

# Using Student Growth Data to Improve Teaching and Learning



CAO Meeting  
October 2013

# This Presentation

**IS**

Using Student Growth (VAM) Data to improve instructional programs

***IS NOT***

VAM Scores or ratings used for teacher, principal or assistant principal evaluations

# Guiding Questions

- How do I know if the each of the students in my school make a year's worth of growth?
- How can I measure student growth even for students who do not change proficiency categories?
- How can you support teachers in providing intervention for the students who need extra support?
- How can you support struggling (teams of) teachers?
- How can you provide for differentiated support for teachers?

# **GROWTH VS. PROFICIENCY**

# What is Student Growth?

- How much academic progress students are making by measuring growth between two points in time
- Student growth indicates the amount of growth a student made in a testing subject over the course of one year, **relative to their academic peers**



# A More Complete Picture of Student Learning

## **Growth**

**(Progress)**

Measure of student  
academic progress  
between two points  
in time

**&**

## **Proficiency**

**(Status)**

Measure of student  
performance at one  
point in time

# A More Complete Picture of Student Learning

## Growth

- > Compare student to own prior performance
- > Progress between points
- > Critical to student success

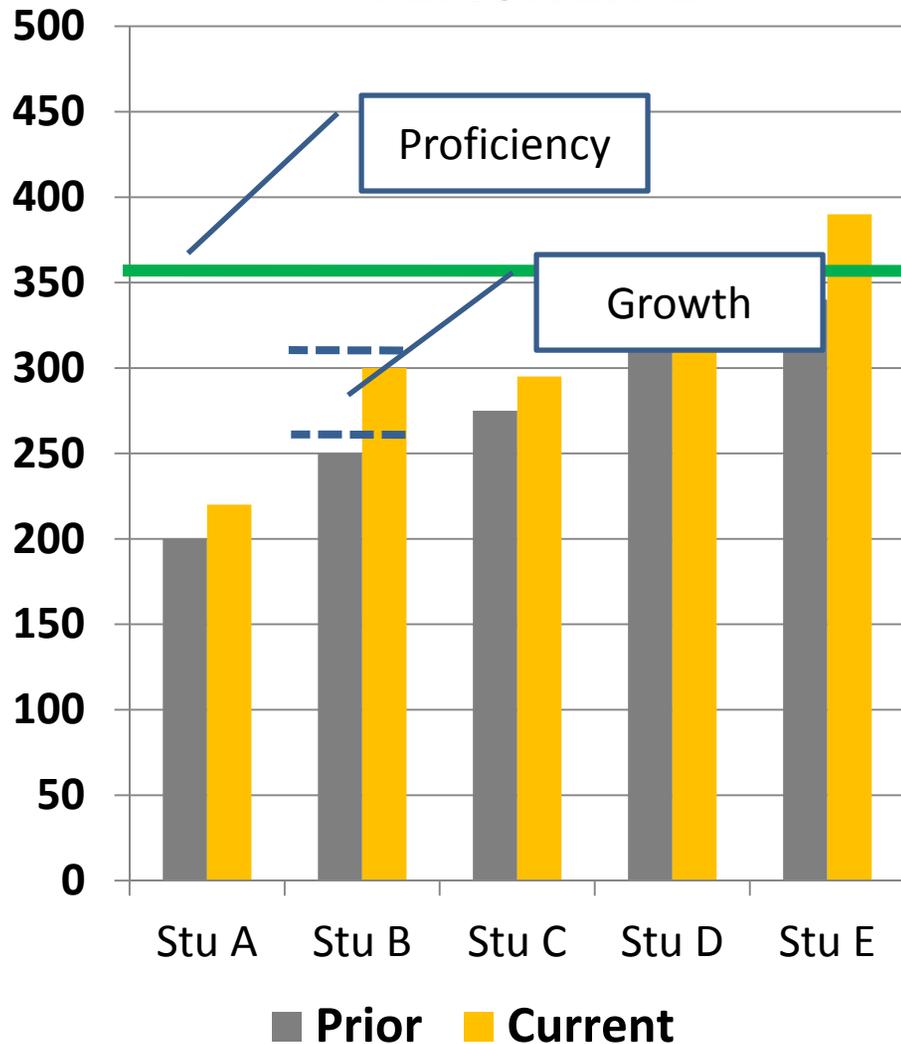
**&**

## Proficiency

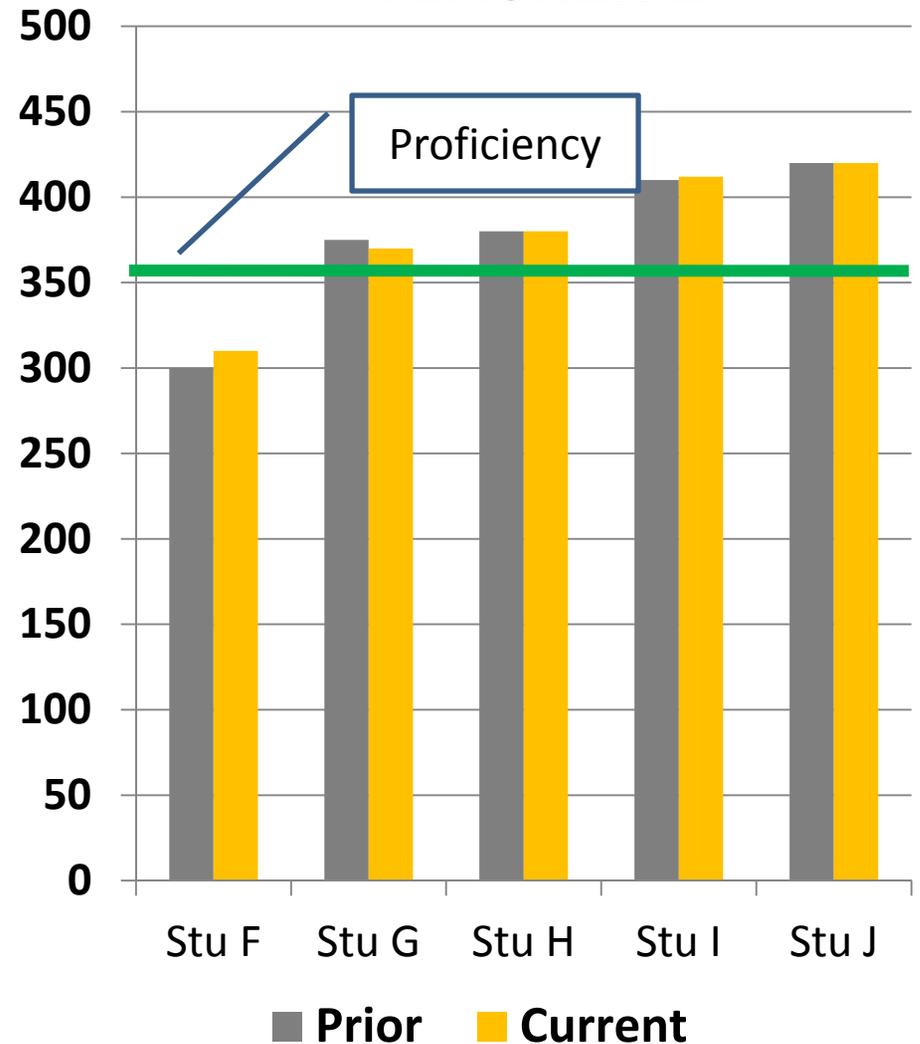
- > Compare student to a standard
- > Performance at a point in time
- > Critical to postsecondary opportunity

# Growth vs. Proficiency

## TEACHER 1

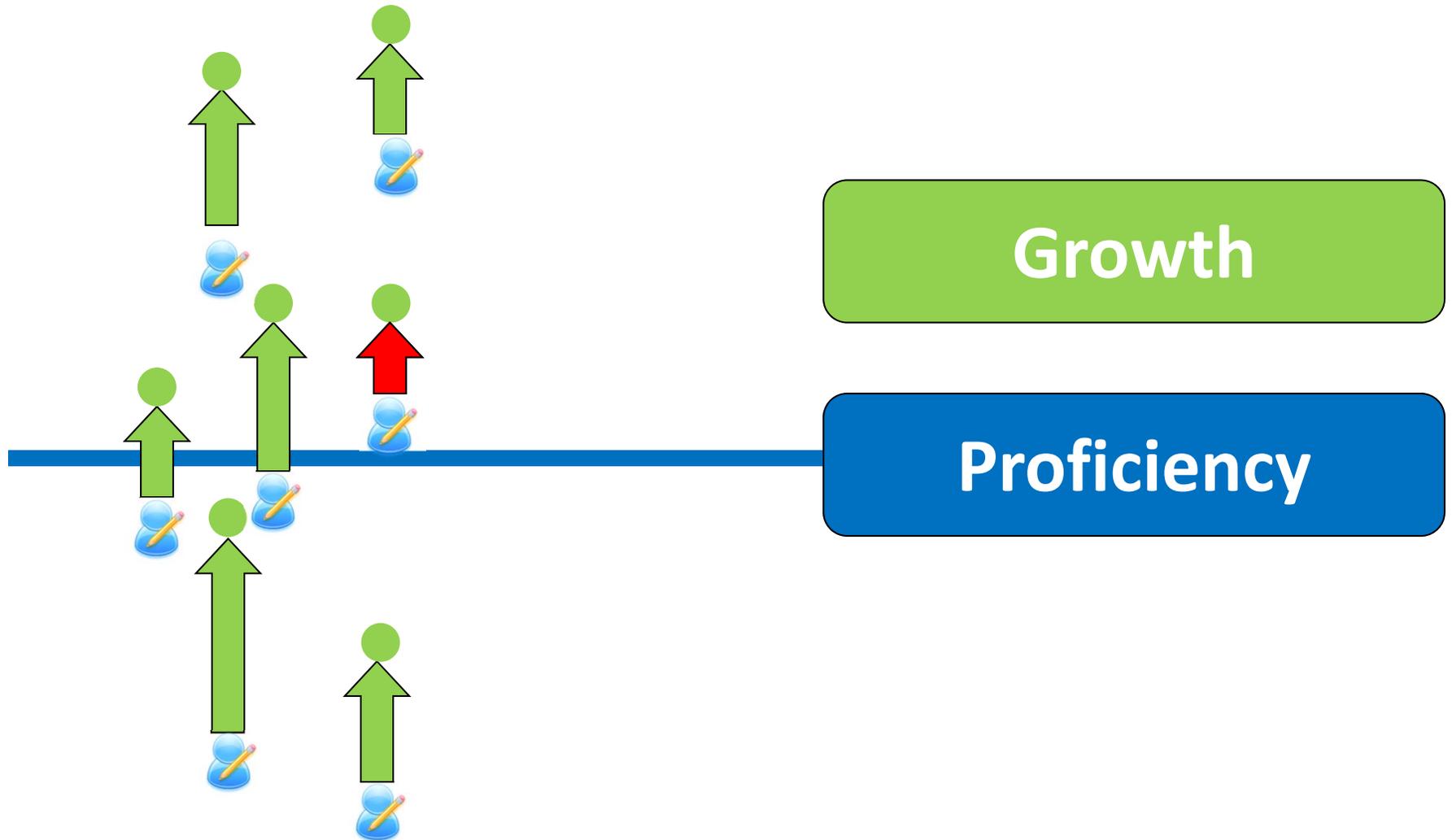


## TEACHER 2



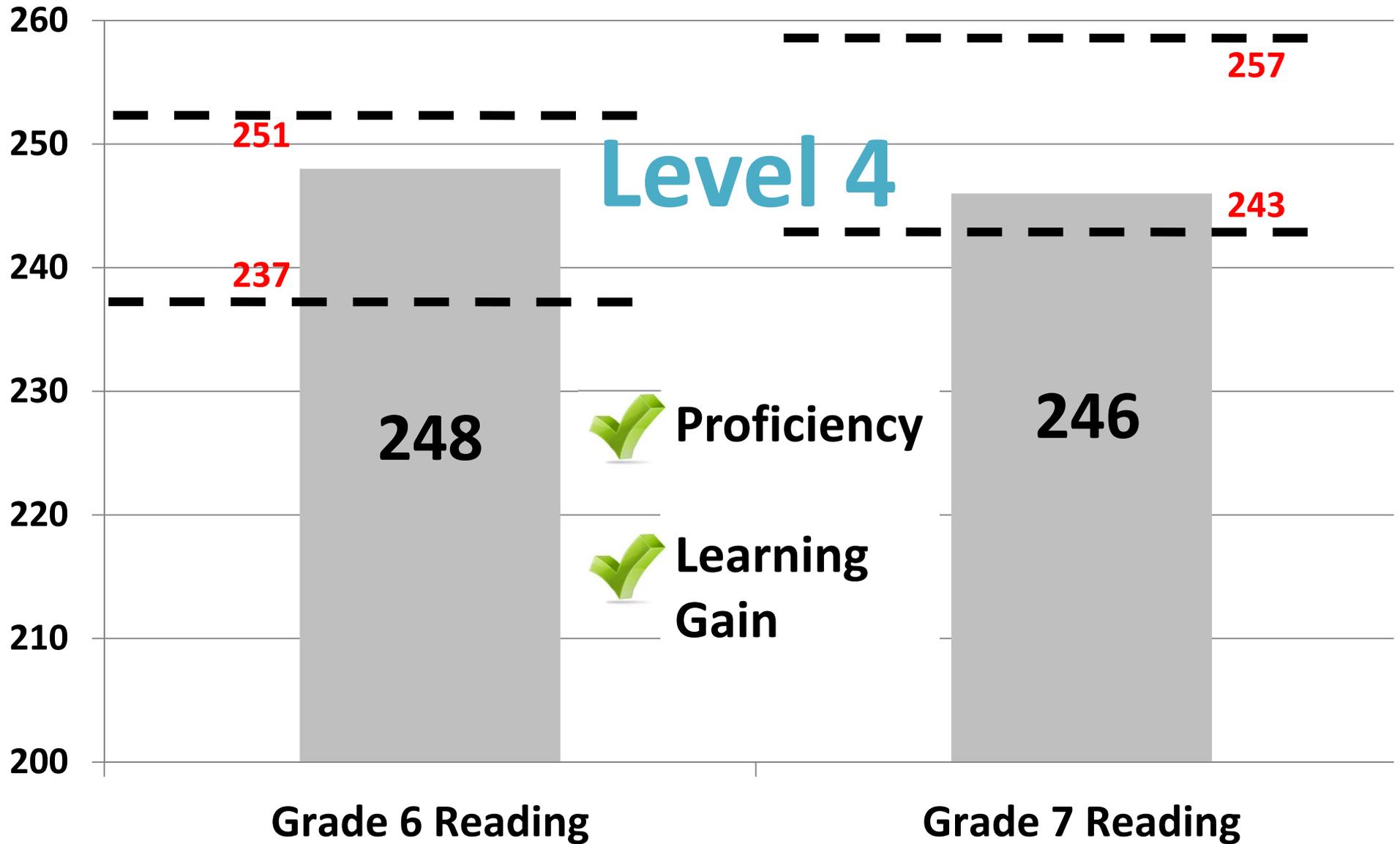
# Growth & Proficiency

## Understanding the Difference



# Growth & Learning Gains

## Understanding the Difference

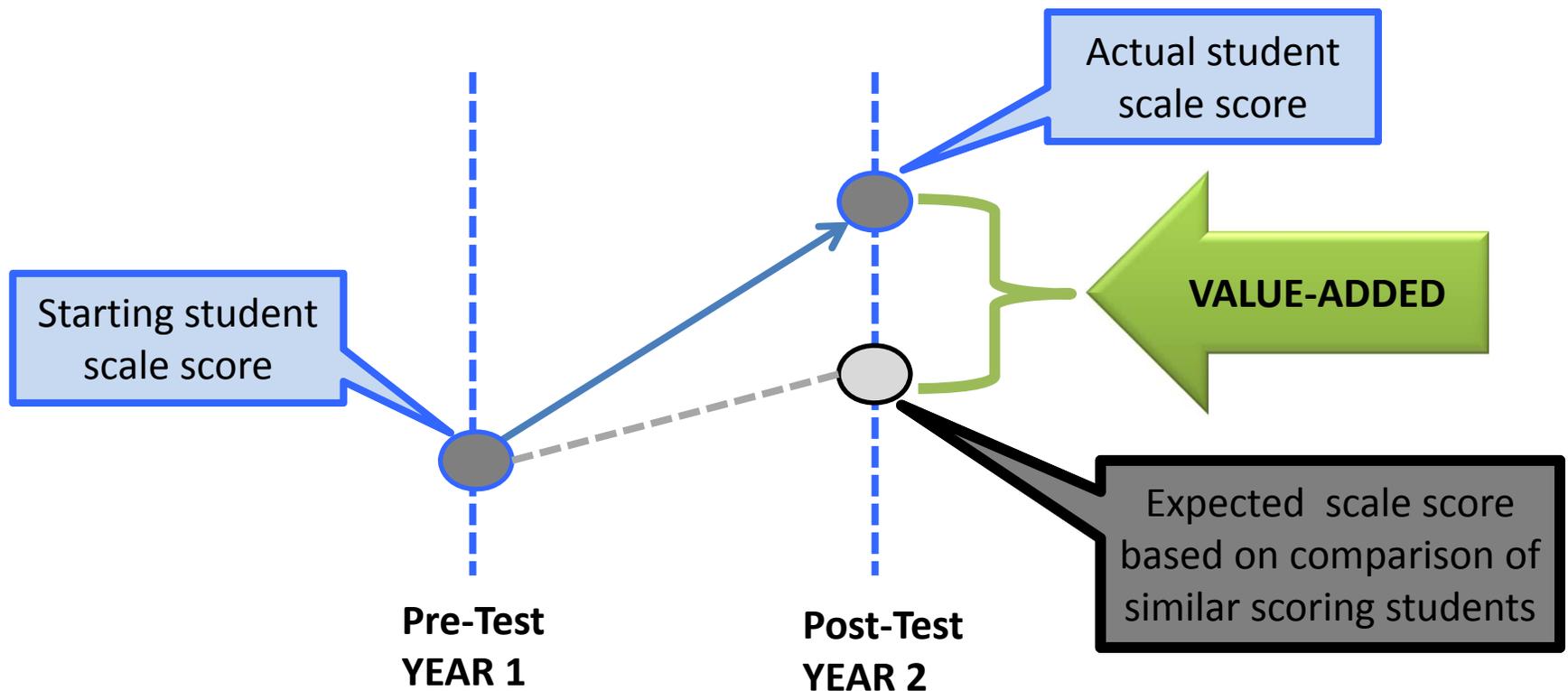


# **VALUE-ADDED MODEL**

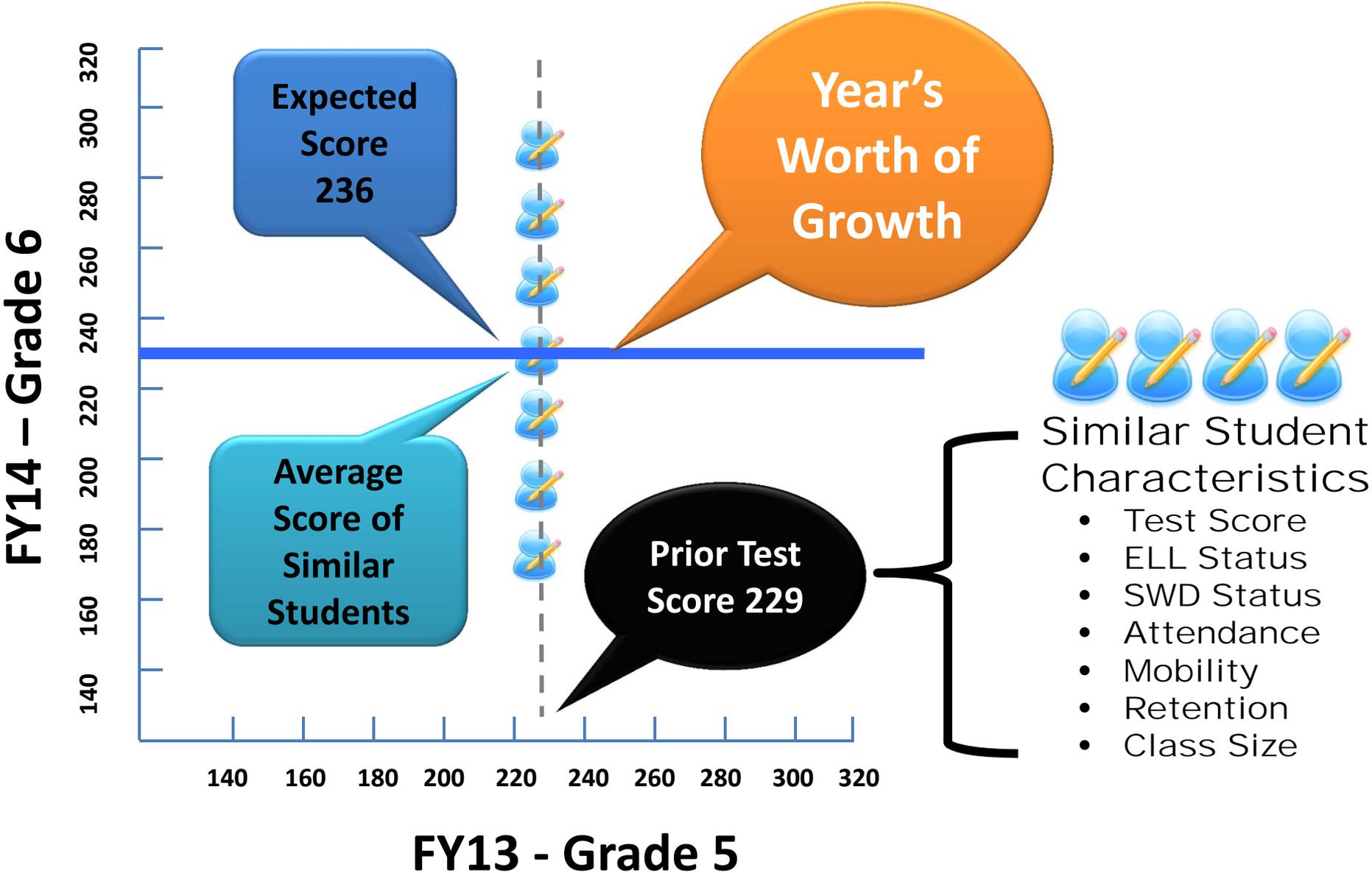
# What is the Value-Added Model of Student Learning Growth?

The difference between

***Actual Test Score*** and ***Expected Test Score***

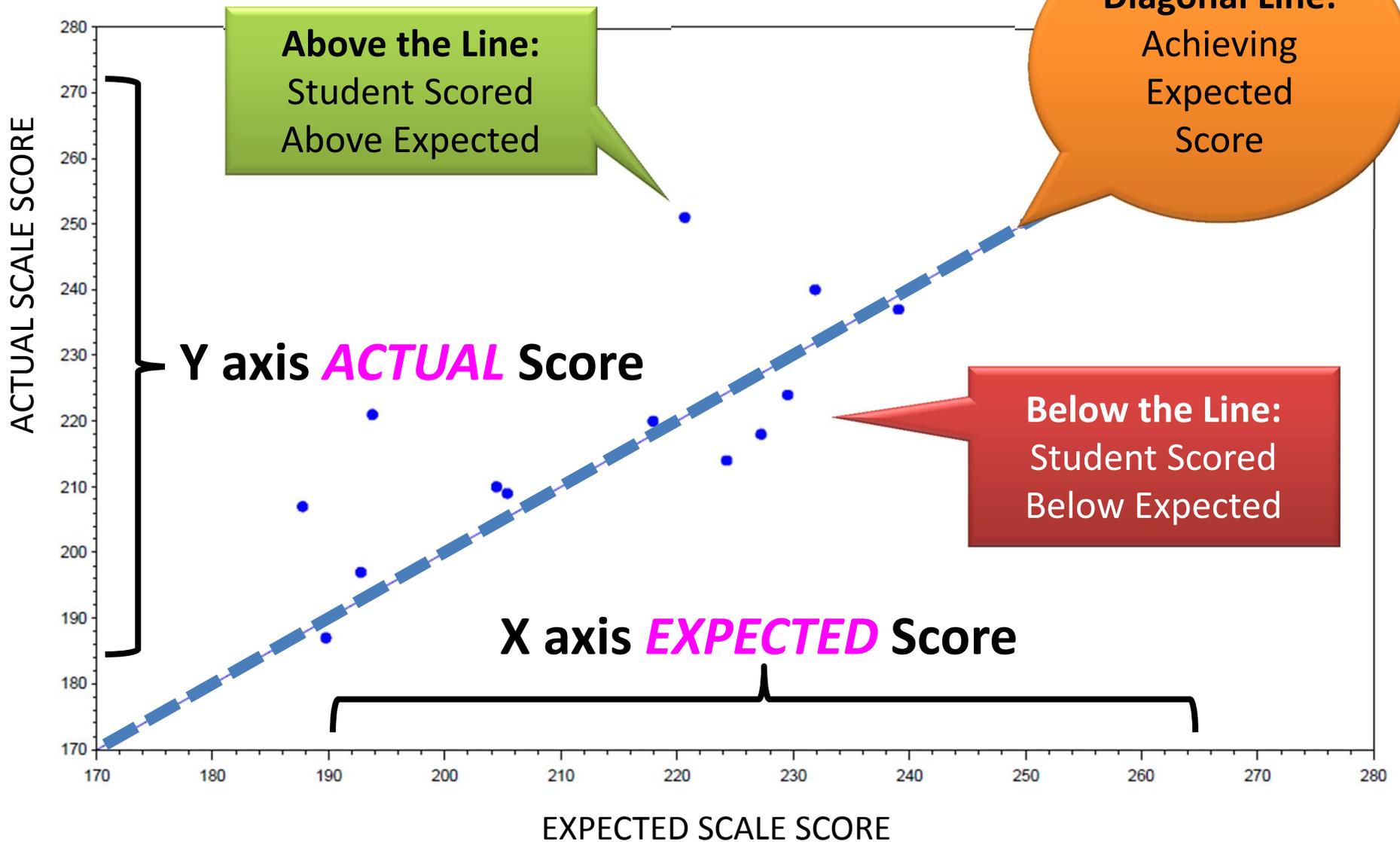


# How is the Expected Score Determined?

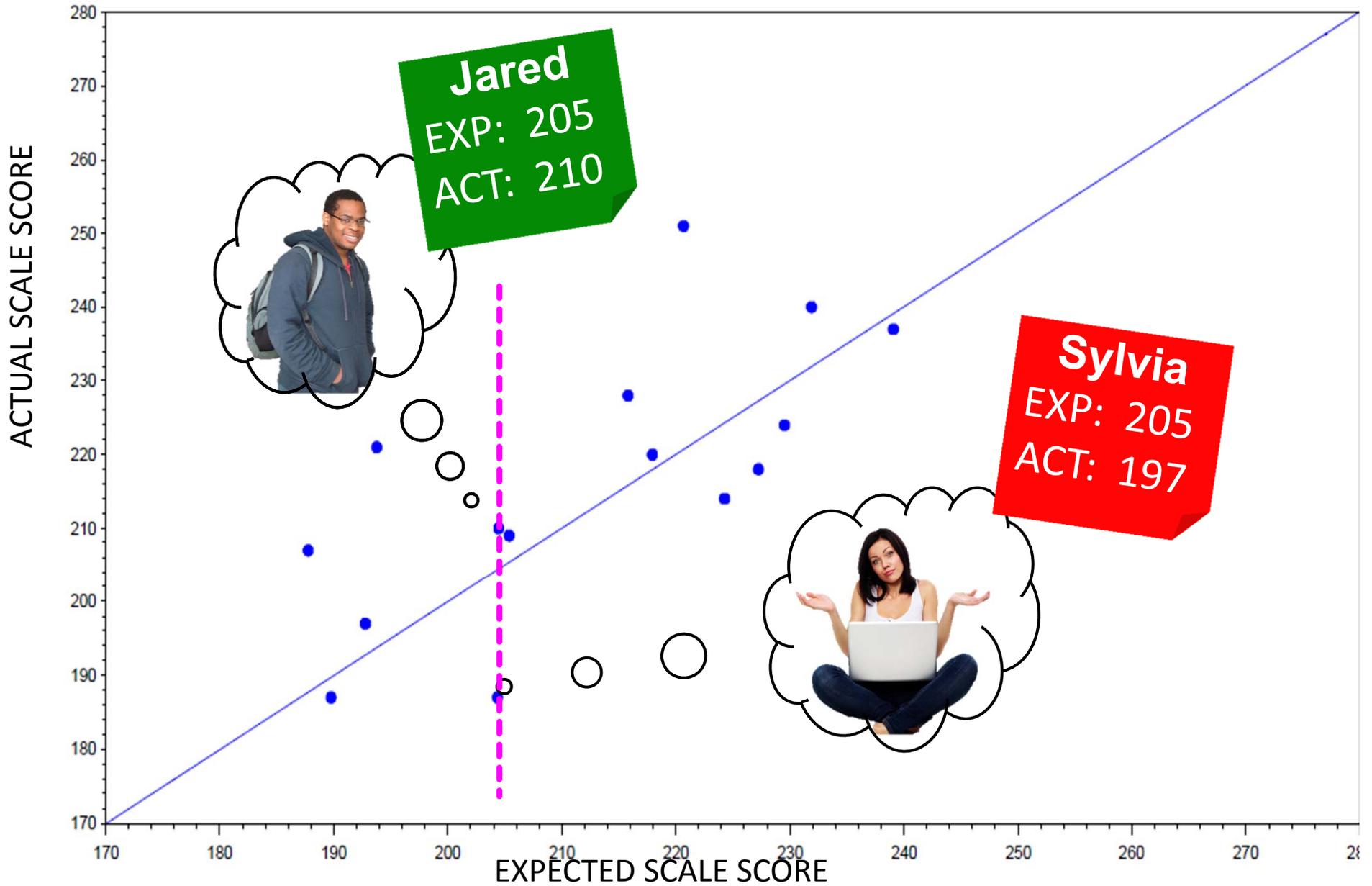


# **SCATTERPLOTS**

# Teacher State Growth Data Scatterplot



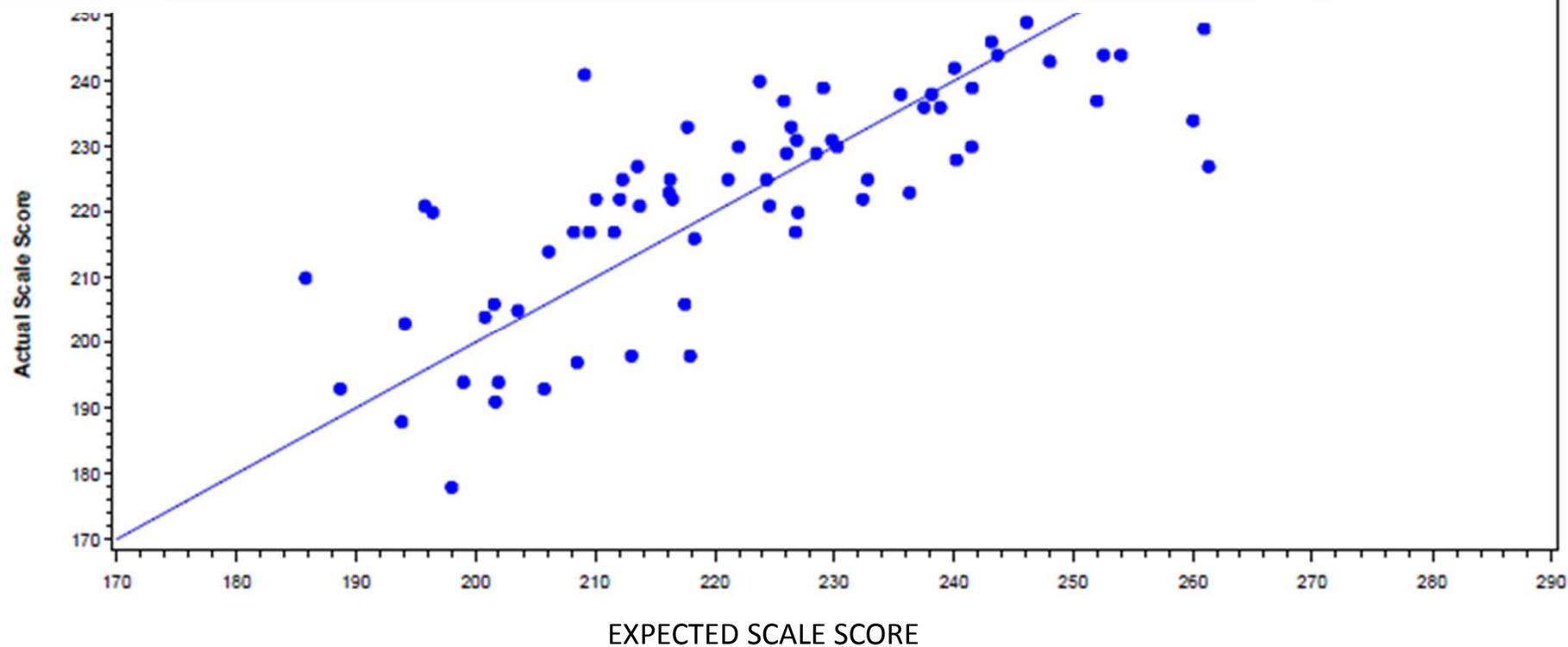
# Teacher State Growth Data Scatterplot



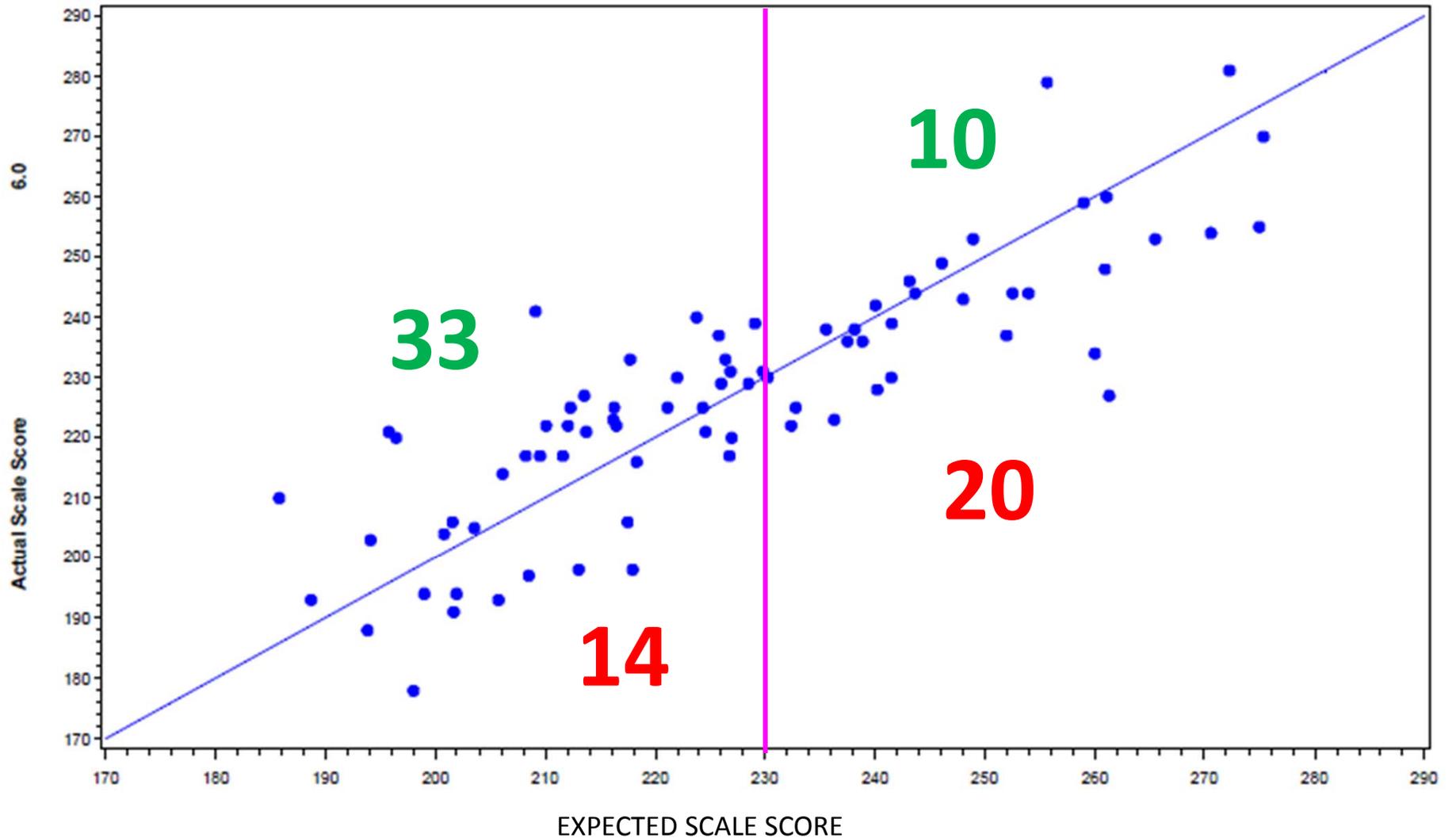
# Teacher State Growth Data Scatterplot

**Table 2: Achievement Levels for the FCAT 2.0 Mathematics Developmental Scale Scores (140 to 298)**

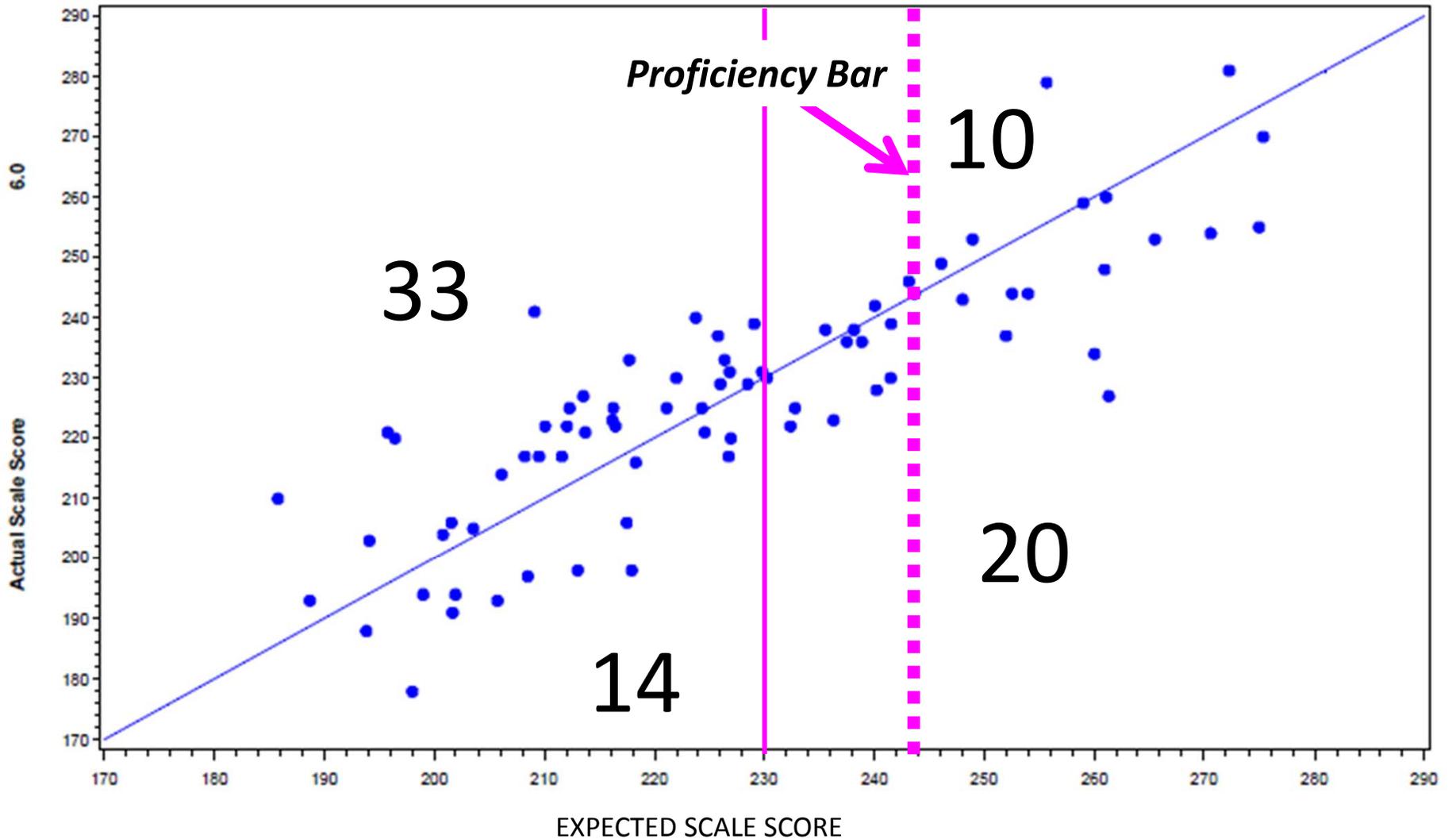
Grade	Level 1	Level 2	Level 3	Level 4	Level 5
3	140-182	183-197	198-213	214-228	229-260
4	155-196	197-209	210-223	224-239	240-271
5	163-204	205-219	220-233	234-246	247-279
6	170-212	213-226	227-239	240-252	253-284
7	179-219	220-233	234-247	248-260	261-292
8	187-228	229-240	241-255	256-267	268-298



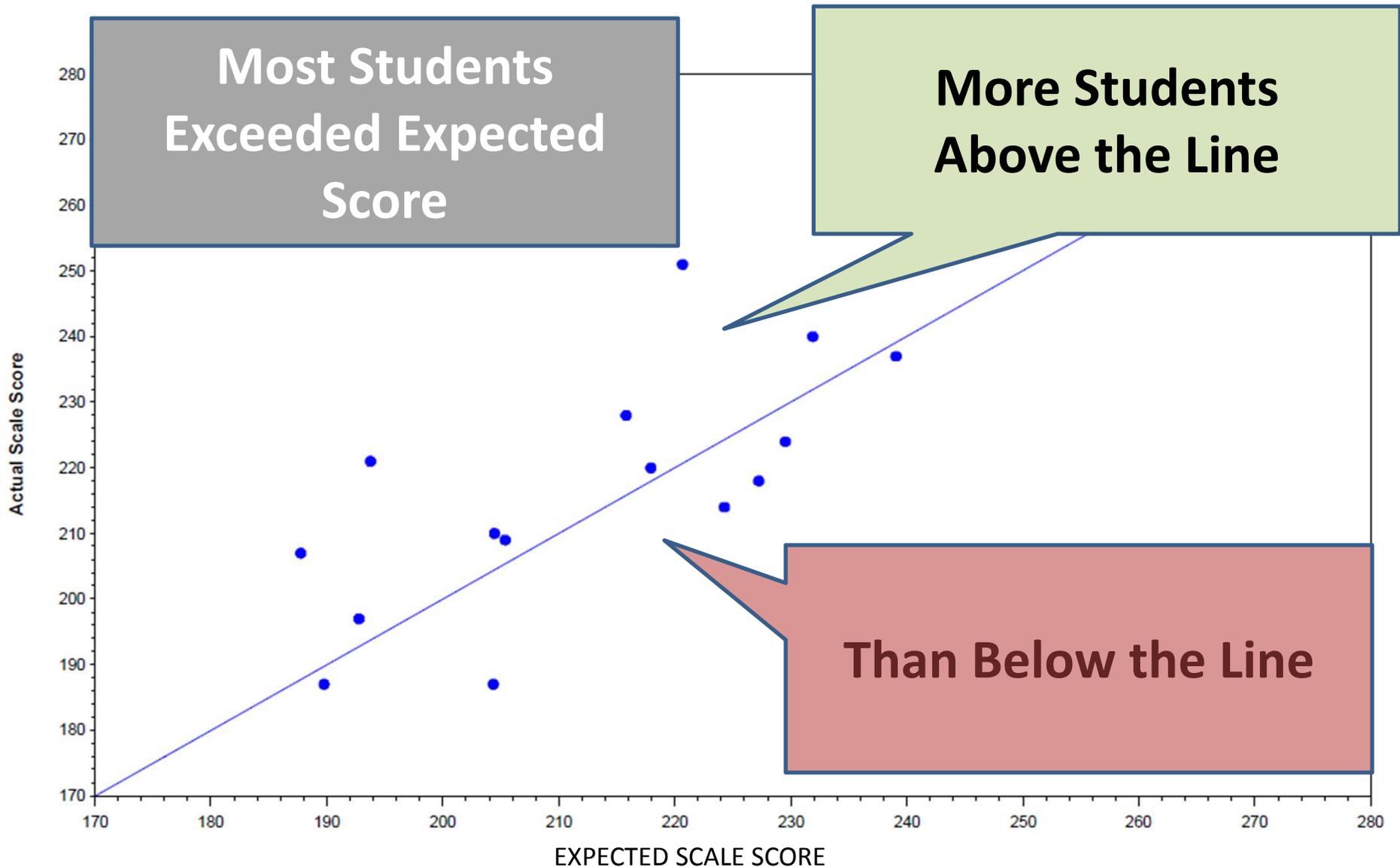
# Teacher State Growth Data Scatterplot



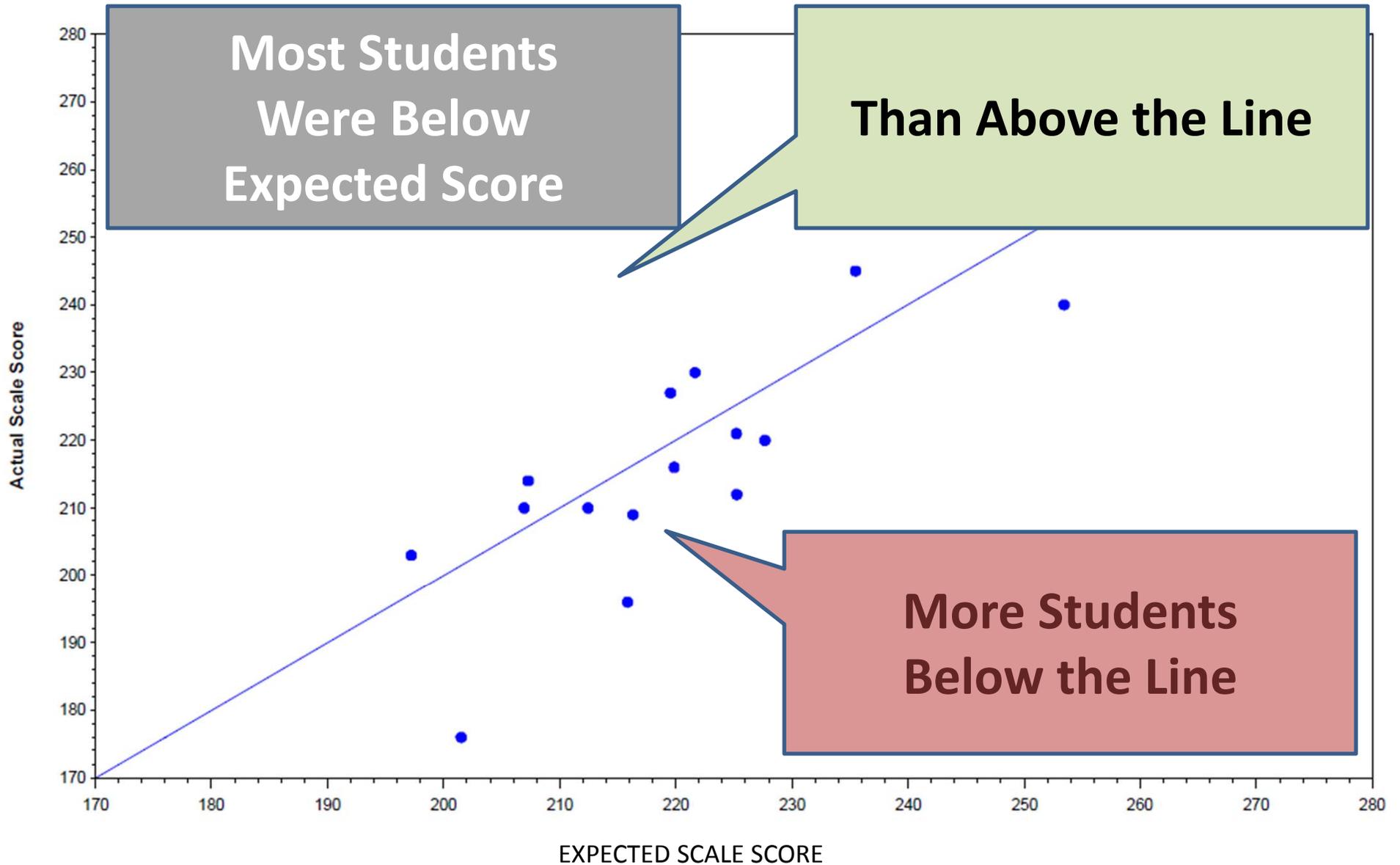
# Teacher State Growth Data Scatterplot



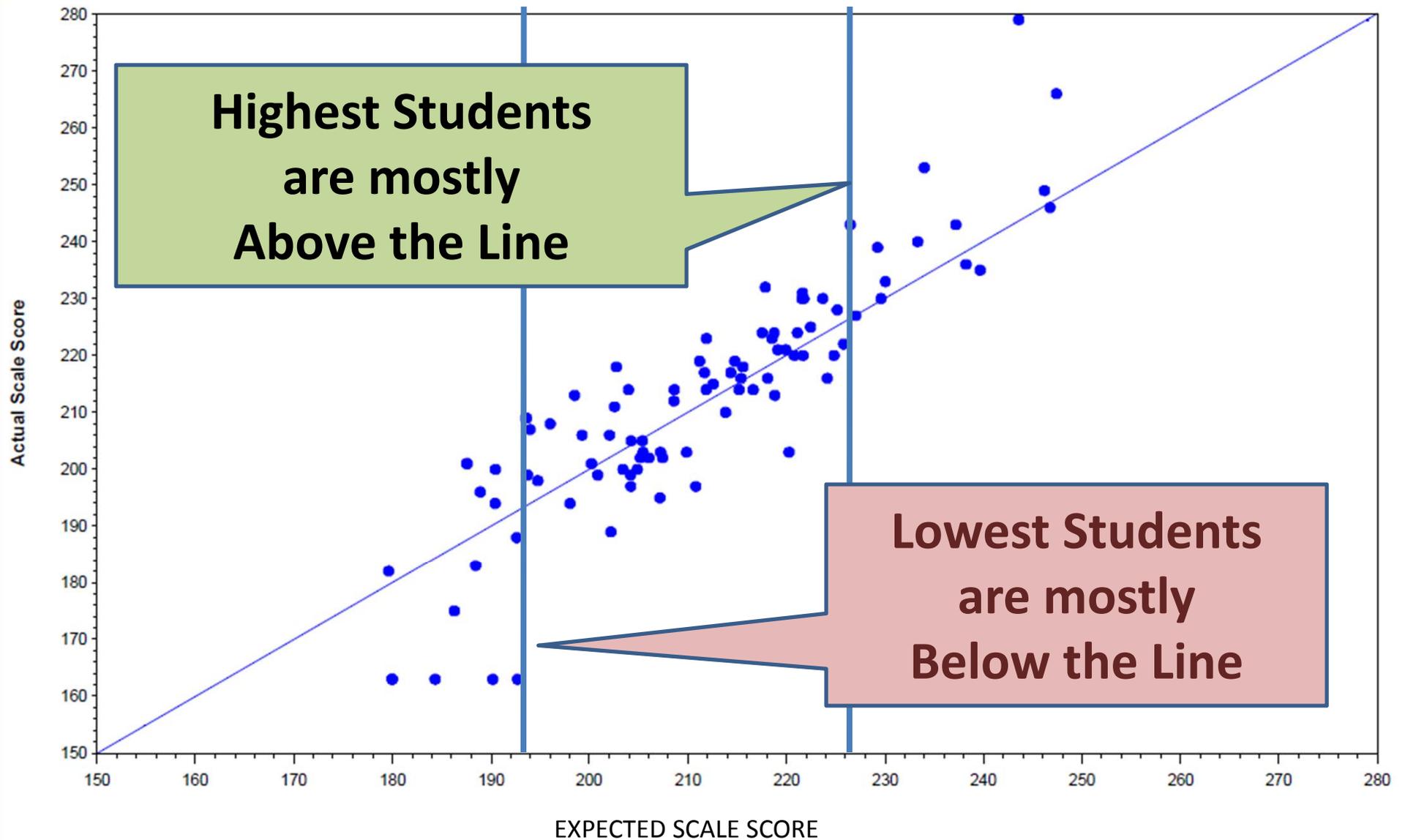
# Example 1: Above Average Growth



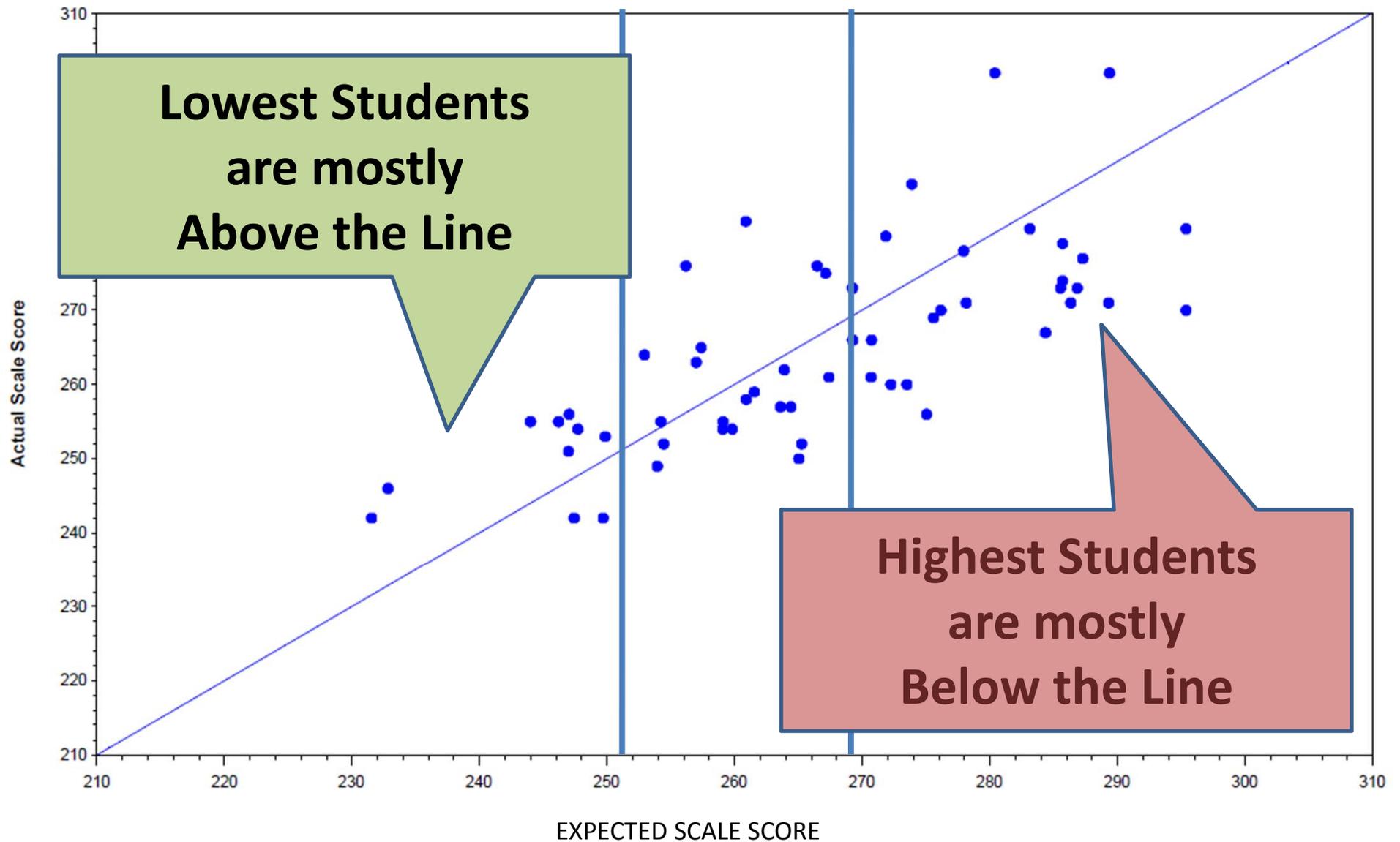
# Example 2: Below Average Growth



# Example 3: Possibly Refocus Instruction



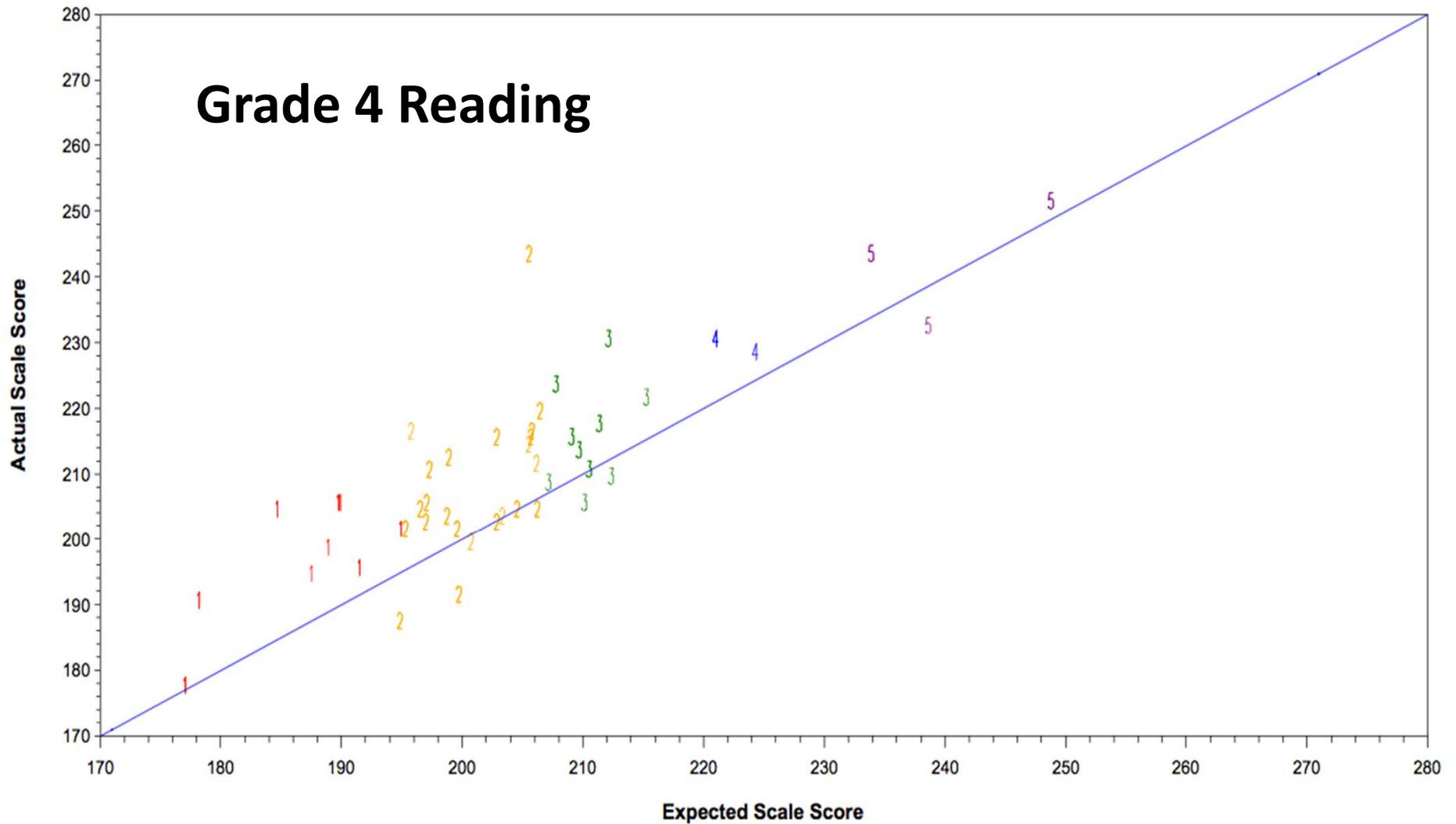
# Example 4: Possibly Refocus Instruction



# **SCATTERPLOTS WITH PRIOR LEVELS**

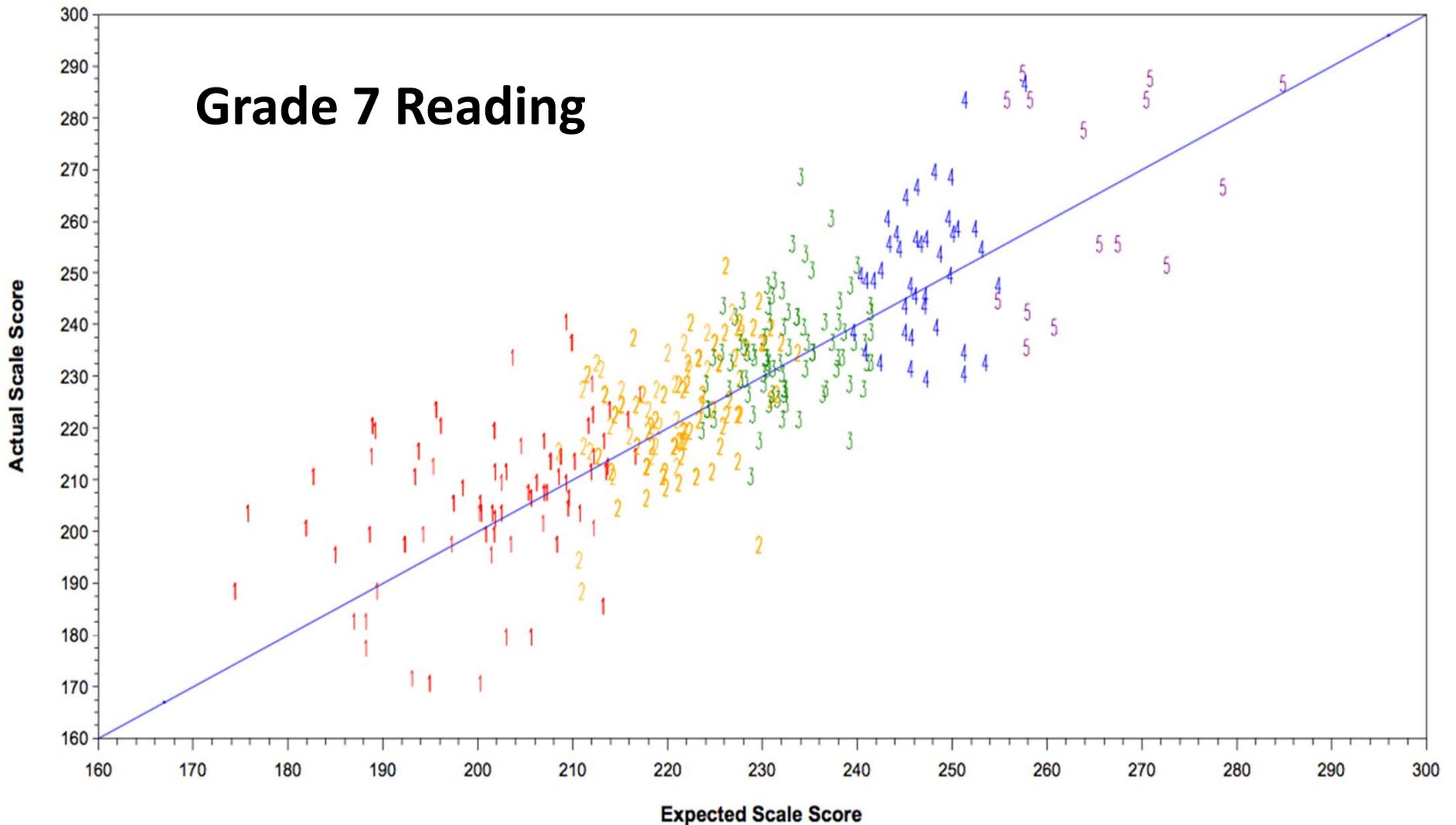
# Scatterplots with Prior Levels

Number of Students: XX Number of Students Meeting Expectation: XX Percent Meeting Expectation: 88%



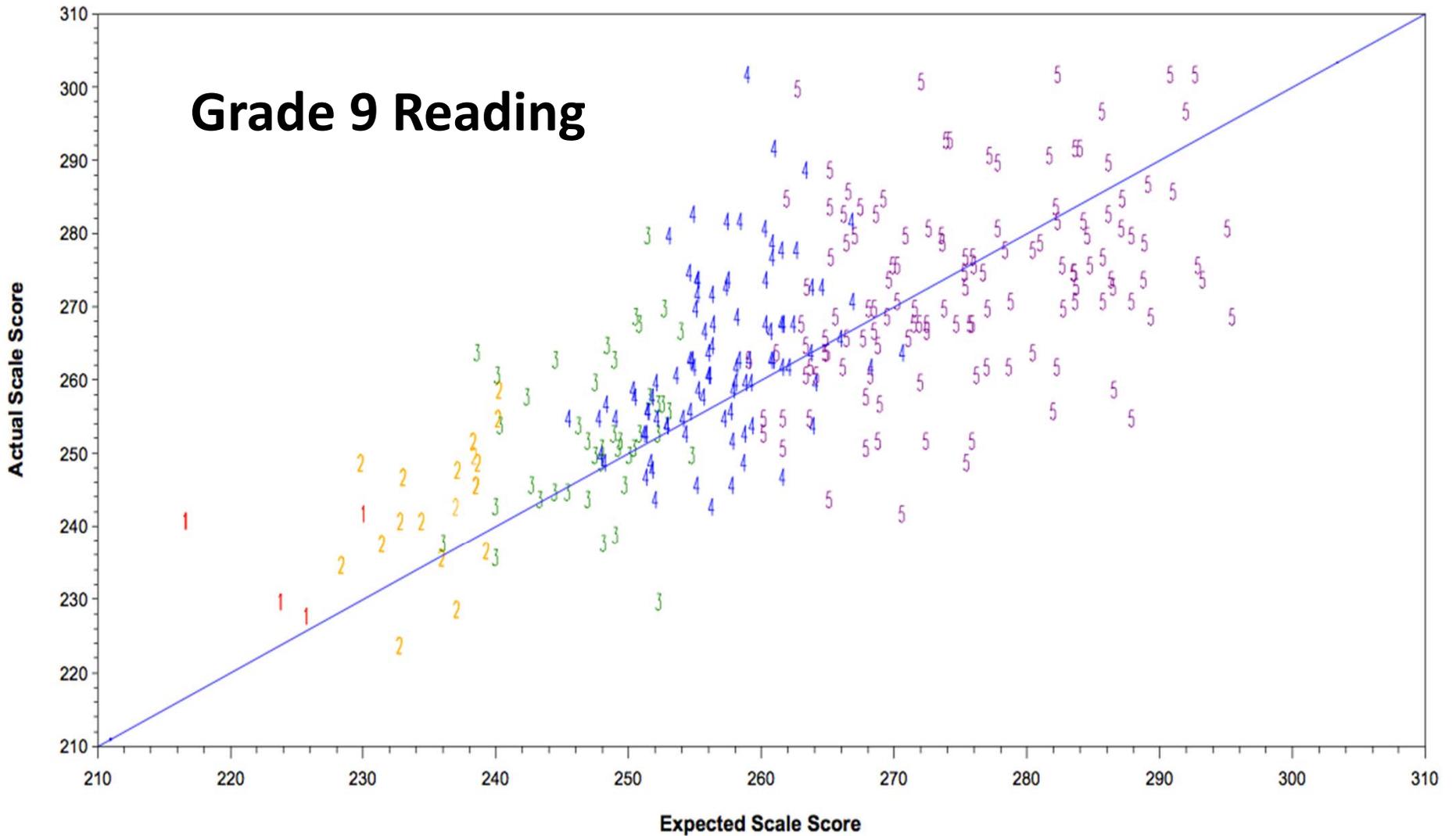
# Scatterplots with Prior Levels

Number of Students: XX Number of Students Meeting Expectation: XX Percent Meeting Expectation: 63%



# Scatterplots with Prior Levels

Number of Students: XX Number of Students Meeting Expectation: XX Percent Meeting Expectation: 62%



# **STUDENT ROSTERS**

# Sample Teacher Roster

## *Same Students as Scatterplot*

### List of Students Having FY2013 VAM Data

**School Type: EL School Name: Sample School**  
**Teacher: Sample Teacher**

Subject	Grade	Student ID	Last Name	First Name	FY2012 Scale Score	FY2013 Scale Score	Predicted FY2013 Scale Score	Difference	Met Expectation	SAR Gain
READ	5	99999999	LAST	FIRST	243	257	246.78	10.22	Yes	1
		99999999	LAST	FIRST	232	256	237.54	18.46	Yes	1.2
		99999999	LAST	FIRST	269	253	265.66	-12.66	No	1
		99999999	LAST	FIRST	236	257	244.28	12.72	Yes	1.2
		99999999	LAST	FIRST	258	260	258.75	1.25	Yes	1
		99999999	LAST	FIRST	214	242	220.64	21.36	Yes	1.1

# **EXCEL STUDENT DETAILS LISTING**

# Student Details Listing

## Sortable Excel File

- Pretest Score
- Posttest Score
- Expected Score
- Difference
- Met Expected Score
- State Gain Read
- State Gain Math
- Prev Year Read Level
- Prev Year Math Level
- Race
- Sex
- FRL
- ELL Code
- ELL Less Than 1 Year
- State SWD Code
- Primary Exceptionality

# What is the District / State Percent Meeting Expected Score?

Subject	District Percent	State Percent
Reading	54%	50%
Math	54%	50%
Algebra	42%	50%
All Above	53%	50%

# **QUESTIONS AND ACTION STEPS**

# Planned Response to the Data

- Did the students in my school make a year's worth of growth across content areas?
- Did the students in my school make a year's worth of growth at each grade level?
- Can I compare results from different grades to draw summary conclusions?
- Are our students growing toward meeting state standards?
- Can I measure student growth even for students who do not change proficiency categories?

# Planned Response to the Data

- How will you leverage and recognize the success of highly effective (teams of) teachers?
- How will you support struggling (teams of) teachers?
- How will you support teacher teams in providing intervention for the students who need extra support?
- How will you arrange for differentiated professional development to support all teachers?
- How can professional learning be more focused on instruction and based on specific, identified needs?

# Tracking Student Growth

- **DQ1: Providing Clear Learning Goals and Scales**

<http://www.palmbeachschools.org/academics/documents/DQElement1PacketforTeachers.pdf>

- **Learning Goals** state what students will know & be able to do
- **Scales** describe levels of understanding & performance for those targets

Score 4.0: In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.
Score 3.0: No major errors or omissions regarding any of the information and/or processes (simple or complex) that were explicitly taught.
Score 2.0: No major errors or omissions regarding the simpler details and processes but major errors or omissions regarding the more complex ideas and processes.
Score 1.0: With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.
Score 0.0: Even with help, no understanding or skill demonstrated.