaches**

### **Advantages**

- Simplicity & Clarity
- Theoretically every teacher can complete their own results

### **Disadvantages**

- It can not account for complexity well

## **Statistical Approaches**

### **Advantages**

- Can accommodate complexity
- Can be tuned to test for fairness where concerns exist

### **Disadvantages**

- They are complex and as a result create anxiety

# Student-Level Data Decisions

- Choosing to include a variable changes expectations for that student and who/how that teacher is compared to
- Many variables that are important do not change results after you include prior achievement and disability

# What Information is Used to Predict Achievement?

## The variables in red are called for in Act 54

- **Prior achievement** on State Assessments (ELA, Reading, Mathematics, Science, Social Studies)
- Gifted Status
- Section 504 Status
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# Impact of Student Factors on Teacher Results

## Ethnicity

### Math

16% of teachers scores change by 1 point  
*(2.8% by 2 points)*

### ELA

0.1% of teachers scores change by 1 point  
*(0 by 2 points or more)*

## Gender

### Math

0.1% of teachers scores change by 1 point  
*(0 by 2 points or more)*

### ELA

0.1% of teachers scores change by 1 point  
*(0 by 2 points or more)*

# Classroom Composition

- The contribution of the mixture of students on the result:  
*potential peer effects*
- How does this change the results?
- The variables that make a difference
  - ***Percentage of students with disabilities***
  - ***Mean prior achievement in the content***
  - Average number of suspensions
  - Class size (*small and inconsistent effects*)

# Protection Against Single-Year Extremes

- The issue: *In any single year a variety of in school events can drive atypical results for a teacher*
- What should a policy solution look like?
  - Principal data disqualification
  - Require disqualification before release of the data?
  - Teacher appeal
  - Acceptable guidance for disqualification

# Minimum Students to Report a Value-Added Result

The common number of students is ten

- Tennessee
- New York City
- Washington, DC

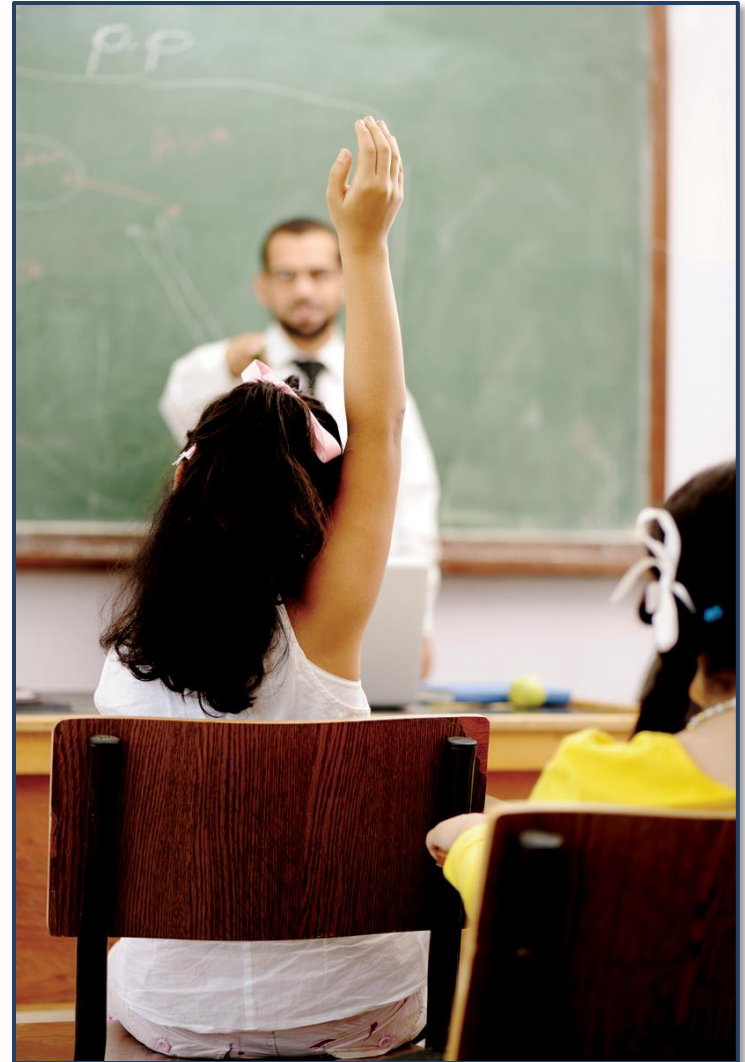
What is the implication for teachers who end up with no students or too few?

- How will their evaluation be completed?

# Rules for Teachers with Mixed Types of Results

## Policy Question

- How do we handle the situation in which a teacher has value-added data and students/classes with non-tested grades results?





# Setting the Framework for Multiple Content Teachers

- How should we incorporate and/or integrate results for teachers with results in multiple content areas?
- This will be exceedingly common in the elementary grades.
- This framework will set the stage for how we think about standard setting.

# An Illustration of a Mixed Result

	Student – Teacher Assessment Result	Percentile
<i>English</i>	<b>-15</b>	<b>3</b>
<i>Mathematics</i>	<b>+20</b>	<b>98</b>
Science	-1	48
Social Studies	+1	53

# Next Steps

1. Which issues require more information before making a recommendation?
2. Are there issues that are more fine grained than ACEE would like to weigh in on?
3. Are there substantive concerns around policy and decisions for value added that we need to prepare to address at the next meeting?